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2... Reference Books

AMERICAN CLOCKS - AN INTRODUCTION

by Tom Spittler (Soft cover, 130 pages)

- ♦ Based on Mr. Spittler's popular series of articles published in "Clocks" magazine, the subject of American clocks manufactured from Colonial days to 1900 is explored and presented in a format that is easily understood by even novice clock enthusiasts
- ♦ Includes sections on manufacturers and how clocks work

#B-284... \$25.95



by Sonya Spittler, Thomas Spittler & Chris Bailey (Hard cover, 596 pages)

- ♦ Latest, most up-to-date edition of the popular reference volume which the authors have been compiling for almost twenty years
- ♦ Now includes over 36,400 entries making it the most comprehensive and accurate listing of American clock and watchmakers in print!

#B-285... \$29.95



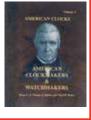
AMERICAN CLOCKMAKERS & WATCHMAKERS

by Sonya L. & Thomas J. Spittler, & Chris Bailey (Hard cover, 336 pages)

Compiles an overwhelming amount of previously unpublished material on American clock and watch makers

An impressive listing of thousands of craftsmen, arranged logically in an easy-to-use format. Over 16,000 clockmakers and watchmakers are listed in alphabetical order with entries of pertinent information. You will quickly appreciate the value of this volume!

#B-205... \$45.95



MORE CLOCK DECORATING STENCILS OF MID-19TH CENTURY CONNECTICUT

(Soft cover original edition, 64 pages)

A collection from the working stencils of master stenciller William B. Fenn (1813-1890), compiled by Chris Bailey

 Mr. Fenn used these designs on clock tablets for Seth Thomas, Silas Hoadley, Terry & Andrews, J.C. Brown, Brewster & Ingrahams, and many other notable clockmakers

#B-222... \$12.00



150 YEARS OF ELECTRIC HOROLOGY

by E. G. Krum & W. F. Keller (Soft cover, 101 pages) A truly unique and useful reference book with a wealth of long overlooked information concerning more than 60 manufacturers of electric clocks. It is loaded with history, photographs, and other important information.

#B-168... \$16.50

CHELSEA CLOCKS

Reprint of the only known copy of the Chelsea January 1917 Catalog in existance!

(Soft cover, 64 pages)

This reprint contains a large wealth of information concerning Chelsea clocks offered at the beginning of World War I. Included is everything from alarms to wall clocks!

#B-206... \$10.50



Reference Books...3

RAILROAD TIMEKEEPING

Edited by James L. Hernick

(Soft cover, 68 pages) A comprehensive look at watches, clocks and electric horology: important facets of American railroad history. Fully illustrated with marvelous examples of the instruments used to keep the 19th and 20th Century railroads running on time!

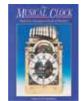




by Arthur W. J. G. Ord-Hume (Hard cover, 356 pages)

Chronicles the history and development of musical clocks, their mechanisms, and the music played. The text is accompanied by over 450 illustrations and diagrams.

#B-238... \$89.50

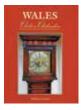


WALES CLOCKS and CLOCKMAKERS

by William Linnard (Hard cover, 272 pages)

A comprehensive reference book that explores the clock industry in Wales from medieval times through the eighteenth and nineteenth centuries. A major part of this book is the illustrated, alphabetical list of well over 2000 individual Welsh clockmakers and their clocks. The first book ever on Welsh clocks, this publication incorporates the latest research and a wealth of previously unpublished material.

#B-241... \$69.50



GUSTAV BECKER STORY

Revised edition by Karl Kochmann (Soft cover, 112 pages)
Becker's beautifully designed, industrially crafted clocks are known world-wide and were marketed around the world until World War II. This book records the history of the man, his clocks, and includes trademark indices, circa 1920 prices and catalog excerpts.

#B-149... \$10.50



LENZKIRCH - WINTERHALDER & HOFMEIER CLOCKS

by Karl Kochmann (Soft cover, 138 pages)

Formerly known under the title <u>European Industrialized Clockmaking</u>, this book contains photographs and a wealth of archival information on almost 200 years of marvelous clockmaking by the Lenzkirch and Winterhalder-Hofmeier clock companies.

#B-186... \$8.00



CLOCK & WATCH TRADEMARK INDEX OF EUROPEAN ORIGIN

by Karl Kochmann (Hard cover, 989 pages)

An archive of over 35,000 details of trademarks and wordmarks obtained from a multitude of sources and compiled into a valuable resource!

For years, Mr. Kochmann collected trademarks and related information from Switzerland, England, Germany, France, and Austria... now it is all presented here in a highly useful reference volume for watch and clock collectors, hobbyists and historians.

#B-212... \$28.00



4... Reference Books

GUIDES TO IDENTIFICATION AND PRICES

by Tran Duy Ly

Highly informative and comprehensive guides which use exact manufacturer illustrations, descriptions, specifications and prices from original catalogs. These illustrations, direct from the time of manufacture, give you an unquestionable picture of your clock on the day it left the factory! Drawings and photographs show original style hands, glasses, pendulums, finials and other important case features, along with specific movement information and current suggested prices for mint examples. All guides are organized so clocks can be found easily and quickly.

GILBERT CLOCKS SUPPLEMENT

(Hard cover, 113 pages)

Enhances the information found in Mr. Ly's previous volume, <u>Gilbert Clocks and Watches</u>, with previously unpublished photographs and information

#B-204... \$32.00



(Hard cover, 584 pages)

A highly informative listing of over 2000 quality illustrations and photographs show original style hands, glasses, pendulums, finials and other important case features, along with specific movement information and current suggested prices for mint examples

#B-249... \$74.50

<u>k</u>

SETH THOMAS - VOLUME 2

(Hard cover, 576 pages)

Expands on the wealth of information found in Volume 1 with all new material! A unique volume with additional information and a treasury of illustrations!

- Featured clock sections include Seth Thomas mantel, ship's bell and ship chronometers, statuettes and candlesticks, street clocks and tower clocks. Volume 2 also includes Seth Thomas watches and wrist watches.
- Other sections cover Seth Thomas movements, Plymouth clocks and Seth Thomas & Sons clocks

#B-235 ... \$65.50



CALENDAR CLOCKS

(Hard cover, 360 pages)

Features a wealth of previously unpublished photographs and information on 45 companies and inventors! Of special interest is the collection of detailed mechanism drawings rendered by the inventors. This is a major asset in identification, carrying out intricate repairs, and fabricating missing parts. Movements, labels and calendar mechanisms are well illustrated.

#B-171... \$74.50

LONGCASE CLOCKS AND STANDING REGULATORS: PART 1 - MACHINE MADE CLOCKS

(Hard cover, 504 pages)

This is the first published guide to the King of Clocks, the hall clock, and its companion, the standing regulator. The information herein gives you tremendous insight into rare and complex clocks of over 50 different manufacturers.





Reference Books ... 5

CLOCKMAKERS OF MONTGOMERY COUNTY 1740-1850

by Bruce Ross Forman (Hard cover, 309 pages)

Represents 13 years of research tracing the early clockmaking industry of Montgomery County, and its decline. A biographical sketch is included for all watch and clockmakers who worked in the county before 1850, along with a look at the cases, dials, and movements. Hundreds of photographs are provided.

#B-207... \$45.95

HERSCHEDE CLOCKS (Soft cover, 159 pages) Reprint of selections from 4 catalogs circa 1904-1927!

- ♦ Featuring Herschede's renowned line of hall, mantel and boudoir clocks
- Lavishly illustrated, this catalog reprint is produced with much of

#B-153... \$12.75



ANNIVERSARY CLOCK IDENTIFICATION

by Mervyn Passmore (Soft cover, Spiral bound)

the feel of an original edition!

Quickly and accurately identify the movements used in 400-day clocks

- This book allows you to create a source of information for quick identification
- Includes information on manufacturer's names, movement ID codes, logos, backplate dimensions, and a wealth of detailed movement specifications

#B-278... \$26.50



WILLARD HOUSE & CLOCK MUSEUM

By Dr. Roger W. Robinson and Herschel B. Burt (Hard cover, 262 pages)

- Expands and describes, in detail, information pertaining to the Willard House & Clock Museum: the mose complete collection of Willard clocks in existence
- Illuminates, in detail, the Willard House in North Grafton, Massachusetts where the Willard brothers learned and perfected their clockmaking talents
- The history of this property and technical descriptions of Willard clocks by Benjamin, Simon, Ephraim and Aaron are recounted through the concise text and over 370 illustrations, many in color

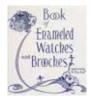
#B-256... \$10.00



ENAMELED WATCHES & BROACHES (Soft cover, 26 pages)

- ◆ A reprint of the 1901 New England Watch Company catalog No. 21 (2nd edition) of enameled watches and brooches..."novel, fashionable, pretty, tasteful and inexpensive"!
- This wonderful reprint is done in full color like the original, depicting the watches and brooches as they appeared to fashionable turn-of the-century women

#B-261... \$2.00



THE ART OF THE PAINTED CLOCK DIAL

By M. F. Tennant (Hard cover, 351 pages)

- ♦ A textbook on the art and history of the painted dial!
- ◆ Over 700 illustrations: over 500 in color!
- This is the most complete book on the early history of painted grandfather clock dials to be compiled
- Investigates the development of painted dial elements, regional British dial styles, and distinguishing dial styles
- Immensely popular and well received, this volume is destined to become an essential reference work for horologists and collectors!



#B-275... \$97.00

6... Repair Books

TIME: A PREMIUM By Ursula Metsker (Hard cover, 22 pages)

- A reference and identification guide listing over 600 premium or promotional watches and clocks compiled by the author over a period of almost 35 years
- Many of these interesting and colorful watches are accompanied by the advertising which enticed people to ordering the timepieces
- The text is written in from a very comfortable first person perspective: informative, yet entertaining
- Guaranteed to bring back memories!

#B-259... \$48.50

THE DREXEL RITTENHOUSE CLOCK (Soft cover, 99 pages)

- The Most Important Clock in America The David Rittenhouse Astronomical Musical Clock at Drexel University - By Ronald R. Hoppes
- Thoroughly illustrated with color images and detailed diagrams, this amazing clock, made in 1773 by scientist and patriot David Rittenhouse, is revealed as a true work of scientific and historical significance

#B-277... \$35.00

LANTERN CLOCKS By Arthur Brian Loomes

- This book includes a detailed survey investigating the development of the lantern clock in Great Britain from the 16th to the 18th centuries.
- Mr. Loomes also surveys lantern clocks as they were used for posted-movement long case clocks as as well as hanging wall clocks.
- Beautifully illustrated with detailed color and black and white photographs
- ◆ More than 400 clocks are pictured using over 1,150 photographs
- ◆ Many of the early clocks are illustrated in this text for the first time
- ◆ Construction and stylistic features ◆ Brass founder's casting marks
- ◆ A biographical section for 1000 clockmakers

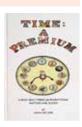
#B-270... \$119.50

WATCHMAKERS OF MASSACHUSETTS

By August C. Bolino (Hard cover - 276 pages)

- ◆ A fine reference book focused on the watches and watchmakers of Massachusetts
- The text covers Massachusetts watchmaking from the 16th to the 20th centuries, providing an in-depth look at the evolution of the trade and the growth of key companies such as Auburndale, Fitchburg, Hampden, E. Howard, Tremont (Melrose), United States Watch Company, American (Waltham), Waltham and more

#B-260... \$19.50









CLOCKMAKER'S NEWSLETTER WORKSHOP SERIES

Compilations of articles, tips and projects that were originally published in the <u>Clockmaker's Newsletter</u> from 1987 to 2008...

- → Edited by Steven G. Conover → Includes previously published and new material
- ◆ Fully indexed! ◆ Spiral bound with a clear acetate cover for easy use & durability

Book 1... REPAIRS

(Soft cover, 190 pages)

- ♦ Techniques: Basic information to guide you toward being a better repairman
- ♦ Mainsprings: Types, repair and replacement information and techniques
- Bushing Methods: A wealth of knowledge on bushing work, plus lots of "how to..." wisdom
- Clock Repair Questions/Answers: Actual questions from novices answered by a variety of clock repair experts
 #B-282... \$37.95



Repair Books...7

Book 2... TOOLS, TIPS & PROJECTS

(Soft cover, 179 pages)

- ♦ Making Tools: Learn to make tools that will allow you to repair more efficiently and eniovably
- ◆ Using Tools: How to properly use tools plus reviews of those commercially available
- ◆ Projects: Includes information on test stands and how to effectively run a repaired movement during its regulation and adjustment period
- Repair Tips: A gold mine of "good ideas" pertaining to a variety of repair subjects #B-283... \$37.95

Book 3... ESCAPEMENTS

(Soft cover, 159 pages)

- Provides you with the proper restoration procedures for Recoil, Deadbeat, Balance and Hairspring escapements
- ♦ Includes an extensive article on floating balance escapements
- ◆ The chapter on pendulums and timekeeping gives tips on regulating clocks and #B-292... \$34.95 determining correct pendulum length





Book 4... GRANDFATHER CLOCKS

(Soft cover, 147 pages)

- Covers all types of grandfather clocks: from antique English-style bell strike grandfathers to modern examples by Hermle, Urgos, Kieninger, Gebr. Jauch and Erhard Jauch
- Specifically addresses repairs to pivots and bushings, moon phase and date gear #B-293... \$34.95 teeth, strike mechanisms and more



Book 5... TUBULAR BELL CLOCKS

(Soft cover, 125 pages)

- ♦ Illustrates the problems and procedures unique to the tubular bell clocks that originated in the late 19th century
- ◆ Features German and English tubular bell examples in addition to American-made Herschede clocks
- ♦ Includes movement repair instructions and house call repair tips

#B-294... \$32.95



(Soft cover, 158 pages)

(Soft cover, 142 pages)

- ◆ Fully indexed ◆ Well illustrated with 321 photographs and drawings
- ◆ Tried and tested content pertaining to the most popular Seth Thomas clock movements, plus new updated information
- ◆ Chapters are devoted to the #89, #113, #124, Sonora chime, early Ship's bell, early alarms (including the Long Alarm and Automatic Eight-Day Alarm), commonly seen time and strike movements, plus several time-only mechanisms

#B-295... \$37.95







Book 8... INGRAHAM, NEW HAVEN & SESSIONS MOVEMENTS (Soft cover, 149 pages)

repairs, details on count wheel striking mechanisms, stopworks mechanisms

♦ Information on repairs to a variety of American movements: Manross, Welch, Spring & Co., George Brown, B. B. Lewis, Fashion Calendar Clocks and others

Includes an introductory chapter on American clock

#B-297... \$37.95

#B-296... \$37.95



8...Repair Books

INFORMATIVE, EASY-TO-FOLLOW REPAIR GUIDES

by Steven G. Conover

Chime Clock Repair (Spiral bound soft cover, 126 pages)

◆ The perfect repair guide for those who restore, or want to learn more about chime mechanisms. This guide includes chapters on the basics of chiming movements, common repair problems, and an in-depth look at eighteen common American and European chime clocks. #B-169... \$34.00



Striking Clock Repair Guide (Spiral bound soft cover, 90 pages)

♦ A textbook on American, English, French, and German striking mechanisms. This guide is concisely written and fully illustrated with numerous line drawings and photographs. This book is a must for repairmen! #B-184... \$21.50



CLOCK REPAIR

CLOCK REPAIR

Clock Repair Basics (Spiral bound soft cover, 92 pages)

- ◆ Teaches you time tested repair procedures and formulas actually used by experienced clockmakers
- ◆ The topics included comprise the basic repairs facing the beginner, repairs that are standard for an experienced repairman. Each topic, from letting down mainsprings to the assembly of movements, is presented as though you were personally being taught.
- ♦ Five other representative starter clocks are also included

#B-192... \$22.50

Clock Repair Skills (Spiral bound soft cover, 92 pages)

- ♦ An intermediate level book which acts as a follow-up "course" on repair skills
- Learn to repivot arbors, repair lantern pinions and recoil escapements, replace teeth, make bushings and a rack & snail, repair moon dials and hands. Bell strike main wheels, grandfather chainwheels and depthing tool use are also covered in detail.

#B-224... \$23.50

How to Repair Herschede Tubular Bell Clocks

Revised Expanded 2nd Edition (Spiral bound soft cover, 116 pages)

♦ Contains a wealth of information on Herschede's movements. These complex clock works are clearly illustrated with drawings, and repair procedures are lucidly outlined. Procedures, etc., cover both the Herschede 5 and 9-tube movements. #B-172 ... \$27.50



Repairing French Pendulum Clocks (Spiral bound soft cover, 92 pages)

- ♦ Illustrates the steps necessary to successfully repair French movements
- ◆ Includes chapters on black marble timepieces, rack and snail exposed escapement clocks, count wheel striking clocks, picture frame clocks, Morbier spring wall clocks and silk thread suspensions
- ◆ Glossary & Question/Answer section included #B-264... \$22.50



Building an American Clock Movement

(Spiral bound soft cover, 84 pages)

♦ An easy-to-follow guide to making an American-style shelf clock movement with a 6" drop. This is a perfect project for the first-time #B-182... \$24.75 clockmaker!





Repair Books...9

How to Repair 20 American Clocks

(Spiral bound soft cover, 140 pages) Steven Conover's 8th guide investigates movements and case repairs based on the characteristics and requirements of 20 specific clocks. Assembly and adjustment of each clock movement is also included.

The twenty clocks... → Waterbury Cottage, Canton, and Antrim

- ◆ Seth Thomas Salem Cottage, Athens, Cluny, and Sharon ◆ Gilbert Amboy
- ◆ New Haven #95 and Harmonious ◆ Poole Patrician and Executive Model #5
- ♦ Ansonia Belmont and La Normandie ♦ E. N. Welch OG
- ♦ Ingraham Amulet & Domino ♦ Sessions Regulator #2 and Credo
- → Welch, Spring, and Co. Italian #3 and Patti

#B-232... \$36.00



VIVERSARY

Anniversary Clock Adjusting by Mervyn Passmore (Soft cover, 44 pages)

A concise book which reveals the workings and adjustments necessary to tune your 400-day clock for optimum running order

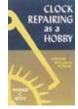
- → Technical information is kept to a minimum: helpful text and relevant illustrations expand the text into a useful volume of readily applied techniques and information
- Chapters include the suspension, letting down the mainspring, set up, escapement adjustment and more #B-234... \$14.95



The book written especially for those who have never worked on a clock movement before!

- ◆ Part 1 ...deals with movements, escapements, pendulums, and balance wheels
- → Part 2 ...discusses tools, American striking clock repair, alarms, 400-day clocks, and special repair techniques

#B-71... \$13.50



The Modern Clock by Ward Goodrich

(Now Hard cover, 502 pages) A complete, authoritative, and reliable guide to clock repair

↑ This guide goes far beyond the cataloging of historical clock types. It is truly a study of time-keeping mechanisms, advice for the beginner, counsel for the specialist, and a source of valuable information for the hobbyist. Basic repair fundamentals are stressed as they relate to clock construction and repair. #B-115... \$17.50



SIMPLIFY and SAVE- STARTING A SMALL CLOCK REPAIR SHOP

by Tom Seaman (Soft cover, 19 pages)

 A <u>basic</u> guide, authored by a veteran repairman, with suggestions for setting up and streamlining an efficient, economical repair shop #B-279... \$15.95



CLOCK REPAIR-CUCKOO CLOCKS

by Bill Tipton (Spiral bound, soft cover, 90 pages)
Step-by-step repair guide based on the Regula 25 30-hour cuckoo movement...

- ◆ A fully illustrated guide to cleaning, disassembly, bushing installation and reassembly of one of today's most commonly used cuckoo movements
- ◆ Includes sections on trouble shooting and movement testing





10...Repair Books

The Top 300 Secrets of a Master Clockmaker by J.M. Huckabee (Soft cover, 111 pages)

◆ Includes over 300 illustrations with directions and critical notes as they relate to 36 repair topics. This material essentially covers the more difficult tasks encountered in the restoration of older American clocks. Each step is discussed in detail, with easy to read directions and illustrations. Each task is broken down into simple operations...all are presented in a logical sequence of events.

#B-197... \$31.50



CLOCK REPAIR: SKETCHES AND BENCH NOTES

by Bill Tipton (Soft cover, 210 pages)

Mr. Tipton's latest book which includes handwritten sketches and bench notes for thirty-six movements (circa 1838-1910) by twelve major American clockmakers. This book addresses the repair of broken gear teeth and worn saddle pivots, set-up of strike and chime sequences and the setting and adjusting of mainspring stop works. Electrical circuits for an IBM Master clock are included.

#B-265... \$42.00



CUCKOO CLOCK REPAIR MADE SIMPLE Revised Edition

by Tom Seaman (Spiral wire bound, soft cover, 58 pages)

- Based on repair techniques for the popular 1-day Regula® 25
 movement, one of the most commonly used cuckoo movements.
 The understanding this book gives you will readily transfer to other
 models and brands of movements.
- → Well illustrated, with simple step-by-step directions
- Includes a list of required tools to complete an evaluation and carry out necessary repairs #B-266... \$26.00



THE PIN-PALLET ESCAPEMENT- ADJUSTMENT AND

REPAIR by Robert Porter (Spiral bound, soft cover, 44 pages) Points out important details that cannot be overlooked when repairing or adjusting Brocot (Pin-Pallet) escapements as found in its various forms. Avoid misdiagnosing movement troubles!

Illustrated with large, clearly labeled line drawings
 #B-273... \$14.95



THE ART OF REPIVOTING FOR THE WATCH AND

CLOCK MAKER by Robert Porter (Soft cover, 60 pages)

- Includes basic and advanced repair methods to accurately replace worn, broken, or missing pivots in both watch and clock wheels and pinions
- ◆ Includes instructions on how to make micro pivot drills

#B-272... \$16.95



Repair Books ...11

TAPS, DRILLS, AND DIES

by Robert Porter (Soft cover, 60 pages)

- ♦ Information on choosing screw thread, tap and die sizes, drill sizes
- → Includes quick reference charts

#B-298.... \$14.50



HOW TO MAKE A PIVOT POLISHER AND MICRO DRILL ATTACHMENT

by Robert Porter (Soft cover, 24 pages)

◆ A simple and easy proces to make a highly useful tool

#B-299.... \$10.50



RESTORING THIS OLD LATHE

by Robert Porter (Soft cover, 24 pages)

◆ Steps for the restoration of an older watchmaker's lathe. In this example, a Levin Model B. Techniques can be applied to most American-style watchmaker's lathes.

#B-302.... \$9.50



CLOCK REPAIR TIPS

by Bill Tipton (Spiral bound, soft cover, 121 pages)

Featuring the popular Hermle #340-020 movement

- Learn how to inspect, trouble shoot, disassemble, repair, lubricate and adjust one of Hermle's most widely used movements, the #340-020 floating balance, Westminster chime movement
- Also includes a wealth of techniques and tips that pertain to the inspection and repair of movements in general
- Special attention is given to the use of bench bushing tools and mainspring winders in comparison to cheaper, but less effective tools
- Utilizes a unique flow chart that allows you to efficiently zero in required repairs and procedures to remedy your movement's ills

#B-274... \$35.00



ANTIQUE WATCHES AND HOW TO ESTABLISH THEIR AGE

by Henry G. Abbott (Soft cover, 204 pages)

◆ Includes a directory of over 6000 watchmakers, along with biographical sketches #B-300.... \$31.00



REVERE CLOCKS SERVICE MANUAL (Soft cover, 24 pages)

◆ Recently reprinted, this illustrated manual was originally published by the Revere Clock Co. Text explains service techniques for Revere's #100 Mantel Chime Movement, and the "Electric 5-tube Floor Clock Movement". #B-147... \$4.00



12...Repair Books

MAINSPRING AND PENDULUM CALCULATOR

An easy to use CD program, complete with instructions, calculates...

- ◆ Running time between windings
- ♦ Optimal mainspring length from barrel, arbor and spring thickness measurements
- ♦ Number of barrel revolutions from fully wound to unwound
- ♦ Barrel revolutions and running time for changes in spring length
- ◆ Pendulum length for any beat rate
- ♦ Beats per hour based on gear tooth counts for the entire train
- ♦ Compound pendulum rate from entered weights and dimensions
- ♦ Change in driving power and running time for changes in spring thickness

Runs using Microsoft® Excel 97 to Excel 2007 #P-2025... \$19.00



PRACTICAL CLOCK ESCAPEMENTS by Laurie Penman

(Hardcover, 248 pages) For beginners and experienced repairmen: covers in depth the five escapements most commonly used in domestic clocks: Crownwheel and verge, Recoil anchor, Graham deadbeat, Brocot, and Platform escapements

Over 400 line drawings enhance the lucid, clearly written text which includes

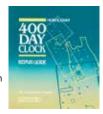
- Practical information on how to design and make pallets and escape wheels
- Practical advice on how to assess faults and repair escapements, plus detailed information on pendulums and suspensions
- Less common escapements, gravity escapements, and Harrison's grasshopper escapement
 #B-227... \$42.50



HOROLOVAR 400-DAY CLOCK REPAIR GUIDE

(Hard cover, 237 pages)

- In addition to thoroughly documenting the history of 400-day clocks, this book contains guidelines on repairs, adjustments, pendulums, suspensions, and other components
- ♦ It also includes an extensive collection of back plate and suspension illustrations which aid clock identification and the selection of replacement parts
 #B-78... \$36.00



ATMOS REPAIR GUIDE/PARTS LIST (Soft cover, 16 pages)

- → A sixteen page reprint of Jaeger-LeCoultre brochures detailing repairs and parts related to the Atmos VI (Cal. #528), the Classic #5400 and the #150e (Cal. #540)
- Fully illustrates step-by-step repair checks, assembly hints, and adjustment information for the Atmos VI #B-180... \$3.75

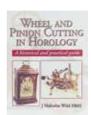


WHEEL AND PINION CUTTING IN HOROLOGY: A HISTORICAL AND PRACTICAL GUIDE

by J. Malcolm Wild (Hard cover, 253 pages)

Are you afraid of cutting your own wheels and pinions? Do you think the process too complicated? This book was written by a master tool maker whose purpose was to dispel your apprehensions...

- → You are guided step by step with over 500 photographs and line drawings to make your understanding of machining techniques more complete and the results pleasing
- ◆ The text covers early methods for cutting wheels, theory behind wheels and pinions, practical instruction on all aspects of wheel and pinion cutting, plus detailed information on the equipment used #B-213... \$62.50



Repair Books...13

CHELSEA SHIPS BELL STRIKING CLOCK

(Soft cover, 8 pages)

- An illustrated parts list and assembly guide for the Model 4L movement with an 11 jewel escapement, first made in 1950
- ♦ Well illustrated with exploded drawings
- → Topics include lubrication, the escapement, strike levers, assembly of the strike mechanism, gear trains, regulator and strike assembly, the power train, and plates/posts/bushings #B-245... \$3.50



TABLETOP MACHINING: A BASIC APPROACH TO MAKING SMALL PARTS ON MINIATURE MACHINE TOOLS

by Joe Martin (Soft cover, 343 pages)

Written by the late manufacturer of Sherline Products, this marvelous source of information addresses how to carry out an operation, stressing why you would want to do a job a certain way

- ◆ Chapters are designed so that each is a complete reference on a specific topic. General machining, lathe operations, milling, projects, resources, and related subjects are included.
- ◆ Lavishly illustrated: full color/full page photographs and drawings Regardless of the lathe you use, this book will quickly become your main source for machining knowledge! #B-203... \$49.50



PRACTICAL WATCH REPAIRING by Donald deCarle

(Hard cover, 319 pages) A marvelous book which describes the repair and adjustment of modern watches in complete detail!

- Mr. deCarle's book has been reviewed by the <u>Horological Journal</u> as "The best illustrated book on practical watch repair yet issued..."
- Includes 23 chapters on repairs, tools and the workbench, examination, cleaning, lathe work, jeweling, plus much more on specific watch characteristics and function #B-223... \$34.00



Please note: The books below are for making craft novelty clocks,

NOT antique wooden works clocks

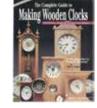
THE COMPLETE GUIDE to MAKING WOODEN

CLOCKS Second Edition by John A. Nelson

(Soft cover, 176 pages)

Plans for 37 different clocks... from simple mantels to Grandfather clocks in traditional, Shaker and contemporary styles!

- Includes chapters on the history of clocks, popular American clock styles and clock components with step-by-step instructions
- An informative edition: well written and lavishly illustrated with photographs and drawings!



MAKING WOODEZ

#B-208... \$24.00

MAKING WOODEN GEAR CLOCKS

(Soft cover, 64 pages)

- ♦ This book consists of seven projects to maken wooden clocks
- ◆ Projects range in order from beginner to advanced
- ◆ Patterns are in a pouch at the back of the book



#B-303... \$12.75

14... Movements: Quartz Fit-Up

1-7/16" MINIATURE QUARTZ FIT-UP MOVEMENTS

These miniature movements can be installed in anything you can bore a hole into!

- ◆ Simple front mount installation ◆ Battery included ◆ 1-7/16" diameter
- ♦ Mounts in a 1-3/8" hole ...3/8" minimum depth

Your Choice... \$8.25 each 3+ ...\$8.00 each 12+ ...\$7.75 each



- **#P-1170...**◆ Arabic numerals
- ◆ Brass finished bezel



- **#P-1171... ♦** Roman numerals
- → Brass finished bezel



- #P-1508...
- Fancy Arabic numerals
- Brass finished bezel



- **#P-1509...**→ Fancy Roman numerals
- Brass finished bezel



- #P-2204...
- ✦ Roman numerals
- → Silver finished bezel

HIGH QUALITY 1-7/16" (36MM) SEIKO® MINI-QUARTZ INSERT MOVEMENTS

- ♦ 1-7/16" (36mm) outer diameter
- ◆ 1-3/8" inside diameter
 ◆ Glass crystal
- ♦ Metal alloy case with a stainless steel back
- Rubber battery hatch for super easy battery changes!

Your Choice... \$8.75 each



- #P-2283...
- ◆ Roman numerals
- ◆ Gun metal finished bezel



- #P-2328...
- ◆ Arabic numerals
- Silver finished bezel



- **#P-1649... ♦** Arabic
- Arabic numerals
- Brass finished bezel



- **#P-1650... ♦** Arabic
- numerals • Brass
- Brass finished bezel



- #P-1651...
- ◆ Roman numerals
- Brass finished bezel



- #P-1652...
- → Roman numerals
- Brass finished bezel



- #P-1651S...
- Roman numerals
- ◆ Silver finished bezel

2" DIAMETER PREMIUM FIT-UP MOVEMENTS

- ♦ Heavy solid brass case
 - ◆ Stainless steel backcover
- Fits into a 1-3/8" dia. hole using the "soft gasket" mounting system
- ◆ 1/4" depth required
- → Gold, beveled edge bezel
- ◆ Applied indicators ◆ Flat glass lens





#P-2083

#P-2084

#P-2083... White face with black Arabic numbers ...\$17.00 each #P-2084... Black face with gold time indicator ...\$18.00 each

Movements: Quartz Fit-Up ...15

SOLID BRASS 2" DIAMETER QUARTZ FIT-UPS

Each is a top quality fit-up movement machined to precise specifications with a major brand quartz movement installed!

- ♦ Ribbed gasket system makes these fit-ups easy to install in almost any material
- ♦ Mounts in a 1-3/8" diameter hole ♦ 1/8" min. depth required
- ◆ Scratch-resistant mineral glass lens ◆ Replaceable battery included

Your Choice... \$18.50 each 3+... \$17.50 each



#P-1273...

◆ Fancy Arabic with a traditional white German-style face, gold accents, and a triple waterfall style bezel



#P-1274...

◆ Ivory Roman with a traditional Roman-style dial on an ivory background, and a triple waterfall style bezel



#P-2343...

◆ Off-white Arabic with a traditional Arabic-style dial on an off-white background, and a beveled brass bezel

2-3/4" DIAMETER QUARTZ FIT-UP MOVEMENTS

High quality quartz movements with brass finished plastic bezels!

- ◆ Fits in a 2-3/8" opening ◆ Friction fit, spring clip mounting
- Requires P1576 "AAA" Alkaline battery (not included)

Your Choice... \$8.00 each Any 3... \$7.75 each



#P-1428

 Ivory dial with Arabic numerals

#P-2329...

◆ White with Arabic numerals (Also available with silver bezel, P2365)



#P-1429...

Ivory dial with Roman numerals

#P-2330...

◆ White with Roman numerals (Also available with silver bezel, P2366)



#P-1430...

 Fancy white with Arabic numerals

#P-2331...

 Fancy ivory with Roman numerals

16... Movements: Quartz Fit-Up

3-1/2" DIAMETER QUARTZ FIT-UPS

A versatile fit-up made to pressure fit into a 3" opening

- ◆ Operates on one "AA" battery (not included)
- ♦ Black spade hands with a sweep second hand
- ◆ 8 built-in pressure arms combine to securely hold your movement in place when installed in a 3" diameter hole

Your choice... \$8.50 each Any 6+... \$8.00 each



#P-2037

White dial with Roman numerals

#P-2038

White dial with Arabic numerals

#P-2039

 Ivory dial with Roman numerals

#P-2332

 Fancy ivory dial with Arabic numerals



#P-2333

◆ Fancy ivory dial with Roman numerals

#P-2334

♦ White dial with Arabic numerals

#P-2335

 White dial with Roman numerals

#P-2344

 Ivory dial with Arabic numerals



3-7/8" DIAMETER PREMIUM QUARTZ FIT-UP MOVEMENTS

Superior quality fit-up movements at a reasonable price! Each movement features a brass finished plastic bezel and a flat lens

(MOUNTING RING NOT INCLUDED)

- Movement operates on one "AA" battery (not included)
- ♦ Mounts into a 2-15/16" hole
- Minimum hole depth: 9/16"
- 3-7/8" diameter plastic bezel with a brass colored finish
- ◆ Black sweep second hand, hour and minute hands

#P-1909... Black Roman numerals with an ivory finish

#P-1910... Black Arabic numerals with an ivory finish

Your choice... \$9.50 each 3+... \$8.75 each

Movements: Quartz Fit-Up...17

5-7/8" QUARTZ FIT-UP MOVEMENT

Fit-up movement complete with a brass finished metal bezel and a plastic crystal

- → White dials with contrasting black Roman numerals and black hands
 → Sweep second hand
- Minimum hole diameter: 2-7/8" with metal mounting clips installed for adaptation to holes up to 3-7/8" diameter
- ◆ Requires one "AA" battery (not included) #P-2097... 5-7/8" diameter

...\$10.75 each 3+...\$10.50 each 6+...\$10.00 each



6" DIAMETER QUARTZ FIT-UP MOVEMENTS

- ♦ 6" diameter
- ♦ 5/8" deep movement
- ♦ 3/8" dial depth ♦ Gold bezel
- → Runs on AA battery (not included) #P-2338...

White dial with Arabic numerals **#P-2339...**

White dial with Roman numerals **#P-2340...**

Ivory dial with Arabic numerals
Your choice... \$14.50 each



6" DIAMETER PREMIUM QUARTZ FIT-UP MOVEMENTS (152mm)

A superior fit-up movement at a reasonable price! Each movement features a polished brass bezel and a convex glass crystal!

- Operates on one "AA" cell (not included)
- ◆ Curved glass lens: not a plastic crystal!
- Mounts into a 3-1/8" hole using a soft ribbed rubber gasket
- → Minimum hole depth: 9/16"
- ♦ 6" diameter polished brass bezel
- Black sweep second hand/ hour/ minute hands
- Decorative gold dial center

A top quality fit-up movement!
#P-1907A... Arabic numerals with an ornate chapter ring: white numeral background
#P-1908A... Roman numerals: ivory dial
Your choice... \$18.50 each 3+... \$17.50 each



18... Movements: Quartz







FIT-UP WEATHER INSTRUMENTS

- ♦ Hand polished metal bezels with a bright brass finish
- ◆ Each fits into a 2-3/8" opening using a soft gasket mounting system (included)
- Ivory dials with black American indicator markings rather than Metric equivalents
- ◆ Thermometer and Hygrometer: quality European-made coils
- Barometer: with a superior British barometric pod incorporating a rack and pinion transfer system #P-2085... 2-3/4" overall diameter thermometer\$8.50 each

<u>European</u> made!

#P-2087... 2-3/4" overall diameter barometer\$17.00 each #P-2172... 3-1/2" overall diameter barometer\$20.00 each #P-2173... 3-1/2" overall diameter hygrometer\$10.00 each #P-2174... 3-1/2" overall diameter thermometer ...\$10.00 each

COMPACT QUARTZ MOVEMENT

for carriage clocks, miniature desk clocks and other special craft clocks that require compact movements

- ◆ Compact size: 1-15/16" diameter x 5/8" thick
- ◆ Utilizes "push-on" type hands ◆ 9/32" long handshaft
- Sweep second hand capability (Hands not included)
- ◆ Requires one "N" battery (not included)

#P-2040... \$4.00 each 6+... \$3.75 each 12+... \$3.50 each

2-PC. PUSH-ON HAND SETS

for Compact Quartz Movements

◆ Spade hour hand and minute hand... each finished in black #P-2040B... Set with 1-1/2" long min. hand ... \$1.00 set



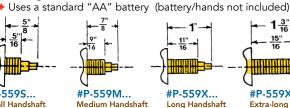


Available in 4 handshaft

lengths!

#P-559S... Small Handshaft





American made! MINI-QUARTZ MOVEMENTS

...Our smallest quartz movement! ♦ 2-5/32" high x 2-5/32" wide x 19/32" deep Pulsing second hand moves in one second intervals



Your Choice... \$3.75 each 3+...\$3.50 each 12+ ...\$3.00 each 100+ ...\$2.75 each

Movements: Quartz ... 19



AMERICAN-MADE MINI QUARTZ

MOVEMENT with push-on hand mounting

No bushing... designed exclusively for use with cases that require a clip-in movement: just snap it in place and push on the hands!

- ♦ American-made movement ♦ 2-7/32" square x 5/8" deep
- ♦ Built-in hanger holds up to 4 pounds

◆ Requires one "AA" battery: not included

Your Choice... \$3.75 each

#P-1976A... 3/8" Handshaft for dials up to 1/8" thick **#P-1976B... 9/16" Handshaft** for dials up to 5/16" thick

3+...\$3.50 each 12+... \$3.00 each

MINI QUARTZ MOVEMENTS with push-on hand mounting

- ◆ Snaps into molded case backs: 2-7/32" wide x 2-7/32" high x 5/8" thick
 - ♦ Built-in hanger molded into the case back: 4 lb. limit
 - Sweep second hand capability
 - ◆ Requires one "AA" battery (not included) Your choice... \$2.75 each #P-2205...1/2" Handshaft (12.7 mm) overall length

→ 3/16" threaded section (4.75 mm long)

3+... #P-2206 ...3/4" Handshaft (19.05 mm) overall length \$2.50 each

◆ 5/16" threaded section (7.94 mm long)

HANDS FOR PUSH-ON MINI QUARTZ MOVEMENTS

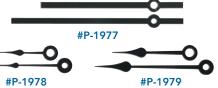
- ◆ Can only be used with push-on movements ◆ Aluminum with a Black finish
- ◆ Measured from the tip to the center of the shaft hole

#P-1977...Minute hand: 4-1/8"

#P-1978...Minute hand: 1-15/16"

#P-1979...Minute hand: 2-11/16"

Your Choice... \$1.00 pair 12+... \$.75 pair





SERPENTINE HANDS FOR PUSH-ON MOVEMENTS

#P-2311... Black - 3-1/8 "Minute Hand **#P-2312... Gold** - 3-1/8" Minute Hand #P-2313... Black - 4/-1/8" Minute Hand **#P-2314...** Gold - 4-1/8" Minute Hand

Your choice... \$1.00 each

TRANSPARENT MINI-QUARTZ MOVEMENTS

Clear movement cases for use with glass, stained glass, plexiglass and other applications where you might wish to have a less conspicuous movement

- ◆ 2-1/8" wide x 2-1/8" high x 5/8" depth ◆ Uses standard "I" shaft hands
- ◆ Requires one "AA" battery (not included)

#P-2212... 1/2" Handshaft (12.7 mm)overall lenath

◆ Threaded

section: 7/32" (5.55 mm)

#P-2213... 3/4" Handshaft (19.05 mm) overall length

◆ Threaded section: 7/16" (11.12 mm)

#P-2214... 1-7/32" Handshaft (30.95 mm) overall length

◆ Threaded

section: 15/16" (23.8 mm)

Your Choice... \$4.00 each 3+... \$3.50 each

20... Movements: Quartz

SEIKO® PRECISION MINI-QUARTZ MOVEMENTS

High quality, high accuracy quartz crystal movements accurate to +/- 15 seconds per month!

- Runs for approximately two years on a fresh "AA" battery (not included)
- → Pulsing second hand moves in exact one second increments
- ◆ Designed for trouble-free operation
- ◆ Compact 2-1/8" x 2-1/8" x 1/2" size
- Hanger included
- Please note: Since 2012, Seiko movements have been made in various Asian factories, not exclusively in Japan

Your choice of four handshaft lengths... #P-2001S... 5/8" for dials up to 1/8" thick

#P-2001M...11/16" for dials up to 1/4" thick #P-2001X... 7/8" for dials up to 3/8" thick

#P-2001XL...1-1/16" for dials up to 5/8" thick

\$5.50 each 3+... \$5.00 each 12+... \$4.75 each









"X" Handshaf

TIME-ONLY MINI-QUARTZ MOVEMENTS

- ◆ Brass clutch gear: not plastic like most units on the market today!
- ◆ Steel tension leaf spring: can carry hands heavier than the average mini quartz
- The minute shaft incorporates a rim: the minute hand can not slide back onto the hour tube. No more hand jamming!
- ♦ 2-3/4" overall height x 2-1/4" wide x 5/8" thick
- → Molded integral plastic hanger
- ♦ Mounting hardware included
- ♦ Uses standard I-shaft hands
- → Requires one "AA" battery (not included)

Now with a

Manufacturer's lifetime warranty!



Your Choice... \$4.00 each 3+... \$3.75 each 12+... \$3.50 each

#P-2168... 35/64" Handshaft

(14 mm) overall length for dials up to 1/8" thick

→ Threaded section: 15/64" (6mm) long

#P-2169... 25/32" Handshaft

(20 mm) overall length for dials up to 3/8" thick

→ Threaded section: 15/32" (12mm) long

#P-2170... 13/16" Handshaft

(21 mm) overall length for dials up to 5/8" thick

→ Threaded section: 1/2" (12.7mm) long

#P-2299... 1-1/16" Handshaft

(27 mm) overall length for dials up to 5/8" thick

→ Threaded section: 23/32" (18.5mm) long



BACKWARDS QUARTZ MOVEMENT

This crazy movement runs backwards to create a unique, yet accurate timepiece!

- ◆ 5/8" handshaft for dials up to 1/4" thick ◆ Hands are included
- → 2-5/64" high x 2-13/64" wide x 5/8" deep

#P-640... \$5.75 each 3+... \$5.25 each 12+...\$4.75 each

Movements: Quartz ...21

HIGH TORQUE "AA" MINI QUARTZ MOVEMENTS

The same compact size of our regular time-only mini quartz movements with 30% more torque

Pulsing sweep second hand

- ◆ Time only movements with a heavy duty, built-in hanger: designed so the hanger can be removed if not required ◆ Manufacturer's lifetime quarantee
- 2-3/16" wide x 2-3/4" high w/ hanger (2-3/16" high with hanger removed)
 x 5/8" thick
 Uses standard "I" shaft hands
- ◆ Requires one (1) AA battery (not included)

Your choice... \$5.75 each 3+... \$5.50 each 12+... \$5.25 each

#P-2192... 35/64" Handshaft
(14 mm) for dials up to 1/8" thick

#P-2194... 55/64" Handshaft
(22 mm) for dials up to 3/8" thick

#P-2193... 21/32" Handshaft (17 mm) for dials up to 1/4" thick

#P-2195... 1-1/16" Handshaft (27 mm) for dials up to 5/8" thick











SEIKO® HIGH TORQUE "AA" MOVEMENT

...43% more power than conventional AA movements!

- ◆ Compact size: 2-1/8" high x 2-1/8" wide x 5/8" deep
- ◆ Continuous sweep second hand
- ♦ 5/8" centershaft accommodates dials up to 1/4" thick
- Utilizes one "AA" battery (not included) and any of our quartz movement hands (not included)

Please note: Since 2012, Seiko movements have been made in various Asian factories, not in Japan #P-1442... \$9.00 each 12+... \$8.50 each



HIGH TORQUE QUARTZ MOVEMENT

With a step sweep second hand

- ◆ Designed to accommodate larger, heavier hands
- ◆ 2-1/8" high x 2-1/8" wide x 1" depth
- ◆ Operates on one "AA" battery (not included)
- ♦ 7/8" hand shaft with an extended minute hand shaft #P-2089... \$5.25 each 3+... \$5.00 each





QUARTZ CLOCK MOVEMENT COVER

Use to protect outdoor quartz clock movements

- ◆ Can withstand temps 23°F 122°F ◆ Measures 2-3/8" x 2-3/8"
- ◆ For use with select Quartex clock movements

#P-2282... \$1.00 each 3+... \$.90 each 12+...\$.85 each

22... Movements: Quartz

"AA" HIGH TORQUE CONTINUOUS SWEEP MOVEMENT

A compact, quiet-running movement that powers hands 7" or larger!

- ◆ 13/16" long I-shaft for dials up to 5/16" thick (11/32" threaded).
- ◆ Operates on one "AA" battery (not included) ◆ 2-1/8" x 2-1/8" x 5/8"
- Extended hand shaft feature for ease in aligning larger hands

#P-2230... \$13.50 each 3+... \$13.00 each



CONTINUOUS SWEEP HIGH TORQUE MINI QUARTZ MOVEMENT

This high-torque, mini-quartz movement is a time only clock movement with a heavy-duty, built-in hanger, which can be removed. Comes with a manufacturer's lifetime guarantee!

- ◆ Size With Hanger: 2-3/16" (width) x2-3/4" (height) x 5/8" (thick)
- ◆ Size Without Hanger: 2-3/16" (width) x 2-3/16" (height) x 5/8" (thick)
- ♦ Uses Standard "I" Shaft Hands
- ◆ Continuous Sweep Second Hand
- ♦ Extended minute shaft

↑ 1 "AA" Battery Required: not included #P-2294... 35/64" (14mm) handshaft

#P-2295... 21/32" (17mm) handshaft #P-2296... 55/64" (22mm) handshaft

#P-2297... 1-1/16" (27mm) handshaft

Your choice... \$6.50 each 3+... \$6.25 each 12+... \$6.00 each

"C" CELL HIGH TORQUE MOVEMENT

Powerful movement that powers hands 7" to 18" long!

- ♦ 1-1/8" long I-shaft for dials up to 5/8" thick (11/16" threaded)
- ◆ Operates on one "C" battery (not included) ◆ 2-1/8" x 2-3/4" x 1"
- ◆ Extended hand shaft feature for ease in aligning larger hands #P-2231... \$9.25 each 3+... \$9.00 each



HIGH TORQUE "C" CELL MOVEMENT

Now available with or without a pendulum! A full size "C" cell powered movement designed specially for use with today's larger clocks and clock hands. This is the most powerful movement on the market today!

- ◆ Overall size: 2-3/16" wide x 2-3/4" high x 5/8" deep
- Requires one "C" battery (not included)
- ♦ Will fit dials up to 3/8" thick ♦ Pulsing sweep second hand
- Increased spacing between hour and minute hands to accommodate the use of larger hands when necessary. This increased distance will help to prevent hands from binding because it leaves enough room for the counterweights commonly used on large minute hands.

#P-1561... no pendulum capability

\$9.25 each 3+... \$9.00 each 12+... \$8.75 each

#P-1561WP... with pendulum: Includes a 25" adjustable pendulum \$22.75 each 3+... \$22.50 each 12+... \$22.00 each

Extended minute handshaft!



Movements: Quartz ... 23





CONTINUOUS SWEEP HIGH TORQUE "C" CELL MOVEMENT

Now available with a continuous sweep second hand motion! This motion allows the minute hand to operate more smoothly and eliminates the "wiggle" that can be seen when using large hands

- Increased spacing between hour and minute hands to accommodate the use of larger hands when necessary. This increased distance will help to prevent hands from binding because it leaves enough room for the counterweights commonly found on large minute hands.
- ◆ Requires one "C" battery (not included)
- ♦ Will fit dials up to 3/8" thick
- ♦ Uses P2180B or P2180R second hands
- ◆ Overall size: 2-1/8" wide x 2-3/4" high x 1" depth #P-2178... \$19.75 each 3+... \$19.50 each

10" TAPERED CONTINUOUS SWEEP SECOND HAND

Designed and balanced specifically for use with the P-2178 high torque movement!

◆ 10" long from the mounting post to the tip
 ◆ Bold tapered style #P-2180R... Red ...\$4.75 each #P-2180B... Black ...\$4.75 each

MILITARY TIME QUARTZ MOVEMENT

24-hour military time movement!

- ◆ 3/4" handshaft length ◆ For up to 3/16" thick dial
- ◆ 2-3/16" square ◆ Operates on one "AA" battery (not included) #P-706... \$13.50 each



RADIO CONTROLLED QUARTZ MOVEMENT

Accurate to within 1 second per million years!

- ◆ Updated three times a day by the Cesium Atomic clock at Fort Collins, Colorado
- Operates on one "AA" battery (not included)
- ◆ 3-5/8" high x 2-3/16" wide ◆ Calibrates to local time zones
- Each now takes standard "I" shaft hands

#P-1468A... 13/32" handshaft #P-1468B... 3/8" handshaft

#P-1468C... 11/16" handshaft

Your Choice... \$13.00 each



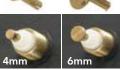
HAND SHAFT CAPS FOR QUARTZ MOVEMENTS

Attaches to your movement's hand shaft to cover the opening on the end when a second hand is not required or a closed hand nut is not desired

◆ Sold in packs of 6 ◆ Choice of two sizes...

#P-2220... 4mm diameter ...\$1.25 pack #P-2221... 6mm diameter ...\$2.25 pack





24... Movements: Quartz



TIDE-ONLY QUARTZ MOVEMENT

Accurately tell the rise and fall of the tide!

- ◆ Uses standard I-shaft hands ◆ 3-3/4" tall x 3" wide x 1-1/4" deep
- → This movement can be used with either 6" or 7-7/8" diameter dials
- Operates on 1 "AA" battery (not included)

#P-2248S... 17/32" handshaft, 3/16" threaded end, for dials up to 1/8" thick

#P-2248M... 5/8" handshaft, 5/16" threaded end,

for dials up to 1/4" thick

Your Choice... \$8.50 ea.

TIDE AND TIME QUARTZ MOVEMENT

This movement tells you the tides as well as time...

- → It can accomodate hands for hours, minutes, seconds and tide
- → This movement can be used with either 6" or 7-7/8" diameter dials
- ◆ Operates on 1 "AA" battery (not included)
- ♦ 2-7/8" tall x 2-1/8" wide x 1" deep

#P-1917S... 5/8" handshaft, 3/16" threaded end, for dials up to 1/8" thick **#P-1917M...** 13/16" handshaft, 5/16" threaded end, for dials up to 1/4" thick

Your Choice... \$11.50 ea.

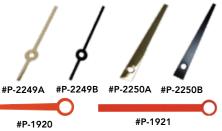
INDICATOR HANDS

For P2248S and P2248M Time and Tide Movements

#P-2249A... 3-5/8" long, Gold #P-2249B... 3-5/8" long, Black #P-2250A... 2-15/16" long, Gold

#P-2250B... 2-15/16" long, Black #P-1920... 1-5/8" long, Red

#P-1921... 3" long, Red



Your Choice... \$1.00 ea.



SEIKO® PRECISION PENDULUM QUARTZ MOVEMENTS

High quality, accurate quartz crystal movements with adjustable pendulums!

- → Designed for trouble-free operation
- ◆ 2-1/4" x 3-1/4" x 7/8" size
- ◆ Runs on a "AA" battery (not included)
- ◆ Optional pulsing second hand
- → Hanger/pendulum included

Please note: Since 2012, Seiko movements have been made in various Asian factories, not in Japan

Your choice of two handshaft lengths...

#P20025... Handshaft 5/8" overall length with 11/32" threaded for dials up to 1/8" thick #P2002XL... Handshaft 1-1/16" overall length w/3/4" threaded for dials up to 5/8" thick Your Choice...\$14.25 each 3+... \$13.75 each 12+... \$13.25 each



QUARTZ TIME-ONLY PENDULUM MOVEMENT

- → Adjustable 16" pendulum included
- → 3" wide x 4" high x 1" deep → Mounting hardware included
- ◆ Uses a standard "AA" battery ◆ Battery and hands not included

Choose from 4 handshaft lengths...

#P-834S...5/8" Handshaft #P-834M...3/4" Handshaft #P-834X... 1" Handshaft #P-834XL... 1-1/4" Handshaft Your Choice ...\$15.00 each 3+...\$14.50 each 12+...\$14.00 each

Movements: Quartz ... 25

QUARTZ CALENDAR MOVEMENT

The 31-day calendar hand on this movement works off the centershaft and functions just like an antique mechanical calendar movement!

- Mounting hardware included
- Use with our 5", 7", 9" or 11" calendar dials
- Separate time and date setting knobs
- Calendar hands available, but not included

#P1854... No pendulum capability

- ◆ Requires one (1) "AA" battery (not included)
- ♦ Accommodates a dial up to 1/4" thick
- ♦ Handshaft: 31/32" overall length with the hand nut in place
- ◆ Square: 2-3/16" overall width x 2-3/16" overall length
- → 13/16" overall depth (excluding handshaft)

\$10.00 each 3+... \$9.00 each

#P1854WP.... With pendulum

- ◆ Requires two (2) "AA" batteries (not included)
- ♦ Handshaft: 7/8" overall length with the hand nut in place
- ◆ 2-3/8" overall width x 5-1/2" overall length
- ◆ Accommodates a dial up to 1/4" thick ◆ 1-1/4" overall depth (excluding handshaft)
- ◆ Pendulum: Length adjustable from 16-1/2" to 4" ◆ Brass finished 2-3/4" dia. bob \$23.00 each 3+... \$22.00 each

#P-1856...

SMALL RED CALENDAR HAND

◆ 4-1/4" from the tip to the center of the centershaft hole ...\$1.00 each

#P-1855...

LARGE RED CALENDAR HAND

◆ 5-1/8" from the tip to the center of the centershaft hole ...\$1.00 each



QUARTZ BIM-BAM STRIKE PENDULUM MOVEMENT

Strikes the hour and half-hour on real chime rods!

- ♦ Includes a 10 -16" adjustable pendulum
- ♦ 7/8" handshaft for dials up to 3/8" thick
- ◆ Requires one standard "D" battery
- Battery and hands are not included
- ◆ 5-3/4" wide x 5-7/8" high x 2-3/16"depth #P-647WP... \$84.00 each 3+ ...\$82.00 each

"C" CELL SUPER HIGH TORQUE

CHIME MOVEMENT WITH OPTIONAL PENDULUM

Powerful movement which plays the full 4x4 Westminster chime melody every 15 minutes and powers hands 7" to 18" long!

- ♦ 7/8" long I-shaft for dials up to 3/8" thick (7/16" threaded)
- ◆ Operates on one "C" battery (not included) ◆ 3" x 3-3/4" x 1-1/4"
- ◆ Extended hand shaft feature for ease in aligning larger hands

#P-2233... \$49.50 each 3+... \$47.50 each





26... Movements: Quartz



SEIKO® QUARTZ 4X4 DOUBLE

CHIME MOVEMENTS With improved sound!

with the sound of a mechanical movement!

- Plays your choice of Westminster or Whittington chimes on the quarter hour
- ◆ Automatic night silence ◆ Volume control switches
- Operates on one "C" battery (not included)
- Removable speakers

#P-1167L... 1-1/8" handshaft without pendulum:

- ◆ 1-1/8" (3/4" threaded) handshaft
 - ♦ 3-1/2" h x 2-3/8" w ♦ Fits dials up to 3/4" thick
- ◆ Thickness: 1-7/16" with speaker attached, 1" detached \$28.00 each 3+... \$27.50 each 12+... \$26.00 each

#P-1167WP... 1-1/8" handshaft with pendulum:

- ♦ 1-1/8" handshaft fits dials up to 3/4" thick
- 4-1/2" high x 3-1/4" w
 Thickness: 1-3/4" with speaker attached, 1-3/8" detached
 \$35.50 each
 3+... \$34.50 each
 12+... \$33.50 each

#P-1167... 11/16" handshaft no pendulum capability:

- → Thickness: 1-7/16" with speaker attached, 1" detached
- ightharpoonup 3-1/2" high x 2-3/8" wide ightharpoonup 11/16" handshaft fits dials up to 5/16" thick

\$28.00 each 3+... \$27.50 each 12+... \$26.00 each

#P-1167WPS... 11/16" handshaft with pendulum:

- lacktriangle 11/16" (3/8" threaded) handshaft fits dials up to 5/16" thick \lacktriangle 4-1/2" high x 3-1/4" wide
- → Thickness: 1-3/4" with speaker attached, 1-3/8" detached

\$35.50 each 3+... \$34.50 each 12+... \$33.50 each

REALISTIC ELECTRONIC 4X4 CHIMING QUARTZ PENDULUM MOVEMENT

The most realistic tubular chime sounding quartz movement yet... utilizes standard

"I" shaft hands!

- ◆ Repositional speaker
- ◆ Requires two "C" batteries: not included
- Choose from Westminster, 4x4 Westminster, 4x4 Ave Maria, or Bim-Bam strike modes!
- ◆ 4x4 strike modes will chime on the quarter hours as well as on the top of the hour. Melodies without the "4x4" will not chime on the quarter hours.
- → "Monitor" button to demonstrate the hourly strike
- ◆ "Select" switch to choose the hourly strike mode
- ◆ Also incorporates a "Volume" control knob, and a "Night Off" (no chimes from 11:00 P.M. to 5:45 A.M.), "24 Hour On" or "Off" (no strike at all) selector
- ◆ Remote mounted speaker delivers a realistic, high quality chime sound
- ♦ Movement: 4-5/8" wide x 4-5/16" high x 1-5/16" thick with a 1/2" handshaft
- → Remote speaker: 3-1/2" wide x 3" high x 1" thick with 12" lead wires
- ◆ Adjustable pendulum length... may also be used without a pendulum if desired #P-2029A... Handshaft length 18 mm (45/64") with 3/8" threaded

...\$58.50 3+ movements... \$57.50 each

#P-2029B... Handshaft length 21.5 mm (27/32") with 1/2" threaded\$58.50 3+ movements... \$57.50 each

#P-2029C... Handshaft length 26.4 mm (1-1/32") with 5/8" threaded

...\$58.50 3+ movements... \$57.50 each





Movements: Quartz...27



MINI QUARTZ "TRIGGER" MOVEMENT

Designed to emit an electronic impulse on the hour to trigger a sound making device

- ◆ A 2-wire unit that is commonly used in novelty clocks that have the sound of a bird, train or other sound on the hour
- ◆ Compact size: 2-1/8" wide x 2-1/8" high x 5/8" thick
- → Includes two 14" wire leads
- ◆ Uses one "AA" battery (not included) ◆ Handshaft: 5/8" long
- ◆ 5/16" of the shaft threaded

#P-2201... \$13.75 each

SET AND FORGET® DAYLIGHT SAVING TIME MOVEMENTS

Automatically adjusts your time backward or forward when Daylight Savings Time occurs! The internal microchip "calendar" is programmed with the date until the year 2030.

- ◆ No radio signal required ◆ 2-7/32" high x 2-7/32" wide x 5/8" deep
- ◆ Incorporates a three-way mode switch: OFF for areas where Daylight Savings Time (DST) is not observed, NEW for the new DST format adopted in March 2007 where DST is extended by approximately one month, and OLD for the old, conventional DST dates in case the government chooses to not extend the new format.
- → "Step pulse" sweep second hand → 5/16" shaft diameter
- → I-shaft hands may be used with these movements

Quartz - requires one "AA" battery (not included)

#P-2014A... with an 11/16" handshaft for dials up to 3/16" thick

\$13.00 each 3+... \$12.50 each 12+...\$12.00 each

#P-2014B... with a 1- 3/16" handshaft for dials up to 3/4" thick

\$13.00 each 3+... \$12.50 each 12+...\$12.00 each

Electric - 6' cord

#P-2015A... with an 11/16" handshaft

\$14.50 each 3+... \$14.00 each 12+...\$13.50 each

#P-2015B... with a 1-3/16" handshaft

\$14.50 each 3+... \$14.00 each 12+...\$13.50 each



SET AND FORGET® WORLD MOVEMENT

Set this unique movement to any time in the world and the Set and Forget® World movement automatically adjusts to compensate for Daylight Savings Time

- ♦ No radio signal required
- → High Torque: can be used with larger I-shaft hands
- Set it once and don't worry about the beginning or ending of Daylight Savings Time
- → 3" high x 2-1/4" wide x 5/8" deep → 5/16" shaft dia.
- → 3/4" handshaft for dials up to 1/4" thick with 5/16" threaded
- → Time regulation module with LCD functions runs for up to 5 years on one standard watch battery (included). Simple to operate: just set the component module for the desired city, then set the year/month/date and time. This unit also has 12 or 24-hour time capability
- → Time unit requires one "AA" battery (not included)

#P-2176... \$25.00 each 3+... \$23.00 each



28... Movements: Quartz/Pendulum

QUARTZ WESTMINSTER-WHITTINGTON CHIME MOVEMENT WITH RECORDABLE CHIMES

Add any sound or the message of your choice! You have got to hear this movement to believe it!

- ◆ 2" speaker for greater sound quality
- ◆ Volume control ◆ Night shut off switch
- → Supplied with a pendulum, but it can be operated without it
- Westminster and Whittington chimes that strike on the hour with an hour count
- Designed with a built-in microphone and a jack to plug into a higher quality microphone
- ◆ Record up to 10 seconds of any sound or a message of your choice.
- ◆ Wire connecting the chime module to the movement: 12"long
- Movement... ♦ 5-1/2" high x 2-3/8" wide x 1-1/4" deep
 - ◆ Overall handshaft length: 13/16" ◆ For dials up to 7/16" thick Chime Module... ◆ 3-1/4" high x 2-7/16" wide x 1-1/2" deep

#P-1891... \$27.00 each 3+... \$26.00 each





BATTERY PENDULUM SWINGING UNIT

The most powerful pendulum swinging unit on the market!

- → The manufacturer guarantees the swinger for up to 1-3/4 lb. pendulums. In our shop tests, it has worked with pendulums weighing up to 3 lbs.
- ◆ Great for small wall clock pendulums, large wall clocks, grandmother and grandfather clocks!
- ◆ Mounts inside your case to simulate a mechanical swinging pendulum... simply screw mount the unit to the inside, back panel of your clock
- "D" Battery and pendulum not included
- ♦ 8-1/4" overall length x 3" overall width ♦ Requires 2-1/4" depth
- #P-1640... \$22.00 each 3+...\$21.50 each 12+...\$21.00 each



200 GRAM PENDULUM DRIVE

Designed to drive longer and/or heavier pendulums: Can be used independently or you can insert a mini quartz movement into the drive's frame.

- ◆ Operates on one "AA" battery (not included)
- ◆ Pendulum not included ◆ 5-5/8" long x 2-5/16" wide x 1-1/4" depth #P-2088... \$7.50 each 3+... \$7.25 each

ANNIVERSARY CLOCK ROTARY PENDULUM DRIVE

- ◆ Combine this drive with any quartz movement to create a 400-day (anniversary) clock or a clock of your own unique design
- ◆ The lower drive mechanism supports and animates the rotary pendulum
- ◆ Operates on 1 "AA" battery (not included)
- → This drives only the rotary pendulum: it does not provide a time function
- **#P-1923...** 3-3/4" high x 2-3/4" wide
- **#P-2327...** 4-1/8" high x 3-3/8" wide







#P-1923 \$13.75 ea.

Movements: Electric/Motors...29

MINI ELECTRIC MOVEMENT

Use to convert your mechanical or battery movement to a plug-in electric movement...

◆ 2-3/16" square ◆ 5 foot cord **#P-2317...** 3/4" handshaft #P-2318... 1-1/4" handshaft

Your choice... \$14.50 each





HI-TORQUE ELECTRIC MOVEMENT

43% more power than conventional AA movements

- ◆ Compact size: 2-1/8" high x 2-1/8" wide x 5/8" deep
- ◆ Continuous sweep second hand
- ♦ 5/8" centershaft accomodates dials up to 1/4" thick #P-2319... \$20.50 each

SPARTUS® MODEL #58 ELECTRIC STRIKING PENDULUM MOVEMENT

- ♦ 120V, 60 Hz
- ◆ Accessories, including pendulum, are not available
- ◆ Has the capability to be used with a pendulum #P-1276 ... \$2.00 each 3+... \$1.50 each



FLEXIBLE FIT-UP MOUNTING RINGS

Flexible mounting ring for replacement fit-up movements... also great for adapting fit-ups to slightly oversized clock movement openings

◆ Clear Rubber ◆ 2-1/4" unexpanded outside diameter #P-1965... Your choice...\$1.25 each 12+... \$1.00 each

FLEXIBLE ADHESIVE MOVEMENT MOUNTING PAD

Fasten your battery movement in place quickly and securely: No more fooling around with double-sided tape!

- ◆ Peel the protective films off of the 1/16" thick preshaped adhesive pad and securely attach your movement to a case or dial
- ♦ Holds movements securely in position and prevents unwanted rotation
- ♦ 1-7/8" x 1-7/8" with a 7/16" center hole for your handshaft

#P-2210... Pack of 3 ...\$2.50



HANSEN #A-43RA "SYNCHRON" MOTOR

◆ 1 RPM ◆ 60CC ◆ Complete with a 10-tooth pinion

#P-660... \$39.50 each 3+... \$38.50 each

"GOLDEN HOUR" REPLACEMENT MOTOR

Supplied complete with a 27-tooth gear! #P-748... \$52.00 each

3+... \$50.00 each



30... Movements: Motors/Mechanical

HANSEN ELECTRIC MOVEMENTS

- ◆ 3-1/4" high x 2-1/4" wide x 1-15/16" deep
- ♦ No hands available

Rear Set Bottom Set

Movements... Movements...

#P-662...5/8" handshaft #P-661...5/8" handshaft #P-664...7/8" handshaft #P-663...7/8" handshaft

Your Choice... \$40.25 each 3+... \$39.25 each



#P-1830A... 3" stem \$6.00 each





REPLACEMENTS FOR TELECHRON "B" TYPE ROTOR ASSEMBLIES

This simplex motor will replace the entire field, coil, and rotor assembly

- ◆ 1RPM ◆ Clockwise direction ◆ 60 cycles
- Easy to mount: uses the same 3-position, in-line mounting pattern as Telechron assemblies
- ◆ Nonreversible ◆ 20 times more torque than a rotor #P-1492... \$47.00 each 3+...\$46.00 each

REPLACEMENT MOTOR

for timing devices, barographs, and other mechanisms

♦ 60 RPM ♦ Runs in a counter clockwise direction

#P-1732... \$34.00 each 3+...\$33.00 each



GOVERNOR FOR MUSIC BOXES OR MUSICAL CUCKOO MOVEMENTS...

For 22 and 28-tooth units:

Please note: this item was redesigned by our supplier with a round mounting hole. This hole can be filed into a slot for additional mounting configurations.

↑ 7 tooth pinion #P-1264... \$26.00 each 5+... \$25.00 each

MUSICAL CUCKOO MOVEMENT...

A musical movement for cuckoo clocks complete with a chain wheel and Black Forest figure

- Mounted on a board
- Requires chain (#S-88) and one 420 gram weight (#P-171.420): these are not included with this mechanism
- ♦ 22 tooth chain wheel #P-513... \$82.00



ALARM MECHANISM

An exact copy of the original used in kitchen and mantel clocks

#P-378... Complete unit with spring-driven mechanism, center piece, and trip arm ...\$15.50

#P-378A... Center Piece only with trip arm ...\$3.25



Movements: Mechanical ... 31

Cuckoo movement pendulum length is measured from the point of suspension to the middle of the pendulum bob

Due to the rapid fluctuation of the EURO, please call or visit our website for current prices

HUBERT HERR® CUCKOO MOVEMENTS

Manufactured by the only German cuckoo clock factory still making their own movements!

- Each movement is complete with a bird rod, chains, stop rings, weight hooks, and a hand nut
- Weights are not included

#P-1122... 1-Day Movement

- ◆ Plates: 2-5/8" wide x 2-7/16" high ◆ Uses S32 chain
- ◆ Requires two 275 gram weights ◆ 28cm pendulum length \$Call 2 for \$Call

#P-1123... 8-Day Movement

- ◆ **Plates:** 3-5/16" wide x 3-1/2" high ◆ Uses S83 chain
- ◆ Requires two 1500 gram weights ◆ 29cm pendulum length

\$Call 2 for \$Call



REGULA® CUCKOO MOVEMENTS

These movements will replace many cuckoo movements made within the last 25 years!

- ◆ Each movement is complete with a bird rod, chains, stop rings, weight hooks, and a hand nut
- ♦ Weights are not included

#P-626 Series 1-Day Movements

- ◆ Plates: 3-13/16" wide x 2-13/16" high ◆ Uses S88 Chain
- ◆ Requires two 320 gram weights

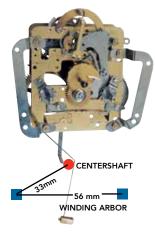
#P-626.19... Short length: 19 cm (7-1/2") \$Call 2 for \$Call #P-626.23... Medium length: 23 cm (9") \$Call 2 for \$Call

#P-627 Series 8-Day Movements

- ◆ Plates: 3-3/16" wide x 2-15/16" high ◆ Uses S86 chain
- ◆ Requires two 1260 gram weights

#P-627.19... Short length: 19 cm (7-1/2") \$Call 2 for \$Call #P-627.23... Medium length: 23 cm (9") \$Call 2 for \$Call #P-627.28... Long length: 28 cm (11") \$Call 2 for \$Call





HERMLE® 14-DAY TIME & STRIKE MOVEMENT

(#141-020/32)

A high quality Hermle® front wind movement with a 9" pendulum length perfect for kitchen clocks and other short drop mantel clocks!

- ♦ 3" depth including the 1-3/8" handshaft
- ♦ 32 cm. pendulum drop
- ♦ 9" pendulum length from the handshaft to the bottom of the rating assembly

#P-1571M... Movement only ...\$Call 3+...\$Call



32... Movements: Mechanical

Due to the rapid fluctuation of the EURO, please call or visit our website for current prices

HERMLE® 8-DAY BIM-BAM MOVEMENT

(Hermle #130-020)

- ♦ 3 bottom hammers
 ♦ Front mount ears
- ♦ Hour and 1/2 hour strike
 ♦ Hairspring balance
- ◆ Handshaft length: 13/16" ◆ Key wound

#P-1885M... Movement only

\$Call 3+... \$Call

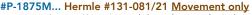
#P-1885C... Movement complete with hands, key, and chime assembly \$Call 3+... \$Call





HERMLE BELL-STRIKE MOVEMENTS (Hermle #131-081)

- ♦ Great for small wall or shelf clocks
- Bim-bam strike on double bells
- ◆ Quality German workmanship by Hermle, complete with bronze bushings
- Pendulum Length: 5-1/2" from the centershaft to the center of the bob



♦ 8-1/4" (21cm) pendulum drop and top hammers

...\$Call 3+...\$Call

#P-1875C... Hermle #131-081/21 Movement complete with hands, key, and pendulum ...\$Call 3+...\$Call



HERMLE® TIME & STRIKE BELL STRIKE MOVEMENT

(Hermle® #241-080.94) A value priced, chain-driven =

8-day movement from Germany!

- ♦ Works great in Shaker-style and narrow waisted clocks
- Minimum width for case swing: 9"
- Minimum case depth required: 4-1/2"
- ◆ Plates: 3-3/8" wide x 4" high
- ◆ Pendulum length: 34-1/2" from the centershaft to the bottom of the pendulum
- ♦ Includes two steel weights (4.7 lbs. ea.) and brass shells
- #P-1539M... Movement only... ...\$Call 3+...\$Call



-

2-WEIGHT VIENNA REGULATOR **MOVEMENT** (HERMLE ® #241-840.75)

A quality 8-day weight driven movement for

Vienna and other regulators

- ◆ Complete with cable, brass pulleys, weights with brass shells, coil gong, hands, key, pendulum, a 7" diameter brass-trimmed enameled dial (with a 6" chapter ring) and beat scale
- ◆ Pendulum Length: 28" from the centershaft to the bottom of the rating assembly
- → Minimum Case Width: 8" for pendulum swing
- Minimum Case Depth: Back mounted movement bracket adjusts from 3-3/4" to 4-1/4"
- Strike: Hour and half hour on a coil gong

#P-1515A... with a wood stick pendulum ...\$Call

#P-1515B... with a #P-1547 lyre pendulum ...\$Call

Movements: Mechanical...33

Due to the rapid fluctuation of the EURO, please call or visit out website for current prices



HERMLE® ZAANDAM-TYPE MOVEMENT (Hermle #261-080A)

- → 31 cm pendulum length → 90 mm mounting depth
- ◆ Long top hammer ◆ Plates: 87 mm x 87 mm
- ♦ Complete with chain, mounting plate and screws
- 8-day weight-driven movement with 1/2 hour strike and a deadbeat escapement

#P-1989M... \$Call 3+... \$Call

HERMLE® 8-DAY WESTMINSTER CHIME MOVEMENTS*

with HAIRSPRING BALANCE (Hermle #340-020)
Top quality German-made movement for use as replacements or in new cases!

- → Hairspring Balance Model → Handshaft: 3/4"
- Front-mount movement with striking hammers below the movement
- ◆ Overall Size: 6" high x 5" wide x 3-1/2" diameter
- #P-726M... Movement Only ...\$Call 3+...\$Call
- #P-726C... Movement complete with hands, key, and a five-rod chime assembly ...\$Call 3+...\$Call

with PENDULUM (Hermle #341-020)

A front mount movement with striking hammers below the movement for regulators and wall clocks

- → Handshaft: 3/4" → Plates: 100mm x 100mm
- ◆ Brass rod pendulum is complete with a hanger, rating assembly, and a 3-3/16" brass bob

Hermle #341-020/11

#P-727M... Movement only ...\$Call 3+...\$Call #P-727C... Movement complete with pendulum, hands, key, and a five-rod chime assembly ...\$Call 3+...\$Call

Hermle #341-020/35

#P-1648M ... Movement only ...\$Call 3+...\$Call
◆ Pendulum Length: 11-1/2" from the centershaft to the bottom of the rating assembly ...\$Call 3+...\$Call
#P-1648C... Movement complete with pendulum, hands, key, and a five-rod chime assembly ...\$Call 3+...\$Call

CENTERSHAFT 437mm 83mm 25mm WINDING ARBOR





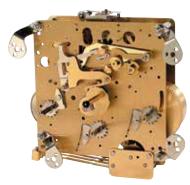
Hermle #341-020/45

#P-1022M... Movement only: ◆ Pendulum Length: 14"
from the centershaft to the bottom of the rating assembly ...\$Call 3+...\$Call
#P-1022C... Movement complete with pendulum, hands,
key, and a five-rod chime assembly ...\$Call 3+...\$Call

^{*} Movement apperance may differ from picture shown

34... Movements: Mechanical

Due to the rapid fluctuation of the EURO, please call or visit our website for current prices



with BALANCE WHEEL (Hermle #350-020)

- ◆ Bottom hammers ◆ Westminster strike
- → Floating balance → Handshaft length: 11/16"
- ♦ Key wound

#P-1886M... Movement only \$Call 3+... \$Call #P-1886C... Movement complete with

hands, key, and chime assembly





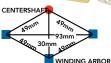
with a HAIRSPRING BALANCE (Hermle #350-060) Front-mount movement with rear mounted striking hammers: perfect for mantels and other clocks when rear chimes are required

♦ Handshaft: 3/4" ♦ Overall Size: 120mm x 120mm

#P-1021M... Movement Only ...\$Call 3+...\$Call #P-1021C... Movement complete with hands, key, and chime unit ...\$Call 3+...\$Call







HERMLE 8-DAY TRIPLE CHIME MOVEMENTS

with HAIRSPRING BALANCE (Hermle #1050-020) With a three melody option: choose from Westminster, Whittington, or St. Michael's

- Handshaft: 3/4"
- ◆ Overall size: 6-1/2"h x 5"w x 4"d
- → Hairspring balance wheel escapement
- ◆ Front mount with bottom mounted hammers

#P-728M... Movement Only ...\$Call 3+...\$Call #P-728C... Movement complete with hands, key, and an eight-rod chime assembly ...\$Call 3+...\$Call

with PENDULUM (Hermle #1051-020.45)

- ♦ With bottom hammers
- ♦ Graham (deadbeat) escapement
- Triple chime: St. Michael's, Whittington and Westminster strike
- ◆ 45 cm pendulum drop ◆ Handshaft length: 7/8"
- ★ Key wound #P-1887M... Movement only



#P-1887C...
Movement complete
with pendulum, hands, key,
and chime assembly
...\$Call 3+...\$Call

...\$Call 3+... \$Call



Movements: Mechanical ...35

Due to the rapid fluctuation of the EURO, please call or visit our website for current prices

MOVING MOON DIALS

...for the #P-1036 and #P-1882 Movements

◆ Raised corner spandrels and numerals

♦ Brass finished

#P-1036D... ♦ 9-27/32" wide x 13-7/8" high

→ 7-7/8" brass finished chapter ring ...\$67.50 each

#P-1584...Larger size → 11" wide x 15-1/2" high

→ 9-1/2" brass finished chapter ring ... \$75.00 each

#P-1882D... With longer posts for the Hermle #P-1882 Movement with a 2" handshaft

→ Fits Hermle movement #451-053 → Brass finished → 9-7/8" wide x 13-7/8" high

◆ 7-13/16" brass finished chapter ring, raised corner spandrels and numerals\$67.50 each



HERMLE® GRANDMOTHER SIZE WESTMINSTER CHIME MOVEMENTS Available in 2 HANDSHAFT LENGTHS!

Specifications: ◆ Graham Escapement

♦ Plate size: 4-23/32" h x 4-23/32"w x 1/16" thick

♦ Weights: (1) 6.6 lbs. (2) 4.7 lbs.

Case Requirements:

 Minimum Width: 10" for wood stick pendulum swing; 12-1/2" for a lyre pendulum

 Pendulum Length: 34-1/2" with a wood stick pendulum; 37-1/2" with a lyre pendulum (centershaft to the bottom of the rating assembly)

 Minimum height for 8-day operation: 38-1/2" from the bottom of the seatboard to the base

#P-1036M (Hermle #451-050.94)...

Movement only: 1-1/4" handshaft...

 Minimum depth: from the dial to the backboard with rear mount hammers: 5-1/2"

♦ Handshaft Length: 1-1/4" ...\$Call 3+...\$Call

#P-1036C... Movement with all accessories* and a wood stick pendulum

...\$Call 3+...\$Call

#P-1036CWL... Movement with all accessories* and a #P-1007 brass lyre pendulum ...\$Call 3+...\$Call

#P-1882M (Hermle #451-053.94)...

Movement only: 2" handshaft... → Minimum depth: from the dial to the backboard with rear mount hammers: 6-1/2" → Handshaft Length: 2"

...\$Call 3+...\$Call

#P-1882C... Movement with all accessories* and a wood stick pendulum ...\$Call 3+...\$Call

#P-1882CWL... Movement with all accessories* and a

#P-1007 brass lyre pendulum ...\$Call 3+...\$Call

*Accessories: 8 rod gong set, mounting hardware, chains, hands and brass-shelled weights



36... Movements: Mechanical

Due to the rapid fluctuation of the EURO, please call or visit our website for current prices

HERMLE® GRANDMOTHER SIZE WESTMINSTER CHIME MOVEMENTS





Specifications: ◆ Rear mount hammers

- ◆ Plate size: 4-23/32" high x 4-23/32" wide x 1/16" thick
- ♦ Weights: (1) 6.6 lbs. (2) 4.7 lbs.
- ◆ Graham Escapement
- Handshaft lengths: 1-1/4" (Hermle #451-050.85)
 or 2" (Hermle #451-053.85)

Case Requirements:

- Minimum Width: 10" for wood stick pendulum swing; 12-1/2" for a lyre pendulum
- Pendulum Length: (centershaft to the bottom of the rating assembly)
 ...29-1/2" with a wood stick pendulum, or
 ...33-1/2" with a lyre pendulum
 (our #P-1557 pendulum)
- Minimum height for 8-day operation: 38-1/2" from the bottom of the seatboard to the base
- ♦ Minimum depth: from the dial to the backboard: 5-1/2"

#P-1928M** (Hermle #451-050.85) 1-1/4" handshaft...

Movement only: ...\$Call 3+...\$Call

#P-1928C**... Movement with all accessories* and a wood stick pendulum

...\$Call 3+...\$Call

#P-1928CWL**... Movement with all accessories* and a #P-1557 brass lyre pendulum ...\$Call 3+...\$Call

#P-1997M*** (Hermle #451-053.85) 2" Handshaft...

Movement only: ...\$Call 3+...\$Call

#P-1997C***... Movement with all accessories* and a wood stick pendulum ...\$Call 3+...\$Call

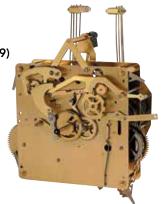
#P-1997CWL***.... Movement with all accessories* and a #P-1557 brass lyre pendulum ...\$Call 3+...\$Call

- * Accessories: 8 rod gong set, mounting hardware, chains, hands and brass-shelled weights
- ** Uses a #P-1036D or #P-1584 dial (page 35)
- *** Uses a #P-1882D dial (page 35)

URGOS® 8-DAY WESTMINSTER CHIME MOVEMENT (Urgos #32-319)

- → Replaces UW32/1 movement
- ◆ Chain driven
- ♦ Westminster strike
- → 32-1/2" pendulum drop (80 CM)
- → Handshaft length: 7/8"
- ◆ Back hammers
- Movement only with chain and hands, but no other accessories

#P-1884... \$Call 3+... \$Call



Movements: Mechanical ... 37

AMERICAN-MADE 8-DAY BELL STRIKE TALL **CLOCK MOVEMENT**



...An expertly crafted American-made copy of an old American/English-style tall clock movement. Use in your new case to achieve an authentic antique look and sound, or use it as a replacement in an antique case!

- ♦ 8-day cable-driven operation with the hour strike on a cast brass bell
- ♦ Seconds beat pendulum
 ♦ Heavy cut gears
- ◆ Plate Size: 5" wide x 6-1/2" high x 3/64" thick
- ♦ Min. case depth: 7" ♦ Pendulum Swing: 10"
- ◆ Pendulum Drop: 45-43/64" from the centershaft to the bottom of the rating assembly

#P-53... Movement only ...\$995.00

#P-54... Movement complete with accessories: Pendulum, cast iron weights, cable, pulleys, brass bell, bell stand, winder, and seat board hooks. (Dial and hands are not included)

...\$1095.00

UNPAINTED STEEL DIALS AND DIAL PLATES FOR TALL

CLOCKS ... Fits our #P-53 movement and many antique American

& English movements

American made!

Moon Phase / Date Wheel Dials...

High quality...matches the antique originals in every detail!

♦ Mounting posts included

#P-53.12D... 12" wide x 17" high

♦ Includes a moving moon disk with a date wheel \$225.00

#P-53.13D...13-1/4" wide x 18-7/8" high

♦ Includes a moving moon disk with a date wheel \$225.00

Dials with Date Wheel, but No Moon phase... #P-53.12PD... 12" wide x 17" high (not shown)

♦ with a date wheel and a solid top: no moon disk and no moon disk opening \$105.00

#P-53.13PD... 13-1/4" wide x 18-7/8" high (not shown)

with a date wheel and a solid top: no moon disk and no moon disk opening \$105.00

Dial Plate... ♦ A flat dial plate ready to paint!

- Drilled for center shaft only
- Does not include mounting posts

#P-1322...12" wide x 17" high....... \$20.00

#P-1323...13-1/4" x 18-7/8" high...... \$21.50

STEEL DIAL POSTS FOR TALL CASE DIALS...

These posts fit our P-53 movement or can be custom turned to fit all American and English tall clocks #P-1730... \$19.50 Set of 4



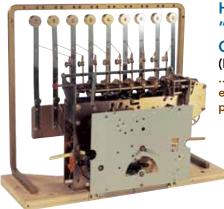
#P-53.12D

#P-53.13D



38... Movements: Mechanical

Due to the rapid fluctuation of the EURO, please call or visit our website for current prices



SECOND

2-3/16" CENTERSHAFT

35 mm

53 mm

156 mm

81 mm

HAND SHAFT

HERMLE CABLE-DRIVEN "FLAGSHIP" 9-TUBE TRIPLE CHIME MOVEMENT

(Hermle #1171-890)

...plays your choice of three tunes, each exquisitely struck on nine polished brass tubes!

- → Your choice of St. Michael's, Whittington, and Westminster chimes
- Many built-in features: Automatic night shut-off, direct drive second hand
- 9 attractive brass tubes complemented by polished brass weight shells and a lyre pendulum with a 10-5/8" polished brass pendulum bob

Case Requirements & Specifications:

- ◆ Minimum depth: 8-5/8" from the dial to the backboard
- → Minimum width: 16-7/8" for pendulum swing
- Minimum height for 8-day operation: 61-1/2" from the bottom of the seat board to the base
- winding + Plate size: 8-5/8" wide x 6" high x 3/32" thick ARBOR + Overall size: 14-1/8" wide x 12" high x 9" deep
 - ◆ Chime tubes: Longest-59-5/8" Shortest-38"
- ◆ Seatboard (included): 15-3/4" long x 7-1/16" wide x 13/16" thick
- ♦ Weights: (1) 18.5 lbs. (2) 7.7 lbs., each 11" long x 2-3/8" diameter

Now available in two pendulum lengths...

#P-1124M... Hermle #1171-890/94: 39-1/2" Movement only (Measured from the centershaft to the bottom of the rating assembly) movement with seatboard and tube frame only ...\$Call

#P-1124C... Movement complete with accessories* including a polished brass tube set ...\$Call

#P-1374M... Hermle #1171-890/114: 45-3/4"

Movement only (Measured from the centershaft to the bottom of the rating assembly), with seat board and tube frame only ...\$Call

#P-1374C... Movement complete with accessories* including a polished brass tube set ...\$Call



* Accessories: Includes 9-tube brass chime set, weights, hands, pulleys, lyre pendulum (#P-1043 with the 39-1/2" movement and #P-961 with the 45-3/4" movement), winder, and pre-installed cables

MOVING MOON DIAL for the #P-1039, #P-1124, #P-1373, and #P-1374 Movements

- Brass finished with raised brass numerals, spandrels, centerpiece, blue and gold moon disk
- → 11" wide x 15-9/32" high
- ♦ 9-1/2" brass finished chapter ring
- ◆ Seconds bit #P-1039D... \$127.00 3+...\$123.00

Movements: Mechanical ...39

Due to the rapid fluctuation of the EURO, please call or visit our website for current prices

HERMLE CABLE-DRIVEN TRIPLE CHIME GRANDFATHER

MOVEMENT (Hermle Movement #1161-853)

...plays your choice of Westminster, Whittington, or St. Michael's on a 12-rod chime



- Now with a second hand!
- ◆ Large brass lyre pendulum with an 8-5/8" diameter brass bob
- Polished brass weight shells
- ◆ Automatic night shut-off

Specifications:

- ◆ Plate size: 7-7/8" w x 5-1/2" h x
- 1/16" thick ♦ Weights: (1) 9.9 lbs. (2) 7.7 lbs., each 11" long x 2-3/8" diameter
- ◆ Graham Escapement

Case Requirements:

- ♦ Minimum depth: 8-3/8" from the dial to the backboard
- ♦ Minimum Width: 15-3/8" for pendulum swing
- ♦ Minimum height for 8-day operation: 39-1/2" from the bottom of the seatboard to the base

Now available in two pendulum lengths...

#P-1038M... Hermle #1161-853/94 Movement only

→ 39-1/2" Pendulum length from the centershaft to the bottom of the rating assembly

#P-1038C... Movement complete with accessories: Weights, #P-1008 pendulum, hands, installed cable, winder, chime rod assembly, and mounting hardware

CENTERSHAFT 143 mm Z5 _{mm} WINDING 42 mm ARBOR

34 mm

SECOND

2-1/8"

HAND SHAFT

... \$Call #P-1883M... Hermle # 1161-853/114 Movement only

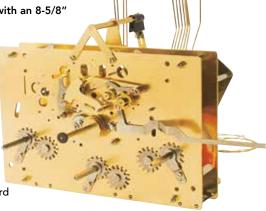
- ◆ 45-3/4" Pendulum length from the centershaft to the bottom of the rating assembly ... \$Call
- #P-1883C... Movement complete with accessories: Weights, #P-1894 pendulum, hands, installed cable, winder, chime rod assembly, and mounting hardware ... \$Call

MOVING MOON DIAL for the #P-1038 and P-1883 movements and other Hermle movements with a #1161 prefix ... now with a seconds bit!

- Brass finished with a 9-1/2" diameter silvered chapter ring and dial center
- Plastic corner spandrels
- Raised brass numerals
- ♦ 11" wide x 15-19/32" high

#P-1038D... \$84.00 each





40... Movements: Mechanical

Due to the rapid fluctuation of the EURO, please call or visit our website for current prices

HERMLE CABLE-DRIVEN "FLAGSHIP" TRIPLE CHIME MOVEMENT (Hermle Movement #1171-850)

...plays your choice of three tunes on the guarter hours!

- → Your choice of St. Michael's, Whittington, and Westminster chimes
- Many built-in features: Automatic night shut-off, direct drive second hand

 Polished brass weight shells and a lyre pendulum with a 10-5/8" polished brass pendulum bob

Specifications:

- Plate size:
 - 8-5/8" w x 6" h x 3/32" thick
- ◆ Weights: (1) 9.9 lbs. (2) 7.7 lbs., each 11" long x 2-3/8" diameter

Case Requirements:

- Minimum depth: 9" from the dial to the backboard
- Minimum Width: 16-7/8" for pendulum swing
- Minimum height for 8-day operation: 61" from the bottom of the seatboard to the base



Available in two pendulum lengths...

#P-1039M... Hermle #1171-850/94 Movement only:

→ 39-1/2" from the centershaft to the bottom of the rating assembly ...\$Call

#P-1039C... Movement complete with accessories* including a lyre pendulum (#P-1043)



SECOND

HAND SHAFT

- #P-1373M... Hermle #1171-850/114 Movement only: ◆ 45-3/4" from the centershaft to the bottom of the rating assembly ...\$Call
- #P-1373C... Movement complete with accessories* including a lyre pendulum (#P-961) ...\$Call
 - → Flagship Accessories: Includes chime assembly, weights, hands, pulleys, 10-1/2" lyre pendulum, winder, mounting hardware and pre-installed cables

LOW ARCH MOON DIAL

- ◆ For the Hermle #1151 and #451 Series Hermle Triple Chime movements
- ◆ Slotted for chime selection on the 1151 or the chime/silent lever on the 451
- → 13" high x 9 7/8" wide → Blue/gold moon disk → Silvered chapter ring
- ♦ This is a SOLID BRASS dial.. not an aluminum look-alike!

#P-1489... \$35.00 each



Movements: Mechanical ...41

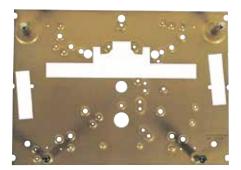
Due to the rapid fluctuation of the EURO, please call or visit our website for current prices

MOVING MOON DIAL for the #P-1039, #P-1124, #P-1373 and

#P-1374 Movements

- Brass finished with raised brass numerals, spandrels, centerpiece, blue and gold moon disk
- + 11" wide x 15-9/32" high
- ◆ 9-1/2" brass finished chapter ring ◆ Seconds bit #P-1039D... \$127.00 ea. 3+... \$123.00 ea.





KEINNINGER FALSE PLATE

- ...Use this plate to mount a Kienninger Bell Strike Movement to virtually any dial!
- ◆ Complete with four mounting studs

#P-1344... \$27.00 each



HERMLE® "MARINER" DIAL

Use with the #P-1587 false plate to replace your old "Royal Mariner" movement with our the 132-071 Hermle® Ship's Bell Strike Movement

- → Painted white with black numerals and a 4-3/4" chapter ring
- Predrilled for the winding arbors, centershaft,
 +/- lever and silencing lever
- ◆ 5-5/8" overall dial diameter #P-1588... \$9.00 each

HERMLE® FALSE PLATE

Adapts the Hermle® #130, #131, and #132 series movements to your old Royal Mariner case or any other style case

- Mounting studs are pre-attached!
- ♦ 5-5/8" diameter pre-drilled plate

#P-1587... \$14.50 each



42...Bezels

American-Made BEZEL & DIAL PAN ASSEMBLY





- ◆ With an attached latch and hinge
- → Glass retaining tabs require soldering
- ◆ Complete with everything except glass #P-125....8-7/8" for 7" dials......\$41.50 #P-124....10-7/8" for 9" dials.....\$44.50 #P-282....12-5/8" for 11" dials...\$55.50 #P-123....13-1/8" for 11" dials...\$55.50

SOLID BRASS American-Made BEZELS #P-60A 2-3/4"\$14.25 #P-60L 6-1/2"\$17.50 #P-60M 8-5/8"\$19.50 3-1/8"\$14.25 #P-60C #P-60D 4"\$14.75 #P-60N 8-7/8"\$19.50 4-1/2"\$14.75 #P-60E #P-60P 10-1/2" \$22.00 #P-60F 5"\$15.50 #P-60Q 10-7/8"\$22.00 #P-60G 5-1/4"\$15.50 12-5/8" **\$29.00** 13 1/8" **\$29.00** #P-60R #P-60H 5-1/2"\$15.50 #P-60W 5-5/8"\$15.50 #P-60S ◆ Complete with unattached 5-3/4"**\$15.50** #P-60J glass tabs, latch blank, and hinge #P-60K 6"\$17.50 Glass not included!

SOLID BRASS BEZELS WITH FLAT GLASS Completely assembled...

Completely assembled with installed glass... with the hinge and a flat glass soldered in place

#P-1894 -1/2" diameter #P-2835" diameter #P-1905-1/8" diameter #P-1010....5-1/4" diameter #P-1915-1/2" diameter #P-1925-5/8" diameter #P-1935-3/4" diameter #P-1946" diameter #P-1956-1/4" diameter #P-1966-3/8" diameter

#P-1976-1/2" diameter

soldered in place Ready to install on your clock!



Your Choice... \$19.75 each



CAST BRASS BANJO BEZEL

- ◆ Solid cast brass with a polished finish
- ♦ Attached solid brass hinge, glass tabs and knob
- ♦ 8-5/16" outside diameter
- ◆ Accepts a 7-1/4" diameter glass

#P-2018... \$55.00 Glass not included!

Glass not included!

BANJO BEZELS Reproduced from an original design, these bezels will fit the large spring-driven banjos produced by Ingraham, New Haven, and others

Solid brass, complete with <u>unattached</u> glass tabs, latch blank, and hinge

#P-60T ...7" diameter #P-60U ...7-1/2" diameter Your Choice ... \$19.50

20-PIECE BRASS GLASS TAB ASSORTMENT

A useful assortment... just what you need to secure glass in a brass bezel! #P-1518... \$3.50 assortment





BEZEL LATCH

No soldering required! Installs on one of our bezels in a matter of minutes. #P-242 ...\$3.00 each 6 for \$15.00

Dial Pans/Dials...43

KITCHEN CLOCK DIAL PANS

#P-336 ...

- ♦ 6-3/8" diameter for a 5" dial with a small center hole
- ◆ Solid Brass
 ...\$17.00 ea.

#P-391 ...with a scalloped alarm opening

- ♦ 6-3/8" diameter for a 5" dial
- ♦ Brass plated ...\$14.50



AMERICAN-MADE BRASS PLATED DIAL PANS

r	
	#P-61A4-3/4" for 4" dials \$11.50
	#P-61B5" for 4" dials
	#P-61C5-1/4" for 4-1/2" dials \$11.50
	#P-61D5-1/2" for 4-1/2" dials \$11.50
	#P-61E5-3/4" for 5" dials \$11.50
	#P-61F6" for 5" dials
	#P-61G6-3/8" for Kitchen Clocks with 5" dials
	\$14.00
	#P-61M8-5/8" for 7" dials \$17.50
	#P-61J10-7/8" for 9" dials \$18.75
	#P-61K12-5/8" for 11" dials \$20.00
	#P-61L13-1/8" for 11" dials \$20.00



- Brass finished metal dial with a silver finished chapter ring surrounding a decorative etched center
- ◆ Embossed Roman numerals
- → 7-1/2" wide x 10-3/8" high #P-1469... \$30.50



BRASS GLASS RETAINING

RING 12-3/8" diameter ring used to retain the top glass on Seth Thomas #2 and other regulators #P-205 ...\$29.50

BEZEL/DIAL/CONVEX GLASS

COMBOS for quartz movements...

Complete with a steel mounting plate.
 Simply screw the predrilled plate to your clock to mount the dial.

- After installation of the movement and hands, the bezel and glass securely snap into place!
- ◆ Real convex glass....NOT plastic!

#P-1946A... ARABIC ◆ Overall dia.: 6-1/4" ◆ Chapter ring: 5-3/8"

#P-1946R... ROMAN → Overall dia.: 6-1/4" → Chapter ring: 5-3/8"

Your choice \$23.75 each 3+... \$22.75 each

#P-1947A... ARABIC → Overall dia.: 7-7/8" → Chapter ring: 7-1/16" **#P-1947R... ROMAN** → Overall dia.: 7-7/8" → Chapter ring: 7-1/16"

Your choice \$29.50 each 3+... \$28.50 ea.





44... Dials



BLACK MANTEL BEZEL & DIAL COMBO

Copied exclusively for Merritt's from an antique original, this assembly will fit 90% of the existing Black Mantel clocks



...#P-791A

#P-791D...

♦ White dial with an embossed dial and pan assembly
 ♦ 5-5/8" diameter dial pan complete with an installed hinge, bezel and glass tabs

♦ 4" chapter ring ♦ It uses a 5-1/2" diameter glass: not included

#P-791A... Bright finish

#P-791D... Antique finish

Your Choice....\$19.50 ea. 3+...\$18.00 each 12+...\$17.00 each

#P-791G... 5-1/2" flat glass.... \$3.25

GENUINE PORCELAIN DIAL & CENTERS FOR ANSONIA CLOCKS

Exact two-piece copy fired on copper just like the antique originals: complete with the Ansonia logo

#P-1532... 4-3/4" dia. white with Arabic numerals

\$29.00 ea. 2 for \$50.00





TIME AND TIDE DIALS

Painted on sturdy aluminum, each dial incorporates time on the outer ring and tide increments in the center

◆ White with black numerals Available in two dial diameters:

#P-1918... 6" diameter dial ...\$3.50 each #P-1919... 7-7/8" diameter dial ...\$3.75 each

ALUMINUM DIAL

Finished with the look of black marble 4-1/2" diameter #P-2177... \$6.00



Dials ...45







#P-930

#P-943

#P-944



BRASS FINISHED BRACKET CLOCK DIALS

Available with Arabic or Roman numerals and contrasting corner spandrels!

#P-930... ♦ 6" dia. chapter ring ♦ 7-7/8" x 7-7/8"

♦ Arabic numerals ...\$25.50 each
#P-944... ♦ 6" dia. chapter ring ♦

Arabic numerals ...\$15.75 each

#P-1176... → 6" dia. chapter ring → 7-1/4" x 7-1/4"

◆ Arabic numerals ...\$9.00 each

ALUMINUM DIALS Choose from two antique finishes in two sizes

#P-2202... 4-1/2"- Arabic numerals with a light antique finish ◆ 4" dia. chapter ring ...\$5.50

#P-2215... 6"- Arabic numerals with a light antique finish → 5-3/4" dia. chapter ring

...\$7.50

#P-2203... 4-1/2"- Roman numerals

with a distressed dark antique finish • 3-7/8" dia. chapter ring

...\$5.50

#P-2216... 6"- Roman numerals

with a distressed dark antique finish

→ 5-1/2" dia. chapter ring

...\$7.50





UNIQUE ANTIQUE-FINISHED ALUMINUM DIAL

With a unique antique finish that replicates the look of age on a durable aluminum dial

- Uses the latest in printing technology to bond the antique dial image to the aluminum dial pan
- Made with a raised dial and pan edge to replicate the look of an antique dial pan
- ♦ 6-1/2" diameter

#P-2179... \$10.75 each



46... Dials



PAINTED STEEL DIALS Copied from antique originals,

these are perfect replacements for American clocks with damaged dials. Each is painted on metal in an authentic off-white color!



For American Cottage Style Clocks... Your Choice:

\$10.75 each 3+....\$10.00 ea. **#P-680...** 6-1/4" square, 5" dia. chapter ring **#P-889...** 6-3/4" square, 5" dia. chapter ring **#P-888...** 6-3/4" sq., 5 1/2" dia. chapter ring **#P-887...** 7-1/4" sq., 5 1/2" dia. chapter ring

For #5 Banjo Clocks: #P-318...

- ♦ 7-1/2" dia.
- 6-3/8" chapter ring ...\$18.00 each



10

For School Clocks:

#P-710.1...

- ♦ 11-5/8" dia. ♦ 11" chapter
- ring No seconds
- ...\$18.00

For Regulators:

For Steeple Clocks:

#P-340...

For 8-day steeple clocks

- ♦ 9-3/8" L x 6-1/2" W
 - ♦ 5" chapter ring

#P-447...

For 30-hour steeple clocks

- ♦ 8" L x 5-3/4" W
- ♦ 4-1/8" chapter ring

Your Choice: \$10.75 ea. 3+... \$10.25 ea

For American Ogee Clocks: With red and green spandrels and contrasting black numerals

#P-291.8 for 8-day Ogee Clocks

◆ 9-1/2" square ◆ 8" chapter ring **#P-291.30** for 30-hr. Ogee Clocks

 ◆ 8-1/2" square
 ◆ 7-1/4" chapter ring Your Choice: \$13.00 ea.

3+... \$12.50 ea.



#P-710.2...

- 12-3/8" dia.
- 11" chapter ring
- 2" from the centershaft to the seconds bit ...\$18.00
- #P-710.3... ▶ 12-3/8" dia.
- ↑ 11" chapter ring
- ◆ 1-3/4" from the centershaft to the seconds bit ...\$18.00

#P-710.4...

- ◆ 12-3/8" dia. for Regulators
- 1-3/4" from the centershaft to the seconds

bit ...\$18.00





2-1/4" from the centershaft to the seconds bit ...\$18.00





PAINTED STEEL DIAL

Copied from an antique original

For Beehive & Cottage clocks...

#P-892... ♦ 6-1/2" diameter ♦ 5 "chapter ring **#P-2022...** → 7" diameter with a 5-1/2" chapter ring Replaces #P-891

Your Choice... \$11.50 each 3+... \$11.00 ea.



6-1/2" DIAMETER VIENNA REGULATOR CLOCK DIAL

An elegantly simple dial with a raised, brass-finished rim and center ring

- For use with quartz movements
- Aluminum with a white dial finish that simulates the look of porcelain and contrasts richly with the black Roman numerals
- An attractive alternative when you are replicating a traditional Vienna styled clock or designing a contemporary timepiece

#P-1916...\$5.50 each 3+... \$5.00 each

VIENNA REGULATOR DIAL WASHER AND CLIPS

...Extends through your dial and clips on the back just like antique originals!

#P-2155... → 7.5mm hole required

#P-2156... → 8mm hole required

#P-2157... ◆10mm hole required

Set of 1 Clip & 1 Washer

...\$2.25 each 3+... \$2.00 each

KEYHOLE GROMMETS Easy-to-install dial protection!



24-Piece Grommet Assortment...

A versatile German-made assortment of 12 different sized grommets (2 each style) **#P-792** ...Only \$9.75 Assortment



Solid Brass... → 3/8" inside dia. 1/2"outside dia. #P-90 ...\$1.50 doz. \$12.00 gross



Solid Brass... perfect for many 30-hour shelf clocks ♦ 7/16" inside diameter ♦ 9/16" outside diameter \$15.00 gross



Large Keyhole Grommets for Grandfather #P-1161... \$1.50 doz. and Morbier Clocks + 3/4" outside dia. ♦ 1/2" inside dia. #P-308 ... \$2.75 dozen

FAKE WINDING ARBORS Make any clock look like a key

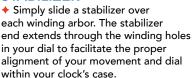
wound movement!

◆ Simply fill the empty holes in a dial with these fake arbors and your clock will look like it is key wound!

♦ Arbors are 5/32" square and are available in three arbor lengths:

#P-1893A... 7/32" long #P-1893B... 1/2" long #P-1893C... 15/16" long Your Choice \$3.00 pair 12+ pairs... \$2.00 pr.

ARBOR-DIAL STABILIZER



◆ Reusable: made from durable plastic #P-1391... Pack of 12 ...\$8.50



48... Dials

REPLACEMENT WOODEN CUCKOO

DIALS Factory direct replacements that will match old cuckoo dials!

- Stained brown with a darker edge
- White numerals

#P-822... 7cm overall diameter (2-3/4") ...\$7.50

#P-823... 9cm overall diameter (3-9/16") ...\$11.50

#P-824... 11cm overall diameter (4-5/16") ...\$12.25



REPLACEMENT WOODEN CUCKOO

DIALS Factory direct replacements

♦ Stained brown overall
♦ White numerals #P-1409W... 6cm overall diameter (2-3/8") ...\$4.25

#P-1410W... 7cm overall diameter (2-3/4") ...\$4.25

#P-1411W... 8cm overall diameter (3-3/16") ...\$4.50

#P-1412... 9cm overall diameter (3-9/16") ...\$6.00

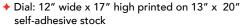




ADHESIVE BACKED TALL CLOCK DIAL

A beautiful, economical adhesive replacement for flaky old tall clock dials, or create your own clock by attaching this dial to a backing board and then fitting a quartz or





- Mounting and backboard preparation instructions included
- → Hands to seconds bit: 2" → 10" chapter ring
- Very high quality design and color reproduction: this dial absolutely looks like an antique original!
- Self-adhering backing bonds to most surfaces: requires a minimum of tools and preparation to create a lovely dial!
- Also great for Wag-On-The-Wall clocks #P-1747... with seconds bit #P-1747B...without seconds bit

Your Choice \$31.50 ea. 3+... \$29.50 each





TRADEMARK DIALS Excellent replacement dials for kitchen clocks

♦ 5" clock dials reproduced from antique originals! Printed on highest quality white or antique ivory card stock...Please specify Color!

#ATM-500... Ansonia Clock Co. #WTM-500...Waterbury Clock Co.

#GTM-500... Gilbert Clock Co. #ITM-500... E. Ingraham Clock Co.

Your choice...Only \$1.50 each \$9.00 dozen Any 100...\$45.00 Mix or Match

Dials ... 49



STEEPLE CLOCK DIALS

...Available in two sizes;
White or Antique Ivory
#\$R-500... 5" dia. time track
#\$R-425... 4-1/4" dia. time track
...\$1.50 each \$9.00 dozen

All of Merritt's paper dials are printed on high quality card stock!
Please specify White or Antique Ivory where applicable.

PAPER OGEE DIALS







OG-2 Style → 7" dial w/ green corner spandrels #OG-2... Antique Ivory stock #OG-2W.. White stock OG-3 Style → 7-1/2" dial with a rose and green floral corner design #OG-3... Antique Ivory stock #OG-3W.. White stock

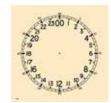
Your choice... \$1.50 each, \$9.00 dozen

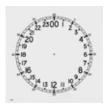


PORCELAIN-TYPE R/A PENDULUM CENTER

Made by the same high quality photo-offset lamination process as our Porcelain-Type dial! #PL-18... R/A Pendulum Center for the replacement of damaged pendulum inserts on German spring-driven regulators

→ Design dimensions: 1-1/2" wide x 1-5/8" high #PL-18... \$5.00 ea. 3+... \$4.50 ea. 12+... \$4.00 ea.





11" 24-HOUR PAPER DIAL #A-2400... Ivory #A-2400W... White Your Choice... \$1.50 each

DATE STRIP SETS FOR ITHACA CALENDAR CLOCKS

Small:

2-1/4" wide w/1-3/4" wide month/day lettering Large:

4-1/4" wide w/2-7/8" wide month/day lettering

#P-1334A... Small ivory strip set #P-1335A... Small white strip set #P-1335W... Large white strip set

Your Choice \$4.50 set

ресемися	SUNDAY
PERSONAL MARCH	THESDAY WEDNESDAY THEREDAY
APRIL MAY JUNE	FRIDAY SATURDAY SUNDAY
TOUGH	MONDAY TUESDAY WYONFSDAY
SEPTEMBER OCTOBER	FRIBAY
NOVEMBER	SATURDAY

50... Dials

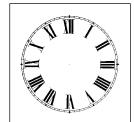
All of Merritt's paper dials are printed on highest quality card stock!



...available in either White or Antique Ivory Please specify the color you desire...









Arabic Numeral Dials...

Catalog #:	Size:	Price Each: Dozen Price
#A-400	4"	\$1.50\$9.00
#A-450	4 1/2"	\$1.50\$9.00
#A-500	5"	\$1.50\$9.00
#A-600	6"	\$1.50\$9.00
#A-700	7"	\$1.50\$9.00
#A-800	8"	\$1.50\$9.00
#A-900	9"	\$1.50\$9.00
#A-1000	10"	\$1.50\$9.00
#A-1100	11"	\$1.50\$9.00

Calendar Dials...

Catalog #:	Size:	Price Each:	Dozen Price:
#C-500	5"	\$1.50	.\$9.00
#C-700	7"	\$1.50	.\$9.00
#C-900	9"	\$1.50	.\$9.00
#C-1100	11"	\$1.50	.\$9.00

Paper Dial Special:

Mix or Match Any 100 Dials... Only \$45.00

Roman Numeral Dials...

Catalog #:	Size:	Price Each:	Dozen Price
#R-350*	.3 1/2"	.\$1.50	.\$9.00
#R-400	.4"	.\$1.50	.\$9.00
#R-450	.4 1/2"	.\$1.50	.\$9.00
#R-500	.5"	.\$1.50	.\$9.00
#R-600	.6"	.\$1.50	.\$9.00
#R-700	.7"	.\$1.50	.\$9.00
#R-800	.8"	.\$1.50	.\$9.00
#R-900	.9"	.\$1.50	.\$9.00
#R-1000	.10"	.\$1.50	.\$9.00
#R-1100	.11"	.\$1.50	.\$9.00

^{* #}R-350 available only in white

Backwards Dial...

#BA-1100... 11"
\$1.50 each
\$9.00 dozen
See page 20 for
Backwards Quartz

Movements







12-PIECE PAPER LABEL ASSORTMENT

12 different paper labels for a variety of clocks!

24-PIECE PAPER DIAL ASSORTMENT

◆ Assorted Roman and Arabic numerals... plain, calendar and trademark dials... all printed on card stock in shades from white to dark antique

#P-1871... 24 different paper dials: 1-3/4" to 6" dia. ...\$10.25

#P-1874... 24 different paper dials: 7" to 11" dia. ...\$12.50



◆ Waterbury, Seth Thomas, Welch, Spring & Co., Sessions, E.N.Welch, Jerome and Co., New Haven, Ansonia, Ingraham, Eli and Henry Terry, Ithaca, and more... all printed on antique-looking paper in shades from light brown to dark brown

#P-1870... \$11.00 assortment

Numerals/Pins...51

NUMERAL SETS Complete sets of metal numerals for one clock face, numbers 1 to 12!

For Mission Clocks... → Large numerals: 1-9/16" ave. height

- ◆ Supplied unfinished: ready to paint or use with the natural silver finish
- ◆ Includes attached mounting nails #P-1366... \$15.00 set

For Mission shelf clocks, Hickory Dickory Dock and others

- ◆ Medium numerals with a brass finish ◆ 7/8" average height
- ◆ Includes attached mounting nails #P-1408... \$15.00 set

For Grandmother Clock Dials... → Medium numerals: 1-1/8" high

- ◆ Anodized aluminum with a gold finish
- ◆ Simply apply adhesive and position! #P-1601... \$5.00 set

For Grandfather Clock Dials... → Larger numerals: 1-5/16" high

- ◆ Anodized aluminum with a gold finish
- ◆ Simply apply adhesive and position! #P-1602... \$5.00 set

For Cuckoo Clocks ... → Eight plastic numeral sets in assorted sizes, 9 to 28 mm. #P-339 ... \$35.00 Set

SELF-ADHESIVE PLASTIC NUMERALS ...

- ↑ 1" tall ◆ Gold colored ◆ Raised design
- ◆ Gold colored#P-401B ... \$1.00 Set

2264011 35978111



Our best buy... ECONOMY

TAPERED PINS in packs of 500, each pin approximately 1/2" long

Metal/Taper:

#P-235B Small Brass: .011"/ .023"

#P-235S Small Steel: .011"/ .023"

#P-236B Medium Brass: .025"/ .043"

#P-236S Medium Steel: .025" / .043"

#P-237B Large Brass045"/ .059"

#P-2375 Large Steel045"/ .059"

#P-238B Ex. Large Brass... .055"/ .068" Your Choice ...\$18.00 pack

130-PC. BRASS AND STEEL ASSORTMENT

One of the most versatile

assortments on the market

 Includes various diameters in 1" and 1-1/4" lengths #P-940 ...\$23.00 Assortment



100-PC. TAPERED PIN ASSORTMENT

#P-2306... Brass Assortment \$4.75 #P-2307... Steel Assortment \$5.75

LONG ROUND



Metal: Taper:

#P-856 ..Steel015"/ .053" #P-857 ..Brass030"/ .065"

#P-858 ..Steel030"/ .065" #P-859 ..Steel040"/ .075"

Your Choice ...\$5.25 pack

Any 3 packs ... \$5.00 ea. Any 12 Packs... \$4.50 ea.

Large Round Brass Tapered

Pins The largest we sell!

♦ Packs of 100

→ 1-1/4" long with a .070" to .100" taper

#P-941 ...\$5.25 pack

3+ packs... \$5.00 each 12+... \$4.50 each

OLD STYLE BRASS TAPERED WEDGE PINS

◆ Packs of 100 ◆ 1-1/4" long #P-2048 Taper: .020"/ .060"

#P-2049 Taper: .035"/ .075" **#P-2050** Taper: .050"/ .090"

Your choice...\$6.75 pack 3+ packs... \$6.50 each

12+ packs... \$6.25 each



52...Hand Washers & Nuts/Hands

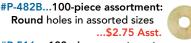
AMERICAN-STYLE HAND BUSHINGS

for American wall and mantel clocks #P-677 ...\$3.50 dozen 3+ ...\$3.00 dozen



BRASS HAND WASHERS...

#P-482A... 100-piece assortment: Square holes in assorted sizes ...\$2.75 Asst.



#P-516... 100-piece assortment: Round and Square holes

#P-356 ... \$11.50 Assortment

...\$2.75 Asst.



#P-515 ... \$11.75 doz.

Assorted sizes for Cuckoo movements

BRASS CUCKOO

HAND NUTS



in assorted sizes: a special assortment for American movements with threaded handshafts

#P-73 ... \$5.25 dozen 6+ dozen... \$4.75 doz.



HAND NUTS FOR **HERMLE® MOVEMENTS**

This 12-piece assortment includes a hand nut for every Hermle movement currently being made **#P-1181** ...\$10.25 Assortment





LUX CLOCK HANDS Metal with a white enameled finish to match original LUX hands ♦ 1" Minute hand is brass bushed #P-1250... \$1.50 each pair

3 pr. ...\$1.25 each 12 pr. ...\$1.00 each

CALENDAR HANDS FOR MECHANICAL MOVEMENTS ...measured from the center of the center hole to the tip of the hand

BLACK CALENDAR HAND with a brass bushing

♦ 5-3/4" for 11" dials

#P-69B... \$3.50 each 6+... \$3.00 each



BLACK CALENDAR HAND without a bushing

#P-155A...3" for 5" dials #P-155B...4-1/2" for 9" dials

Your Choice... \$2.75 each 6+... \$2.25 each



BLACK CALENDAR HAND with a brass bushing...

#P-156A...3" for 5" dials

#P-156B...4-1/2" for 9" dials

Your Choice... \$2.75 each 6+... \$2.25 each





HERMLE VIENNA HANDS - MOON STYLE

- ♦ 3" minute hand ♦ 2-3/16" hour hand
- → Measurements from tip to centershaft cutout
- → Black finish #P-2280... \$14.00 pair

ANSONIA STYLE BRASS HAND SET

- ◆ 2-1/4" minute hand ◆ 1-5/8" hour hand
- → Measurements from tip to centershaft cutout
- ◆ Brass finish #P-1599... \$18.00 pair



FOR MECHANICAL MOVEMENTS

MOON-STYLE HANDS...

Reproduced from an antique pair of hands for an 11" dial

- Brass hour hand bushing
- Black oxide finish
- Minute hand: 5-3/8" long
- ♦ Hour Hand: 4-5/8" long
- Available with a square or oblong minute hand hole: #P-303S... Square hole #P-303B... Oblong hole

Your Choice... \$2.75 pair 12 pair ...\$2.25 pair

MOON-STYLE HANDS..

Reproduced from an antique pair of hands for a 5" dial

- Brass hour hand bushing
- ◆ Available with a square or oblong minute hand hole

#P-328S... Square hole #P-328B... Oblong hole

Your Choice... \$2.00 pair 12 pair ...\$1.50 pair



STEEL CLUB HANDS

- ◆ Steel hands with a square minute hand hole (may require filing to
- Supplied with a brass hour hand bushing (may require installation)

#P-1357A... for 5" dials ◆ Minute hand: 2-1/2"

#P-1357B... for 7" dials → Minute hand: 3-1/2"

#P-1357C... for 3" dials → Minute hand: 1-1/2"

#P-1357D... for 3-1/2" dials ◆ Minute hand: 1-3/4"

#P-1357E... for 4" dials ◆ Minute hand: 2-1/8"

#P-1357F... for 4-1/2" dials ◆ Minute hand: 2-3/16"

All hand measurements are made from the center of the hole to the tip of the hand

Your Choice...

\$2.75 pair 12 pair ... \$2.25 pair

SETH THOMAS #2 SPADE HANDS

♦ With machine bushing

♦ For 11" dials #P-2252...

\$2.75 pair



#P-1678 #P-86... #P-276... #P-1218...

#P-1678... Steel Terry Eagle Style

- → Minute hand: 4-5/8"
- Hour Hand: 3-9/16" ...\$12.25 pair

#P-86...

- Terry-Style Hands Minute hand: 5-3/8"
- ♦ Hour Hand: 4-5/8"
 - ...\$3.50 pair

#P-276... OG Hands

- ♦ Brass hour hand bushing
- Minute hand: 3-1/2" lona
- ♦ Hour Hand: 2-1/2" long ...\$2.75 pair

12 pr...\$2.25 pair

HANDS FOR OG'S, WOOD WORKS AND OTHER TRADITIONAL **AMERICAN SHELF CLOCKS**

Reproduced from antique originals!

#P-1218... Banjo Clock Hands

Finely cut steel hands with a black finish

- ◆ Pilot holes predrilled in each hand
- Minute hand: 3-1/2"
- Hour hand: 2-5/16"

...\$10.00 pair

54... Hands

ANTIQUE STYLE CUCKOO HANDS

Supplied in white or a natural bone color that is faithful to the color of antique examples...

◆ Celluloid ◆ Square minute hand hole Available in two colors, four sizes...

#P-1586.6B Bone for 6 cm dials **#P-1586.8B** Bone for 8 cm dials **#P-1586.10B.....** Bone for 10 cm dials #P-1586.11B Bone for 11 cm dials

#P-1586.6 White for 6 cm dials **#P-1586.8** White for 8 cm dials #P-1586.10 White for 10 cm dials #P-1586.11 White for 11 cm dials

Your Choice... \$1.75 pair 12 pr. \$1.25 pair

CELLULOID CUCKOO HAND ASSORTMENT

Twelve pairs of white celluloid cuckoo hands in assorted sizes from 28 to 71 mm long

 Minute hand bushings not included

#P-338...

\$11.25 Assortment



 Steel hands with a black lacquered finish #P-794 ... for 6" dials #P-795 ... for 8" dials **#P-796** ... for 10" dials Your Choice ... \$5.75 pr. \$63.00 dozen pair



For Hermle® Movements

- ◆ A black finished hand with a slotted, predrilled 1-11/32" brass shaft...readv to install!
- ♦ 3/4" from the center of the shaft to the end of the hand

WHITE CELLULOID **CUCKOO HANDS**

with a brass minute bushing & round holes

#P-939.6

for 6 cm dials (2-23/64")

#P-939.7

for 7 cm dials (2-3/4")

#P-939.8

for 8 cm dials (3-5/32") **#P-939.9** for 9 cm dials (3-1/2")

#P-939.11 ... for 11 cm dials (4-21/64")

#P-939.12 ... for 12 cm dials (4-3/4") Your Choice: \$2.00 pr. \$18.00 doz

#P-939.14 ... for 14 cm dials (5-1/2") **#P-939.16** ... for 16 cm dials (6-19/64")

#P-939.18 ... for 18 cm dials (7")

Your Choice: \$3.50 pr. \$33.00 doz.

#P-939.B... CUCKOO MINUTE HAND BUSHINGS ...\$3.75 dozen

HERMLE® SPADE HANDS

- Steel with a black finish
- Brass bushed hour and minute hand

#P-2110... for 5" dials #P-2111... for 6" dials

◆ 2-1/2" minute hand

♦ 3" minute hand

♦ 1-13/16" hour hand .\$5.50 pr.

2-1/8" hour hand ...\$6.00 pr.

#P-1044... \$5.75 each 3+... \$5.50 each

HERMLE® HAND BUSHINGS



♦ 6 hour and 6 minute bushings, each 2.5 mm diameter

◆ Simply remove your hand's bushing and replace it with a Hermle bushing...

An easy way to expand the selection of hand styles available for Hermle movements! #P-1794... \$29.00

















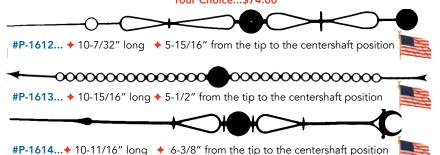
Hands ... **55**

CUT STEEL SWEEP SECOND HANDS FOR TALL CLOCKS

High quality replacement hands for both antique and new tall clocks.

Achieve the look of hand-filed hands at less than 1/3 the cost!

Your Choice...\$74.00



Each hand includes a 1-1/2" long drilled and slotted brass shaft



FOR AMERICAN & ENGLISH TALL CASE CLOCKS

◆ Complete with three slotted hand stems: 3/8", 5/8", and 7/8"



→ 2-3/4" long hand with a 1-1/4" drilled and slotted shaft

#P-839S... Steel ...\$2.75 each #P-839B... Brass ... \$2.75 each Any 3+... \$2.50



◆ 2-7/8" long hand with a 1-3/16" drilled and slotted shaft #P-2S... Steel ...\$3.50 each #P-2B... Brass ...\$3.50 each

Any 6+... \$3.00 each



FOR AMERICAN REGULATORS

◆ 2-1/4" long steel hand with a 1-1/4" drilled and slotted shaft (1-7/16" from shaft to hand tip)

#P-62... \$2.75 each

6+... \$2.25 each

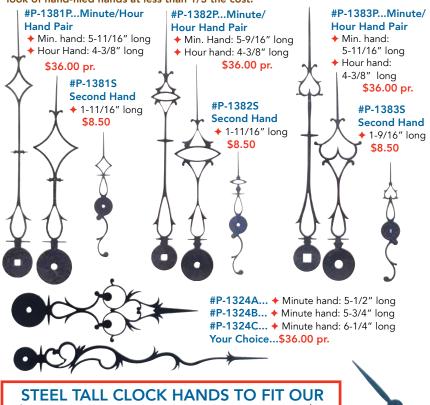
SERPENTINE FOR AMERICAN, ENGLISH AND OTHER TALL CLOCK MOVEMENTS

- A high quality, finely cut hand with the appearance of a hand-filed second hand for a fraction of the cost!
- ♦ Blued steel with a 1-1/4" slotted, brass post
- ◆ 2-5/8" overall length: 1-11/16" from the tip to the shaft hole #P-1600... \$8.50 each

56... Hands

CUT STEEL HAND SETS FOR TALL CLOCKS

High quality replacement hands for both antique and new tall clocks. Achieve the look of hand-filed hands at less than 1/3 the cost!





CHIME SELECTOR HAND

Used to make the chime selection on chiming grandfather and bracket clocks

- ◆ Blued steel
- ◆ 2-1/8" overall length
- Predrilled pilot hole, 1-9/32" from the tip of the hand

#P-1598... \$8.50

Hands...57

AMERICAN-STYLE SPADE & MALTESE HANDS

FOR MECHANICAL MOVEMENTS

Available for a variety of dial sizes...

#P-85	Series Ma	Itese H	lands
-------	------------------	---------	-------

#P-85.4B	for 4" dials, oblong hole	\$2.00 pair 12 pr\$18.00
#P-85.4S	for 4" dials, square hole	\$2.00 pair 12 pr\$18.00
#P-85.45B	for 4-1/2" dials, oblong hole.	\$2.00 pair 12 pr\$18.00
#P-85.45S	for 4-1/2" dials, square hole	\$2.00 pair 12 pr\$18.00
#P-85.5B	for 5" dials, oblong hole	\$2.00 pair 12 pr\$18.00
#P-85.5S	for 5" dials, square hole	\$2.00 pair 12 pr\$18.00
		\$3.75 pair 12 pr\$39.00
		\$3.75 pair 12 pr\$39.00



#P-89 Series Spade Hands...

#P-89.4S for 4" dials, square hole	\$2.00 pair 12 pr\$18.00
#P-89.4B for 4" dials, oblong hole	\$2.00 pair 12 pr\$18.00
#P-89.45B for 4-1/2" dials, oblong hole	\$2.00 pair 12 pr\$18.00
#P-89.45S for 4-1/2" dials, square hole	\$2.00 pair 12 pr\$18.00
#P-89.5B for 5" dials, oblong hole	\$2.00 pair 12 pr\$18.00
#P-89.5S for 5" dials, square hole	\$2.00 pair 12 pr\$18.00
#P-89.7B for 7" dials, oblong hole	\$2.25 pair 12 pr\$19.50
#P-89.75 for 7" dials, square hole	\$2.25 pair 12 pr\$19.50
#P-89.95 for 9" dials, square hole	\$2.75 pair 12 pr\$24.00
#P-89.11S for 11" dials, square hole	\$3.00 pair 12 pr\$30.00
#P-89.11B for 11" dials, oblong hole	\$3.00 pair 12 pr\$30.00



VIENNA REGULATOR

HANDS for 7" dials

- ♦ Made by Hermle®
- ♦ Brass bushed ♦ Black finish

#P-1980... \$6.00 pair



LARGE STEEL GALLERY CLOCK HANDS

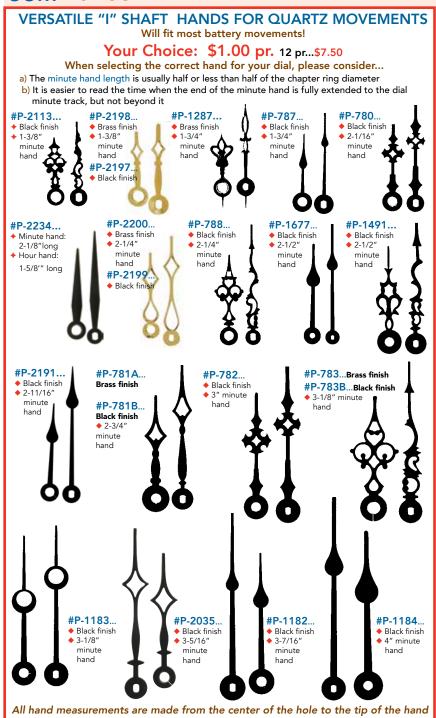
♦ Bushing included, but <u>not</u> installed #P-1194for 12" dials \$10.75 #P-1195for 14" dials \$12.25 #P-1196for 16" dials \$14.00 #P-1200for 30" dials \$23.50 #P-1201for 36" dials \$26.50



Makes the installation of minute hand nuts on "I" shaft movements quick and easy! ◆ Easy to use...

- While the nut is on your work surface, just push the knob on the back of the Nut Driver and the "jaws" open
- Grab the nut and turn it on the shaft until securely positioned on the hand shaft
- ◆ Steel and aluminum construction ◆ 3-1/8" long #P-2137... \$20.50

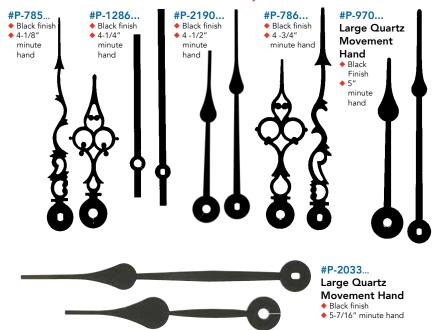
58... Hands



VERSATILE "I" SHAFT HANDS FOR QUARTZ MOVEMENTS

Will fit most battery movements!

Your Choice: \$1.00 pr. 12 pr...\$7.50



LARGE SPADE HANDS FOR HIGH TORQUE MOVEMENTS

Large aluminum hands ready to mount to our High Torque "C" or Mini-Quartz movements

- ◆ Minute Hand: with opening for standard "I" shaft movements
- ◆ Black finish ◆ Hour Hand: Brass bushed
- ◆ Scored the length of the hand for strength and stability!



#P-1568... → For 20" dials → Minute Hand: 10" ...\$7.75 pair **#P-1569...** → For 24" dials → Minute Hand: 12" ...\$8.00 pair **#P-2090...** → For 28" dials → Minute Hand: 13-3/4" ...\$8.25 pair **#P-2091...** → For 35-1/2" dials → Minute Hand: 17-3/4"...\$9.25 pair

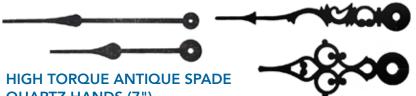
EXTRA LARGE COUNTER-BALANCED STRAIGHT HANDS

for use with High Torque Quartz Movements...

- ◆ Aluminum hands ◆ Finished in black ◆ Hour Hand: 13" long
- ♦ Minute Hand: 17-5/8" long ♦ Straight Hands to fit 35" dials
- Bushed for German high torque movements. Just broach the hour hand slightly to fit American and Japanese movements

#P-1890... \$9.50 pair

60... Hands



QUARTZ HANDS (7") ◆ Antique finish ◆ 7" minute hand

#P-2316... \$5.75 pair

#P-994... Extra Large Quartz Movement Hands... Must be used with a high torque movement

◆ Black Finish ◆ 7" minute hand \$2.50 pair 12+ pr.. \$2.00 pair

HIGH-TORQUE SERPENTINE HANDS

#P-2315... Black - 7" Minute Hand Your choice... \$5.75 each



SECOND HAND FOR QUARTZ MOVEMENTS

- ◆ 2-1/2" from the tip of the hand to the shaft ◆ 3-5/8" overall length ◆ For use with 5" dials ◆ Traditionally styled
- ♦ 1-3/8" from the tip of the hand to the center of the mounting hole #P-1924... \$1.00 each \$7.50 dozen

1-3/4" INTERMEDIATE SIZE SWEEP SECOND HAND

♦ 1-3/4" from the tip to the center of the mounting tube

♦ The tube on this hand has a slightly larger interior diameter. It can be gently crimped for use with smaller sweep second hand shafts.

#P-2188... \$1.00 each \$6.00 dozen

#P-1869... BLACK FINISH ♦ 5" from tip to centershaft hole for 10" dials \$1.00 each \$7.50 dozen #P-1185 ... RED FINISH ◆ 4-1/2" from tip to centershaft hole \$1.00 each \$7.50 doz. ♦ 3-1/2" from tip to centershaft hole Choice of 2 finishes: **#P-790B... BLACK FINISH** #P-790A... BRASS FINISH \$1.00 each \$7.50 dozen



BLACK QUARTZ SECONDS HAND RED QUARTZ SECOND HAND

- ◆ Black finish
- ♦ 5-7/8" from center to tip
- #P-2255... \$1.00 each

- ◆ Red finish
- ♦ 2-3/4" from center to tip

#P-2303... \$1.00 each

American made exclusively for Merritt's...

ENGLISH SIZE KEY GAUGE

for American and English clock keys

Complete with a range of 18 key sizes from #000 (2.0 MM) to #18 (6.00 MM).

- Now you can accurately measure American clock keys with this finely made gauge!
- ♦ American made from 1/8" thick aluminum with durable steel key studs
- ◆ 4-3/4" overall length x 1-5/8" wide
- ◆ This gauge measures American keys that are traditionally measured in English sizes. Please note: There is a noticeable difference between the English and Swiss scales: Swiss sizes run smaller than English sizes. #P-2017... \$54.50

BRASS KEY GAUGES

Use these quality, solid brass gauges to determine the size of clock keys and winders from sizes #0 to #14

- ◆ Determine the size of a key quickly and accurately with these tools!
- → Five sizes per gauge

#P-882 ... Sizes #4, 6, 8, 10, 12 ...\$11.50 each #P-883 ... Sizes #3, 5, 7, 9, 11 ...\$1150 each

#P-886 ... Sizes #0, 1, 2, 13, 14 ...\$11.50 each Set of 3 (one each size) ...\$31.00

GENUINE CHELSEA® SHIP'S BELL CLOCK KEYS

Direct from the Chelsea factory, size #5 keys imprinted with the current Chelsea Clock logo

- ◆ Size #5 (American/English gauge)
- ◆ Clearly and evenly imprinted:

NOT an imitation!

#P-2218... Nickel finish ...\$25.00 #P-2219... Brass finish ...\$25.00

7

SHIP'S CLOCK KEYS

#P-2010... Size #5 **#P-2011...** Size #3 **#P-2012...** Size #000

Your choice ... \$3.00 ea. 12+... \$2.50 ea.



ECONOMY NICKEL PLATED KEYS

- Fits Hermle movements and clocks
- ◆ Size #3

P-2093... \$3.00 each 3+... \$2.75 each





HERMLE® KEYS Factory direct keys for Hermle® springdriven movements #P-1868... Size #8 \$5.25 each 3+... \$5.00 each

NICKEL PLATED

SCHATZ-STYLE LONG STEM TRADEMARK KEY for SCHATZ COACH CLOCKS

\$6.50 each 3+... \$6.25 each

→ #3 Key with a 2-7/16"
long stem

#P-1932... Size #4

◆ Schatz trademark on wing #P-1776...\$3.50 ea.

3+... \$3.25 ea.

12+... \$3.00 ea.

OLD STYLE CHELSEA KEY

- ◆ Size #5
- ♦ No trademark imprint

#P-2298... \$3.00 each

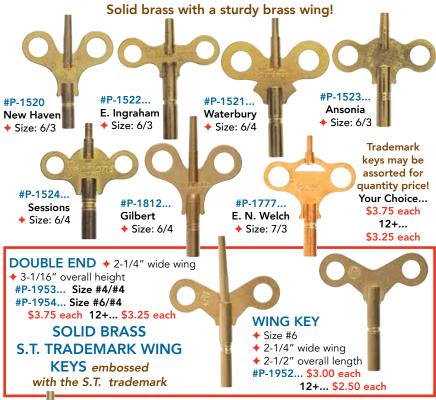


ALARM KEY/BUTTON 25-PIECE ASSORTMENT

- ◆ 25-piece nickel plated assortment
- For alarm clocks and small fit-up movements needing a threaded key/button #P-2309... \$7.00 each

62... Keys

SOLID BRASS DOUBLE END TRADEMARK WING KEYS





DOUBLE END WING KEYS Highest quality! Solid

brass with a sturdy brass plated steel wing

◆ Available in 15 sizes: #4/1, #4/3, #4/5, #5/1, #5/3, #5/5, #6/1, #6/3, #6/5, #7/1, #7/3, #7/5, #8/1, #8/3, #8/5

(Please specify sizes required)

#P-145... Your Choice ...\$2.50 each 12+... \$2.25 each 100+... \$2.00 each

33-PIECE BRASS DOUBLE END KEY ASSORTMENT

...Keys and key ends in American sizes snap together to form the precise combination of sizes required!

- ◆ Each set includes 3 each of the following large end wing key sizes: #4, #5, #6, #7, #8 plus 3 each of the following small end sizes #5, #4, #3, #2, #1, #0
- Assemble your double end keys just as you need them!



#P-2152... \$28.00 Set

BRASS DOUBLE-END CHIME KEYS

#P-620 ... Size #9

with a 4/0 small end

#P-621 ... Size #13

with a 4/0 small end

Your Choice ... \$5.00 each 3+...\$4.50

#P-271 ... Size #4 with a 4/0 small end **#P-272** ... Size #6 with a 4/0 small end

#P-273 ... Size #8 with a 0 small end

Your Choice ...\$3.50 each 3+...\$3.00

BRASS LONG STEM KEYS

Why struggle with a shorter key? These are perfect when you need additional clearance to avoid bezels and other obstructions

#P-1775.3 Size: #3 #P-1775.4 Size: #4 #P-1775.6 Size: #6

#P-1775.8 Size: #8 #P-1775.11 ... Size: #11

◆ Solid brass ◆ Sturdy brass wing

◆ 1-6/16" long stem

Your Choice \$2.25 ea.

12+... \$2.00 each

(Mix or match sizes)

SOLID BRASS WING KEYS

- ♦ 13/16" stem
- Available in sizes:

#000, 00, 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, and 12 (Please specify sizes required)

#P-3... Your Choice ... \$2.25 each

12+... \$2.00 ea. 100+... \$1.75 ea.

WIDE WING BRASS KEYS

◆ Available in eight sizes: #6, 7, 8, 10, 12, 13, 14, 15, and 16 (Please specify sizes required)

#P-1419... Your Choice ...\$2.75 each 12+... \$2.25 each

BRASS EXTRA LONG STEM KEY

- → The key stem is 1-15/16" long
- ♦ Key Size #3

#P-1775.3L... \$2.75 each 12+... \$2.25 each

BRASS TRADEMARK KEYS Exact reproductions of



64...Keys



FRENCH-STYLE CLOCK KEYS

Made in England, these fine quality steel clock keys are available in sizes #4 to 14!
◆ Please specify key size

required: #4, 5, 6, 7, 8, 9, 10, 11, 12, 13, or 14

#P-1796... \$6.00 each

3+...\$5.50 each 12+... \$5.00 each Sizes may be mixed for quantity price

5-PRONG CLOCK KEYS

Available in three size ranges: #P-51A..... Sizes #4, 6, 8, 10, 12

#P-51B Sizes #3, 5, 7, 9, 11

#P-904 Sizes #0, 1, 2, 13, 14





Solid brass with 4 different key sizes per unit!

PENDULETTE AND NOVELTY CLOCK KEY

For Bouncing doll and other pendulette/novelty clocks

- ◆ Nickel plated
- ♦ 1-1/4" long x 1-3/16" wide

#P-682 ...\$1.25 ea. 12+... \$1.00 each 100+... \$.75 each

LUX/KEEBLER NOVELTY CLOCK KEY



- ♦ Nickel plated
- ♦ Available in sizes: #1, 2, 3

#P-1013... \$1.50 each 12+... \$1.25 each

Conversion Table

...Clock key sizes to Millimeters

Size # MM	Size #	MM
5/01.6	8	4.0
4/01.8	9	4.2
3/02.0	10	4.4
2/02.2	11	4.6
02.4	12	4.8
12.6	13	5.0
22.8	14	5.2
33.0	15	5.4
43.2	16	5.6
53.4	17	5.8
63.6	18	6.0
7 3.8		

4-PRONG CLOCK KEYS

Available in two size ranges: #P-94A... Sizes #6, 8, 10, 12 #P-94B... Sizes #5, 7, 9, 11

Your Choice ...\$8.25 Save: Set of 2...\$15.50

"T" HANDLE CLOCK KEY for old master and time clocks

◆ Each with a 3-11/16" long brass shank (5/16" dia) and a 4" steel handle



#P-97...

- → 7mm arbor opening
- ◆ Key size #23

\$11.00 each



Keys/Cranks...65

SLOTTED BENCH KEY

This key will allow you to let the mainspring down on most clocks using your wing key



- ♦ Includes a durable plastic handle with a metal insert and tension spring
- ◆ The slotted steel insert holds all wing keys (wing key not included)

#P-373... \$22.50 set

WINDING CRANK FOR WILLARD AND OTHER AMERICAN WEIGHT-DRIVEN CLOCKS

- Replicates the distinctive iron and brass crank used to wind American weight-driven clocks
- ◆ Available in three sizes:

#P-2080... Size #3 #P-2081... Size #4 #P-2082... Size #5 Your choice... \$6.75

REGULATOR CRANK WINDERS...Brass crank

winders for American and European Regulators

- ◆ Solid brass shank with a steel handle
- ♦ Available in sizes: #0, 1, 2, 3, 4, 5, 6, 7, 8
- ◆ Sizes may be assorted for quantity prices #P-5 ...Your choice... \$2.00 each 12+ ...\$1.75 each

FANCY SOLID BRASS VIENNA REGULATOR CRANKS..

- → Solid brass shank with a solid brass handle
- ◆ Available in sizes: #000, 00, 0, 1, 2, 3
- ◆ Sizes may be assorted for quantity price #P-1525... \$4.00 each 12+ ...\$3.50 each

RANKS...

E. HOWARD-STYLE TRADEMARK WINDING CRANK

Just like the antique originals for Banjos and other Howard weight-driven clocks!

- Brass shank with a size #4 winding arbor opening impressed with "E. Howard & Co." on the shank
- ◆ Steel crank handle ◆ 2" overall length

#P-2055... \$5.75

OLD-STYLE TALL CLOCK WINDER

A steel handle with a solid brass shank replicates the old style winders used during the 18th and 19th centuries

→ Available in sizes: #10, 11, 12, 14, 16

#P-841...\$14.75 each Any 4+ ...\$14.00 each





66... Cranks/Watch Keys/Click Wheels

MODERN GRANDFATHER CLOCK WINDERS



- ◆ Made from brass and steel with a wooden handle
- Available in sizes:

#8, 10, 11, 12, 13, 14, 16, 18

#P-4... \$14.25 each Any 6+ ...\$13.75 each



- Size #8 fits virtually all modern
 - Grandfather clocks

#P-990... \$16.75 each

WATCH KEYS

Available in Sizes:

- #00---- 2 mm #6----- 1.4 mm #0----- 1.9 mm #7----- 1.3 mm
- #1----- 1.8 mm #8----- 1.2 mm #2----- 1.75 mm #9----- 1.15 mm
- #3----- 1.65 mm #10---- 1.05 mm
- #4----- 1.6 mm #11---- 1.0 mm #5----- 1.5 mm #12---- .95 mm

(Please specify sizes required)

#P-141... Your Choice... \$1.50 each 12+... \$1.00 each

(Sizes may be assorted)

UNIVERSAL WATCH KEY

A nickel-plated key with 5 different sized keys for watches

Available with 2 different sets of sizes:

#P-474A...

Sizes #2, 4, 6, 8, and 10 #P-474B...

Sizes #3, 5, 7, 9, and 11 Your choice... \$4.75 each

Save: Set of 2...\$8.50

15-PC. WATCH KEY & **CHAIN SET**



A versatile set with 14 different watch keys, sizes #12 to #00 on a ring

 If you work with watches as a repairman or hobbyist, this assortment is perfect for bench work or as a set for your key ring!

#H-13

 Made of brass and steel. #P-1476...\$10.25 each

3+...\$9.75 each

BRASS CLICK WHEELS

Part # Diameter: # of Teeth: #H-2 ----- 21 mm -----28

#H-13----- 11.5 mm ----- 13 #H-18----- 23 mm -----24

#H-25---- 9 mm -----18 #H-31----- 13 mm ------16

#H-33----- 15 mm ----- 16 #H-34----- 16 mm ------16

#H-35----- 19.5 mm -----21 #H-41----- 13 mm ------18

#H-52---- 17.5 mm ----- 20 #H-59----- 18 mm -----18 Your Choice... \$8.00 each



































#H-52

CLICKS, SPRINGS & RIVETS FOR AMERICAN CLOCKS... • 2 complete sets of steel springs, rivets, and brass clicks for selected American movements: #P-1551for Ansonia movements #P-1552A ...for old style Seth Thomas #P-1552Bfor new style Seth Thomas #P-1553for Waterbury movements #P-1640for Sessions movements #P-1610for New Haven movements

#P-1995for Gilbert movements #P-1996for Ingraham movements Your Choice... Only \$3.50 Set 6+...\$3.00 set

6+...\$3.00 set

Your Choice... Only \$3.50 Set



BRASS CLICKS... ◆ 3 right and 3 left clicks complete with springs and rivets #P-163 ... \$3.25

50-PC. CLICK & RIVET ASSORTMENT

 25 brass clicks and 25 brass rivets for all types of movements

#P-164... \$6.50 Assortment



STEEL CLICK WIRE ...

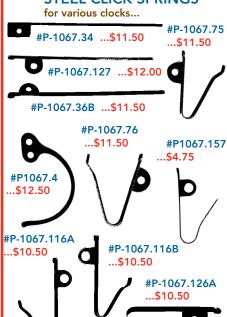
 One dozen prepackaged steel click wires for American clocks #P-606... \$1.25

Hermle® Click Spring...

For use on Hermle Models #340, 341, 350, 351, 1050, and 1051 #P-1067.H... \$1.00 \$9.00 dozen

Clicks/Rivets...67

STEEL CLICK SPRINGS



RIVET ASSORTMENT

- 100-piece assortment of brass rivets
- Perfect for clocks and other applications

#P-381... \$4.25 Assortment



STEEL CLICK→ For bell-strike tall clocks #P-351... \$8.50

BRASS CLICKSPRING

◆ For American and English tall clocks #P-263 ...\$3.25 6+... \$2.75 each



CLICK SPRING ASSORTMENT

♦ 33 pieces, assorted styles #P-2262 ... \$25.00

68... Mainsprings

HOLE END CLOCK SPRINGS

◆ Save 20% off the list price when you purchase any
12 "MS" numbered mainsprings from the "Loop and Special End" or
"Hole End Clock Spring" sections on pages 68 to 73

MB... This entry in the "Barrel Diameter" column indicates a spring designated for music boxes
H... replaces Horolovar springs

Order	Width:	Strength:	Length	Barrel	List
Number:	Inches MM	Inches MM	Inches:	Dia.:	Price
MS100	3/32 2.3	18	18	4 mm	\$2.25
MS101	5/32 4.0	00820	24	17 mm	\$5.25
		01128			
	0,02				40.20
MS104	3/16 4.8	00923	24	17 mm	\$3.50
					40.00
MS105	7/32 5.6	00820	26	20 mm	\$5.25
MS106	7/32 5.6	009524	24	18 mm	\$3.25
					400
MS109	1/4 6.4	01128	15.75	MB	\$4.25
		01128			
	., . •		•		4_
MS111	9/32 7.0	00718	44	19 mm	\$4.00
		25			
MS113	9/32 7.0	01025	39.5	25 mm	\$5.50
	7702 710		07.0		40.00
MS114	5/16 8.0	00820	27	18 mm	\$4.25
		25			
		01025			
		01025			
		01128			
		01538			
		01641			
	0, 10 0.0	.0.0	٠.	00	\$0.20
MS122	11/32 8.7	01333	66	38 mm	\$6.00
WO LEE	11,02 0.7	.0.0	00	00	40.00
MS124	23/64 9.0	01128	45.25	28 mm	\$5.00
		012532			
1113123	20/04 7.0	.0120 .02	10.5	IVID	\$5.50
MS126	3/8 9 5	01128	48	26 mm	\$4 55
		01436			
MS128	3/8 9 5	01743	54	38 mm	\$5.50 \$6.25
1413 120	J, U J. J			30 111111	ψ0.23
MS130	25/64 10 0	01128	45.25	28 mm	\$6 25
		01232			
1413 13 1	25/57 10.0	0 1232	, J	- 0 IIIII	- ψ ι υ.υυ
MS132	7/16 11 0	01025	35 25	22 mm	\$6.00
	• •	01023 01128			
		01128 015540			
1413 130	// 10 11.0				φ/.50
MS137	15/32 12 0	01025	30 5	25 mm	\$5.75
		01025 30			
		01230 01436			
IVIS 14U	13/32 12.0	01430	·/	4 i mm	\$0.00

Mainsprings ... 69

HOLE END CLOCK SPRINGS

◆ Save 20% off the list price when you purchase any

12 "MS" numbered mainsprings from the "Loop and Special End" or "Hole End Clock Spring" sections on pages 68 to 73

MB... This entry in the "Barrel Diameter" column indicates a spring designated for music boxes H... replaces Horolovar springs

Order	Width:	Strength:	Length	Barrel	List
Number:	Inches MM	•	Inches:	Dia.:	Price
	1/2 12.7				
	1/2 12.7 1/2 12.7				
	1/2 12.7 1/2 12.7				
	1/2 12.7				
	1/2 12.7 1/2 12.7				
1413 143	1/2 12./	01040			- \$ 0.50
MS146	33/64 13.0	01025	39.5	25 mm	- \$ 4.50
MS147	33/64 13.0	01128	45.25	28 mm	- \$ 5.50
MS148	33/64 13.0	01230	53	32 mm	- \$ 6.00
	17/32 13.5				
	17/32 13.5				
MS151	17/32 13.5	02255	28	32H	- \$ 7.50
MC4EO	25//4 440	044 00	45.05	20	¢ = =0
	35/64 14.0				
	35/64 14.0				
	35/64 14.0				
MS156	35/64 14.0	015540	37.5	36 mm	- \$ 6.00
MC1E7	9/16 14.3	012 20	20	20	¢ 4 E0
	9/16 14.3 9/16 14.3				
NAC4 FO	9/16 14.3 9/16 14.3	01333	2/	25П	- \$ 5.00
IVIS 160	9/16 14.3	01538	42	28 mm	- \$ 7.00
MS161	19/32 15.0	01128	45.25	28 mm	- \$ 6.00
	19/32 15.0				
	19/32 15.0				
	.,,,,,			-	• • • • • • • • • • • • • • • • • • • •
MS164	5/8 16.0	01025	39.5	25 mm	- \$ 5.50
MS165	5/8 16.0	01128	45.25	28 mm	- \$ 9.00
MS166	5/8 16.0	01128	49	30 mm	- \$ 7.75
MS167	5/8 16.0	01333	78	34 mm	- \$ 8.50
	5/8 16.0				
MS169	5/8 16.0	01436	70	39 mm	- \$ 8.00
	5/8 16.0				
	5/8 16.0				
	5/8 16.0				
	5/8 16.0				
	5/8 16.0				
	5/8 16.0				
		ring for the S.T. #10 m			4.0.00
MS176	43/64 17.0	01025	72	34mm	- \$ 9.00
	43/64 17.0				
	43/64 17.0				
	43/64 17.0				
	43/64 17.0				
-			•		

70... Mainsprings

HOLE END CLOCK SPRINGS

→ Save 20% off the list price when you purchase any
12 "MS" numbered mainsprings from the "Loop and Special End" or
"Hole End Clock Spring" sections on pages 68 to 73

MB... This entry in the "Barrel Diameter" column indicates a spring designated for music boxes
H... replaces Horolovar springs

Order	Width:	Strength: Inches MM	Length	Barrel List
Number:	Inches MM	Inches MM	Inches:	Dia.: Price
MS181	11/16 17.5	01230	72	34mm \$ 9.50
	11/16 17.5			
	11/16 17.5			
MS184	11/16 17.5	01846	96	53mm \$16.50
	45/64 18.0			
	45/64 18.0			
	45/64 18.0			
	45/64 18.0			
	45/64 18.0			
	45/64 18.0			
	45/64 18.0			
WS193	45/64 18.0	02153	48	40mm \$ 9.00
MC10A	3/4 19.0	000 22	72	22mm
	3/4 19.0 3/4 19.0			
	3/4 17.0 3/4 19.0			
	3/4 19.0 3/4 19.0			
	3/4 17.0 3/4 19.0			
	3/4 17.0 3/4 19.0			
	3/4 19.0 3/4 19.0			
	3/4 17.0 3/4 19.0			
MC202	3/4 19.0 3/4 19.0	01230	/3	25mm \$11.00
	3/4 17.0 3/4 19.0			
	3/4 17.0 3/4 19.0			
	3/4 17.0 3/4 19.0			
	3/4 19.0			
	3/4 17.0 3/4 19.0			
	3/4 19.0			
	3/4 19.0			
	3/4 17.0 3/4 19.0			
	3/4 19.0			
	3/4 17.0 3/4 19.0			
	3/4 19.0			
	3/4 19.0			
	3/4 19.0			
MISETS	5/4 17.0	.017 .40	00.0	45mm \$11.00
MS216	25/32 20.0	01128	45.25	28mm \$ 8.25
	25/32 20.0			
	25/32 20.0			
	25/32 20.0			
	25/32 20.0			
	25/32 20.0			
	25/32 20.0			
	25/32 20.0			



Mainsprings ...71

HOLE END CLOCK SPRINGS

 Save 20% off the list price when you purchase any
 12 "MS" numbered mainsprings from the "Loop and Special End" or "Hole End Clock Spring" sections on pages 68 to 73

MB... This entry in the "Barrel Diameter" column indicates a spring designated for music boxes
H... replaces Horolovar springs

Order	Width:	Strength:	Length	Barrel	List
	Inches MM				
MS224	53/64 21.0	01128	45.25	28mm	\$10.00
MS225	53/64 21.0	01128	49	30mm	\$11.50
MS226	53/64 21.0	01230	53	32mm	\$ 8.75
MS227	53/64 21.0	01230	61	35mm	\$ 9.00
MS228	53/64 21.0	012532	67	38mm	\$11.75
MS229	53/64 21.0	01538	100	50H	\$14.00
MS230	7/8 22.2	01128	49	30mm	\$11.25
MS231	7/8 22.2	01230	53	32mm	\$ 9.00
MS232	7/8 22.2	01230	61	35mm	\$ 9.50
MS233	7/8 22.2	012532	67	38mm	\$12.50
MS234	7/8 22.2	01333	72	33mm	\$12.25
MS235	7/8 22.2	40	50	37mm	\$12.00
MS236	7/8 22.2	017544	70	45mm	\$12.75
MS237	7/8 22.2	46	84	49mm	\$12.75
MS238	7/8 22.2	46	96	53mm	\$14.50
MS239	7/8 22.2	50	56	42mm	\$10.00
MS240	61/64 24.0	017544	70	45mm	\$12.75
MS241	61/64 24.0	46	76.5	48mm	\$12.75
MS242	61/64 24.0	46	80.5	50mm	\$14.00
	61/64 24.0				
MS244	61/64 24.0	46	96	53mm	\$27.00

LOOP END & SPECIAL END CLOCK SPRINGS

◆ Save 20% off the list price when you purchase any 12 "MS"numbered mainsprings from the "Loop and Special End" or "Hole End Clock Spring" sections on pages 68 to 73



72... Mainsprings

Width:

Order

LOOP END & SPECIAL END CLOCK SPRINGS

◆ Save 20% off the list price when you purchase any 12 "MS" mainsprings from the "Loop and Special End" or "Hole End Clock Spring" sections on pages 68 to 73 Strength:

Length

List

Order	Width:	Strength: Inches MM	Length	List
Number:	Inches MM	Inches MM	Inches: End:	Price
MS257			26 Open Loop	\$ 6.00
			41 Open Loop	
			•	
			24 Loop	
MS261	1/4 6.4	01641	54 Loop	\$ 4.50
MS262	9/32 7.0	00923	30 Loop	- \$ 5.00
			27 Open Loop	
MC244	0/32 7.0	01230	30 Loop	- \$ 5.50 ¢ F.2F
N15204	9/32 7.0	01230	30 Loop	- \$ 5.25
IVIS265	9/32 7.0	01/43	48 Loop	\$ 6.00
MS266	19/64 7.5	01538	39 Open Loop	\$ 8.00
			•	
MS267	- 5/16 8 0	- 009 23	20 Open Loop	. \$ 3.75
MC269	5/16 0.0	000 22	36 Open Loop	\$ 6.70
MC2/0	5/1/	00725	30 Open Loop	- \$ 0.30
			30 Open Loop	
			24 Loop	
MS271	5/16 8.0	01333	26 Loop	\$ 5.50
			30 Loop	
			42 Loop	
MS274	5/16 8 0	015 406	54 Loop	- \$ 6.00
			71 Loop	
MS2/6	5/16 8.0	016432	41.5 Open Loop	\$ 3./5
MS277	5/16 8.0	019510	45.5 Loop	\$ 6.75
MS279	3/8 9.5	01128	51 Loop	- \$ 7.50
			34 Loop	
MS281	3/8 0.5	014 36	48 Loop	- ¢ 6.75
1413201	3/0 7.5	0 1	40 Loop	- \$ 0.75
146000	2/2 2.5	044 07		¢ 0.00
			60 Open Loop	
			53 Loop	
MS284	3/8 9.5	01641	60 Loop	\$ 8.00
MS285	3/8 9.5	01743	96 Loop	- \$ 9.00
MS286	3/8 9.5	01948	48 Open Loop	- \$ 6.00
MS287	7/16 11 0	- 014 36	72 Loop	- \$ 8 50
MC200	7/16 11.0	019 46	48 Loop	\$ 6.00
IVIS289	//16 11.0	01846	60 Loop	\$ 8.50
MS290	1/2 12.07	01538	84 Loop	\$11.00
MS291	1/2 12.07	01641	66 Loop	\$ 8.00
MS292	1/2 12.07	01846	60 Open Loop	\$ 8.00
			96 Loop	
	.,	.5.0 .40	, 5 200p	Ψ.2.00
MS204	0/16 1/12	015 20	79 Jaan	¢11 75
			78 Loop	
IVI5295	9/16 14.3	UT846	96 Loop	\$12.00
			69 Loop	
MS297	5/8 16.0	01846	96 Loop	\$14.50
MS298	11/16 17.5	01538	108 Loop	\$14.50
			96 Loop	
	, 10 17.5	.510 .40	, 5 Loop	Ψ1-7.50

Mainsprings...73

LOOP END CLOCK SPRINGS

◆ Save 20% off the list price when you purchase any 12 "MS" numbered mainsprings from the "Loop and Special End" or "Hole End Clock Spring" sections on pages 68 to 73

Order	Width:	Strength:	Length		List
Number:	Inches MM	Inches MM	Inches:	End.:	Price
MS300	- 3/4 19.0	01231	- 72	Loop	\$10.00
MS301	- 3/4 19.0	01436	- 108	Loop	\$15.00
MS302	- 3/4 19.0	41	- 78	Loop	\$13.50
MS303	- 3/4 19.0	43	- 120	Loop	\$13.00
MS304	- 3/4 19.0	46	- 96	Loop	\$15.50
MS309**	- 3/4 19.0	016542	- 96	Loop	\$13.00
MS310***	- 3/4 19.0	01641	- 108	Loop	\$14.00
MS305	- 13/16 20.6	01846	- 96	Loop	\$16.00
MS306	- 7/8 22.2	46	- 96	Loop	\$17.50
MS307	- 1.0 25.4	46	- 96	Loop	\$19.50

** #MS309: specifications are the same as the #P-1496 mainspring *** #MS310 is the spring for the S.T. #89 movement



HERMLE BARRELS complete with mainsprings...

Barrel #P-699/#54
Fits movement: Train:
#350-020 Chime
#350-060 Chime
#351-020 Chime
Barrel #P-700/#55
Fits movement: Train:
#351-031 Chime
#351-051 Chime
#1050-020 Chime
Barrel #P-867/#21
Fits movement: Train:
#150 Series Time or Strike
#151 Series Time or Strike
\$42.00 each
3+ \$41.00 each
12+ \$40.00 each
12+ \$40.00 each

Barrel #P-864/#10... Fits movement: ----- Train:

Barrel #P-697/#41... Fits movement: ----- Train: #340-020 ----- Chime #341-020 ----- Chime #341-021 ----- Chime

\$32.00 each 3+... \$31.00 each 12+... \$29.00 each

◆ Please note: Several barrels are interchangeable.

If your barrel is stamped: #42... use #P-696/#40 #30... use #P-868/#32 ◆ To select the correct barrel for your movement, use the number stamped on

Barrel #P-698/#50... Fits movement: -----Train:

#350-020 -----Time or Strike #350-060 -----Time or Strike #350-020 -----Time or Strike #351-031 -----Time #351-051 -----Time or Strike #1050-020 -----Time or Strike

Barrel #P-1766/#52...

Fits movement: ----- Train: #350 Series----- Time #351 Series----- Time #1050 Series ----- Time #1051 Series ----- Time #351-030A ----- Strike

Barrel #P-869/#31...

Fits movement: ----- Train: #131-010 ----- Strike #131-080 ----- Strike #130-020 ----- Strike #130-070 ----- Strike #130-080 ----- Strike

Barrel #P-868/#32... Fits movement: ----- Train:

#131-030 ----- Time #131-080 ----- Time #130-020 ----- Time #130-070 ----- Time #130-080 ----- Time #132-071 ----- Time

Barrel #P-870/#33...

Fits movement: ----- Train: #131-030 ----- Strike #132-071 ----- Strike Barrel #P-871/#56...

Fits movement: ----- Train: #351-031 ----- Strike

your original mainspring barrel. The last two digits of our order number corresponds to this number.

74... Mainsprings

LOOP END MAINSPRING FOR 30-HOUR

AMERICAN MOVEMENTS



COMMERCIAL GRADE MAINSPRINGS FOR

8-DAY CLOCKS → Loop end → Individually boxed

#P-1458... 3/4" x .018" x 96" #P-1496... 3/4" x .0165" x 96"

Your Choice... \$5.75 each 3+... \$5.50 each 24+... \$5.00 each



FUSEE CLOCK MAINSPRING → Hole end

↑ 1-3/8" x .0275" x 130" **#P-1378... \$19.50**



MAINSPRING FOR MODERN 31-DAY CHINESE MOVEMENTS

♦ Hole End ♦ 51/64" x .016" x 116"

#P-1438... \$5.00 each 3+... \$4.50 each 12+... \$4.00 each

MAINSPRING FOR MOST 31-DAY KOREAN AND JAPANESE

MOVEMENTS... → Loop end → 3/4" x .015" x 170"

#P-331 ...\$6.50 each 3+... \$6.00 each 12+... \$5.50 each

HOLE END STEEL MAINSPRINGS FOR HERMLE BARRELS

(Please note: All measurements in millimeters)

#P-1237 for Barrel #1017 x .45 x 1490 mm #P-1238 for Barrel #1117 x .42 x 1500 mm

#P-1239 for Barrel #20 & #56

......17 x .38 x 1200 mm \$16.00 each

3+ ...\$15.50 each 12+ ...\$15.00 each

#P-1241 for Barrel #31 12 x .34 x 1150 mm #P-1242 for Barrel #32 12 x .42 x 1100 mm

#P-1242 for Barrel #3212 x .42 x 1100 mm #P-1243 for Barrel #3312 x .32 x 1150 mm

\$12.00 each 3+ ...\$11.50 each 12+ ...\$11.00 each #P-1240 for Barrel #21, #50 and #52...... 17 x .40 x 1200 mm

#P-1244 for Barrel #4017 x .38 x 1100 mm \$13.00 each

3+ ...\$12.50 each 12+ ...\$12.00 each

#P-1245 for Barrel #4121 x .40 x 1550 mm #P-1247 for Barrel #5421 x .42 x 1900 mm

#P-1248 for Barrel #5521 x .45 x 1800 mm \$19.50 each

3+ ...\$19.00 each 12+ ...\$18.50

MAINSPRING CLAMPS

FLAT 8-DAY SIZED → A pair of flat steel mainspring clamps with a low 1/8" profile: easier to install on movements than round clamps! #P-1736... \$6.00 pair



BRASS SPRING WIRE...



B & S Wire Gauge Size: Inches:

#P-486.22 ...22...0250" ...\$8.00 #P-486.24 ...24...0200" ...\$8.00

#P-486.26 ...26...0153" \$9.00

ROUND ASSORTED SIZES

→ A complete selection of steel clamps in four sizes (1-1/8" to 2-1/2") to fit alarm clocks, 30-hour clocks (2-1/4"), 8-day clocks (1-7/8"), and large time clocks

#P-862... \$7.50 Set



Pendulums ... 75

SINGLE/DOUBLE BARREL **PENDULUMS**

- ◆ Solid brass frame with a polished brass barrel
- ◆ Threaded steel rod
- #P-153 ... Single Barrel
- ♦ 6-1/2" long ...\$15.50 #P-154 ...Double Barrel
 - → 7-1/2" long ...\$22.00

HEAVY S.T.-STYLE ADJUSTABLE BOB

◆ An exact copy of the 1-11/16" dia. original complete with an adjustable bob wire





WILLARD-STYLE PENDULUM PARTS

Willard-style Bob

- ♦ 3" dia. brass faced bob: 11.49 oz.
- Polished brass finish
- Tapered back slot #P-2160A...
 - \$16.00

Willard-style Pendulum Spike

- Cast brass with a threaded rating stud: nut included
- ♦ 3-3/4" overall length
- ◆ Tapered to match Willardstyle bob
- Threaded to fit steel pendulum #P-2160B... \$9.50 rod

Willard-style Pendulum Kevstone

- Cast brass with a steel suspension spring
- ♦ 3-7/8" long x 1-1/8" wide at the widest point of the keystone bottom
- Threaded to fit the steel #P-2160C pendulum rod #P-2160D... \$8.00

Willard-style **Pendulum Rod**

◆ Steel: 18" long threaded on both ends

#P-2160C... \$4.25

S.T. - TYPE PENDULUM

A complete pendulum for the "Globe", "World" and other models

> ♦ 13-1/2" overall length with a 4-1/2" dia. cast iron backed, brass bob #P-1386... \$29.00 each

lead bob (4.5 oz) #P-1307...\$6.00







WOOD STICK REGULATOR PENDULUM

- Hook top for T-type suspensions
- ♦ 7" overall length with a 2-3/4" brass bob #P-358B... \$5.00 each



PENDULUM RATING NUT ASSORTMENT

♦ 10-piece assortment #P-2273... \$6.00

ADJUSTABLE CAST IRON BOB for WOODWORKS GRANDFATHER CLOCKS

- ♦ 3-1/4" dia. cast iron bob with a dark antique finish: 16.45 oz bob
- ◆ Adjustable bob wire with a brass adjusting nut #P-2151... \$12.00



ADJUSTABLE PENDULUM FOR AMERICAN MANTEL CLOCKS

- ◆ 2-9/16" overall length with a 1-1/2" diameter lead bob
- Natural silver finish #P-304... \$5.25 each

76... Pendulums





S.T. STYLE SUNBURST PENDULUM

Faithfully recreates an original antique pendulum

- Cast from metal with a brass finish and a hook top
- ◆ 3-13/16" overall length
- ◆ 2-7/16" dia. bob #P-1465... \$14.00

WA AI

WATERBURY STYLE ADJUSTABLE BOB

- → 1-11/16" diameter cast bob with an antique bronze finish
- ◆ Adjustable bob wire included

#P-1011... \$5.50 each

MUNGER PENDULUM

A replica of an antique Asa Munger eagle pendulum

◆ Cast metal with a threaded steel bob wire and a knurled brass rating nut #P-1960... \$6.75



Pendulums...77

BRASS-FACED ADJUSTABLE BOBS ◆ Lead-backed with a

solid brass face and a steel bob wire

#P-98A... 2-1/4" dia. **#P-98B...** 2" dia.: Standard 8-day

movement size

#P-98C... 1-3/4" dia.:

Standard 30-hr. movement size #P-98D... 1-1/2" diameter

Your Choice: \$6.75 ea. 3+... \$6.50 ea. 12+... \$6.00 ea.

STEEL PENDULUM **BOB WIRES**

...with a brass adjustment nut #P-100A... 3-11/16" #P-100B... 3-7/16" #P-100C... 2-3/4"

Your Choice...\$1.50 ea. Any 12 ...\$15.00

HERMLE LYRE **PENDULUM**

- ♦ 114cm long with spiral rods
- ◆ Embossed bob diameter 10-5/8"
- ◆ Pendulum length 43-3/4" long
- Polished brass

#P-2304... \$120.00 each



LYRE PENDULUMS FOR HERMLE® GRANDFATHER and GRANDMOTHER **MOVEMENTS**

- ◆ Polished brass lyres, tops, and bobs
- ◆ Use with Hermle movements #141,151, 241, 451, 461, 471, 1161, and 1171
- **#P-1894...** for 114 cm movements ◆ 8-5/8" diameter bob ◆ 41-1/2" long ...\$89.00
- **#P-2004...** for 114 cm movements ◆ 6-5/8" diameter bob ♦ 42" long ...\$75.00
- **#P-1043...** for **94 cm movements ◆** 10-5/8" diameter bob ♦ 35-3/8" long ...\$99.00
- **#P-1008... for 94 cm movements** → 8-5/8" diameter bob
 - ♦ 37-3/4" long ...\$89.00
- **#P-1007...** for 94 cm movements ♦ 6-5/8" diameter bob
 - ♦ 34-7/8" long ...\$59.00
- **#P-1557...** for 85 cm movements
 - ♦ 6-5/8" dia. bob ♦ 30-1/4" long ...\$59.00
- **#P-1547...** for 75 cm movements
 - ♦ 5-1/2" dia. bob ♦ 27-1/4" long ...\$59.00

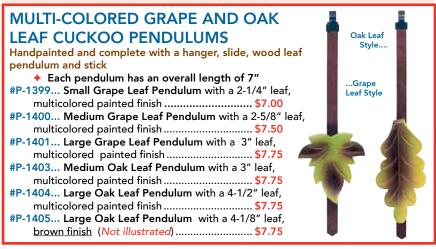
SPIRALED LYRE PENDULUM

- ◆ Alternating chrome/brass colored rods and spirals
- ◆ Polished brass lyre, top, and bob
- ♦ for Hermle 114 cm movements
- 10-5/8" diameter bob
 43-3/4" long #P-961S... \$120.00

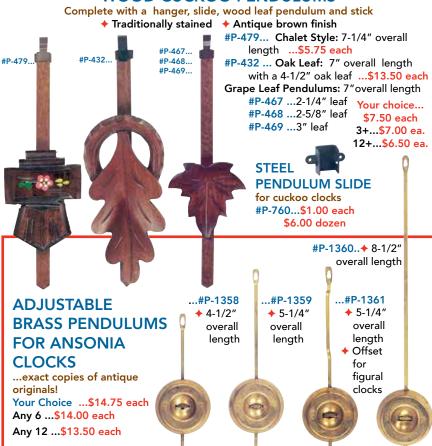




78... Pendulums



WOOD CUCKOO PENDULUMS



Pendulums ...79



#P-527A ... Sessions

- ♦ 1-1/2" dia.
- ♦ 2.6 ounces



#P-527B... Ingraham

♦ 1-1/2" dia. ◆ 1.7 ounces



#P-527C... Waterbury

- ♦ 1-5/8" wide
- ♦ 3.0 ounces



#P-527D... S. Thomas

- ↑ 1-5/8" dia.
- ♦ 3.3 ounces



#P-527E... Ingraham

♦ 1-1/2" dia. ♦ 2.5 ounces



#P-527F ... Sessions

- ♦ 1-1/4" dia.
- ♦ 1.6 ounces



#P-527G... Universal

↑ 1-1/2" dia. ♦ 2.7 ounces



#P-527H... Ingraham

- ♦ 1-1/2" dia.
- ♦ 2.4 ounces



#P-527S... Sessions

Gilbert

- ♦ 1-3/8" dia.
- ♦ 2.8 ounces



#P-527J... Universal

- ♦ 1-1/2" dia.
- ♦ 1.5 ounces

NONADJUSTABLE CAST METAL PENDULUM BOBS

Higher quality with improved details!

- Copied from antique originals for all types of American shelf clocks!
- Perfect to authentically replace a damaged or missing bob Your Choice... \$4.00 ea. 3+... \$3.75 ea. 12+... \$3.50 ea.





EXTRA-HEAVY S.T.-TYPE NON-ADJUSTABLE BOB

- ◆ 1-25/32" diameter
- ♦ 4-1/2 ounces
 - #P-1012... \$3.75 ea.
- 3+...\$3.50 ea. 12+...\$3.25 ea.

EUROPEAN CLOCK PENDULUM

- ♦ 3-1/2" long with a 1-11/16" diameter polished brass bob
- ♦ 3.0 oz.
- ♦ Hook top #P-669... \$32.00



HEAVY NON-ADJUSTABLE

- ♦ 1-3/4" diameter
- ♦ 4 ounces
- #P-1342... \$4.75 ea.
- 3+...\$4.50 ea. 12+...\$4.00 ea.

REPLACEMENT BALL/CORD FOR HOROLOVAR FLYING PENDULUM CLÓCKS

★ Extra long 7" cord #P-1256... \$8.75 each

80... Pendulums

HOWARD-STYLE PENDULUM BOBS

#P-2052... 2-1/2" diameter

♦ 8.5 oz. \$15.25 Just like the antique originals!...

♦ Unpolished

solid brass face #P-2053... with a cast lead 3" diameter

backing → 15 oz.

\$16.50





PENDULUM BOB for SETH THOMAS "JUPITER" & "LUNAR" MODELS

Just like the antique originals!

- → 3-1/4" diameter → 8 oz.
- Cast metal with an antique brass finish #P-

#P-2051... \$17.50





WOOD PENDULUM RODS...

Available in four sizes...

#P-258 ... 3/4" wide x 36" ...\$5.75 #P-258B...3/4" wide x 48" ...\$9.25

#P-259... 1" wide x 36" ...\$5.75

#P-259B... 1" wide x 48" ...\$9.25

An authentic replacement set for Regulator A's and other American clocks #P-550... \$2.00 Set

NOVELTY CLOCK PENDULUM

- ◆ A 7-1/2" long pendulum with a 7/8" dia. plastic bob
- ♦ If desired, it can easily be shortened #P-348... \$1.75 each \$18.00 dozen

BRASS ZAANDAM PENDULUM

- ◆ Solid cast brass bob with a brass rod and hook
- Threaded end with a brass knurled rating adjustment nut
- ♦ 8-1/2" overall length #P-873...\$9.50

UNIVERSAL PENDULUM

- ◆ With a brass bob and a steel rod, 6-5/8" long
- ◆ Can be easily shortened to fit many different clocks #P-305...

\$11.50 each

ZAPPLER PENDULUM

- ◆ A perfect replacement for small novelty clocks
- Steel shaft, 2-3/4" long with a 5/8" diameter brass bob

#P-612... \$1.00 each \$10.60 dozen



REPLACEMENT DOLL FOR BLACK FOREST CLOCKS

A 2-3/8" x 1-5/16" hand-painted figure, complete with suspension spring #P-808... \$5.75





Pendulums...81

S.T. #2 STYLE REGULATOR PENDULUM

An easily assembled, 3/4" wood stick pendulum used in S.T. #2 Regulators #P-200... COMPLETE UNASSEMBLED PENDULUM ...\$40.00

Parts available individually...

- A) #P-201... Pendulum top: ...\$4.00 ea. 12+... \$3.50 ea.
- B) #P-202... Crutch plate: ...\$1.50 ea. 12+... \$1.25 ea.
- C) #P-203... Brass faced pendulum bob: ◆ 4-1/2" diameter
- D) #P-204... Rating assembly ...\$5.00 ea. 3+... \$4.50 ea.
- E) #P-258... 36" Wood pendulum stick: ◆ 36" long x 3/4" wide

Unfinished ...\$5.75



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#P-1951... ASSEMBLED PENDULUM STICK for S.T. #2 Regulators

- ♦ 25-1/8" overall length
- ♦ Includes an assembled pendulum crutch plate, hook, rating assembly as illustrated at right. Requires only a #P-203 pendulum bob for a complete pendulum. ◆ Glossy black finish ...\$18.50

ASSEMBLY FOR ANSONIA "A" REGULATORS

- ◆ 11-13/16" overall length
- #P-1950... \$9.00 ◆ Black finish

BOB FOR ANSONIA REGULATORS

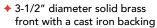
- ◆ 4-1/2" diameter
- ◆ Brass faced

#P-1955... \$19.00

ASSEMBLY FOR WATERBURY SHOP **REGULATORS**

- ◆ 16" overall length with a brass pendulum hanger, steel adjustment rod with a brass rating nut
- ▶ Wood pendulum stick with a glossy black finish #P-2075... \$9.50

BOB FOR WATERBURY **SHOP REGULATORS**



◆ Polished #P-2074... \$16.00

SHOP REGULATOR **PENDULUM**

... Easily assembled! #P-377 ... COMPLETE UNASSEMBLED PENDULUM ...\$21.00

Parts available individually: A) #P377A... Reversible Brass Hook

...\$1.25 ea. 12+... \$1.00 ea.

B) #P-377B...

18" rectangular wood stick with a slot at the bottom for the rating assembly

...\$4.00 ea. 3+... \$3.25 ea.

C) #P-377C...

4-1/2" brass faced bob with a steel back \$15.00

D) #P-1178...

Rating Assembly ...\$3.50 ea. 3+... \$3.00 ea.

BOB FOR GILBERT SHOP REGULATORS

- ♦ 4-1/2" diameter solid brass front with an iron backing
- Polished finish

#P-2076... \$19.00



PENDULUM STICK ASSEMBLY FOR SHOP REGULATORS

- ◆ 14-5/16" overall length
- Brown stained finish

#P-1949... \$8.25

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82... Pendulums

TALL CLOCK PENDULUM FOR ENGLISH & AMERICAN **BELL STRIKE GRANDFATHER CLOCKS**

The standard seconds beat pendulum for tall clocks

#P-26... COMPLETE PENDULUM with cast iron bob ...\$24.50

#P-26.1015... COMPLETE PENDULUM with #P-1015 brass-faced bob

Parts available individually:

...\$35.50

A) #P-10...Top suspension unit ...\$5.50 each 12+... \$5.00 ea.

B) #P-26A... 33" Steel rod with 6/32" threads on both ends... \$3.50

C) Pendulum Bobs:

В...

#P-26D... 4-1/2" dia. CAST IRON bob

- ◆ Replaces former #P26C cast iron bob
- ♦ 4-1/2" diameter ♦ 40.5 oz
- ◆ Requires larger #P26E spike ...\$15.75



♦ 4-1/2" diameter brass-faced bob with lead backing (note: the bob pictured has been polished /buffed, sold in antique looking condition

◆ Accepts #P26B or #P26E spike

\$27.50 ea. 3+... \$26.50 ea.

D) Brass Pendulum Spikes

#P-26B... ◆ 5-7/8" long (1-7/8" threaded) with a brass adjusting nut \$6.50

#P-26E... ♦ 6-1/2" long (1-1/4" threaded) with a brass adjusting nut ...\$9.50

FUSEE PENDULUMS Made in England

- ◆ Brass shafts ◆ 3" diameter lead filled brass bob
- ◆ Suspension spring included

#P-1091... 7-1/2" long ...\$85.00

#P-332... 9-1/4" long ...\$95.00 #P-333... 11" long ...\$99.00

FUSEE PENDULUMS

#P2300... 8-1/2" long ...\$33.50 #P2301... 10-1/2" long ...\$35.00

#P2302... 12-1/2" long ...\$36.00

BRASS PENDULUM BOBS FOR REGULATORS, GERMAN **GRANDFATHER CLOCKS**, and OTHER CLOCKS

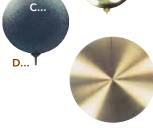
With a spun brass finish

#P-46A ---- 4-1/2" dia. brushed bob

#P-46D ---- 4-1/2" dia. polished bob **#P-46C** ---- 5-1/2" dia. polished bob

#P-46E ---- 5-1/2" dia. brushed bob

Your Choice... \$30.00 each





Pendulums...83

SILK THREAD PENDULUM

♦ 11-3/4" long steel rod with

a brass bob for silk thread

#P-58... \$8.00 each

FOR FRENCH CLOCKS

suspensions

FRENCH CLOCK PENDULUMS...

- Each is complete with a brass hook and a 11-3/4" long steel rod which can be shortened to fit your clock
- ♦ 3-48 thread for hook
- ♦ These pendulums are available with brass bobs in three different diameters:

#P-880: 1-1/2" dia. ...\$14.75 **#P-16:** 1-3/8" dia. ...\$14.00 #P-881: 1-1/4" dia. ...\$12.25

CAST SUNBURST PENDULUMS

- ◆ Antique brass finish
- ◆ Each is complete with a 12" long steel rod and a brass hook

Choose from three sizes:

#P-453A...1-1/2" diameter ...\$10.75 #P-453B... 2" diameter ...\$11.00 #P-453C...3" diameter ...\$11.75



SOLID BRASS PENDULUM INDICATORS..

Choose from 2 styles:



#P-310... 3-3/8" long: \$4.00 each 3+... \$3.50 each



#P-66...3-3/4" long \$4.00 each 3+... \$3.50 each





#P-16A #P16B

SOLID BRASS FRENCH-STYLE PENDULUM HOOKS

Now in three sizes!

#P-16A... STANDARD FRENCH/EMPIRE

◆ 13mm long with 3-48 thread ...\$1.75 ea. 12+... \$1.50 ea.

#P-16B... FRENCH MINI

◆ 12mm long with a hole, NO thread ...\$2.00 ea. 12+... \$1.75 ea.

#P-16C... LARGE FRENCH/VIENNA

◆ 20.5mm long with 5-40 thread

...\$2.25 ea. 12+... \$2.00 ea.



PENDULUM BOB FOR **LUX PENDULETTE CLOCK**

◆ A silver faced, 7/8" diameter replacement pendulum bob for Lux novelty clocks #P-799... \$1.75



LARGE AMERICAN PENDULUM TIF-DOWN

◆ Solid cast brass ◆ 2-3/4" wide #P-2095... \$11.75



PENDULUM TIE-DOWN

◆ 2-1/8" long, solid brass tie-down #P-317 ... \$8.00

84... Pendulums

CUCKOO CLOCK PENDULUM LEADER STFFI ◆ A 3-3/4" steel pendulum leader for use with **PENDULUM** antique and modern cuckoos **LEADERS** #P-793... \$1.00 each \$6.00 doz. #P-75C... ◆ 2-1/8" long S. T. - STYLE PENDULUM LEADER #P-75D... ◆ Used in many Seth Thomas kitchen and ♦ 3-1/4" long shelf clocks #P-1325... \$1.50 #P-75E... ♦ 4-5/16" long CRUTCH BLANK FOR FUSEE CLOCKS #P-75F... ◆ 2-5/16" long #P-2274... \$2.25 ea. ♦ 6-7/8" long Your choice... \$6.50 each PENDULUM LEADERS 12+... HERMLE PENDULUM LEADER \$6.00 each For #341-020 Movements #P-75A #P-1754... \$4.50 each 3+...\$4.25 ea. ♦ 5-1/2" long \$11.25 each COMPLETE PENDULUM STICKS FOR HERMLE® MOVEMENTS Unfinished wood sticks with an attached pendulum hook and rating assembly ♦ 3/4" wide wood stick #P-1928PS... 27-1/4" (85 cm) ...\$21.00 #P-1036PS... 32-1/2 (94 cm)....\$21.00 #P-1754 PENDULUMS FOR HERMLE® SECTIONAL **MOVEMENTS** WIRE MORBIER **#P-1676E...** for 18 cm movements: **PENDULUM** with a cast metal bob 2-3/16" dia. bob ...\$35.00 each Cast metal bob with a steel shaft, steel 3-1/8" dia. bob ...\$18.50 each sectional wires and a #P-1676B... for 45 cm movements: brass rating nut Overall length: 36.5" #P-1676C... for 55 cm movements: #P-1959... \$21.75

S.T. #2-STYLE RATING **ASSEMBLY**

- ♦ 2-1/4" long threaded steel rod
- Brass regulating nut
- #P-204... \$5.00 ea. 3+...\$4.50 ea.

SHOP REGULATOR RATING **ASSEMBLY**

- ◆ 2-1/4" long copy of an antique original
- Complete with a threaded steel rod and a brass regulating nut

P-377D... \$6.00 ea.

3+... \$5.50 ea.

1-11/16" dia. bob ...\$25,20 each #P-669... for 21 cm movements:

#P-1676A... for 35 cm movements:

3-2/8" dia. bob ...\$20.00 each

2-3/4" dia. bob ...\$26.00 each

SHOP REGULATOR RATING ASSEMBLY

- ◆ 2-1/4" long copy of an antique original
- Complete with a threaded steel rod and a brass regulating nut #P-1178... \$3.50 each 3+... \$3.00 ea.

THREADED ADJUSTING ROD

◆ Complete with a 3-1/2" long threaded rod and brass adjusting nut #P-48... \$4.00 each 6+... \$3.50 ea.

Pendulum/Weights...85

OVAL PENDULUM



#P-481A... 4-3/4" long # P-481B... 6-1/4" long #P-481C... 7 -1/2" long Your Choice...\$3.75 each 12+... \$3.25 ea.



BRASS ADJUSTING NUT for OVAL PENDULUM RODS

#P-270 ... \$1.00 each 12+... \$.85 ea.

TALL CLOCK PENDULUM

- CRUTCH Made in England ♦ 5-3/8" overall length
- ◆ Steel #P-12... \$16.00

VIENNA REGULATOR-STYLE PENDULUM CRUTCH PLATE

◆ Solid brass ◆ 1-3/4" long

#P-884... \$1.50 ea. 12+... \$1.25 ea.



AMERICAN-STYLE PENDULUM CRUTCH

PLATE → Solid brass → 1-5/8" long

#P-202... \$1.50 each 2+... \$1.25 each

PENDULUM TOPS

#P-201... Brass top for American-style regulators: 3/4" wide rods \$4.00 each 3+... \$3.50 each

#P-47A... Brass top for Urgos wall and grandmother clocks \$1.75 each 12+... \$1.50 each

#P-759... Steel top for cuckoo clocks \$2.00 each 12+... \$.50 each

#P-754... Brass Hermle-style top for wall and Grandmother clocks: 3/4" wide rods

\$1.25 each 12+... \$1.00 each

#P-2150... Brass Kieninger pendulum hook for wood stick Grandfather clock pendulums

♦ 3/4" wide x 1-7/8" long \$1.75 ea.





#P-759 #P-47A

#P-2150 #P-201

#P-754





LEAD BANJO WEIGHT → 7 lb. ave. wgt. ♦ 6-1/4" high x 2-3/8" wide x 1-3/8" thick

#P-343... \$26.00

"TIN CAN" WEIGHT SHELLS Made for Merritt's in

Pennsylvania by a master tinsmith!!

 Exact copies of the original weights used on many New England grandfather clocks

♦ Please note: An original pair consists of one each of the following:

#P-299... 6-3/4" long x 2-1/2" dia. ...\$11.00

#P-300... 6-3/4" long x 2" dia. ...\$11.00



WILLARD-STYLE BANJO WEIGHT

A lead weight cast to replicate the weight used on Willard banjo clocks ◆ Lead with a steel weight hook

- 7.4 lbs. average weight
- ♦ 6-1/8" long x 2-1/16" wide at the bottom x 1-9/16" thick

#P-2013... \$30.50



86...Weights



TAPERED CAST IRON MORBIER WEIGHTS

COUNTER WEIGHT ★ 4.09 oz. (115.9 q)

◆ 1-9/16" long x 1-1/16" dia. at base #P-2146... \$4.00

ALARM WEIGHT ◆ 2.28 oz. (64.6 g)

→ 3-3/8" overall length x 5/8" dia. at base #P-2148... \$5.50

#P-2148

Weights...87



VIENNA **REGULATOR WEIGHTS**

DI AINI DDACC.

PLAIN DRASS:	Cel
#P-78A ◆ 4-1/2" long	
x 1-3/4" dia.	
◆ 4 lbs., 3 oz.	
#P-78B ◆ 4-1/4" long	
x 1-5/8" dia.	

♦ 3 lbs., 4 oz. #P-78C... ♦ 4" long x 1-1/2" dia. ♦ 2 lbs., 8 oz. Your Choice... \$24.00 each 3+ ... \$22.50 each 12+... \$21.50 each

EMBOSSED BRASS:

Ready for assembly! ♦ 4-1/2" long x 1-3/4" dia.

#P-80C... Complete weight \$29.50 #P-80S... Shell only\$15.50 #P-80W... Insert only......\$15.00

SOLID BRASS S.T. #3 STYLE **REGULATOR WEIGHT**

◆ Solid brass shell: 6-1/8" long x 2-1/8" diameter

 Complete with hook and knurled top/bottom

#P-2072... Shell & Hook with washer only (Insert NOT included) ...\$45.00 #P-2073..Lead Insert only

♦ 6.20 Lb. (Not illustrated)...\$19.00 #P-2077...Hook/Washer only ...\$5.75

CAST IRON CUCKOO WEIGHTS

With an authentic painted finish!

One-day weights.

One day weights
#P-171.100 100 grams (3.5 oz.)
#P-171.150 150 grams (5.3 oz.)
#P-171.250 250 grams (8.8 oz.)
#P-171.275 275 grams (9.7 oz.)
#P-171.320 320 grams (11.3 oz.)
Your choice \$5.00 each
#P-171.375
#P-171.420
Your choice \$6.50 each

1 or 8-day weights....

#P-171.500 ... 500 grams(1 lb, 1.6 oz.) **#P-171.630** ... 630 grams(1 lb, 6.1 oz.) **#P-171.750** ... 750 grams(1 lb, 10.4 oz.) **#P-171.875** ... 875 grams(1 lb, 14.8 oz.)

Your choice... \$11.50 each

8-day weights...

#P-170.1000 . 1000 grams (2 lb, 3.2 oz.) **#P-170.1170** . 1170 grams (2 lb, 9.2 oz.) **#P-170.1260** . 1260 grams (2 lb, 12.4 oz.)

#P-170.1350 . 1350 grams (2 lb, 15.5 oz.) **#P-170.1500** . 1500 grams ... (3 lb, 4.8 oz.) **#P-170.1750** . 1750 grams(3 lb, 13.6 oz.)

Your choice...\$16.00 each

SOLID BRASS S.T. #2 STYLE REGULATOR WEIGHT

♦ 6-1/4" long brass shell, 1-3/4" diameter

5 lbs. with insert

#P-79C...Complete weight

...\$49.00

#P-79S... Shell only ..\$28.75 #P-79W...Insert only..\$19.50 #P-79H...Hook only...\$ 3.50



3-PC. WEIGHT SETS FOR HERMLE® MOVEMENTS

◆ 3 polished shells complete with cast iron inserts and hooks

◆ Anodized aluminum with a polished brass finish

For Hermle #1161 and #1171 movements:

Shells: 2-23/64" (60 mm) x 9-41/64" (245 mm) Weights: 2 @ 7.7 lbs and 1 @ 9.9 lbs

#P-1431... \$105.00 Set

For Hermle #451 Series Grandmother Clock

Movements Weights: 1 @ 6.6 lbs. and 2 @ 4.7 lbs. Shells: 1-27/32" (47mm) x 10-45/64" (272mm)

#P-1470... \$89.00 Set





88... Weights

POLISHED BRASS-FINISHED WEIGHT SHELL for HERMLE® MOVEMENTS

- ♦ A metal shell only with a brass finish, top hook and bottom nut
- ♦ 60 mm diameter x 245 mm long (2.36" x 9.65") #P-1987S... \$19.50 each Set of 3 Shells....\$55.00 set

BRASS-FINISHED GRANDMOTHER CLOCK WEIGHT SHELLS

Complete with a hook, bottom knob and rod

- For Hermle #451 and similar grandmother movements
- ↑ 1-9/16"dia. x 9" long
- ◆ Aluminum with a bright brass finish
- Can be used with either P-1036W or P-771W

#P-1948S... \$26.50 each Set of 3...\$75.00





GRANDFATHER AND **GRANDMOTHER** WEIGHTS

Polished brass shells complete with cast iron inserts, hook, bottom and rod... ready for assembly!

For Grandfather clocks...

#P-55S...Shell only ...\$ CALL

#P-55C... Complete weight → 7 1/2 lbs. → 60mm x 245mm ...\$ CALL

- #P-55W... 3-piece Insert Set for 60mm brass grandfather clock weights:
 - ♦ Now supplied in a three segment set for versatility!
 - → 7-1/2 total pounds of lead insert x 2-5/16" diameter: Segment A) 1/2 pound- 5/16" thick, B) 3 pounds- 2" thick, and C) 4 pounds-2-5/8" thick Sold as a three piece set only ...\$28.00 set

#P1039W...7.7 lb. cast iron insert for 1161 and 1171 Hermle movements

♦ Fits #P-55S shell ♦ Will not fit P-1987S Shell ♦ 2" x 10" ...\$ CALL #P-1039HW...9.9 lb. cast iron insert for 1161 and 1171 Hermle movements

♦ Fits #P-55S shell ◆ 2-1/8" x 9-1/2" ◆ Will not fit P-1987S shell...\$ CALL

For Grandmother clocks...

#P-771S...Shell only...\$ CALL #P-771W...Insert only ...\$ CALL #P-771C... Complete weight ◆ 4.7 lbs. ◆ 40mm x 232mm ...\$ CALL

#P-771CHW...Complete heavy weight for Hermle #451 movements

♦ 6.6 lbs. ♦ 40mm x 232mm ...\$ CALL

#P1036W... 6.6 lb. lead insert only for P-771S Shell: fits #451 Hermle movements ♦ 1-5/8"dia. x 9-1/4" long ...\$ CALL

Due to the rapid fluctuation of the **EURO** and shipping costs, ' please call for current prices.

REPLACEMENT WEIGHT

SETS for Lux Pendulettes #P-800... PINE CONE

WEIGHT SET

→ 7/8" long cones only: no chain

#P-801... CYLINDER WEIGHT SET

11/16" long cylinder only: no chain Your Choice...

\$2.50 Set



FACTORY REPLACEMENT WEIGHT CHAIN SETS FOR NOVELTY CLOCKS

#P-809...

PINE CONE WEIGHT SET

- ◆ 1" long cones w/ brass chains
- ♦ 2" overall length

#P-810... CYLINDER WEIGHT SET

- ♦ 11/16" long cones with brass chains
- ♦ 2" overall length

Your Choice... \$2.25 Set



Weights/Chains...89



#P-178... BRASS CHAIN STOP RINGS ◆ 5/8" diameter ...\$7.50 dozen

#P-369... BRASS WEIGHT HOOKS for Vienna Regulators

↑ 7/8" long threaded hook with a washer ...\$2.50 12+... \$2.00 ea.

#P-208... SCREW-IN BRASS WEIGHT HOOKS for Vienna Regulators

♦ 1-1/2" long hook with a screw-in stud for the repair

of Vienna Regulator weights\$2.75 12+... \$2.50 ea. #P-177 ... CUCKOO CHAIN HOOK and RING + Brass hooks/rings sold one

dozen pairs per pack \$3.50 pack 3+... \$3.25 pack 12+... \$3.00 pack

BRASS WEIGHT HOOK/BOTTOM for Grandfather & Grandmother weights

#P-143... → Pre-drilled and tapped with a 1/8" thread \$5.75 set 12+... \$5.50 ea.

#P-143M ... → With 3/16" threaded studs that screw into your weight insert

\$5.75 set 12+... \$5.50 ea.

#P-179... BRASS CHAIN ENDS for Grandfather and Grandmother weights

→ Sold in pairs only

\$3.50 pair 12+ pr... \$3.25 ea.

#P-357... STEEL "S" HOOK

◆ Great for hanging clock weights in OG and other clocks! \$2.75 dozen



PULLEY CONVERSION KIT FOR ENGLISH BELL STRIKE TALL CLOCKS...

Complete with 2 brass pulleys and chain to convert your ropedriven clock to chain drive #P-37... \$95.00

LEAD DONUT COUNTERWEIGHT

◆ For endless chain and rope movements #P-121... \$3.50

TALL CLOCK CHAIN AND SPROCKET SET Improved quality... Made in England to high British Horological standards!

- ◆ Convert your rope movement to chain drive or refurbish worn-out chain sprockets
- ◆ Set includes two brass and steel sprocket wheels, two brass sprocket sleeves and 12 feet of steel chain (33.5 links per foot)

#P-1864... \$55.00





CHAIN RETAINERS (SET OF 3)

A time saving accessory necessary when working with

chain-driven clock movements!

- ◆ A set of 3 adjustable retainers to keep chains from slipping off the chain wheel when the clock is in transit or lying down
- ◆ Spring-loaded barrels keep the spring retainer locked securely around your chain
- ♦ Inexpensive; simple to use

#P-1372...\$7.50 set

3+ Sets ...\$7.00 set

90... Chains/Pulleys

SOLID BRASS PULLEYS

For Grandfather movements with cable or catqut...

#P-7... 1-1/2" diameter #P-7A... 1-3/4" diameter Your choice... \$8.50 each

For rope or chain

Grandfather movements...

#P-7R... 1-1/2" diameter \$10.00 each

For Hermle cable-driven floor clocks...

♦ 1-3/4" diameter #P-993... \$19.00 each



For Vienna Regulators...







EARLY-STYLE FIVE SPOKE PULLEY

◆ 1-1/8" diameter #P-1311... \$6.25 each

For Banjos and other weightdriven American clocks...

◆ 1-5/16" diameter #P-67... \$7.00 each





LARGE DUST COVERS

for OG's, Woodworks and other American weight-driven clocks

- Made from pine: ready to sand lightly and stain!
- ◆ 5-9/32" long x 1" wide x 1" high
- → Milled 7/8" deep for pulleys at the deepest point

#P-1986... \$3.50 pair



BRASS

PLATED CHAIN... Each chain consists of a 6-foot length with a hook and ring included. Sold by the piece...



		vvire Dia.	: LINK/FL.:	rrice:
#S-8	3	90 mm	61	-\$6.50
#S-3	2	.80 mm-	59	-\$6.50
#S-8	5	-1.05 mm	48	-\$6.50
#S-83	3	-1.35 mm	45	-\$8.25

WOOD DUST COVERS

- Made from pine: ready to sand lightly and stain!
- ◆ 4-5/8" long x 7/8" wide
- ♦ Milled 17/32" deep for pulleys at the deepest point

#P-554... \$3.00 pair

WOOD PULLEYS

Stained, finished and ready to install #P-1164... for OG clocks ♦ 15/16" dia. x 7/16" thick

#P-1165...for Woodworks clocks

♦ 1-1/16" dia. x 9/16" thick Your Choice... \$2.50 pair 12+... \$2.00 pr.



BRASS CHAIN

for all Hermle chain-driven movements

- ◆ Complete with hook and end plate
- ◆ 46.5 links per foot ◆ 57" per length #P-1229... \$14.50 per length

STEEL CHAIN

- for 30-hour Tall Case clocks
 - ♦ 33 links per foot
 - ♦ 12 feet per length #P-374... \$18.00 per length

Cable/Cord...91

ROPE FOR TALL CASE CLOCKS

♦ Sold in 11-foot long hanks #P2003A... 5.0mm #P2003B... 6.0 mm **#P2003C...** 7.0mm



YOUR CHOICE... \$15.00 hank



#P-885.21 ... 21' coil..........\$8.25 #P-88S.100...100' coil \$27.00 #P-88\$,1000...1000' coil \$255.00

1/16" for Tall Case Clocks: #P-87S.21 ... 21' coil \$8.25 #P-87S.100...100' coil\$27.00 #P-87S.1000...1000' coil \$255.00

SYNTHETIC CORD

For Grandfather and American Weight Clocks

 Thickness: 1/16" #P-27.21... 21' coil ...\$5.00

#P-27.100... 100' coil ...\$14.50

BRASS CABLE 1/32" for Vienna Regulators:



#P-114.21 ... 21' coil\$8.50 #P-114.100...100' coil\$35.00 #P-114.1000...1000' coil......\$325.00

3/64" for Wall & Shelf Clocks:

#P-88B.21 ... 21' coil\$8.25 #P-88B.100...100' coil\$27.00 #P-88B.1000...1000' coil\$260.00

1/16" for Tall Case Clocks:

#P-87.21 ... 21' coil\$8.50 #P-87.100...100' coil\$35.00 #P-87.1000...1000' coil\$340.00

5/64" for Tubular Chime **Grandfather Clocks:**

#P-542.100...100' coil\$49.00

CATGUT

◆ 20-ft. coils sized by **B&S** gauge:

#P-8.15... 1.4 mm ...\$13.50 Coil

...\$13.50 Coil

#P-8.22... .65 mm

for Grandfather clocks **#P-8.20...** .8 mm for Vienna Regulators



BRAIDED NYLON CORD



For Vienna Regulators... ♦ 35 lb. test ♦ .62 mm #P-731.21... 21' coil \$3.00 #P-731.100... 100' coil \$8.00

For OG/American Weight Clocks...

♦ 80 lb. test ♦ 1.25 mm #P-255.21... 21' coil \$3.00 #P-255.100... 100' coil \$8.00

For Grandfather Clocks...

Thickness: 1/16" ◆ 80-100 lbs.

#P-278... 300' coil \$18.25





#P-1992A,B,C

CABLE RETAINERS for HERMLE® MOVEMENTS

#P-1992A... for #1171 & #471 series movements

#P-1992B... for #241 series movements #P-1992C... for #1161 series movements #P-1992D... for #461 series movements

YOUR CHOICE ...\$3.00 ea.

92... Cable/Suspensions

REPLACEMENT FLOOR CLOCK CABLES

with installed brass ends, .040 diameter cable (1.00mm) just like the factory originals!

#P-1901A... Kieninger 51" Replacement... \$5.00 each #P-1901B... Kieninger 60" Replacement... \$5.50 each

#P-1901C... Kieninger 76" Replacement... \$5.50 each

#P-1901D... Kieninger 90-1/2" Replacement... \$6.00 each #P-1902A... Urgos 53" Replacement... \$6.75 each

#P-1902B... Urgos 106" Replacement... \$7.00 each

#P-1903A... Hermle 53-1/2" Replacement... \$5.50 each

#P-1903B... Hermle 61" Replacement... \$6.00 each



20-PC. ASSORTMENT SET for Hermle, Urgos and Kieninger cables

#P-1899...\$6.00 set 6-PC. CABLE END SETS → All 6-piece sets consist of three each of two cable ends

#P-1900A... 6-pc. for Hermle Cables #P-1900B... 6-pc. for Urgos Cables #P-1900C... 6-pc. for Kieninger Cables Your Choice...\$2.50 ea. Any 3+...\$2.00 ea.

PRE-CUT HERMLE CABLE Ready to install, factory

replacement cable for Hermle floor clocks!

 Complete with brass end fittings #P-991... .040" thickness for Hermle movements manufactured

from 1986 to the present (89" long) ...\$25.00 each

#P-1345... .040" thickness for Hermle #1171 movements (105" long) ...\$24.50 each



MORBIER-STYLE SUSPENSIONS

#P-21.308... Traditional Morbier-style suspension

♦ 12 mm wide x 24.2 mm long \$8.50 each

#P-21.304... Heavy duty suspension to eliminate

pendulum wobble. Also for clocks with lyre pendulums.

♦ 11.9 mm wide x 25 mm long \$6.00 each



SUSPENSION SPRINGS AND CLIPS

For use with some types of #P-21.100... German pendulums and other clocks #P-36B...Clip \$1.00 ea. 12+... \$.75 ea. #P-21.102... #P-21.102...Spring #P-36B... #P-21.100... Spring Your Choice: \$2.50 ea. 12+... \$2.25 ea.

COPPER HAIRSPRING ASSORTMENT

A 72-piece assortment for alarm clocks, lever escapements and more! #P-616 ... \$11.25 Asst.

24-PIECE SUSPENSION SPRING ASSORTMENT

An assortment of two (2) dozen quality suspension springs #P-107...\$40.00



Suspensions...93

SUSPENSION SPRINGS... Our expansive line of suspension springs for most European wall, shelf, and grandfather clocks...all at very low prices!!!





#P-21.41

HERMLE/KIENNINGER SUSPENSION SPRING ASSORTMENT

#P-21.43

Your Choice: \$6.00 each 12+... \$5.75 each

↑ 10-piece assortment of suspensions to fit virtually any movement by these manufacturers #P-1376 ...for Kieninger mvts. #P-1377 ...for Hermle mvts.

2-PC. TALL CLOCK SUSPENSION SPRING

#P-21.46

◆ 4-11/16" long #P-1785... \$4.25 each



#P-21.45



SPRING SCREW #P-1834... \$2.60 each

TALL CLOCK SUSPENSION BRIDGE

#P-21.42

- ◆ A solid brass replacement bridge for damaged or missing originals on American and English
- tall clock movements

 2-3/8" wide x 29/32" high
- ♦ 1-3/4" betweenmounting holes

#P-1317... \$11.75 ea.

TALL CLOCK SUSPENSION SPRING

♦ 5-5/8" long

#P-10... \$5.50 each 12+... \$5.00 each



94... Suspensions

SUSPENSION SPRING

for Kienninger & Oberafell. Kundo, and other Electro-Mechanical Clock Movements



#P-1560... \$16.50 each

3+ ...\$16.00 ea. 12+... \$15.50 ea.



SUSPENSION SPRINGS FOR **URGOS SELF-ADJUSTING**

MOVEMENTS

#P-671... 1-11/16" long for grandfather movements **#P-672...** 1-1/8" long for grandmother movements Your Choice: \$9.75 each

3+...\$9.50 ea. 12+... \$9.00 ea.

#P-1318

Full lenath not shown

SUSPENSION FOR TIME CLOCKS and LARGE REGULATORS

♦ 1-9/16" long x 13/32" wide Steel with brass





#P-1387... \$4.00 each ends 3+... \$3.50 ea. 12+... \$3.00 ea.

HERSCHEDE SUSPENSIONS A replacement suspension for Herschede hall clocks ◆ Steel: .006" thick ↑ 1-3/4" long x 1/2" wide #P-936... \$3.50

3+... \$3.25 ea. 12+... \$3.00 ea.

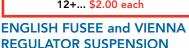


FUSEE SUSPENSION SPRING

...with a round brass end

+ 1-7/16" long #P-1768... \$2.50 each

12+... \$2.00 each



♦ 2-1/4" long

#P-102... \$5.25 each 12+... \$4.75 ea.

S.T. #2 REGULATOR TYPE **SUSPENSION**

♦ 1-1/4" long

#P-350... \$3.25 each 3+... \$3.00 ea. 12+... \$2.75 ea.



#P-851

#P-852

ANSONIA REGULATOR SUSPENSIONS

with "T-type" hangers

#P-851... For movements with front-mount suspensions \$4.00 each 12+... \$3.50 each

#P-852... For movements with rear-mount suspensions \$4.00 each 12+... \$3.50 each

S.T.-STYLE SUSPENSION UNIT

- ◆ Exact copy of the original unit used on the S.T. #89 and other S.T. movements
- ♦ Complete with an attached suspension spring, brass keystone, and a 10" lower rod (can be trimmed to the length you require)
 - ♦ Keystone: 1-15/16" overall width x 3-3/4" long #P-1318 ... \$7.00 each



ANSONIA SWINGING ARM SPRINGS

Pack of 5 springs as illustrated

#P-1814... .004" thick... \$4.50 each pack #P-1815... .007" thick... \$4.50 each pack

400-Day Suspensions...95

SUSPENSION RODS FOR AMERICAN CLOCKS

3-PC. SUSPENSION ROD → A durable, long-lasting 17" long rod constructed from three pieces #P-111... \$3.50 dozen 12+... \$3.00 doz.

"OLD STYLE" ONE-PIECE SUSPENSION ROD

◆ A traditionally constructed one piece rod, 24" overall length

#P-543... \$10.25 dozen 12+... \$9.75 doz.

GENUINE HOROLOVAR

No: Horolovar #:

400-DAY CLOCK SUSPENSION UNITS

Completely assembled with fork and blocks. Units are guaranteed for the clock/model specified...

	P-872.1	1	Kundo Standard 49
		(Repl	acement for 3A)
	P-872.3B	3B	Kundo Standard 54
	P-872.3C	3C	Kundo Standard 55
	P-872.5A	5A	Kundo Junior 53
_	P-872.5E	5E	Kundo Junior 56
0		(Repl	acement for 5B)
	P-872.5F	5F	Kundo Midget 58
l l	P-872.6789	6789	Schatz Standard 49
l i	P-872.10A/B	10 A	Schatz Miniature 53
	P-872.10A/B	10 B	Schatz 1000-Day 54
- 1	P-872.10C	10C	Schatz Midget 57
- 1	P-872.11A	11A	Kern Standard 50
- 1	P-872.11B	11B	Kern Standard 54
	P-872.12C	12C	Kern Miniature 57
	P-872.12D	12D	Kern Miniature 58
	P-872.12E	12E	Kern Midget 58
- 1	P-872.12F	12F	Kern Miniature 61
- 1	P-872.13B	13B	Koma Standard 52
	P-872.13C	13C	Koma Standard 56
	P-872.14A	14A	Koma Miniature 54
- 1	P-872.14B	14B	Koma Miniature 65
1	P-872.16	16	Link Standard 52
	P-872.18C	18C	Peterson Standard 54
i	P-872.20A	20A	Herr Standard 54
	P-872.20B	20B	Herr Standard 54
- 1	P-872.23A	23A	Reiner Standard 53
	P-872.23B	23B	Reiner Standard 56
	P-872.25A	25A	Hermle Standard 53
	P-872.25B	25B	Hermle Miniature 54
9.8	P-872.26	26	Wurther Standard
1	P-872.27A	27A	Herr Standard 53
	P-872.27B		Herr Standard 55
	P-872.27C	27C	Neueck Standard 57
	P-872.28B	28B	Herr Miniature 54
		(Repl	acement for 28A)
	P-872.28C	28C	Herr Miniature 56

No: Horolo	var #:	
P-872.29C	29C	Henn Miniature 52/53
	(Repla	acement for 29A & 29B)
P-872.31	31	Henn Standard 52
P-872.32	32	Henn Standard 54
P-872.33	33	Jauch & Haller 54
P-872.34	34	Kaiser Standard 54
P-872.35	35	Link Miniature 56
P-872.36B	36B	Petersen Stand. 55
P-872.38A	38A	Koma Midget 57
P-872.41B	41B	Master Standard 55
P-872.42A	42A	S. Haller Standard 73
P-872.43A	43A	S. Haller Miniature 73
P-872.44A	44A	S. Haller Midget 73
P-872.45A	45A	Master Standard 70
P-872.46A	46A	New Master 80
P-872.6789A	6789	A Jahresuhrenfabrik

Battery Operated:

	No:	Horolo	var #:	
	P-872	.47	47	Hermle Miniature 71
	P-872	.48B	48B	Kundo Standard 73
	P-872	.49B	49B	Kundo Miniature 73
	P-872	.50B	50B	Master Standard 75
	P-872	.51B	51B	Kundo Standard 76
ļ	P-872	.52B	52B	Kundo Miniature 76
	P-872	.53B	53B	Hermle/Koma 76
	P-872	.54B	54B	Hermle/Koma 77
	P-872	.55	55	Kern Standard 75
	P-872	.56	56	Kern Miniature 55
	P-872	.57	57	Kern Standard 77
	P-872	.58	58	Kern Miniature 77
	P-872	.59	59	Kern Miniature 78
	P-872	.60B	60B	Master 75
	P-872	.61B	61B	Master 77
	P-872	.67B	67B	Hermle 80 Quartz
	P-872	.68B	68B	Hermle 83 Quartz

Full rod length not shown



STUD...

- ◆ Use on Kitchen clocks, OG's and all types of American clocks
 ◆ 3/4" long with the small end threaded with a 4-36 nut (included)
- (included) #P-211...
- \$1.00 each \$10.00 dozen

Your Choice... \$32.50 each



#P-925... For use with #130 Series movements

HERMLE BALANCE UNITS

◆ New balances used on currently manufactured Hermle movements

 Interchangeable with, and can be used as replacements for the old style balance unit

> Your choice... \$56.00 ea. Any 3+...\$55.00 ea.



For use with #340, 350, & 1050 Series movements

96... 400-Day Suspensions



HOROLOVAR TEMPERATURE-COMPENSATING 400-DAY **CLOCK SUSPENSION SPRINGS**

- ◆ Spring tension is controlled during temperature changes
- ♦ Made of a special NiSpan "C" alloy that is far superior to steel or bronze
- Allowances are made for the expansion and contraction of the pendulum bob

#P-490...POPULAR 12-SPRING ASSORTMENT: Contains the following: .002", .0023"(2), .0025", .003", .0032"(2), .0035"(2), .0037", .004"(2)

...\$21.00 per assortment

#P-491...INTERMEDIATE 12-SPRING ASSORTMENT: Contains 1 each: .0018", .0019", .0021", .0022", .0024", .0028", .0031", .0033", .0036", .0038", .0045", .005" ...\$21.00 per assortment

HOROLOVAR 3-SPRING PACKS 3 suspensions of the same size per pack

YOUR CHOICE... \$5.00 pack 4+ packs...\$4.50 pack

NO: INCHES	MM	NO: INCHES	MM	NO: INCHES	MM
#P-473.0018 0018	.046	#P-473.00240024	.061	#P-473.0033 0033	.084
#P-473.0019 0019	.048	#P-473.00250025	.064	#P-473.0034 0034	.085
#P-473.0020002	.051	#P-473.00280028	.071	#P-473.00350035	.089
#P-473.00210021	.053	#P-473.0030003	.076	#P-473.00360036	.091
#P-473.00220022	.056	#P-473.00310031	.079	#P-473.00370037	.094
#P-473.0023 0023	.058	#P-473.00320032	.081	#P-473.00380038	.097
LABOR CIZE CLICA	ENICL	ONE		#P-473.0040004	.102

LARGE SIZE SUSPENSIONS

12 suspensions per pack

◆ Top, bottom and fork <u>are not</u> included

YOUR CHOICE: \$17.50 pack NO:..... INCHES MM #P-473.00450045 .114 #P-473.0050005 .127 #P-473.00550055 .140 #P-473.0060006 .152

ASSORTMENT of TOP/BOTTOM BLOCKS and FORKS for 400-DAY CLOCKS

◆ 12-piece assortment #P-366 ...\$95.00 assortment

TOP/BOTTOM BLOCKS AND FORKS FOR 400-DAY CLOCKS

Your Choice: \$8.75 each Any 12... \$8.25 ea.

Please note: These blocks are not illustrated actual size... Measure your original carefully when ordering!



























#P-1002... Top Block III Bottom Block I Bottom Block II Bottom Block III Fork I (6x 5mm)

#P-997... (16mm long)









#P-1005... Fork EH (12mm long)

#P-1006... Fork EN (14mm long)

Platforms/Gears ... 97

#P-438.2...

SWISS MADE PLATFORM

ESCAPEMENTS

- Eleven ruby jewels
- ◆ Reversible regulator
- Clockwise direction
- ◆ Polished pinion/escape wheel
- Balance with screws...18,000 vibrations

◆ Temperature compensated flatisoval hairspring

\$210.00 each





REPLACEMENT BALANCE STAFFS

(not pictured)

◆ Actual size illustrated ◆ 23 x 36mm

◆ Gold-plated cocks/plates

◆ Screwed end plates

♦ 8 leaf escape wheel

#P-438.BS1... for #1 platform

#P-438.BS2...for #2, 2A, 2C and #4 platforms

Your choice... \$16.75 each



HERMLE PLATFORM

Factory replacement for the #132-071 Ship's Bell movement

- → 34mm (1-11/32") x 21.4mm (27/32")
- 11 Ruby jewels

#P-1216. \$180.00 each







6-JEWEL PLATFORM ESCAPEMENT

for Urgos Movements #UW06, #UW20, and #ŪW65

→ 28.5 mm (1-1/8") x 18.5 mm (23/32") #P-1527... \$27.00 ea. 3+... \$25.00 ea.



CALENDAR CONVERSION KITS

Convert any clock to a calendar in minutes!

 Each kit includes a 31-tooth date wheel. a calendar drive pinion and an intermediate wheel with bracket and date wheel retainer

#P-106J... for Japanese school clocks \$2.00 #P-628... Universal conversion kit \$10.00

#P-877... for Waterbury school clocks \$10.00 (Note: The main gear shaft will have to be

trimmed down before adding this to your movement)

#P-879... for Ansonia school clocks \$10.00 #P-1319... for Sessions school clocks \$10.00







98... Gears/Escapement Parts

CUCKOO CHAIN WHEELS For Regula #25 One-day movements:

◆ 33 mm diameter ◆ 64 teeth

#P-804... Time Train side

CUCKOO CHAIN WHEELS For Regula #34 Eight-day movements:

36 mm diameter

#P-806... Time Train side ◆ 64 teeth



#P-805... Strike Train side





Your Choice... \$6.00 each 3+... \$5.75 ea. Your Choice... \$8.50 each 3+...\$8.00

3-PC. CALENDAR WHEEL

 For English and American tall clocks with the calendar aperture below the center shaft



ESCAPE SHAFT & PINION



- An easy way to change pendulum drops or replace damaged pinions
- This is a steel shaft with completely installed pinion and gear hub
- ♦ 2" overall length

#P-681.6... 6 leaf pinion Your Choice **#P-681.7...** 7 leaf pinion \$3.00 each

#P-681.8... 8 leaf pinion 3+ ...\$2.75 ea.

#P-681.9... 9 leaf pinion

#P-681.10... 10 leaf pinion



MINUTE TENSION **SPRING**

For tall case clocks

♦ 29/32" long x 3/8" wide #P-261... \$1.00 ea.

12+... \$.85 ea.

TENSION WASHER ASSORTMENTS

Assorted size lock washers to lock up gears and rods to correct endshake for a smoother running clock

#P-609... 100 pieces, assorted sizes

#P-1020... 24-piece assortment for new German grandfather and mantel movements

...\$5.00



Verges...99

UNIVERSAL VERGES

- 3 verges designed to fit over fifty different American clock movements
- ♦ Each verge is tempered, polished and ready for installation on your movement
- → Just match your damaged verge to the illustration (shown actual size)





12-PIECE VERGE ASSORTMENT IN THE MOST POPULAR SIZES

 Includes the most common sizes to fit most repair needs!
 #P-1363...Only \$32.00 per assortment





#P-734...will fit Ansonia kitchen clock movements

#P-735...will fit Ansonia short-drop and the small long drop movements

#P-736...will fit the larger Ansonia long drop regulator "A" movements

Your Choice... \$7.00 each Any 3+... \$6.50 each

VERGES FOR REGULA CUCKOO MOVEMENTS

#P-1269...

for one-day Regula cuckoo movements

#P-1270...

for eight-day Regula cuckoo movements

Your Choice... \$2.00 each

3+... \$1.75 each

BEND-A-PALLET

◆ Just bend the Bend-A-Pallet to match your original verge, then harden and polish! #P-629... \$4.00 3+... \$3.75 ea.



STEEL VERGE RETAINER

#P-387... \$1.00 12+... \$.75 each

BRASS VERGE SADDLE

#P-327 ...\$1.00 each 12+... \$.75 each



BRASS VERGE PIN PLATE

#P-210...

\$1.00 each 12+... \$.85 each



100...Escapement Parts

MATCHING VERGE/ **ESCAPE WHEEL SETS**

♦ Replacement escape wheels supplied with a matching verge

♦ Verges are hardened and polished: ready to

install

#P-1016.26... 26 tooth esc. wheel #P-1016.27... 27 tooth esc. wheel #P-1016.28... 28 tooth esc. wheel #P-1016.29... 29 tooth esc. wheel

#P-1016.30... 30 tooth esc. wheel #P-1016.31... 31 tooth esc. wheel

#P-1016.32... 32 tooth esc. wheel #P-1016.33... 33 tooth esc. wheel

#P-1016.34... 34 tooth esc. wheel

#P-1016.35... 35 tooth esc. wheel

#P-1016.36... 36 tooth esc. wheel #P-1016.37... 37 tooth esc. wheel

#P-1016.38... 38 tooth esc. wheel

#P-1016.39... 39 tooth esc. wheel

#P-1016.40... 40 tooth esc. wheel #P-1016.41....41 tooth esc. wheel

#P-1016.42... 42 tooth esc. wheel

#P-1016.43... 43 tooth esc. wheel

#P-1016.44... 44 tooth esc. wheel

#P-1016.45... 45 tooth esc. wheel #P-1016.46... 46 tooth esc. wheel

#P-1016.47... 47 tooth esc. wheel

#P-1016.48... 48 tooth esc. wheel

#P-1016.49... 49 tooth esc. wheel #P-1016.50... 50 tooth esc. wheel

#P-1016.52... 52 tooth esc. wheel

YOUR CHOICE... \$8.50 set

Any 3+... \$8.00 each set

BRASS TALL CLOCK ESCAPE WHEEL WITH HUB

◆ A 30-tooth escape wheel and hub that is interchangeable with all "seconds beat" tall clock escape wheels

◆ 1-3/4" diameter.

#P-1316...

\$10.00 each



BRASS MAIN GEAR

...fits most American and Japanese clock movements

2-27/32" diameter with a 5/16" diameter center hole

#P-1994... \$6.00 each



RUBY PALLET JEWELS

for open escapement clocks Your Choice... \$9.50 each Any 3+... \$8.75 each

Wire

Order #	Gauge: Inches:
#P-874.42	420920"
#P-874.43	430880"
#P-874.44	440850"
#P-874.45	450810"
#P-874.46	460790"
#P-874.47	470770"
#P-874.48	480750"
#P-874.49	490720"
#P-874.50	500690"
#P-874.51	510660"
#P-874.52	520630"
#P-874.53	530595"



Two piece fast/slow assembly commonly used on Sessions Black Mantels and other shelf clocks

Brass and steel construction

#P-2006... \$9.25



A fully jeweled replacement bar for German swinging arm clocks

♦ 3/4" between iewels

#P-518... \$26.50 each

Escapement Parts/Strike Parts...101

HERMLE® PINION & ESCAPE WHEEL Fits Hermle® #340, 350 and 10

Fits Hermle® #340, 350 and 1050 series balance wheel movements #P1578... \$11.00 3+... \$10.50 ea.

HERMLE® PALLET AND FORK

For Hermle's #350-020, #340-020, and #1050-020 movements #P-1215... \$12.50 each





STRIKE SELECTOR ARM

#PA-11A... Short, 1-1/4" long #PA-11D... Long, 2" long Your choice... \$2.00 each

HERMLE® 2ND GEARS FACTORY REPLACEMENTS!

For #1050-020 movements: #P-1258... Time train

#P-1259... Strike Train #P-1260... Chime Train

For #340-020 movements:

#P-1261... Time train #P-1262... Strike Train

#P-1260... Chime Train
Your Choice... \$10.00 each
6+ ...\$9.50 each

12+ ...\$9.00 each

Moon Gears for Hermle Clocks...

For Hermle grandfather clocks: ◆ 15 mm outside diameter

→ 7.5 mm inside diameter → 20 teeth

#P-1566A....\$4.25 each 3+... \$4.00 each

For Hermle grandmother clocks: ◆ 15 mm outside diameter ◆ 4.7 mm inside diameter ◆ 20 teeth #P-1566B...\$3.50 each 3 +...\$3.25 each

GEAR BLANKS ...made from clock brass and spoked as illustrated!



#P-1354A 1/8" x 3-1/4"	\$9.00 each
#P-1354B 1/16" x 2"	
#P-1354C 1/16" x 1-7/8"	
#P-1354D1/16" x 1-3/4"	*
#P-1354E 1/16" x 1-3/8"	
#P-1354F 1/16" x 1-3/8" (spok	teless). \$4.00 each

CAST IRON BELL

- ♦ A 4" dia. cast bell with good tone
- Perfect for tall clocks or other large timepieces

#P-1308... \$11.25 each

TALL CLOCK GATHERING PALLETS...



#P-20L...Left Hand Pallet: used when the pin is located in <u>front</u> of the rack

...\$20.00 each



#P-20R...Right Hand Pallet: used when the pin is located <u>behind</u> the rack

...\$20.00 each

CAST BRASS BELLS...

#P-893.1.5\$ 5.50
#P-893.1.751-3/4 " diameter\$ 5.75
#P-893.2 \$ 6.75
#P-893.2.252-1/4 " diameter\$ 7.75
#P-893.2.5 2-1/2" diameter\$10.00
#P-893.3 \$12.25
#P-893.3.5 3-1/2" diameter\$17.50
#P-893.4 4" diameter\$24.50
#P-893.5 5" diameter\$32.75
#P-893.5.755-3/4" diameter\$33.00

STRIKING HAMMER for AMERICAN CLOCKS...

- Brass hammer
- Steel arm may be bent to desired position



102... Strike Parts



STRIKE GOVERNOR ASSORTMENT

Exact copies of six original "butterflies" for the strike trains of American clocks

- ♦ Solid brass
- Shaft/pinion not included

TALL CLOCK STRIKE GOVERNOR

The perfect replacement for damaged or missing governors on English and American tall clock movements

- Brass with a steel shaft and 7-leaf pinion
- ♦ 2-37/64" from one end of the shaft pivot to the opposite end
- ◆ Fan: 1-5/32" wide x 1-39/64" long #P-1315... \$11.50

PLASTIC HAMMER TIPS

for Hermle® Movements

◆ Each "wheel" has 25 hammer tips, each #P-1033... \$6.00 assortment ready to detach and insert in your hammer! #P-2007A... Clear ...\$9.50

#P-2007B... Brown ...\$6.50



FRENCH BELL HAMMER

 2-1/2" overall length → Solid brass #P-158... \$5.00 each

KNURLED NUT

◆ Solid brass nut for French bell stands #P-279... \$1.50 each

12+...\$1.25 each

FRENCH CLOCK STRIKE HAMMER

◆ Solid brass ◆ Nylon head

◆ 2-3/4" overall length #P-1936... \$5.00 each



FRENCH BELL STAND

- Solid brass with a knurled nut
- ◆ 2-3/16" overall length #P-17... \$4.50 each



BRASS STRIKING HAMMERS

- Complete with steel set screw
- Durable nylon strike pads

#P-129...for Grandfather Clocks ...\$2.25 each #P-130...for Mantle and Wall clocks

...\$2.25 each 12+...\$1.75 each



10-PIECE ASSORTED BRASS

HAMMER WITH TIPS

- Variety of sizes
- ◆ Two different tips materials: leather and nylon
- Brass hammers
- #P-2305... \$8.50 each

BRASS STRIKE HAMMERS

with leather strike pads! #P-1936... for Grandfather Clocks #P-1937...for Mantel and Wall clocks Your choice \$2.00 | 12+... \$1.50 each 🍑



TALL CLOCK STRIKING RACK **ASSEMBLY**

- ◆ Steel with a brass arm on front
- ◆ 2-1/2" from mounting post to top of teeth
- Mounting stud included

#P-265... \$23.25



Cuckoo Strike Parts...103

ANTIQUE STYLE **TAPERED CUCKOO**

BELLOWS ...Complete replacement with resonating tube and a tapered bellows top!

 Made in the antique style with a back opening Tube length without top:

#P-1397... Medium (5-1/2" long)... \$35.00 pair #P-1398... Large (6-1/4" long)... \$40.00 pair

Also available ...

ANTIQUE-STYLE BELLOWS TOP ONLY: No tube!

- ◆ A replacement top only in the tapered antique style... Ready to glue to your tube!
- ♦ 2-1/4" long x 2" wide

#P-1402 ... \$16.00 pair

RECTANGULAR BELLOWS TOP

Top only with no tube Your choice...\$6.75 pair

3+... \$6.00 pr. 12+... \$5.50 pair



#P-458 ----- 1-1/4" x 2" #P-1062 ----- 1-1/4" x 2-3/16"

#P-457 ----- 1-9/16" x 2-3/8"

CUCKOO LIFT WIRE ASSORTMENT

A convenient assortment of lift

wires, eyes and staples for cuckoo strike mechanism installation

#P-372... \$14.00

BELLOWS COVERING **MATERIAL**

...repair your own bellows with factory replacement fabric

◆ 27" x 7-3/4" piece #P-1432 ...

\$7.50 each

#P-470... QUAIL BELLOWS WITH SIDE OPENING 2-3/16" \$10.50 ea.

RECTANGULAR CUCKOO BELLOWS

Complete replacement bellows with resonating tube and a rectangular bellows top!

Choice of side or back openings

TUBE Length	SIDE	BACK	YOUR
w/o top:	OPENING #	OPENING #	CHOICE:
2-1/2"	-#P-1060	#P-1061	\$10.50 pr.
2-3/4"	-#P-1058	#P-1059	\$10.50 pr.
3"	- #P-466	#P-465	\$10.50 pr.
4"	- #P-464	#P-463	\$10.50 pr.
4-5/8"	- #P-1056	#P-1057	\$11.25 pr.
		#P-1055	
		#P-461	
		#P-1053	and the second second

PLASTIC CUCKOO BIRD

- ♦ 3" overall length
- ♦ Metal mount w/screw

#P-425... \$2.00

12+... \$1.75 ea.



WOOD CUCKOO BIRD

- Perfect for old cuckoo restoration
- ♦ 3-1/2" overall length





104... Chimes

HIGH QUALITY POLISHED BRASS TUBE **CHIME SET** → Complete with suspension cords ◆ Longest: 59" ◆ Shortest: 39" **#P-937PB... Call for current price** STEEL CHIME RODS AND SETS ◆ Each complete with a 1/4" brass screw top **INDIVIDUAL STEEL RODS: #P-34A...**19" long **#P-34B...** 21" long YOUR CHOICE... \$9.50 each TUNED CHIME ROD SET for WESTMINSTER GRANDFATHER and GRANDMOTHER CLOCKS... ♦ 1/4" screw ♦ Rods: 20-1/8" to 26" #P-134... 4-ROD SET ...\$23.00 set TUNED BRASS ROD SET for WESTMINSTER MANTEL CLOCKS... → 5 rods → 1/4" screw ◆ Longest rod: 7-1/2" #P-353...\$29.00 set **CAST IRON GONG BASES** #P-471A... 2" diameter #P-471B... 2-3/4" diameter Your choice... \$3.75 3+... \$3.25 ea. 12+... \$3.00 ea. CUCKOO GONG AND BASE ◆ Steel coil gongs with a mounting base ◆ Your choice of three popular sizes #P-1150... 7 cm (2-3/4") diameter **#P-1151...** 9 cm (3-1/2") diameter **#P-1152....** 11 cm (4-3/8") diameter Your Choice... \$2.00 3+... \$1.50 each **UPRIGHT GONG** #P-113... AND BASE... #P-231.

ROUND WIRE GONGS

#P-113... 4" dia. with an inside loop mount #P-231... 4" dia. with a washer mount Your choice...\$2.25 each

12+... \$2.00 each



Chimes/Case Parts...105

Please note... ALL chime rods are pressed into the blocks, they DO NOT screw in.





MOVEMENT MOUNTING FEET

for Hermle Movements #P-1753... Set of 4... \$6.50

PAD FEET for mantel clocks and other small items

- ♦ 3/8" plastic pad easily installed: incorporates a nail mount
- ◆ Protects surfaces from scratching

#P-1389A ...

Pack of 12 ...\$3.00

LEVELING FEET

A set of four, easy-to-install feet which allow you to easily level clocks and furniture!

- ♦ 3/16" wide threaded post
- ↑ 1-1/2" tall
- ↑ 1" wide foot #P-2279...

Set of 4

...\$7.50



106...Case Parts

CAST FOOT FOR ANSONIA CLOCKS

◆ 1-1/8" diameter aluminum foot with a threaded steel mounting post and nut



◆ Ready for paint or another finish to match your clock's patina #P-2079... \$7.50 pair

ANNIVERSARY CLOCK LEVELING FEET

Solid brass replacements for 400-day & Kundo-style clocks

◆ 10 mm long with a 4 mm thread dia. **#P-2153... 3/4"** (19 mm dia.) \$1.75 ea.



#P-2154... 1" (25.5mm dia.) \$2.00 ea.

STFFI **MANTEL CLOCK BACKPLATES**

finished just like the originals! #P-443 ...

- ◆ 5-1/4" diameter for Black Mantel Clocks #P-704 ...
- ◆ 4-1/2" diameter for China Clocks #P-1139 ...
- ♦ 3-3/4" diameter for small clocks Your Choice: \$4.50 each

3+... \$4.25 each 12+... \$4.00 each

BRASS BACKPLATE FOR ANSONIA MANTEL **CLOCKS**

SOLID BRASS just like the originals!

♦ 4-7/16" diameter

P-1985... \$10.00

MANTEL CLOCK BACKBOARD

- ◆ Wood with a precut 4-3/4" diameter hole. Perfect for Black Mantel clocks!
- ◆ 14" long x 7- 31/32" high x 1/4" thick #P-1017... \$8.00 each

BLACK MANTEL CLOCK FEET

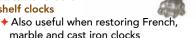


...Copied exactly from antique originals!

- ♦ 2" wide x 3/4" high
- A set of 4 feet (2) of each illustrated)
- Unpainted metal: You match the color to your clock's existing hardware #P-1481... \$13.00 Set
- on Black Mantel clocks and other American shelf clocks
- ◆ Unpainted metal: You match the color to your clock's existing hardware #P-116... Set of 4 ...\$13.50

STATUE CLOCK FEET





- Unfinished cast metal
- ◆ 2-3/8" wide x 3/4" high

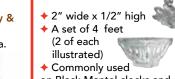
#P-1309... \$18.50 pair

NEW HAVEN "CLAPPER" SIDE ORNAMENT for STATUE CLOCKS

- Unpainted cast metal; ready for a finish to match your clock's patina
- ♦ 1-13/16" wide x 2-1/8" long

#P-2235... \$12.75 pair









Case Parts...107

HORSE & EAGLE ORNAMENTS FOR GERMAN CLOCK TOPS

Brown with a wood grain appearance

#P-118... Horse ♦ 6-1/2" tall x 5-3/4" wide

#P-119... Eagle ◆ 4-5/8" tall x 9-1/2" wide Your Choice... \$5.00 3+...\$4.00 each



CAST METAL EAGLES WITH A BRASS-PLATED FINISH

#P-1107... 1-3/4" tall x 2" wide... \$5.00 ea. 3+...\$4.75 #P-1108... 2" tall x 2-1/4" wide... \$5.00 ea. 3+...\$4.75 #P-1109... 2-3/8" tall x 2-3/8" wide... \$5.25 ea. 3+...\$5.00

#P-1110... 2-3/4" tall x 2-11/16" wide... \$6.25 ea. 3+...\$6.00



#P-1110...

MIRROR-SIDE CUPID FINIAL

→ A copy of the cupid finial used on the Ansonia "Mirror-Side" clocks

◆ Cast metal with a natural silver finish ◆ 4-5/8" tall

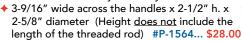
#P-117... \$10.00 each 3+... \$9.50 each



CAST METAL URN FOR ANSONIA STATUE CLOCKS

An exact copy for the size used on smaller Ansonia statue clocks

 ◆ Unfinished so you can easily match it to the color of your clock's finish
 ◆ Easy assembly





SOLID BRASS ROSETTE FOR TALL

CLOCKS → 2" diameter

#P-24... \$4.50 each 3+...\$4.00 each

BRASS COLUMN BASES FOR TALL CLOCKS

with a polished finish!

- **#P-1141A...** → 31 mm wide x 20 mm high x 22 mm inside diameter... \$12.00
- **#P-1141B...** → 31 mm wide x 20 mm high x 19 mm inside diameter... \$11.00
- **#P-1141C...** → 35 mm wide x 20 mm high x 25 mm inside diameter... \$12.00
- #P-1141D... → 40 mm wide x 20 mm high x 28 mm inside diameter... \$12.00







108... Case Parts

CAST METAL SIDE ORNAMENT FOR BLACK MANTEL CLOCKS

An exact reproduction of an antique side ornament!

Unpainted metal: You match the color to your clock's existing hardware ◆ 3-1/4" long x 7/8" wide #P-1482... \$7.75 pair

CAST METAL SIDE ORNAMENTS FOR BLACK MANTEL CLOCKS

An exact reproduction of an antique side ornament!

- Finished with an antique brass plating
- ♦ 3-1/2" long x 1-3/8" wide

#P-1362 ...\$14.00 pair

CAST METAL SIDE ORNAMENTS FOR STATUE CLOCKS

The most authentic we have ever seen!

- Unpainted metal: You match the color to your clock's existing hardware
- ◆ 2-15/16" overall length
- ◆ Threaded mounting stud/nut included #P-1505... \$14.50 pair 3+... \$14.00 pair

CAST METAL BASE ORNAMENTS

Unpainted metal: You match the color

CAST METAL ORNAMENTS

LION HEAD...

For shelf clocks by Ansonia and others!

- ◆ Unpainted metal
- ↑ 1-7/16" high x 1-7/16" wide #P-260... \$2.50 each 3+...\$2.25

LADY ORNAMENTS...

#P-166... 1-7/8" tall

- ◆ Unpainted metal **#P-167...** 2-3/16" tall
 - Painted gold

#P-256... 2-5/8" tall

◆ Unpainted metal

Your choice...\$3.50 ea.

3+... \$3.25 ea. LION/RING...

Used on Black Mantel Clocks Unpainted metal

◆ 2-7/16" high x 2-1/2" wide

#P-115... \$9.50 pair

3+...\$9.00 pair



#P-165...

◆ 5-1/8" wide x 2" long



♦ 4 -7/8" wide x 1-1/2" long

Your choice...\$4.25 ea. Any 3+... \$3.75 ea.







#P-324... #P-323...



◆ 1/2" opening → 3/4" opening

HALF-COLUMNS FOR BLACK MANTEL **CLOCKS**

◆ Reeded metal with a flat black finish

Available in two versatile sizes: **#P-1162...** 1/2" wide x 5-1/4" long **#P-1163...** 3/4" wide x 6" long

Your Choice... \$5.50 pair Any 3+ pair... \$5.00 pr.

ORNATE COLUMN HOLDERS

Perfect for Black Mantel restoration!

- Cast metal with a gold finish
- ◆ Set consists of one top and one bottom piece

Your choice...\$3.50 set 3+... \$3.25 set



Case Parts...109







AUTHENTIC ANTIQUE-STYLE TALL CLOCK LOCK/KEY SET

#P-183...

- ◆ All steel construction with a solid brass key
 - ◆ 2-7/16" high x 7/16" wide x 1-3/4" deep
 - ♦ 23/32" back set #P-1213... \$8.50 Set

DOOR LOCKS

Terry-Style Door Lock Set

- Also fits other large American shelf clocks
- All steel construction with a solid brass key
- 1-5/8" high x 15/16" wide #P-183... \$6.25 Set
- #P-183K.... Extra Key ...\$3.25

S.T. #2-STYLE DOOR LOCK

- A solid brass re-creation of this S.T. door latch
- Opens with your movement winder
- ◆ 2-1/4" long mechanism with catch

#P-187... \$6.75 each



WALL HANGERS

Brass Hangers:

#P-71... 2-1/8" long x 5/8" wide **#P-70...** 1-1/2" long x 1-1/4" wide Pack of 6 hangers: \$1.50 3+ packs....\$1.25 pack

#2 S.T. Regulator-style Steel Hanger:

 An exact replica of the antique original with an antique finish

#P-354... \$2.00 ea. 6+...\$1.75 each



SOLID BRASS KEYHOLE ESCUTCHEON

for tall clocks, wall clocks, furniture and other applications when a quality, vertical escutcheon is required! + Unpolished

◆ 4" long x 1-5/16" wide #CO136B... \$.10 each

WALL LEVELERS Steel with a knurled

brass knob

#P-359... → 5/8" dia. knob

♦ 1-7/8" long #P-360...

- ♦ 3/4" dia. knob
- ↑ 1- 7/8" long

Your Choice... \$3.75 each 12+... \$3.25 each





CAST BRASS WALL LEVELERS

Predrilled, beveled mounting holes

#P-2054...Large:

- ♦ 1-3/4" long cast brass leveler with a 1/2" dia. knurled brass knob
- ♦ 3/4" long threaded steel adjustment post ...\$6.75 each

#P-2057... Small:

- ◆ 1-11/16" long cast brass leveler with a 3/8" diameter knurled brass knob
- ◆ 1-1/16" long threaded steel adjustment post

...\$6.50 each

MOVEMENT STRAPS FOR FRENCH CLOCKS

- ♦ 6" brass straps for securing Frenchtype bezels/dials to case backs
- ◆ 1-3/4" long steel tightening screws
- Sold in pairs only #P-753... \$6.50 pr.

3+ pr. ...\$5.75 pr.





110... Case Parts



BRASS HINGES

#P-2341... 1/2" long **#P-93...** 3/4" long **#P-2342...** 1" long **Your choice...** \$1.50 each

> 12+ \$1.25 (Widths may vary)

#P-95... School Clock Hinge:

◆ A 2" long, solid brass replica of the antique original ... \$4.50 each

#P-435... Solid Brass Door Hinge:

◆ Designed for tall clock cases: 1-1/4" high x 1-5/8" wide when open ...\$35.00 each



3/32" THICK SOLID BRASS TALL CLOCK STRAP HINGE ...Will fit doors up to 3/4" thick. A top quality hinge with a polished finish, made in England

 Hinge tabs are not drilled so you can match the holes to meet your requirements

◆ Strap length (Pre-drilled as shown): 3-3/8" long

♦ Hinge tabs: 3/4" wide x 1" long

#P-1544... \$25.00 each



SOLID BRASS PIVOT HINGES

- ◆ Predrilled with countersunk holes
- Sold in pairs: one top and one bottom hinge

#P-325 ...for Grandfather clocks

↑ 1-7/16" long x 7/8" wide \$3.50 pair 3+...\$3.00 pair

#P-176... for American shelf clocks

◆ 1-1/8" long x 3/4" wide

\$3.50 pair 3+...\$3.00 pair

BRASS DOOR LATCHES #P-109... O.G.-Style latch assembly \$3.00 each 12+...\$2.50 ea. #P-72... Latch Assembly \$3.00 each 12+...\$2.50 ea. (P-109 and P-72 Latches may be mixed or matched for the quantity price) #P-120... For American clocks \$1.50 each 12+...\$1.00 each



◆ Sold in packs of 6 #P-92A ... 1" long #P-92B ... 3/4" long Your Choice \$2.50 pack 6+ packs... \$2.25 pack

1/2" BRASS SCREW EYE

#P-362 ...\$2.00 dozen 12+ dozen...\$1.50 dozen



SOLID BRASS KNOB

→ 1/2" x 1/2" with a steel screw shank

#P-945C... \$2.50 each 3+... \$2.00 each



#P-1577...

♦ 1-5/8" overall length

\$4.00 each

3+...\$3.75 ea. 12+...\$3.50 ea.

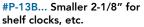


STEEL SEATBOARD HOOKS

#P-13A... Large 3-1/2" for tall case clocks

 Now supplied with a washer and square steel nut for traditional installation and a wing nut for contemporary or optional installations

♦ 9/64" diameter steel \$4.50 pair 6+ pr. ...\$3.75 pr.



◆ Supplied with a square steel nut for traditional installation

♦ 7/64" diameter steel

\$4.50 pair 6+ pr. ...\$3.75 each

MOVEMENT MOUNTING **SCREWS & PLATES**

 Pack of 6 screws and 6 plates to secure movements to seatboards

◆ Plates: 1-5/16" long x 11/16" wide

◆ Screws: 1-9/16" long

#P-1367... \$15.00 pack



♦ 5-1/8" tall x 2" wide

1" threaded post

#P-619...\$12.50 each

SOLID BRASS ACORN FINIAL

 Perfect for bracket clocks and other clocks

♦ 2-7/8" tall with a steel screw

- ↑ 1-55/64" diameter
- Polished finish

#P-1477... \$8.25 ea.

Case Parts...111



3+ ...\$29.50 each #P-50A...Terry-style for Pillar and Scroll clocks ◆ 3-5/16" tall

#P-50B... S. Thomas-style for Pillar and Scroll clocks → 3-5/16" tall

AMERICAN-MADE! SOLID BRASS

SPIRE FINIALS

#P-1394...Round Ball Spire

- ♦ 5 -1/4" tall
- ◆ Antique finish
- ◆ 2-3/8" diameter sphere \$29.50 each

3+... \$27.50 each

#P-1393...

Suppressed Ball Spire

- ♦ 4" tall
- ◆ Antique finish
- ♦ 2" dia. sphere

\$27.50 each

3+... \$25.50 each

SOLID BRASS SPIRE FINIAL

◆ A high quality, 4-1/2" tall solid brass finial with a polished finish

#P-618... \$11.50 each 3+... \$10.75 ea.



SET OF 3 MAHOGANY FLAME FINIALS

Exact copies of old Pennsylvania tall clock finials turned from solid mahogany!

- Ready for light sanding and a finish!
- ♦ 5-7/8" tall, set of 3 finials

#P-1420A... ...\$21.00 3+ Sets...\$18.00 each



112...Case Parts

SOLID WOOD CLOCK FINIALS

Superbly crafted by a local craftsman from antique originals!

- ◆ Ready for the stain and finish of vour choice
- ♦ 1/2" dia. mount allows you to trim and match to almost any existing sized hole



♦ 3-1/2" tall #P-552A... \$35.00 pair

> ...TAPERED STYLE for EARLY

STEEPLE CLOCKS ♦ 3-1/2" tall #P-551A...

#P-445... \$29.50

\$19.50 pair



Solid mahogany supplied in 24" long lengths...

#P-2158... for American school clock doors + 3/4" overall width ...\$5.50 length

#P-2159... for Seth Thomas "Globe" and "World" doors:

↑ 1" overall width ...\$7.25 length

SOLID OAK SCHOOL CLOCK DOOR MOLDING

♦ 3/4" wide x 9/32"thick

> ◆ 24" lengths #P-412 ... \$5.50 each 3+... \$5.00 each

OAK KITCHEN CLOCK DOOR MOLDING

Crafted from solid oak with an original antique pressed design

- ◆ Ready to cut and form a custom replacement door for your oak kitchen clock
- ◆ Supplied in 24" lengths, 3/4" wide x 13/16" thick
- Milled for glass on the back, just like the originals

#P-1305.6...

\$6.25 each length



5-7/8" depth

◆ 16-1/2" long x 4-3/4" high x 4-7/8" depth

SHOP REGULATOR TOP &

with a pressed design

BOTTOM Crafted from solid oak

Top... ♦ 17-1/2" long x 2-7/8" high x

Can also be used as an attractive shelf! #P-267...\$35.50

EMBOSSED OAK KITCHEN CLOCK BOTTOM

A ready-to-assemble and finish solid oak base to replace damaged or missing bases

- Designed to accommodate virtually all kitchen clock cases!
- ♦ 14-1/2" wide x 5-1/4" deep at the base when assembled
- ◆ Pre-mitred: requires only nailing and gluing

#P-1615... \$30.00

Case Parts ...113



#P-217...

- ♦ 2" tall
- ◆ Lacquered
- ♦ Base dia.:1"
- Max. dia.:1"



#P-1734...for Cuckoo Clocks

- + 2-7/16" tall
- Unfinished Base dia.:1-9/16"
- Max. dia.:1-9/16"



- ♦ 2 -1/2" tall
- Lacquered
- ♦ Base dia.:1" ♦ Max. dia.: 1-1/4"



+ 2- 3/4" tall

- Unfinished
- Base dia.:1"
- ◆ Max. dia.: 1-1/2"



#P-220...

Half Finial

- ♦ 2-3/4" tall
- Unfinished
- ♦ Base: 2-1/4" wide
- ♦ 2-1/2" wide



#P-219...

- + 2-7/8" tall
- Unfinished
- Base dia.:1"
- ♦ Max. dia.:1-1/4"



#P-912...

- ♦ 3" tall
- Unfinished
- ♦ Base dia.:1-1/2" ♦ Max. dia.:2"



#P-908...

- ♦ 3-1/8" tall
- Unfinished
- ♦ Base dia.:1"
- ♦ Max. dia.:1"



#P-907...

- ♦ 3-1/2" tall
- Unfinished
- Base dia.:1-1/4"
- ♦ Max. dia.:1-3/4"



#P-906...

- ♦ 3-5/8" tall
- Unfinished
- Base dia.:1"
- Max. dia.:1-1/2"



#P-905...

- ♦ 4-1/2" tall
- Unfinished
- Base dia.:1-1/2"
- Max. dia.:2"



ready for light sanding and a finish. Those "lacquered" are finished with clear lacquer: no stain

> Your Choice... Mix or match:

\$1.75 each

Any 12+... \$1.50 ea.

Maximum diameter:

measured at the widest point on the finial's body

114...Case Parts

REPLACEMENT TOPS FOR VIENNA REGULATORS ◆ Unfinished: ready for light sanding and finish of your choice ◆ Made from quality veneered plywood Solid wood finials Solid wood moulding, ornamentation and blocks #P-2092... ♦ 19" wide x 9-1/4" high ...\$54.00 #P1881... ◆ 12" wide x 5-3/4" tall ...\$30.00 #P-2063... ◆ 11" wide x 4-3/16" high ...\$30.00 #P-2061... ◆ 16-1/4" wide x 6" high ...\$38.00 #P-1880... ◆ 12" wide x 9-1/2" tall ...\$32.00

VIENNA REGULATOR TOP MOUNTING BLOCK & TONGUE

- ◆ An antique-style mounting block with matching tongue for Vienna Regulators
- ◆ Made locally! #P-2106... \$5.00

REPLACEMENT BOTTOM FOR VIENNA REGULATORS

- ◆ Made from quality solid wood. Ready to sand lightly, stain and finish
- ◆ Complete with bottom finial
- → 7-5/8" long x 4-15/16" depth x 2-5/16"
 high #P-2065... \$32.00

Case Parts: Cuckoo...115

WOOD STAG HEAD ORNAMENTS

- ♦ Brown finish
- Antlers are included

Overall width: Overall height:

Sold only in pairs

#P-1415......1-5/8".....1-5/8"....\$18.00 #P-1416.....2"2"\$21.00 #P-1417.....2-3/8"....2-3/8"...\$26.50

#P-1418.....3 1/4"3"\$29.50

 Plastic antlers, realistically colored brown with black highlights

#P-553A... 3-1/4" long......\$4.50 pair

#P-553B... 3-3/4" long\$5.75 pair

#P-553C... 4-1/2" long......\$6.50 pair



HANDCARVED WOOD STAG HEAD **ORNAMENTS**

Brown finished

- Antlers are not included
- Available in three sizes:





HARDWOOD FINIAL FOR CUCKOO CLOCKS

Ready for light sanding and vour choice of finish!

+ 2-7/16" tall

#P-1734... \$1.75 each 12+...\$1.50 ea.

(May be mixed or matched with other finials on page 113 for the quantity price)

Handcarved in the Black Forest by German craftsmen!

- Solid wood with a traditional brown finish
 - Antlers are not included with these frames

HUNTER MOTIF CUCKOO UPPER

FRAME

#P-1500A 8-3/4" wide x 5" high \$ 39.00 #P-1500B 11-1/2" wide x 5-1/2" high...\$ 50.00 #P-1500C 14" wide x 6" high....... \$ 72.00 #P-1500D.... 17" wide x 10" high............. \$145.00



WITH A BIRD AND LEAVES Handcarved in the Black Forest by

German craftsmen!

Solid wood with a traditional brown finish

#P-1498A... ♦ 8-3/4" wide

♦ 5-3/4" high ...\$17.50

#P-1498B... ◆ 11-1/4" wide

♦ 6-1/2" high ...\$23.50

#P-1498C... → 13-3/4" wide

♦ 8" high ...\$45.50

CUCKOO TOP CLIPS #P-1821... \$1.00 ea. \$6.00 dozen

116... Case Parts: Cuckoo/Glass

WOOD HORN & MOUTHPIECE FOR BLACK FOREST CUCKOO CLOCKS

Stained and finished; ready for mounting on your cuckoo!

Available in two sizes.... #P-1593... 42mm horn/mouthpiece ...\$9.25

#P-1594... 65mm horn/mouthpiece..\$9.25

WOOD CUCKOO DOOR

This is a great replacement for damaged or missing cuckoo doors!

#P-274... 20mm x 29mm .\$1.25 ea. 3+ ...\$.75 ea.

12+ ...\$.50 ea.

ROUND CONVEX GLASS READY TO INSTALL IN YOUR BEZEL!

When ordering convex glass to fit a bezel:

◆ For bezels up to 6" in diameter: Order glass 1/4" less than your bezel diameter ◆ For bezels over 6" in diameter: Order glass 3/8" less than your bezel diameter PLEASE NOTE: This is a guidline, and may vary based individual bezel sizes.

I LEASE NOT	<u>Li Tillo io a guiullile, a</u>		
CX2.6252-5/8"	CX6.0006"		
CX3.0003"	CX6.1256-1/8"		
CX3.125 3-1/8"	CX6.2506-1/4"		
CX3.250 3-1/4"	CX6.3756-3/8"		
CX3.375 3-3/8"	CX6.5006-1/2"		
CX3.500 3-1/2"	CX6.6256-5/8"		
CX3.625 3-5/8"	CX6.7506-3/4"		
CX3.750 3-3/4"	CX6.8756-7/8"		
CX3.875 3-7/8"	CX7.0007"		
Your choice	CX7.1257-1/8"		
3" to 3-7/8"	CX7.2507-1/4"		
\$3.75 ea.	CX7.3757-3/8"		
12+\$3.25 ea.	CX7.5007-1/2"		
12+\$3.25 ea.	CX7.6257-5/8"		
CX4.0004"	CX7.7507-3/4"		
CX4.125 4-1/8"	CX7.8757-7/8"		
CX4.250 4-1/4"	Your choice		
CX4.375 4-3/8"	6" to 7-7/8"		
CX4.500 4-1/2"	\$5.00 ea.		
CX4.625 4-5/8"	12+\$4.50 ea.		
CX4.750 4-3/4"	12111141100 car		
CX4.875 4-7/8"	CX8.0008"		
CX5.0005"	CX8.1258-1/8"		
CX5.125 5-1/8"	CX8.2508-1/4"		
CX5.250 5-1/4"	CX8.3758-3/8"		
CX5.375 5-3/8"	CX8.5008-1/2"		
CX5.500 5-1/2"	CX8.7508-3/4"		
CX5.6.25 5-5/8"	Your choice		
CX5.7505-3/4"	8" to 8-3/4"		
CX5.8755-7/8"	\$9.00 ea.		
Your choice	, ,		
4" to 5-7/8"	12+\$7.50 ea.		

12+...\$3.75 ea.

...\$4.25 ea.



OVAL CONVEX GLASS

...for Revere and other Telechron clocks!

♦ 5-3/4" high x 4-1/4" wide #P-1849... \$10.00





...\$12.50 ea. 12+...\$11.50 ea.

CX11.750 11-3/4"

CX12.500 12-1/2"

CX12.750 12-3/4"

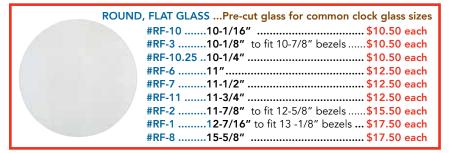
CX15.3125 15-5/16"

Your choice...

...\$15.00 ea. 12+...\$14.00 ea.

GLASS RETAINING BELT

- ♦ Used to secure glass in modern grandfathers and other clocks
- Sold in 10 ft. lengths #P-2320... \$3.50



Glass...117



#SR1...TOP GLASS

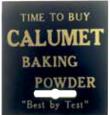
◆ 12" opening ◆ Black/gold

GLASS FOR SHOP REGULATORS

- ♦ Silkscreened on 14" x 16" glass which can be easily trimmed to fit your clock
- Unwanted lettering and borders can be easily removed with a razor blade

YOUR CHOICE...\$17.50 ea.

3+...\$15.00 ea. 6+...\$14.00 ea.





#SR6



#SR8



#SR9

#SR2



#SR10



#SR11



#SR12



#SR13



#SR14









#SR15 #SR18 #SR19 #SR20

118...Glass

Just like the antique originals!







#NG-1...

#NG-2...

#NG-5...





...#NG-18S

...NG-19A/19B

HIGH QUALITY DECORATED CLOCK GLASSES

Faithfully reproduced in authentic styles and colors and etched just like the antique originals!

#NG-1... Sunburst (9" x 12")

- ♦ Red, blue and silver design with black background and gold scroll work ...\$15.50 #NG-2... Floral Design (12" x 14")
 - Beautiful 5-color design surrounded by gold scroll work on a black background ...\$16.75

#NG-5... George Washington (9" x 12")

→ Portrait within a medallion surrounded by a light green border....\$15.50

#NG-185... Beehive Glass (8" x 10")

→ Multicolored with silver silkscreened scroll work ...\$16.75

#NG-19A... Eagle/Shield Flag Etched glass (9" x 12")

◆ For OG and wood works clocks ... \$16.75

#NG-19B... Eagle/Shield Flag Etched glass (7" x 8") → Same as NG-19A, but 7" x 8" size for steeples, beehives, and other American mantel clocks ... \$12.00

HEAVY DUTY GLASS CUTTER

Allows you to precisely cut plate glass from 1/8" to 1/4" thick



◆ Ball handle end aids in the snapping of scored glass ◆ American-made!

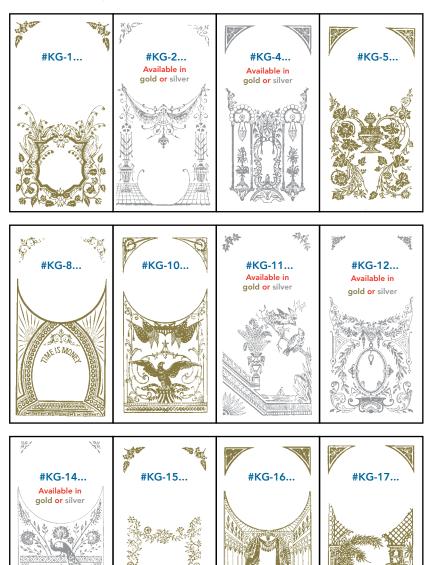
#P-1329... \$4.50

Glass...119

REPLACEMENT GLASSES FOR KITCHEN CLOCKS

Designs are exact copies of original stenciled motifs, each stenciled in gold on an $8" \times 14"$ glass. Some designs are available in gold or silver.

\$9.50 each 3+...\$8.00 ea. 12+...\$7.00 ea.



120...Glass

REPLACEMENT GLASSES FOR KITCHEN CLOCKS

Designs are exact copies of original stenciled motifs, each stenciled in gold on an 8" x 14" glass. Some designs are available in gold or silver.

\$9.50 each 3+...\$8.00 ea. 12+...\$7.00 ea.









#KG-68...

#KG-70...

HIGH QUALITY ETCHED CLOCK GLASSES

Faithfully reproduced in authentic styles etched just like the antique originals!

#NG-6... Etched glass for OG Clocks: 10" x 12"\$18.00 #NG-17... Small etched glass for mantel clocks: 7" x 8" size for steeples, beehives, and other American mantel clocks \$12.00

#NG-20... Lyre etched glass: 7" x 8" size for steeples, beehives, and other American mantel clocks ... \$12.00
 #NG-21... Cross/Leaf etched glass: 7" x 8" size for steeples, beehives, and other American mantel clocks

#NG-22... Heart etched glass: 7" x 8" size for steeples, beehives, and other American mantel clocks ... \$12.00 #NG-23... Rosette etched glass: 5-5/8" square ... \$12.00







Glass/Repair Tools...121

PENDULUM VIEW GLASSES

A beautiful gold view design with a black background

- ◆ Screened/Painted
- ♦ Easily trimmed to fit your door

#PV-1... 7" wide x 8" high, 2-5/8" opening

#PV-2... 5-1/8" wide x 7-7/8" high

#PV-4... 6" wide x 8" high, 2-1/4" opening

Your choice... \$6.00 each 3+...\$5.00 ea. #PV-1...



"REGULATOR A" GLASS

For Ansonia Long Drop Regulators, but it can be used as a standard "Regulator" glass for other clocks by removing the Ansonia trademark

◆ Gold lettering on one end; silver on the other. The color not desired may be easily removed with a razor blade. ◆ 8" x 14" glass #RA... \$9.50 each 3+...\$8.00 ea.



WOOD GLASS RETAINING STRIPS

No more searching for wood and then ripping it down to size

 12 strips ready to cut to length and nail into place: secures glass quickly, safely, and firmly

◆ Each piece is 12" long x 1/4" x 1/8" #P-1018... \$6.50 dozen pieces

BRASS TENSION WIRE

ASSORTMENT

◆ 12 coils, one each B&S Wire gauge sizes 18 to 29

#P-1759...

Only \$8.25 assortment





BRASS WIRE → 6" lengths

◆ 23 pieces of brass wire in assorted sizes #P-329...\$4.50



- → 37 pieces, assorted sizes
- ♦ 6" lengths #P-330... \$6.25



SOLID BRASS WIRE STOCK

- → 11" lengths → 10-piece assortment
- ◆ .50 mm to 9.50 mm diameters

#P-1817... \$23.00



Table of the same and the same

AMERICAN MADE by H.A.Z. LABORATORIES

- 24-piece assortment in the correct sizes for lantern pinions in American, German, and other movements
- ♦ 6" lengths #P-1222... \$15.50

See page for our American-made Pinion Cutter/ Staking Tool



PINION ROD ASSORTMENT

5-Piece assortment in 5"-6" lengths, various diameters #P-1353... \$13.50

122...Repair Tools: Drill Press/Lathe



5-SPEED BENCH DRILL PRESS

A versatile bench-size drill press with 5 speeds from 760 RPM to 3070 RPM, an adjustable table which allows for diagonal drilling and an adjustable stroke depth scale

- ◆ Overall dimensions: 17" long x 22-5/8" high x 7-1/2" depth
- ◆ Base dimensions: 11-1/2" long x 7-1/4" wide
- → Table: 6" x 6-1/4", tilts 45° left & right, rotates 360°
- ◆ Chuck w/ Key: 1/16" to 1/2"
- ◆ Throat Depth: 4" ◆ Spindle Stroke: 2"
- ◆ Maximum Swing: 8" → Column Diameter: 1-13/16"
- ◆ Depth Adjustment Gauge ◆ Weight: 25 pounds
- ◆ Speeds: 760/1150/1630/2180/3070 RPM
- ♦ Motor: 2/5 HP, 2.4 amps @ 120V; 60 Hz
- ◆ Removable Safety Lock Switch
- ◆ Positional work light #P-1495 ... \$99.00



A STATE OF THE STA

DRILL SET...20 high speed twist drills in an indexed metal case

♦ Includes drills #61 to #80

#P-483... \$41.50



ECONOMY TWIST DRILL SETS

20 high speed twist drills in an indexed case #P-1771...

◆ Includes drills.30 mm to 1.50 mm...\$8.00



Economical, high quality lathes for the craftsman or hobbyist! These fine lathes come complete with...

- → 1/2 horsepower motor
 → Electronic speed control
 → Face plate
 → Lathe dog
- 2 Dead Centers → Tool post → 3-jaw Chuck with key → Instruction manual
 Specifications...
- → 18" long x 7-1/2" wide x 6" high → 3-1/2" swing over bed → 8" between centers
- ◆ 4-1/2" slide travel ◆ Calibrations in increments of .000"
- ♦ Adjustable spindle: 70 to 2800 R. P. M. ♦ .405" hole through the spindle

#P-1202...Sherline Lathe (inches) complete with above accessories ...\$700.00 #P-1558...Sherline Lathe (metric) complete with above accessories,

but with metric calibrations ...\$700.00

Repair Tools: Lathe...123

"T" DRIVER

- Use in place of the standard 5/32" hex wrench furnished with vour lathe
- Easier to grip...provides more leverage!

#P-1559... \$7.75

LATHE ADAPTING ARBOR

The 8mm collet fits old type jeweler's lathes, allowing you to use the Sherline 3-Jaw chuck (Our #P-1340)

- American-made from high quality, finished steel
- ◆ Add versatility to your old lathe at a modest price!

#P-1497...\$52.00

MILLING VISE

The most convenient way to hold small parts



- Designed to hold the movable jaw down while clamping
- Eliminates the chance for the jaw to
- Allows you to accurately align the milling machine to this vise where drill press vices will fail
- The fixed jaw has both a vertical and horizontal "V" groove to facilitate holding round bar stock
- Includes two clamps for use attaching this vise to your milling machine

#P-1502... \$80.00



Replacement for the standard chuck supplied with the #P-1202 Sherline lathe

- ♦ 3/32" to 2-1/4" grip range
- ◆ Jaws move together for automatic centering #P-1340... \$105.00

4-JAW CHUCK

- 4 independently adjustable fingers
- Great for irregularly shaped parts
- ♦ 3/32" to 2-1/4" grip range #P-1206... \$113.00

FIXED STEADY REST

Use to support long, slender pieces which have a tendency to deflect away from your tool during turning → 3 adjustable blades #P-1203... \$42.00

VERTICAL MILLING COLUMN WITH ZERO ADJUSTABLE HANDWHEEL

Converts your Sherline® lathe to a Mill in less than a minute!

- ♦ An economical and space-saving alternative to a separate milling machine
- ♦ All standard vertical milling operations can be accomplished with this attachment
- ♦ Most Sherline milling accessories may be used with this attachment
- Complete with mounting instructions and helpful hints

#P-1501... \$155.00





124...Repair Tools: Lathe



MILL COLLET SET

Designed to use with the Morse #1 internal taper that is standard with the Sherline lathe and vertical mill

 Allows you to apply greater clamping power compared to the clamping power of WW collets. A must for milling operations!

#P-1504 ... \$45.00

WW COLLET SET

- An extensive selection of 5 WW collets, a collet taper adapter and a draw bar
- ◆ Sizes: 1/16", 1/8", 3/16", 1/4", and 5/16"

#P-1211... \$92.00



HOLD-DOWN SET

 Set of 2 adjustable strap clamps with nuts, washers, and socket head cap screws

The most versatile way to safely clamp work of all configurations to your milling machine #P-1503... \$27.00



CARBIDE TOOL SET

- For cutting hard or abrasive materials
- ♦ Set of 3 carbide-tipped cutters

#P-1210... \$22.50

HIGH SPEED TOOL SET

- For cutting steel, wood, plastic, and aluminum
- ◆ Set of 3 cutting tools #P-1204... \$29.50

CENTER DRILL SET

- ◆ Used for drilling stock before mounting on vour lathe centers
- ◆ Set of 3 double-end bits #P-1212... \$19.50



LIVE CENTER

- Use in place of a dead center to reduce friction
- Ball bearing mounted center point

#P-1205... \$41.00

CUT-OFF TOOL AND HOLDER

- Used to separate a part from the excess material used for chucking
 - .040 cut-off blade #P-1209... \$50.00

SHERLINE DRIVE BELT #P-1208...

\$10.00

VINYL DUST COVER (not illustrated)

- Extend the life of your lathe: keep harmful dust and dirt off of your lathe when it is not in use
- ◆ Made from prefitted, 6 mil vinyl #P-1207... \$14.50

1/4" ROCKER TOOL POST

Change the height of your cutting edge by simply adjusting the two clamp screws!

◆ Easily position your older, resharpened cutting tools where you want them without shimming!

An inexpensive tool to reduce setup time and extend the life of your old tools! #P1843... \$31.00



Repair Tools: Lathe...125



SHERLINE W.R. SMITH T-REST

Clamps to your lathe's bed in seconds!

- Used by clock and watch makers to hold gravers.
 A design specifically for Sherline lathes from renowned watch and clock maker, William R. Smith.
- ♦ Solid steel #P-1562... \$199.00

LATHE BELTING FOR JEWELER'S LATHES

Durable plastic belting in two convenient sizes

- ◆ This is the best lathe belting on the market!
- #P-1545... 1/8" dia. (3 mm) #P-1546... 3/16" dia. (5 mm)
 Your Choice... \$4.50 length 3+... \$4.00 length

PRO-CRAFT FLEX SHAFT SET

A premium quality, precision unit at an affordable price! Perfect for drilling, polishing, burring, milling, slotting, sawing, buffing & grinding

- → 1/10 horse power A.C. Motor: 0 to 18,000 R. P. M's
- ♦ 39" flexible shaft with interchangeable handpiece
- ♦ Variable speed foot control
 ♦ Bracket for easy hanging
- ◆ 13-pc. accessory set: brushes, buffs and stones with arbors #P-972... COMPLETE FLEX SHAFT SET ...\$152.50



ELECTRONIC FOOT PEDAL FOR FLEX SHAFT

- Grobet foot control ro use with Flexshaft and other power equipment
- ♦ Solid state ♦ Plastic housing
- ♦ 6" heavy duty power cord
- ♦ 110 volt

#P-2240... \$39.00



REPLACEMENT CHUCK KEY

...for Flex Shaft Tools #P-2222... \$5.75

MAINSPRING BARREL BUSHING AID

You'll wonder how you did without this tool.... makes bushing mainspring barrels a breeze!

- Clamp your barrel in place for safe, accurate work
- Can be used to safely close snap-back mainspring barrels. Includes a heavy 1/8" thick plate and two clamps: Simply fasten the plate to your bushing tool with conventional clamps and you are ready to go!
- → Tool clamps have a range of 5/16" to 3-1/4"

#P-1933... \$21.50





126...Repair Tools: Winders

PLATE SPREADER

Improved Design: Easier to use than previous designs!!... allows you to gradually spread and clamp plates open in a safe, controlled manner and

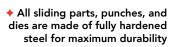
check gear straightness

- You can complete repairs and partial disassembly more efficiently, save time and avoid aggravation
 - → The support legs and grooved tool tips allow you to mount and spin a gear on its pivots to check for straightness
 - ♦ A quick and easy way to evaluate the straightness of a gear!
- ◆ New thumb screw and slide design allows you to maintain smooth, even pressure when spreading plates
- ◆ Plastic thumb screws are included to prevent the scratching of your plates by metal



LANTERN PIN CUTTER AND STAKING TOOL

A top quality, American-made unit which incorporates two tools in one!



- ♦ The pinion cutter is fully adjustable for lengths from .200" to .625"
- The cutter locks for repetitive cutting, giving you perfect alignment every time... accuracy of length and smoothness of cut are quaranteed!
- ◆ The staking tool incorporates 13 holes from 1/8" to 1/2" in 1/32" increments
- ♦ 5 die holes from .020" to .062" ♦ Pinion wire and instructions are included

#P-1223... \$345.00



LOOP-END MAINSPRING WINDER

◆ A simple, yet effective, tool for winding loop-end mainsprings with a clock or bench key

(See page for our bench key set)

♦ Winds the spring on your clock's wheel and arbor #P-404... \$10.00

Repair Tools: Winders...127



THE "OLLIE BAKER" MAINSPRING WINDER

American-made! Highest Quality!



...for hole or loop-end mainsprings! This tool's unique tailstock feature safely stabilizes and secures your mainspring so it will not slip off.

- Our #P-110 Mainspring Let-Down Set, or a comparable tool, is required to operate the "Ollie Baker" Winder
 - → Complete with nine mainspring sleeves

#P-1368... \$245.00 #P-1368A... Set of nine mainspring sleeves...\$54.00

KEYSTONE WINDING ARBOR SUPPORT

Mounts to the bottom of your Keystone Mainspring Winder... acts like a "tailstock" for the winder

- Mounts easily... includes the cap head screws to secure the base to the tool and to reattach the vice bar
- Detailed directions included
- ◆ Allows you to support your barrel or arbor for added security #P-1820... \$85.00

KEYSTONE MAINSPRING WINDER

A simple, yet highly versatile mainspring winder for loop-end or hole-end springs

♦ Simple...

A square chuck grips the winding arbor square, and you tighten it by hand:

No wrenches... No set screws... No damage to your arbor!

With the positive sliding lock, your handle is free to rotate in either direction all of the time... just slide the lock to secure the handle... No ratchet to reverse or wear out!



- ◆ Versatile... The removable vise bar allows you to mount your Keystone winder in a vise, on your bench or on your wall. Set it up for right or left hand operation; choose vertical, horizontal, portable or permanent positioning. Hex wrench and mounting screws are provided! Use on loop or hole end springs of all sizes- it even winds loop-end springs in the movement when the click or ratchet is not functioning. You can even clamp springs for disassembly!
- ◆ Safe... Accessories include a clamp to hold barrels when removing or inserting mainsprings. The gripping surfaces hold firmly without damage to the movement's brass. The Keystone Winder is designed to work safely and eliminate injury to your hands. The clamp adjusts easily to all barrel sizes and anchors firmly to the tool.
- → Fast... Winds, unwinds, inserts, removes smoothly and easily. All adjustments are done quickly by hand:

NO HOOKS, RATCHETS, WRENCHES OR SCREWDRIVER NECESSARY!

Complete with... → Tool with barrel clamp → Nest of 11 spring retainers sizes 1" to 2-3/4" → Anchor pins for loop and hole end springs → Hex wrench → Set of 5 Universal Arbors → 4 mounting screws → Instructions

#P-1819... Complete Winder and Accessories ...\$399.00

128... Repair Tools

"THIRD HAND" HOLDER

With a heavy, non-tipping base: ideal for soldering, gluing, or freeing a hand

- ♦ 6" overall width... large enough to be a practical tool, yet it takes up very little space on your bench
- Ball joint connections allow you to position work at any angle

#P-1396 ...\$14.00



Level clocks quickly with this compact, economical level! It's small enough to carry in your pocket: 1-3/8" diameter 9/16" thick

 Durable plastic construction with a clearly marked bulls eye

#P-2128... \$3.50



TALL ASSEMBLY POST SET

Set of 4 posts, each

3-3/4" long: This is the correct size post to use with grandfather movements, or other movements with the strike hammer in the back

Steel with a knurled brass plate clamp

#P-1597... Set of 4... \$27.00 Set



COMPACT BUBBLE LEVEL

- Just 1-1/2" long...
 It fits right into your pocket!
- ◆ American-made
- ◆ Perfect for leveling clocks!

#P-1343B... Black, with no imprint \$21.50 ea. 12+... \$1.25 each



MOVEMENT ASSEMBLY CLAMP SET

- An easily attached clamp set which you attach to your movement plates to position them for repairs or regulating. Assemble in the horizontal position for assembly and repairs, or vertically for test running.
- Complete with a special stud to securely attach your assembly clamp set to the wall in the hanging position #P-241... \$20.50 Set



AMERICAN-MADE WOODEN OILER/TOOL HOLDER

An economical wooden holder for oilers and other tools

- ◆ This solid wood holder is designed to hold three oilers, or similar tools up to 9/16" dia. and a grease bottle up to 1-1/2" dia.
- ◆ Compact size: 5-15/16" long x 2-3/16" wide x 1-11/16" high
- ◆ <u>Solid wood holder only</u>: oilers/grease are available, but <u>are not included</u> #P-2143... \$5.75





Repair Tools...129

DRILLING/FILING CLAMP An economical clamp which allows you to safely secure, then drill or

file hands, hand washers and other small parts

♦ Work is kept from whipping if the drill bit catches. At the same time you can see exactly where the drill bit enters the work.

- ♦ Made from 1/2" thick aluminum, 4" long x 4" wide
- ♦ Multiple slots and circular opening to allow for stable drill penetration
- → Multiple threaded holes for a variety of clamping positions #P-2078... \$21.50



CLAMPS A must for hard-to-reach places and handling

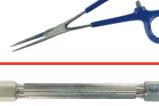
Can be utilized as a clamp, heat sink, or "third hand"

- Serrated locking jaws
- 6" overall length

#P-657... Curved Jaws

#P-658... Straight Jaws

Your choice... \$3.00 each Any 2 for \$5.50







DOUBLE-END PIN VISE

Reversible steel collets on each end with hexagonal heads prevent rolling on your bench

- ◆ 4-1/8" overall length
- ↑ 1/8" (0" to .125") capacity

#P-422... \$3.00 each

4-PC. PIN VISE SET

4 steel pin vises in graduated sizes:

- (mm 8. ot 0.) "040 to 040" (
- .030 to .062" (.8 to 1.3 mm)
- ◆ .050 to .125" (1.3 to 3.1 mm)
- .115 to .187" (3.1 to 4.8mm)

#P-2068... \$6.50 set

BENCH VISE

♦ Mounts to your bench with screws or a thumb screw

- ◆ Double steel guide bars ◆ 1-1/4" jaw width
- ◆ 1-11/16" jaw opening

#P-607... \$11.50



PRY BAR SETS

- ◆ Made of steel ◆ Use to remove hands and gears
- ◆ Curved blade for easy lifting

#P-2254... Small 4" long ...\$17.00 #P-2253... Large 7-1/2" long ...\$25.50

130...Repair Tools

HAND VISE...

Lightweight, with a wooden handle

- ◆ Smooth jaws: 1-1/4" wide with a 1" opening
- ♦ 6-1/4" overall length #P-442.... \$12.75



WALLER CARBIDE GRAVER SET

For efficient, economical high speed

- ◆The sharp carbide tool responds instantly to the slightest pressure
- Set includes 4 graver bits, two handles, lapping wheel with arbor, diamond compound container, Dyna-Lube® diamond compound stick and impregnator...all mounted on a hardwood bench block!
- ♦ New style carbide impregnator permits faster, more dense impregnation of the lap wheel #P-1973... \$170.00

WALLER CARBIDE GRAVER HANDLE AND GRAVER BIT

♦ Handle and bit available individually as a spare or as a replacement for your set! #P-1974... \$18.00



WALLER CARBIDE GRAVER BIT

♦ Bit available individually as a spare or as a replacement for your set! #P-1975... \$14.25



REPLACEMENT DIAMOND COMPOUND AND CONTAINER

#P-1984... \$23.50



PIVOT CENTERING HOOK

Complete with wooden handle!

♦ 8-1/4" overall length #P-1755... \$5.00 each

18" MAGNETIC TOOL HOLDER

 Mounting screws included

#P-2009A... \$17.00

PIVOT POSITIONING TOOL

- ◆ Use this tool to push or pull pivots into their proper place without damage
- ♦ The 8" long, knurled handle allows you to penetrate both large and small movements
- Made from steel #P-1519... \$5.00 each



Repair Tools...131

GERMAN-MADE 12-PC. BROACH

ASSORTMENTS ...the most commonly used stubs from sizes 15 to 70

#P-455...CUTTING BROACHES

◆ 5-sided for enlarging pivot holes

...\$43.00 set



#P-456...ROUNDING BROACHES ◆ For finishing/burnishing pivot holes ...\$43.00 set

6 PC. BROACH SET A versatile "must have" item if you work on grandfather and other large clocks

- ♦ Includes sizes which range from 2.4 mm to 6.2 mm
- #P-1549... \$22.50 set ♦ Easy-to-grip plastic handles





5-PC. STAINLESS STEEL POSITIONING/

SPRING HOOK SET A useful assortment of probes and attachments for separating/positioning/inserting/adjusting wires and springs

- ♦ Heavy duty twist lock chuck with a Versa-Grip® handle holds each 5" long attachment securely in place
- ◆ Includes these attachments: offset pull hook, 135° pull hook, push/pull hook, adjusting push/pull hook, placement auide/lifter
- ◆ Packaged in a fitted storage "holster" #P-2133... \$14.50

12-PC. STAINLESS STEEL PROBE/POSITIONING/

SPRING HOOK SET for separating/ positioning/inserting/adjusting wires and springs, probing and cleaning

- Heavy duty twist lock chuck with a Versa-Grip® handle holds each 5" long attachment securely in place
- Includes the following attachments: 5" extension, straight, 90°, 35° bend, 180° double bend loop, 180° probe hook, offset pull hook, 135° pull hook, push/ pull hook, adjusting push/pull hook, placement guide/lifter
- Fitted, zippered case

#P-2132... \$25.75



132...Repair Tools

"CROW'S FOOT" TOOL Mounts in your vise or bench block. This versatile tool literally has hundreds of uses: use it to stake pinions, easily remove gears from shafts: virtually any job which involves a friction fit wheel or gear.

- ◆ Once you have one you'll wonder how you ever did without it!
 - ♦ 4-5/16" overall height x 3-1/2" overall length x 3/16" thick
 - ◆ Steel with a black oxide finish #P-1472 ... \$9.00

WIRE BENDING TOOLS A set of 3 versatile tools to aid in wire

adjustments and movement reassembly

- Great for bending wires when adjustments are necessary
- Allows you to reach within the movement and position pivots with ease #P-1014... \$9.50

DOUBLE-ENDED WIRE

BENDING TOOL for use with our P110H Handle

- ◆ Reversible, with ends for medium and larger thickness wires
- Easily inserts into our sturdy P110H handle for a wire bending tool with a reach of over 3-1/2"
- ♦ Made from steel
- → 7-7/8" overall length #P-2166... \$7.75

#P-110H ...Handle only ...\$13.50 each



HOROLOVAR BEAT SETTING TOOL

Takes the work out of setting the beat on 400-day clocks!

◆ Extra-long arm allows you to make micro adjustments #P-500... \$25.75



STAKING BLOCK FOR ESCAPE WHEEL BRIDGES

The perfect block for under escape wheel bridges in American Wall and Shelf Clocks

◆ Graduated sizes to fit all movements ◆ Solid brass ◆ 3-7/8" overall length

#P-1320... \$9.75

SOLID BRASS STAKING BLOCK

#P-1543A... → Seven graduated holes (3.5 to 10 mm)

◆ 3-15/16" long x 1-1/2" wide x 3/4" thick ...\$29.00

STEEL STAKING/RIVETING BLOCK...

with 15 graduated holes and 5 milled slots

Durable steel

◆ 1-3/4" overall width x 3/4" high #P-604... \$11.75



- ◆ 16 assorted punches: 4 flat-faced hollow, 10 round-faced hollow and 2 assorted hole closing sizes
- ◆ Large hardened steel anvil with10 holes of graduated sizes
- ◆ Complete with convenient wooden set holder
- ◆ These sets are shipped in protective, rust-inhibiting grease. They will require a bit of attention with a cloth before using! #P-1761... \$50.00





Repair Tools: Pliers ... 133



AUTOMATIC CENTERING PUNCH Just press down

on the body to release the striking mechanism Adjustable for heavy/light strokes

◆ Pocket clip included #P-622... \$15.00



CLOCK HOLE CLOSING PUNCH SET

→ 7 graduated sizes in a plastic container #P-142...\$38.75

SCRIBER with a carbide tip

 Pocket clip and reversible tip so the scriber can be safely carried

♦ 5" long with a knurled aluminum body #P-1931... \$10.00





MADE LOCALLY! CLOCK HANDWASHER

CRIMPING TOOL Designed to improve the convex shape of brass clock washers: eliminates the need to use multiple washers!

- ♦ Place the brass washer on the die and tap lightly with the punch to produce a better shaped brass washer
- ◆ Complete with wooden base block as shown #P-2112... \$9.00

CLOCK REPAIR TOOL KIT

Compiled with clock repair in mind! An economical kit including the essential tools for the collector or hobbvist

Each set includes:

- ♦ 4-3/4" side cutting pliers
- Flat nose pliers
- ♦ 5-1/4" screwdriver
- ◆ 2-jaw pin vise
 ◆ AA tweezer
- ◆ 3 nickel-plated jeweler's screwdrivers

→ 36-hole staking block → All in a plastic case #P-576...\$11.50



SET OF 4 HOBBY PLIERS Each plier is 4-1/2" long

with a cushion grip handle and smooth jaws

- ◆ Round Nose ◆ Side Cutter ◆ Flat Nose
- ◆ Chain Nose ◆ Plastic carrying case #P-526... \$14.50



PARALLEL ACTION CUTTER

AND PLIERS Jaws open and close parallel along the entire length, providing a vise-like action. Great for removing troublesome nuts without destroying the nut!

Nickel plated handles and jaws

#P-1772... Light Flat Nose Pliers with serrated jaws

◆ 5" overall length ...\$25.00

#P-1773... Light Flat Nose Pliers with smooth jaws

♦ 5" overall length ...\$29.50

#P-1774... Diagonal cutters → Spring-action handle

- ♦ 5-1/2" overall length with a maximum jaw opening of 1/4"
- ◆ Cuts soft wire, half hard wire, 3/4 hard wire and piano wire





134...Repair Tools: Pliers



FULL SIZE GERMAN-MADE PROFESSIONAL PLIERS

◆ Box joints for smooth operation ◆ Leaf springs ◆ Plastic cushion grips for comfort



#P-1157... CURVED CHAIN NOSE ◆ 1" long jaws ...\$28.50

#P-1158... END CUTTER ♦ 29/32" long jaws ...\$35.50

#P-1159... SIDE CUTTER ♦ 3/4" long jaws ...\$35.50

Repair Tools: Screwdrivers...135



PITHWOOD BUNDLE

- Useful for cleaning pivots, small parts and the tips
- ♦ Now a 10-piece bundle
- ♦ 3/4" diameter x 4-3/4" long

#P-2310... \$3.00

10-PIECE FLORIDA BUTTONWOOD ASSORTMENT

- Useful for cleaning pivots, small parts, and the tips of collars
- ◆ Sizes 1/2" to 1-1/4" diameter

#P-1499... \$6.75



WOODEN PLIERS RACK WITH DRAWER

- → 7 slots for pliers storage
- → 7/8" deep small tool storage tray
- ◆ 6-7/16" wide x 7-7/16" long x 3-11/16" high with a 13/16" deep lower drawer

#P-2069... \$14.75



Ergonomically redesigned... AMERICAN-MADE "QUICK-WEDGE" SCREW HOLDING SCREWDRIVERS

Just slide the metal tube forward over the 2 spring steel blades to wedge the screw on the tip!

- → Redesigned with ergonomically contoured grips for maximum grasp and torque!
- → Plastic handle and tube are insulated against electrical shock

#P-1187...

◆10" overall length ◆ 7-1/2" long shaft ...\$11.50

#P-1187B... ♦ 6-11/16" overall length

♦ 3-1/2" long shaft ...\$11.50



#P-1187C... LARGE QUICK WEDGE

♦ 12-5/8" overall length ♦ 7-1/2" long shaft ...\$15.50

136... Repair Tools: Screwdrivers

PRECISION GERMAN HEX SETS

#P-1847... 7-pc. Metric Set ◆ .7, .89, 1.3, 1.5, 2.0, 2.5, and 3.0 ...\$35.50 set

#P-1848... 8-pc. Inch Set ◆ .028", .035", .050", 1/16", 5/64", 3/32", 7/64", 1/8" ...\$41.50 set



#P-1798... Set of 7 Slotted and Phillips Screwdrivers:

♦ Phillips: #00, #0, #1

◆ Slotted: 1.5, 2.0, 2.5, & 3.0 MM

...\$50.00 Set



#P-1799... Set of 8 Inch Nut Drivers:

3/32, 7/64, 1/8, 9/64, 5/32, 3/16, 7/32, 1/4' ...\$55.00 set



#P-1797... Set of 6 Slotted Metric Screwdrivers: 1.5, 2.0, 2.5, 3.0, 3.5, and 4.0 MM

...\$30.00 set



Professional quality tools with hardened CVM steel blades, molded ergonomic handles & precision fit tips!

#P-1800... Set of 7 Metric **Nut Drivers:**



◆ Each has a durable color-coded plastic grip

◆ Torque handle measures 3-1/8" x 1" #P-1395... \$74.00 set



EURO PRO SCREWDRIVER SET WITH SWIVEL BASE

- ◆ 9-Piece screw driver set ◆ Includes swivel base
- ♦ 8 flat head screwdrivers: 0.60mm, 0.80mm, 1mm, 1.20mm, 1.40mm, 1.60mm, 1.80mm, and 2mm
- ↑ 1 Phillips screw driver: 1.60mm
 ↑ Made in India

#P-2272... \$42.00





Repair Tools: Screwdrivers...137

DELUXE FIXED-BLADE SCREWDRIVER SET

6 screwdrivers with hex heads, nickeled handles, and tempered blades: made in France

Includes sizes from .80mm to 2.00mm in a protective plastic pouch #P-1234... \$17.75 set





HIGH QUALITY BERGEON® JEWELER'S SCREWDRIVER SETS Sets of superbly crafted

screwdrivers from Switzerland

→ Tempered steel blades → Extra blades included #P-480A... 10-pc. Boxed Set

- ♦ Sizes range from .50mm to 3.0mm
- ♦ With 30+ spare blades
- ◆ Durable wood case

...\$185.00

#P-290... 9 pc. Set on Stand

- ◆ Sizes range from .50mm to 2.5mm
- ♦ With 9 spare blades
- ◆ Revolving stand

...\$110.00



BERGEON® BLADE FIXING SCREWS

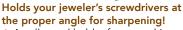
for Bergeon® jeweler's screwdrivers

 One (1) of each size screw for .50 dia., .60 to 1.60 dia. and 1.80 to 3.00 dia. screwdrivers

#P-2124... \$2.00 set



JEWELER'S SCREWDRIVER SHARPENER



- ◆ An all-metal holder for screwdrivers with shafts up to 5.5 mm
- Spring-loaded to hold your screwdriver securely for precision sharpening
- ♦ 1-3/4" overall length

#P-1619... \$4.50



VALUE-PRICED JEWELER'S SCREWDRIVER SET

Set of six screwdrivers

in a hardwood case

◆ Sizes range from 1.0mm to 2.4mm

#P-472... \$8.25 set

VALUE-PRICED SWISS-STYLE SCREWDRIVER SET

A quality screwdriver set, complete with a color-coded, rotating stand and extra blades!

- 9 screwdrivers in a complete range of blade sizes (in mm): .60, .88, 1.00, 1.20, 1.40, 1.60, 2.00, 2.50, and 3.00
- ◆ The base has a swivel head for ease of use, central compartment for storing extra blades and a rubber base plate for stability #P-1725... \$21.00



138... Repair Tools

REPLACEMENT WATCHMAKER'S

SCREWDRIVER BLADES

An economical way to revitalize your jeweler's/watchmaker-sized screwdriver sets

- ◆ Blades fit Bergeon and economy screwdriver sets. Quickly match sizes based on the color coding on the handles of your screwdrivers.
- Sold in packs of 12... all blades same size

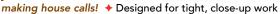
Matches handle color: Blade diameter:

#P-2115Brown 118" 3.00 mm \$11.50 dozen
#P-2116Blue 089" 2.50 mm \$11.50 dozen
#P-2117Green 078" 2.00 mm \$11.50 dozen
#P-2118Purple063" 1.60 mm \$11.50 dozen
#P-2119Gray 055" 1.40 mm \$11.50 dozen
#P-2120Red .047" 1.20 mm \$11.50 dozen
#P-2121Black 039" 1.00 mm \$11.50 dozen
#P-2122Yellow 031"0.80 mm \$11.50 dozen
#P-2123Lilac024" 0.60 mm \$11.50 dozen

4-IN-1 MINI POCKET

SCREWDRIVER

A versatile tool for your tool box or when



 Remove the end caps to expose the easily-reversed, double-ended blades: Phillips (#1 and #00) and Slotted (1/16" and 1/8")
 → Durable plastic barrel

#P-2134... \$2.75

4-IN-1 POCKET SCREWDRIVER

Ideal for repairmen, hobbyists and do-ityourselfers!



- Remove the end caps to expose the easily-reversed, double-end chrome vanadium blades: Phillips (#0 and #1) and Slotted (1/8" and 5/32")
- ♦ Durable plastic grip barrel: faceted for a secure grasp

#P-2135... **\$2.75**

INDIA MEDIUM/FINE COMBO STONE

A stone which can be used on both sides for smoothing or sharpening!

♦ 6" x 2" x 1" **#P-1617... \$29.00**

ANCHOR 2

FLAT EMERY BUFFS

Emery paper mounted on an 11" wooden handle Available in 4 grits:

#P-639.0... Finest #P-639.1...1 Grit #P-639.2... 2 Grit #P-639.3... Coarsest

...\$1.00 each 6+...\$.75 each

4"
DIGITAL
CALIPER
Durable,
precise, &
accurate!
Large, easily
readable,
with 4-way
measurement:
outside,
inside, top
and depth....

- → Measures from 0" to 4" or 0 to 101.6 mm
- ◆ Switch from Inch to Metric with the push of a button
- ♦ On/Off button
- ♦ 6-5/8" overall length
- Protective case included

#P-1752... \$29.75



APPRENTICE MICROMETERS AMERICAN MADE!

- Full satin finish with decimal equivalents
- ◆ Friction stop
- ◆ Adjustable

#P-557...0 to 1" in .001" grads ...\$23.75

Repair Tools...139

MALLET WITH DETACHABLE FACES

A high quality wooden- handled mallet...its faces can be changed to provide various combinations

- ◆ Supplied with a brass, fiber, and nylon head
- Includes a wrench to tighten or remove head-securing collars
- ◆ 2-5/8" long
 ◆ 5 oz. head weight ◆ 9-1/4" overall length #P-1255... \$21.50 **REPLACEMENT FACES AVAILABLE:**

#P-1255A...Brass #P-1255B...Fiber #P-1255C...Nylon

YOUR CHOICE...\$2.00 ea.

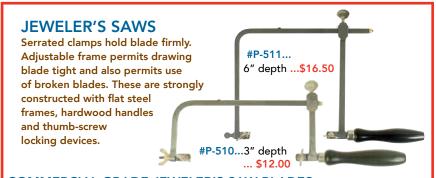
EGG HEAD HAMMER W/ 3 JAWS

- ◆ Comes with three interchangable heads: brass, steel, and nylon
- ↑ 10-1/2" long ↑ 2-1/4"long x 1" wide head

#P-2337... \$13.75

FLAT/BALL PEIN MALLET #P-1863... \$5.50

◆ An economical mallet with a 2-ounce steel head and steel handle ◆ 8-3/16" long



COMMERCIAL GRADE JEWELER'S SAW BLADES

Number	Size	Inickness	width
P-596A	4/0	.010	.019
P-596B	. 3/0	.012	.020
P-596C	. 2/0	.012	.0215
P-596D	. 1/0	.012	.022
P-596E	1	.014	.027
P-596F	2	.014	.031
P-596G	3	.014	.035



For cutting all metals, bone, pearl, and other hard materials. Round backs make it easy to turn corners and follow curves, an operation where many other saws are broken.

Your Choice... \$2.00 dozen

BRASS BRISTLE SCRATCH BRUSH 4 rows of brass wire bristles

produce a soft satin brush finish on hard-to-clean movements ♦ 8-1/2" long #P-403... \$12.50 3+... \$11.75 each

NATURAL BRISTLE HAND BRUSHES

Economical, convenient for cleaning and dusting

- ◆ 10" long
- ♦ Natural Bristle

#P-608... Soft Bristle \$2.75 6+... \$2.00 each



#P-1945... Hard Bristle With a harder bristle than our #P-608 Brush

\$2.75 6+... \$2.00 each

140... Repair Tools: Hand Pullers



12-PC. FILE SET

Set of twelve 5-1/2" long files packaged in a folding plastic pouch

◆ Includes one each of the following file shapes: Round, square, knife, barrette, warding, marking, 3-square, half-round, slitting, crossing, equaling and round-edge joint

#P-175...\$12.25 set

SCREWHEAD FILE WITH TANG

For slots in small screw heads

- → 3" file length x 25/64" wide
- ♦ #8 .014" ♦ .35 mm thickness

#P-1626A... \$39.00

GATHERING PALLET FILE

Especially designed for filing gathering pallets on Tall Clocks, Vienna Regulators, and other European clocks

- ◆ Can be used to file any small, square hole
- ◆ 4" overall length #P-1611... \$16.50

HEAVY DUTY HAND & GEAR PULLER

for all types of clocks and instruments!

- Adjustable to fit various sized hands with the pusher always centered
- Pressure via the knurled nut pulls the hand or gear away from the post or pinion. When used properly, it will not touch your dial.
- ◆ Jaws open to 7/16"

#P-439... \$27.50

CLOCK HAND PULLER

- → Jaw opening: 1/8"
- ♦ Post size: 1/16"

#P-424... \$17.00

UNIVERSAL

PULLER Designed to pull gathering pallets, hands and gears. A versatile imported, economy tool

- ♦ 2-1/2" x 1-1/2"
- ◆ Knurled steel thumbscrew mounted on a threaded steel shaft

#P-1783... \$11.50



BERGEON® PRESTO HAND PULLER

- ◆ A sturdy puller with fiber tips that will not mar your wrist watch dial
- ◆ The jaws retract when the side springs are pressed, while the center plunger holds the hands firmly in place #P-1635...\$49.00



ECONOMY FIBER-TIPPED HAND PULLER

- A sturdy puller with fiber tips that will not mar the dial on your watch or small clock
- ◆ The jaws retract when the side springs are pressed, while the center plunger holds the hands firmly in place #P-1630... \$10.25



PLUNGER-STYLE HAND REMOVER

◆ For small clocks and watches ◆ 4-1/2" long

#P-610...\$9.50

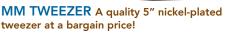
Repair Tools: Tweezers...141

TWEEZER ASSORTMENT

A value-priced assortment of high quality tweezers

♦ 1 each: AA, MM, NN, 3, and 5 in a plastic pouch

#P-611... \$9.00



◆ Boley style #P-577... \$2.50 ea. 3+... \$2.00 each



Dumont Style Tweezers... Forged from the finest grades of metals and machined to a smooth satin finish for professional watch and clock makers!

...#P-1680 Dumont #10b

...#P-1681... Dumont #OC

...#P-1682 Dumont #3C

... #P-1683... Dumont #H

...#P-1684 Dumont #5

...#P-1686... Dumont #6

...#P-1688 Dumont #8

Dumont #10b Tweezers... Fine points for curving hairspring centers

- ♦ 4-3/4" overall length
- ◆ Carbon steel #P-1680... \$55.00

Dumont #OC Tweezers... A shorter (3-1/2") tweezer for handling small parts

- ◆ Tapered shanks with flat edges; points have been honed and are very sharp
- Stainless steel #P-1681... \$36.00

Dumont #3C Tweezers... A shorter (4-1/2") tweezer for handling small

 Tapered shanks with beveled edges; points have been honed and are very sharp → Carbon steel

#P-1682... \$43.00

Dumont #H Tweezers... Stubby, wide shanks for a strong grip on an object Often used in pairs for wire bending, adjusting, etc.
Points are honed with round, blunt tips ♦ Overall length: 3-1/2" ♦ Carbon steel #P-1683... \$59.00

Dumont #5 Tweezers... Ideally suited for handling very small parts. Points are very narrow and needle-like. ♦ Overall length: 4-1/2 ♦ Carbon steel

#P-1684... \$45.00

Dumont #6 Tweezers... Sharp hooked points for wire wrapping, forming, bending, and coiling. Angled points are also useful for reaching hard to reach spots.

◆ Overall length: 4-1/2 ◆ Carbon steel #P-1686... \$55.00

Dumont #8 Tweezers... Blades are extra thick with blunt jaws for straightening wires, #P-1688... \$69.50 leads, etc. → Overall length: 4-1/4" → Carbon steel



CROSS-LOCKING SOLDERING TWEEZERS

A straight, stainless steel tweezer with heat-resistant fiber grips. The cross-locking jaws provide permanent tension and holding power!

◆ Long, blunt, tapered jaws are serrated ◆ 6-1/2" long #P-1788... \$3.00

142...Repair Tools

REPAIRMAN'S TAPER REAMER Excellent for enlarging holes in dial pans, hand bushings, etc. ◆ Tapers from 1/8" to 1/2"

#P-433... \$17.00

GERMAN-MADE AWLS

Each 7-1/2" long with a comfortable ergonomic plastic grip



#P-1590... Square Awl: Great for adjusting the hand bushings on Hermle and other clock movements! ...\$9.50



LET-DOWN KEY WITH INTERCHANGEABLE ENDS

→ Durable plastic handle incorporates a metal insert and tension spring

#P-110A...4-PIECE SET ◆ Includes handle and three double-end keys: (5 & 6), (7 & 8), (10 & 12) ...\$34.25 set

#P-110B...7-PIECE SET → Includes handle and six double-end keys: (1 & 2), (3 & 4), (5 & 6), (7 & 8), (10 & 12), (14 & 16) ...\$51.00 set

#P-110.1... Size 1 & 2 Double-End Key

#P-110.3... Size 3 & 4 Double-End Key SINGLE DOUBLE-ENDED KEYS

#P-110.5... Size 5 & 6 Double-End Key Your Choice... \$6.50 each

#P-110.7... Size 7 & 8 Double-End Key

#P-110.9... Size 9 & 10 Double-End Key (Not included in sets)

#P-110.14... Size 14 & 16 Double-End Key

#P-110.00... Size 0 & 00 Double-End Key (Not included in sets)

#P-110H ...Handle only ...\$13.00 each



- ♦ Hardwood: 6" L x 1-3/4" W x 2" H
- ◆ Let-down keys not included #P-1310... \$9.00



BLOW OFF AIR CLEANER

and DUSTER An all-purpose duster for removing dust and debris from movements, dials and other clock parts

- ♦ Safe on plastics
 ♦ Nonabrasive
- ◆ Leaves no residue
- Also recommended for use with computers, sewing machines, scanners, shredders, jewelry and more
- ♦ 10 oz. can #P-1851... \$9.00 12+....\$7.50 each



"INSTANT AIR" BULB

This durable rubber bulb provides the air to quickly remove unwanted dust particles!

- ♦ Metal nozzle
- ◆ No refill cans to run out!

#P-837... \$3.25



Repair Tools: Beat Amplifiers...143

Improved units from TimeTrax®

Standard accessories with each unit:

Model 20 Clip-On Sensor with an extra long cable
 Train Data book
 Comprehensive User's Guide

Model #185 Clock Timer... for mechanical clocks from 2,000 to 19,999 beats per hour:

Measures the rate of mechanical clocks by sensing the escapement action and the mechanical sounds that accompany each tick. It works on a broad range of clocks, from fast train carriage clocks to tall case clocks. Vibrations are read in beats per hour, the standard measure in the science of horology. Two timing modes are incorporated: direct train measurement and

 Double Rate Update Readout... gives stable, accurate readings in half the time!

 Adjustable measurement cycle from 2 to 130 beats for exact escape wheel match-up

The standard, high quality Built-in Beat Amplifier allows you to hear problems loudly and clearly!

♦ Newly expanded Handbook of Clock Trains

balance mode.

◆ Small, Lightweight and Durable ◆ Flashing LED with each tick

◆ Sensitive Quartz Crystal Timebase ◆ Requires 4 "AA" batteries (not included)

↑ 1-year parts/labor warranty #P-1299... TimeTrax #185 ...\$179.00

TIMETRAX® MODEL 1000 PRECISION CLOCK & WATCH TIMER/BEAT AMPLIFIER

...with increased accuracy and resolution. New LCD display presents you with all information and updates simultaneously...no toggling back and forth from mode to mode!

Each unit includes:

♦ Model 20 Clip-On Sensor with a 72" cable

◆ Train Data book ◆ Comprehensive User's Guide

 High performance, precision timer with updated, built-in beat amplifier

Plug in external AC power adaptor

TimeTrax 1000® captures the rate of mechanical clocks by sensing the escapement action and the mechanical sounds that accompany each tick. It works on a broad range of clocks, from fast train carriage clocks to tall case clocks.

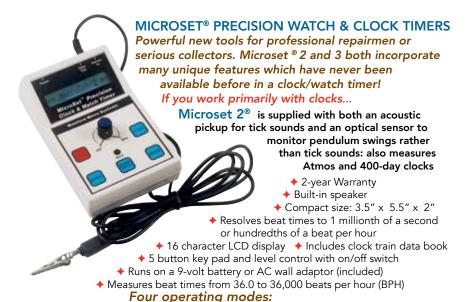
Vibrations are read in beats per hour, the standard measure in the science of horology.

Two timing modes are incorporated: direct train measurement and balance mode.

- ◆ Super Rate Update Readout... updates the display every 4 ticks (0.8 seconds)
- → Timing range: from 60 to 39.999 beats per hour
- ◆ The standard, high quality Built-in Beat Amplifier allows you to hear problems loudly and clearly!
- ♦ Newly expanded Handbook of Clock Trains
- → Small (7" long x 4-15/16" wide x 2-1/2" high), lightweight (1.5 ounces) and durable
- → Flashing LED with each tick
 → Sensitive Quartz Crystal Timebase



144...Repair Tools: Beat Amplifiers



- → Time: measures the beat time of clocks and watches
- ◆ Beat Error: measures the ratio between even and odd ticks to put a watch or clock "in beat"
- ◆ Strike: diagnoses inconsistent errors in a strike train
- ◆ Count: determines the correct beat time of any running pendulum clock without counting teeth or a train table

#P-1666... MicroSet 2® with all of the above features ...\$350.00

If you work primarily with watches and clocks...

Microset 3[®] with all of the features of MicroSet 2[®] PLUS these additional technical modes...

- ◆ Running Average Mode: Will display the accumulated overall rate of any clock or watch, becoming more accurate the longer it runs
- ◆ Display: Adds the ability to display clock and watch rates as seconds of error per day. It is not limited to a predefined set of train times. Microset 3® can be configured for any watch or clock you are working on.
- ◆ Pendulum Adjustment Mode: Will display the amount you must move the bob to make the clock run on time in ten-thousandths of an inch or fractions of a centimeter to make the clock run on time
- Accutron Mode: to rate tuning fork watches (Requires an optional sensor available through Merritt's by special order.)
- → Tick Mode: Produces a graphical display of watch ticks and balance wheel amplitude with the Windows Interface Program (Version 3)
- * "Paper Tape" Display Mode: Emulates paper tape strips like those produced by older watch timing machines using the Windows Interface Program (Version 3)
 ★ 2-year Warranty

#P-1818... MicroSet 3® with all of the above features \$445.00

Repair Tools: Beat Amplifiers...145

TIMETRAX MODEL 60 BEAT AMPLIFIER

An effective beat amplifier with incredible high-gain sensitivity and amplification... as useful and reliable as it is stylish!

→ Built-in rechargeable battery: complete with charger and USB cable included

→ Includes the proven Model 20 acoustic pick-up sensor

♦ Added features: Volume control, on/off slide switch, mini USB socket for charging, LED Charging/Operating indicator

◆ Compact size: 1-7/8" high x 2-15/16" diameter #**P-2229... \$60.00**



A sensitive monaural, acoustic clip-on type pick-up for Timetrax Model #185 and Model 1000



◆ NOT compatible for use with Micro-Set and other amplifiers #P-1299P... \$19.50

ACOUSTIC PICK-UP...

A sensitive acoustic clip-on type pick-up

◆ Can be used as a replacement for the pick-up provided with the Time-Trax® Timers or with the older #P-1339 Amplifiers

#P-2217... \$28.00





MICROSET® PICK-UP

#P-1666P... \$29.50 ea.

LARGE ELECTRIC DEMAGNETIZER...

Magnetizes and demagnetizes tools and parts in seconds!

◆ Simply plug the unit into a receptacle and then insert the object to be magnetized or demagnetized into the opening, push the activation button, and retract the object



◆ Large 3" x 1-1/2" opening ◆ Overall size: 4-13/16" x 3-1/2" high x 2-1/2"deep #P-1160... \$89.00



GERMAN-MADE MAGNETIZER-DEMAGNETIZER

An inexpensive way to magnetize/demagnetize your tools!

- ◆ Magnetize screwdrivers for easy and precise handling in confined spaces
- ♦ Magnetized tools free one hand when you are required to position the work piece!
- ♦ Compact: 2" wide x 1-15/16" tall x 1-1/8" depth

#P-1591... \$7.50



TIMETRAX

146... Repair Tools: Torches

THE MOST ADVANCED TOOLS OF THEIR KIND IN THE WORLD!

BLAZER TORCHES with high-tech Piezo electronic instant ignition systems...

- ♦ Uniquely designed for the shop, outdoors or in the household
- ◆ Refillable using any multiple head butane lighter refill canister
- Because of safety/security regulations, we ship without butane

#P-1301... PENCIL TORCH...

- ◆ Lightweight with a precisely controlled 2500° flame
- → Handy folding stand frees both hands
- ◆ Unlimited uses ...\$42.00

#P-1748... BLAZER STINGRAY HAND TORCH...

- → Butane not included → High quality anodized finish
- → Ideal for all types of repairs
 → Instant electronic ignition
- ◆ Butane powered ◆ 2500 degree flame
- → Gas flow and adjustment knob
- → Includes a detachable stand for hands-free use
- ◆ Up to 2 hours burn time ◆ 6" tall ...\$44.50

"THE BLAZER EXCALIBUR"

Self-igniting cordless soldering iron, hot air blower and torch kit!

- ◆ Instant electronic ignition ◆ Butane powered ◆ 2500° F flame
- ♦ Max. tip temp.: 1110 ° F ♦ 9" long ♦ Gas flow and adjustment knob
- → Up to 70 minutes burn time!
- ♦ Includes a torch, 6 different tips, tip wrenches, solder, and a protective case #P-1749... \$55.00





BLAZER TRIPLE-REFINED BUTANE REFILL

150 gram cannister of butane for Blazer torches and countless pocket lighters!

Complete with the nozzle adaptors to fit devices by: Arcade, Arcole, Augusta, Ben Wade, Blazer Torch, Braun, Brother Life, Bugatti, Cartier, Colibri USA old versions, Colibri England, Consul, Corona, Cozy, Crown, Diplomat, Dupont, Dunhill, Europe, Flamex, Flamecrest, Flaminaire, GBD, G.S.Hill, Hadson, Ibelo, Imco, Japan Lighters, JJJ, Kawee, Kaywoodie, Leo, Maruman, MAXIM, Mytflam, Old Rowenta, Parker, Penguin, Peterson's, Pierre Cardin, Ronson, Scripto, Silvermatch, Starlon Studio, Tanita, Win, Windmill, Zaima, Zenith and others.

+ Can only be shipped via UPS Ground P-1092... \$5.25

Repair Tools: Loupes...147

LIGHTWEIGHT DONEGAN **EYEGLASS LOUPES**

Easily attach to either temple of most eyeglass frames!

- ♦ Supplied with four different cams which adapt the Donegan Loupe to eyeglass frames 1/16" to 1/4" wide and a combination socket/Phillips screwdriver
- ◆ Available with double and single lens systems
- The position of the lens swings to give the proper position, bringing the lens to the center of the eye. It also swings out of the way when not
- ◆ The lens can be changed for left eye use by detaching the stem from the loupe frame with the small combination socket/screwdriver provided and Single Loupes: Your Choice... \$24.50 screwing the stem into the hole provided on #P-16581-1/2" 7X the other side of the loupe frame
- Ultra lightweight polycarbonate frame and clamp: tough and durable
- Precision-ground opthalmic acrylic: precisely ground and polished
- 24 mm lens diameters

Double Loupes: Your Choice... \$31.00 #P-16622 -1-1/2"......5X/7X #P-1663 2-1/2- & 1-1/2" .. 4X/7X #P-1719 2 & 1" 5X/10X #P-1720 3-1/2 & 2" 3X/5X







DOUBLE LENSE LOOPY LOUPE

- ◆ Steel frame, double lens ◆ 3.3x + 3.3x magnification
- Fits on most eye glass frames
- Can be adjusted without having to remove from glasses

#P-2261... \$4.00



EYE LOUPES

Choice of focal lengths:

#P-579A2" #P-579B ---- 2-1/2" #P-579C3" #P-579D ---- 3-1/2"

#P-579E4"

Your Choice... \$1.25 each 3 for \$3.00



EYE LOUPE HEXAGONAL STYLE

- ◆ 10x magnifying loupe with leather pouch
- ♦ Chrome finish ♦ 21mm lens
- ◆ Can be attached to a keychain or loupe holder

#P-2260... \$6.50



LED LOUPE TRU DAYLIGHT

- ◆ 10x magnifying loupe with leather pouch
- ◆ Built-in LED light ◆ Chrome finish
- ◆ Can be attached to a keychain or loupe holder
- ♦ 20.5 mm lens #P-2258... \$21.00



EYE LOUPE TRIPLET STYLE

- ◆ Triplet-style 10x magnifying loupe with leather pouch
- ◆ Chrome finish ◆ 18mm lens
- Can attach to a keychain or loupe holder #P-2259... \$5.00

148... Repair Tools: Visors

DONEGAN OptiVISOR

Featuring a dial adjustment headband to fit any head size

- A quality magnifier constructed from light, durable material
- → Fits over eye glasses

→ Adjustable pivot assembly on visor can be set to desired tension so it will stay in place when tilted

◆ Prismatic lenses are ground and polished

#P-382....14"1-3/4X PLEASE SPECIFY MODEL NUMBER Your Choice... \$55.00 each

OptiLOUPE Fits on either side and swings away when not in use

 Adds 2-1/2X to the magnification of your Optivisor #P-326...\$13.25



OptiSIGHT® VISOR OptiSIGHT® provides hands-free magnification for accurate, effective viewing!

Power

→ Brings work closer into focus: reduce your eyestrain and fatigue

Working

Distance

#P-383....10"2X

#P-368....20"1-1/2X

#P-392....8" 2-1/2X

#P-393....6"2-3/4X

#P-613....4"3-1/2X

No.

- Precision optical-grade acrylic prismatic lenses
- ◆ Can be worn over prescription or safety glasses
- ◆ Visor design shields out unwanted glare
- High strength plastic will not break
 Includes three different interchangeable lens plates:

#3 ...1.75X at 14" viewing distance #4... 2X at 10" viewing distance

#5... 2.5X at 8" viewing distance

◆ Xenon laser VisorLIGHT® LT-6: Attached to the

6000 candlepower of consistent, focused light

OptiVISOR headband, this lamp module delivers

Uses a simple snap-in, snap-out method to change lenses

#P-1664... \$32.00

DONEGAN OptiVISOR® PROFESSIONAL BINOCULAR SET A top-of-the-line magnification system

A top-of-the-line magnification system packaged in an impact-resistant, waterproof storage box. This is all you could ever hope for in a magnifier set!

The professional set includes:

- ◆ OptiVISOR® Magnifier Headband
- → OptiLOUPE® attachment lens: adds 2-1/2X magnification for close inspection/work
- Set of 6 OptiVISOR® Glass Prismatic Lens Plates:
 - → 1-1/2X at 20" focal length
 - ♦ 1-3/4X at 14" focal length
 - → 2X at 10" focal length
 - → 2-1/2X at 8" focal length
 - ♦ 2-3/4X at 6" focal length
 - → 3-1/2X at 4" focal length
- All securely packaged in a custom-tailored, lockable storage box #P-1943... OptiVISOR® PROFESSIONAL SET Only \$299.00

Repair Tools: Shop...149

DONEGAN VISORLIGHT

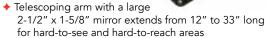
Illuminates the magnified viewing area of your OptiVISOR

- ◆ Add a hands-free, visor-mounted light and battery pack ♦ 6000 candlepower Xenon beam on your OptiVISOR
- ◆ Powered by two "AA" batteries (not included) for up to 5 hours of life

#P-1665... \$29.00 #P-1665B... Replacement Bulb \$7.75



LIGHTED RECTANGULAR INSPECTION MIRROR



Shatter-resistant polished glass mirror

◆ Incorporates two (2) extra bright LED lights that require two (2) CF2032 batteries (included)

◆ Easily adjusted 360° double-ball swivel joint

#P-2130... \$15.75

BIB-STYLE BLUE DENIM APRON

- ◆ Durable ◆ Economical ◆ Perfect for bench and shop work
- ♦ A full-size (35" long) apron with two front pockets

#P-1153... \$12.00



TEAR-OFF REPAIR AND CLAIM CHECK TAGS

- ◆ Convenient perforated tags with both halves numbered
- Complete with strings
- ◆ 2-7/8"L x 2-3/8"W

#P-642...100 tags ...\$9.00

#P-642M...1000 tags ...\$85.00



INSPECTION MIRROR

1" mirror with 7 1/2" steel handle for seeing those hard to reach places

#P-743... \$3.00



INSPECTION LAMP

...Illuminated magnifier provides hands-free viewing!

- ◆ Adjustable arm moves easily to put light where you want it!
- ◆ Supplied with a 22-watt circline fluorescent bulb
- Convenient clamp quickly attaches the lamp to your bench or work table
- Metal, finished in white
- ◆ Incorporates a large 4-3/4",1.75X magnifying lens!
- Hinged cover protects the magnifying lens

#P-2238 ...\$59.50



150... Repair Tools: Shop/Test Stands

DISPOSABLE FACE MASKS WITH EYE SHIELD

- Comfortable earloops and full nosepiece → 25 count
- → 7" wide mask → 11-1/2" wide tapered shield
- ↑ 7" tall with mask and shield #P-2284... \$15.00





COTTON GLOVES

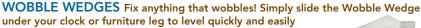
Made from pure white cotton: protect jewelry, watches, silverware, brass, etc. from fingerprints, tarnishing and spotting

◆ One size fits most hands
 ◆ Choose from 2 different fabric weights
 #P-1179...Heavyweight cotton
 *P-1180...Lightweight cotton
 YOUR CHOICE...\$1.50 pair
 12+ pair... \$1.00 pr.

WONDER WEDGE SET

Fix your wobbles... Slide the Wonder Wedge under your clock or furniture leg to level and eliminate wobbles!

- Easily stacked for larger problem areas. Textured surfaces hold the Wonder Wedges in place → Durable plastic: 1-15/16" long x 1-3/16" wide
- ◆ Set of 6: 3 medium (1/18") and 3 thick (1/4") #P-2067... \$3.00



- ◆ Easily stacked for big problem areas
- ◆ Textured surfaces create the friction necessary to hold the Wobble Wedges in place!
- ◆ Durable plastic: 1-7/8" long x 1-1/8" wide → Tapers from 1/16" to 1/4"



#P-1328... Pack of 6 ...\$2.75 6+ packs ...\$2.25 ea.

PNEUMATIC JEWELER'S BENCH STOOL

- ...Built for comfort and smooth mobility
- → 20" to 28" adjustable height
- ◆ Large 13" diameter seat, thickly padded for your comfort
- Sturdy 19" diameter base utilizing 5 full-size casters for stability and easy movement

#P-2237 ...\$120.00



Repair Tools: Test Stands...151



GENE'S CLOCK MOVEMENT TEST STAND

Versatile... Adapts quickly to a variety of movements!

- Horizontal rails are v-grooved and slotted to hold movement plates and mounting feet securely
- ◆ Designed for most wall and shelf clock movements
- Movements can be easily wound when mounted on this test stand
- ◆ Made from maple and birch hardwood: 16" high x 10" wide x 9" deep. Vertical dowels are replaceable if greater height is required.
- The feet can be repositioned in a v-shape for a wider pendulum swing
 - ◆ Support feet are adjustable from the top for leveling #P-1981... \$65.50

GRANDFATHER CLOCK TEST STAND

A large wood test stand that is both portable and versatile!

◆ Shipped "knocked down".... minor assembly required using common tools and glue (optional, if you want permanent joints)

→ 47" tall x 20-1/2" wide with a 2" space between the top support rails

 Movable "H" blocks: easily adjust the stand to meet the requirements of your movement width

◆ Movement as illustrated not included #P-1942... \$90.00



MULTI-MOVEMENT CLOCK TEST STAND

Frees valuable workbench space: holds 2 or more movements, of all varieties, at once!

MADE FROM SOLID OAK!

- Complete with a seat board: slotted with seat board hooks for pendulum and chain placement
- Incorporates a "vice" board that, when used with our #P-1597 movement clamps, can be used to securely clamp rear or front-mount spring-driv

rear or front-mount spring-driven movements (Please note: #P-1597 clamps and C-clamps to secure the seat boards <u>are not</u> included)

Solid oak construction...

- ♦ 48-1/2" tall x 15" x 15" at the top
- → 10-3/4" clearance between side rails on top plate
- Easy-to-use level adjustment: leveling feet on each corner of the base
- ◆ Easy, minor assembly required
- ◆ Movements not included



#P-2030... \$205.00

152... Repair Tools: Test Stands/Bergeon

ADJUSTABLE ALUMINUM MOVEMENT TEST STAND

... A versatile test stand designed for efficient bench use

- ◆ Cast aluminum with thumb screws for quick movement installation and adjustment. Base thumb screws on each leg for quick, even leveling.
- ◆ Supplied with two versatile arms. Each incorporates a 3-7/8" wide-grooved edge for mounting rectangular plates and a removable grooved stud for the secure positioning of round movements.
- ◆ 5-1/2" long legs for exceptional stability
- ♦ 16" tall with a 1/2" diameter shaft #P-2161... \$53.00

ALUMINUM TEST STAND ARMS ...will fit any stand with a 1/2" diameter shaft. Perfect as a replacement or to increase the capability of your test stand! ◆ Cast aluminum



#P-2162.. ♦ 3-7/8" wide grooved edge and a grooved stud for round movement plates \$14.00 each 2 for \$26.00

#P-2163... ♦ 4-1/2" wide grooved edge for rectangular or square movement plates \$12.50 each 2 for \$24.00



BERGEON® FACTORY **REPLACEMENT CENTERSHAFT**

◆ Complete with handle #P-1295...\$105.00



- Precise
- Accurately and easily bushes plates from 50mm to 220mm...

The complete Bergeon **Bushing System includes:**

- ◆ Bushing Tool with two plate clamps
- ◆ Centering bit
- ◆ Centering stake
- ◆ 4 drilled stakes ◆ 1 undrilled stake
- ◆ Chamfering tool ◆ 3 driving punches
- ◆ 10 reamers sized for Bergeon brand bushings

#P-139... Complete Bergeon Set

...\$1050.00



Now available separately:

BERGEON BUSHING TOOL ACCESSORY SET → 21-piece assortment of reamers, stakes, punches, etc. listed above #P-1572... \$375.00

Repair Tools: Bergeon...153

			R
Order	Α	В	С
No.	MM	MM	MM
00	0.30	2.80	2.00
0	0.40	2.80	2.00
1	0.40	1.50	2.00
2	0.50	1.50	2.00
3	0.60	1.50	2.00
5	0.60	3.00	2.00
6	0.70 0.70	1.50 3.00	2.00
7	0.80	1.50	2.50
8	0.80	3.00	2.50
9	0.90	1.50	2.50
10	0.90	3.00	2.50
11	1.00	1.50	3.00
12	1.00	3.00	3.00
13	1.25	1.50	3.00
14	1.25	3.00	3.00
15	1.50	1.50	3.50
16 17	1.50 1.75	3.00 1.50	3.50 3.50
18	1.75	3.00	3.50
19	2.00	1.50	4.50
20	2.00	3.00	4.50
21	2.25	1.50	4.50
22	2.25	3.00	4.50
23	2.50	1.50	4.50
24	2.50	3.00	4.50
25	3.00	1.50	5.50
26	3.00	3.00	5.50
27	4.00	1.50	6.50
28 29	4.00	3.00	6.50
30	5.00 6.00	3.00	7.50 8.50
31	0.30	1.60	2.00
32	0.35	1.50	2.00
33	0.40	2.00	2.00
34	0.45	2.00	2.00
35	0.50	1.20	2.00
36	0.50	2.00	2.00
37	0.55	1.60	2.00
38	0.65	2.00	2.00
39	0.75	2.00	2.00
40	0.85 0.95	2.00 1.20	2.50 2.50
42	1.00	2.00	3.00
43	1.10	2.00	3.00
44	1.20	2.00	3.00
45	1.25	2.00	3.00
46	1.30	2.00	3.00
47	1.40	2.00	3.50
48	1.50	2.00	3.50
49	1.60	1.50	3.50
50 51	1.65	2.00	3.50
52	1.70	2.00	3.50
53	1.80	2.00	3.50 3.50
54	2.00	2.00	4.50

Order No.	A MM	B MM	C MM	BE
55	2.10	2.00	4.50	BL
56	2.25	2.00	4.50	+ 9
E7	2.40	2.00	4 50	1 🛕 🗗

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2.75

5.00

6.50

0.80

1.00

1.00

1.20

1.20

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1.40

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1.60

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2.00

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2.80

3.00

4.00

4.50

5.00

6.00

6.50

0.0*

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RGEON JSHINGS 2 different sizes

4.50

8.50

8.50

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2.00

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7.00

8.00

8.50

3.00

4.00

5.00

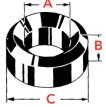
6.00

Each size packaged 10

per pack

 Perfect for replacing bushings in assortment and master boxes

Please note: 100 bushing packs are available... Please call for prices



Many sizes are available in either **BRASS or BRONZE:**

When ordering individual

Bergeon bushing packs: ◆ Please use "BE-" prefix before the order number if you want Brass Bushings

Use a "BR-" prefix before the order number if you want Bronze bushings

* 0.0* designates a "blank" bushing: not drilled

BRASS BUSHINGS → 10 bushings per pack \$4.75 each Any 10+ pks.... \$4.50 each Any 25+ pks....\$4.25 each

BRONZE BUSHINGS

Harder and last longer than brass

- Available only in sizes 00 to 60
- 10 bushings per pack

#BR-00 to #BR-16	\$4.75
#BR-17 to #BR-20	\$4.00
#BR-21 to #BR-26	\$4.75
#BR-27 to #BR-30	\$11.00
#BR-31 to #BR-52	\$4.50
#BR-53 to #BR-58	\$4.75
#BR-59 to #BR-60	\$11.50

154... Repair Tools: Bergeon

BERGEON BUSHING ASSORTMENTS

- All assortments packaged in partitioned cardboard boxes
- Please refer to the table on page for individual measurements

Bergeon Brass Master Assortment #5488... 450 brass bushings for clocks, alarm clocks and instruments

Contains 10 pcs. each: #1-15 and #31-45 plus
 5 pcs. each: #16-30 and #46-60 #P-723... \$135.00



◆ This assortment contains 10 pieces each: #1 to 15 and #31 to 45 plus 5 pcs. each: #16 to 30 and #46 to 60 #P-1548... \$189.00

Bergeon® Brass Assortment #4166... 225 brass bushings for clocks, alarm clocks and instruments

◆ Contains 10 pcs. each sizes #1-15 and 5 pcs. each #16-30 #P-721... \$80.00

Bergeon® Brass Assortment #5456... 225 brass bushings for clocks, alarm clocks and instruments

◆ Contains 10 pcs. each sizes #31-45 and 5 pcs. each #46-60 #P-722... \$80.00

Bergeon® Brass 5mm Bushing Assortment #6717... 210-piece assortment of brass bushings for clocks and regulators → 7 bushings of each size from #BE-101 through #BE-130 #P-1542.... \$120.00

KWM AND BERGEON-SIZE DRILL PRESS BUSHING ACCESSORIES

#P-1606... Bergeon Drill Press Adapter: Instantly converts your drill press to a Bergeon-sized bushing tool ...\$7.75

#P-1607... KWM Drill Press Adapter: Instantly converts your drill press
#P-1606 to a KWM-sized bushing tool ...\$7.75 #P-1609



BERGEON REAMERS AND

CHAMFERING TOOLS Available individually to replace worn or damaged tools, or to add high quality Bergeon tools to your existing set Reamers...

	Re	amers
#P-894.1.2.	1.20 mm dia.	\$22.50
#P-894.1.97	' 1.97 mm dia.	\$22.50
#P-894.2.47	2.47 mm dia.	\$22.50
#P-894.2.97	' 2.97 mm dia.	\$22.50
#P-894.3.47	3.47 mm dia.	\$22.50
#P-894.3.97	3 97 mm dia	\$34.50

#P-1609... Hand Tool

 Hand bush with Bergeon products using this handle and our #P-894 Bergeon reamers ...\$12.25

#P-894.4.47 4.47 mm dia. \$22.50





BERGEON PIVOT CUTTERS Available in five sizes....

#P-1822A 2.20 mm cutter dia. x .40 mm pivot dia \$45.00
#P-1822B 3.00 mm cutter dia. x .70 mm pivot dia \$45.00
#P-1822C 5.00 mm cutter dia. x 1.50 mm pivot dia \$45.00
#P-1822D 6.00 mm cutter dia. x 3.00 mm pivot dia \$45.00
#P-1822E 9.00 mm cutter dia. x 5.00 mm pivot dia. \$50.00



Repair Tools: Bergeon...155

BERGEON® KWM-SIZED REAMERS

For use with the Bergeon Bushing System: If you have a Bergeon Bushing Tool and prefer to use KWM-sized bushings, these reamers will do the job!

#P-1296.1.78 ... 1.78 mm reamer #P-1296,2,68 ... 2,68 mm reamer #P-1296.4.66 ... 4.66 mm reamer **#P-1296.5.85** ... 5.85 mm reamer

#P-1296.8.64 ... 8.64 mm reamer Your Choice... \$35.00 each

Also available as a set...

BERGEON KWM-SIZED REAMER SET

◆ Includes one each of the reamers in the #P-1296 Series plus a wooden stand





BERGEON® CENTERING BIT #P-1823...\$13.50

BERGEON-TO-KWM BUSHING ADAPTOR

 Use this tool with your Bergeon bushing machine to use KWM #P-1608... \$8.75 bushings



QUICK PIVOTS FOR AMERICAN, FRENCH & **GERMAN CLOCKS**

Easy re-pivoting with power drill or lathe:

- 1) Select the pivot cap nearest to your required size and burnish as necessary
- 2) Dress down the shaft of your damaged wheel to match the bore (B) of the pivot cap
- 3) Tap the pivot cap home into position and the job is done Choose from six sizes...

#P-914...Quick Pivot Assortment: 6 pivots; one of each size

...\$17.75 assortment

#P-915... Quick Pivot Packs: 5 pivots; all one size: Please order using #P- numbers ...\$15.00 pack

B C...... L...... #P-915.10.95.... 0.55 ... 3.80 mm #P-915.21.30.... 0.65 ... 3.50 mm #P-915.31.80.... 1.05 ... 5.00 mm #P-915.41.90.... 1.60 ... 6.50 mm #P-915.53.20.... 1.60 ... 7.00 mm #P-915.64.00.... 2.00 ... 9.00 mm



#P-932... \$190.00



BRASS WINDING ARBOR BUSHING 12-PIECE ASSORTMENT

◆ Sizes range from 5.3mm to 10.25mm diameter

♦ Brass

#P-2308... \$4.00

BRITISH-MADE WINDING ARBOR/BARREL BUSHINGS

Your choice... \$2.50 each a 3+... \$2.25 each

Choose from nine sizes:

G3	Α	D	
	Bushing Size:	Bore:	Depth of turning:
P-1816A	6.0 mm	3.00 mm	4.2 mm
P-1816B	7.0 mm	4.00 mm	4.2 mm
P-1816C	8.0 mm	5.00 mm	4.2 mm
P-1816D	9.0 mm	6.00 mm	4.2 mm
P-1816E	10.0 mm	7.00 mm	4.2 mm
P-1816F	11.0 mm	9.00 mm	4.2 mm
P-1816G	12.0 mm	10.00 mm	4.2 mm
P-1816H	13.0 mm	11.00 mm	4.2 mm
P-1816J	14.0 mm	12.00 mm	4.2 mm

156... Repair Tools: KWM

HIGH QUALITY AMERICAN-MADE KWM BRASS BUSHINGS

◆ All sizes: 20 bushings per pack: \$9.00 pack 3+ packs.... \$8.00 pack 5+ packs.... \$7.00 pack Note: All bushing packs must be of the same

Please order from the chart below using the "LB" prefix and the size shown on the number to qualify for quantity discount chart below...



	H 1.0 mm 1.4 mm																	
					mm			1.7	-	.9 mr		2.7 mm					3.0	4.0
В	Rι	Ш	Ш	III	IV	IVa	V	V	Ш	Ш	IV	Ш	III	IV	IVa	V	VI	VI
.10	LB55 LB56														$\overline{}$			
.15	LB56 LB01														L.L			
.25	LB57														Н			
.30	LB02		LB64						LB86									
.35	LB58																_	
.40	LB03		LB08						LB87								-B-	1 1
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1.00		LB61	_	LB14					LB36			LB98	LB99		7 hei	bushin	igs con	ne in
1.10		LB63	LB66						LD3/	LB38			LB100		/ nei	giits		
1.10		LD03	LDUO	LB15					\vdash	LB39			LB100		B = T	he Bore	e or hol	e in
1.30				LB17						LB40			LB101			enter of		
1.40				LB18						LB41			LB103			llimeter		
1.50				LB19						LB42			LB104		receiv	e the p	ivot of	your
1.60				LB20						LB43			LB105		gear's	shaft		-
1.70				LB67						LB88			LB106		l			
1.80				LB21						LB44			LB107			indicat		
1.90				LB68						LB89			LB108			de diam		
2.00					LB22						LB45			LB109		ng and er size f		rect
2.10					LB69						LB90			LB110	bushi		OI IIIai	
2.20					LB23 LB70						LB46 LB91			LB111 LB112	Dusin	l e	_	
2.40					LB24						LB47			LB112			_	
2.50					LB71						LB92			LB114				
2.60					LB25						LB48			LB115				
2.70					LB72						LB93			LB116				
2.80					LB26			LB79			LB49			LB117				
2.90						LB138	LB73	LB80							LB143			
3.00						LB139		LB50								LB118		
3.20						LB140	_	LB51								LB119		
3.40		<u> </u>	<u> </u>	_		LB141		LB81	\vdash			<u> </u>				LB120		—
3.60						LB142		LB52 LB82	\vdash						LB147	LB121 LB122		\vdash
4.00							LB75 LB76		\vdash							LB122	_	\vdash
4.20							LB30	LB53								LB124		—
4.40							LB77	LB84								LB124		
4.60							LB31	LB54								LB126		
4.80							LB78	LB85								LB127		
5.00																	LB128	
5.20																	LB129	
5.40																	LB130	
5.60									L_								LB131	
5.80			L					L				Щ,					LB132	
6.00		RF	ΔMF	R #/	OUT	SIDE I	DIAN	1ETF	R								LB133	
6.20 6.40		R	I		II	III		V	IVa	١	/	VI						LB134 LB135
6.60		1.0	D. 1.	2 1	.8	2.7	3.	.5	4.7	5.	9	8.7						LB135
6.80																		LB137
0.80																		LD13/

HIGH QUALITY GERMAN-MADE KWM BRASS BUSHINGS

Please order from the above chart using an "L" prefix and the size #L01 to #L127 and #L138 to #L147 contain 20 bushings each #L128 to #L137 contain 10 bushings each ...\$9.00 pack Any 12+ packs.... \$8.50 each





Repair Tools: KWM ...157

GERMAN-MADE KWM BRASS BUSHING ASSORTMENTS

Bushings in assortments are sorted and stored in various quantities that can be easily found in the cabinet by sliding the cover to match the numbers printed on the side of the cabinet.



#P-702... INITIAL BUSHING SET... Contains 590 bushings

Pivot hole diameters range from .07mm to 4.45mm ...\$255.00 set

#P-703... SUPPLEMENTARY SET... Contains 590 bushings which do not duplicate #P-702 set

Pivot hole diameters range from .23mm to 4.65mm. ...\$225.00 set

#P-702.3... COMPLETE SET... All 1180 Brass Bushings listed above...\$450.00 set

GERMAN-MADE KWM BRASS BUSHING MINOR ASSORTMENTS



For the limited requirements of small workshops or bulk use of needed sizes...

 Each assortment contains 10 bushings each of 10 different sizes, 100 pieces, (except #P-719) in a partitioned plastic box with a chart showing sizes
#P-711 For miniature clocks and small alarm clocks
Covers diameters 0.15 to 0.7mm, height: 1mm
#P-712 For alarm clocks with thin pivots
Covers pivot diameters 0.4 to 1.3mm, height: 1.4mm\$41.50
#P-713 For alarm clocks with thick pivots
Covers pivot diameters 1.4 to 3.0mm, height: 1.4mm\$41.50
#P-713A Supplement to #P-713 with in-between sizes\$41.50
#P-714 For alarm clock center wheels and barrel arbors
Covers pivot diameters 3.2 to 4.8mm, heights: 1.4 and 1.7mm \$41.50
#P-714A Supplement to #P-714 with in-between sizes
#1 -7 1 -7 Supplement to #1 -7 1 - with in-between sizes
#P-715 For mantel clocks and wall clocks with thin pivots
Covers pivot diameters 0.3 to 1.2mm, height: 1.9mm\$41.50
#P-716 For mantel clocks and wall clocks with thick pivots
Covers pivot diameters 1.3 to 2.8mm, height: 1.9mm\$41.50
#P-716A Supplement of #P-716 with in-between sizes\$41.50
#P-717 For grandfather clocks and wall clocks with thin pivots
Covers pivot diameters 0.5 to 2.0mm, height: 2.7mm\$41.50
#P-717AFor grandfather clocks and wall clocks with medium pivots
Covers pivot diameters 1.7 to 2.8mm, height: 2.7mm\$41.50
#P-718 For grandfather clocks and wall clocks with thick pivots
Covers pivot diameters 3.0 to 4.8mm, height: 2.7mm\$41.50
#P-719 For grandfather clocks and industrial movement center wheels
and barrel arbors
Covers pivot diameters 5.0 to 6.8mm, height 3.0 and 4.0mm, outside
diameter 8.7mm (5 bushings each, 10 different sizes). Larger reamer, anvil
and pusher required for this assortment (see page 156)\$60.00
#P-720 Thin-wall bushings with diameter 4.7mm
Covers pivot diameters 2.9 to 3.6mm, height: 1.4 and 2.7mm\$45.00

158... Repair Tools: KWM

PUSHERS FOR KWM BUSHING TOOLS

LARGE KWM BUSHING ACCESSORY

♦ 8.7mm cutter #P-59.6... \$16.75





#P-2021A... KWM Pusher #1 ...\$7.00 #P-2021B... KWM Pusher #2 ...\$7.00



#P-2021C... KWM Pusher #3 ...\$7.00 KWM BUSHING TOOL CENTERING POINTS #P-2247... Short ...\$7.00

#P-2246... Long ...\$7.00

#P-2246...

#P-2247...

CLAMP-ON KWM BUSHING FIXTURE

When properly clamped, this tool assures perfect perpendicularity: no crooked bushing holes due to hand reaming!

Quick and Easy to use:

- 1) Insert the KWM reamer of your choice
- Attach the bushing fixture to your cordless screwdriver and clamp it to the movement plate to be bushed
- 3) Ream and bush! Reamers are not included #P-1332... \$35.50



#1 #2 #3 #4 #5 #8 #P-59.6

7-PIECE HAND HELD KWM-SIZED BUSHING TOOL SET

This 7-piece set includes a handle, 5 reamers, and a chamfering tool #P-59... \$90.00 set

Available individually: #P-59H

#P-59H... Handle only \$13.50

#P-59.6... 8.7 Cutter (not part of the set) \$16.50 Extra cutters (#1 thru #5) ... \$15.75 ea.



P59.1B P59.2B P59.3B P59.4B P59.5B P59.6B ◆ No handle

Your Choice... \$25.00 each



Please note: We are no

longer able to stock the

KWM DRILL PRESS BUSHING ADAPTER

Simply place the adapter on your drill press, center, bolt in place, and you are ready to bush! #P-1111... \$160.00

- ◆ An economical alternative to other more costly bushing systems
 Includes...
 ◆ Adapter frame with adjustable floating jaws
 ◆ Mounting bolt
- ◆ Drill chuck adapter to hold KWM-type reamers ◆ 2 anvils, 1 centering tool

SCREW-IN CLOCK BUSHING TOOL COMPONENTS

#P-1507A... Placing Tool ...\$28.75 screw-in bushing tool itself, only the components.

#P-1507B... Cutter ...\$26.75

#P-1507C... Clamp-on Bushing Fixture ...\$120.00

#P-1507D... Screwdriver Adapter ...\$12.75

#P-1507E... Centering Tool ...\$14.50 #P-1507G... Chamfer ...\$17.50



Repair Tools: Bushings...159

10-PC. THREADED BUSHING REFILLS

10 identical threaded bushings in the

following	sizes:	Inside dia.
Order #:	Diameter: Thickness:	for pivot:
#SB1	5 1.8	70 mm
#SB2	5 1.8	80 mm
#SB3	5 1.8	90 mm
#SB4	5 1.8	- 1.00 mm
#SB5	5 1.8	- 1.25 mm
#SB6	5 1.8	- 1.50 mm
#SB7	5 1.8	- 1.75 mm
#SB8	5 1.8	- 2.00 mm
#SB9	5 3.0	70 mm
#SB10	5 3.0	90 mm
#SB11	5 3.0	- 1.00 mm
#SB12	5 3.0	- 1.25 mm
#SB13	5 3.0	- 1.50 mm
#SB14	5 3.0	- 1.75 mm
#SB15	5 3.0	- 2.00 mm
Your	hoice \$14.50 P.	ack of 10



BRASS SCREW-IN CLOCK BUSHING ASSORTMENTS

Assortments now available for refills!

- ♦ Assortments of brass screw-in bushings in pivot diameters from .70 to 2.00 mm, thicknesses from 1.8 to 3.00 mm
- Choose from an 80 or 160-piece assortment

#P-1507M... 80-piece assortment ...\$105.00 #P-1507N... 160-piece assortment

... \$205.00

8-PIECE BUSHING WIRE ASSORTMENT

...A lead-free hard brass assortment that includes extra large sizes for winding arbor bushings



◆ Outside diameters range from 1.58mm to 11.10mm

#P-1304 ... \$11.50 Assortment ◆ Inside diameters range from .1mm to 7.50mm



BRASS BUSHING WIRE - 5-PIECE PACK

◆ Outside diameter: 3.00 MM ◆ Inside diameter: 1.00 MM

Length: 80mm (3-5/32") #P-1935... \$7.50 pack

L & R DRYER

A safe and efficient way to dry work after ultrasonic cleaning!

- Compact for counter or bench work: 10" long x 6" wide x 4-1/8" high
- ♦ No installation just plug it in and turn it on!
- ◆ Convenient push-type on/off switch
- ◆ Easy to clean vinyl finish #P-1443... \$350.00



EVAPO-RUST® RUST REMOVER Evapo-Rust® is a water-based solution, non-corrosive to steel. It does not harm brass, copper, aluminum, gold, lead, titanium, steel, cast iron, chrome, solder, vinyl, plastic, rubber, silicone, glass, cork or wood.

Evapo-Rust®...can be used over and over until it absolutely stops working.

- ♦ 1 gallon de-rusts up to 300 pounds of light to moderately rusted steel
- ♦ Not an eye/skin irritant: non-toxic, non-corrosive, non-flammable, non-acidic, and non-caustic: Biodegradable with NO solvents, NO VOC's or HAP's

Evapo-Rust® is easy to use:

- 1) Fully immerse the rusted item: Soak times vary from 30 minutes to 24 hours depending on the severity of rust, type of steel and temperature
- 2) Wash, rinse, then paint or coating for long term rust protection #P-2109... \$39.95 gal.



160... Ultrasonic Cleaners

Built-in quality sets L&R apart from the competition!

- ♦ All metal construction...Made with a stainless steel tank and a vinyl clad steel housing
- ◆10 year Warranty... on the epoxy bonding which secures the crystal to the tank
- ♦ Noise suppression filters... which exceed FCC limits
- ◆ Half Line Circuitry... for superior cleaning
- Welded Steel Drain...No connections within the housing, hoses, or fittings to work loose or disintegrate





of cleaning energy! \$1089.00



Model #Q360... Our most popular

cleaner for the clock repair industry! Incorporates the added depth required to totally immerse larger plated movements! #Q360... \$1089.00 #Q360-H... \$1120.00

HIGH QUALITY STAINLESS STEEL PANS

For L&R Ultrasonic Cleaning Machines

#P-1444 Pan for L&R #Q90 Ultrasonic Cleaners ...\$51.00

#P-1446 Pan for L&R #Q210 Ultrasonic Cleaners ...\$130.00



HIGH QUALITY STAINLESS STEEL TANK/PAN COVER

For L&R Ultrasonic Cleaning Machines

#P-1448 Lid for L&R #Q90 Ultrasonic Cleaners ...\$21.50

#P-1450 Lid for L&R #Q210 Ultrasonic Cleaners ...\$51.00

#P-1451 Lid for L&R #Q280 & #Q360 Ultrasonic Cleaners

...\$59.00

#P-1449 Lid: Plastic Lid for L&R #Q140 Ultrasonic

Cleaners: ...\$31.00



HIGH QUALITY STAINLESS STEEL BASKETS

For L&R Ultrasonic Cleaning Machines

#P-1452 Basket: for L&R #Q90 Ultrasonic Cleaners ...\$79.00

#P-1453 Basket: for L&R #Q140 Ultrasonic Cleaners ...\$89.00

#P-1454 Basket: for L&R #Q210 Ultrasonic Cleaners

#P-1456 Basket: for L&R #Q310 Ultrasonic Cleaners

...\$120.00

#P-1457 Basket: for L&R #Q360 Ultrasonic Cleaners: ...\$145.00



Ultrasonic Cleaners...161



with the power and output to complete high production jobs with ease! #Q210-H... \$809.00 #Q210... \$759.00



Model #Q90H... Ideal for small parts and jewelry! \$299.00

Model #Q140H... Intermediate size cleaning system: handles volume cleanings quietly and efficiently! \$479.00



	Q90-H	Q140-H	Q210	Q210-H	Q310	Q360	Q360-H
Peak Output	160 watts	270 watts	400 watts	400 watts	850 watts	720 watts	720 watts
Capacity	2.0 qts.	3-3/8 qts.	6.0 qts.	6.0 qts.	13.0 qts.	14.4 qts.	14.4 qts.
Tank length x width x depth	5-7/8" l. 5-3/8" w. 4" d.	9-3/8" l. 5-3/8" w. 4" d.	11-3/4" l. 6" w. 6" d.	11-3/4" l. 6" w. 6" d.	15-1/2" l. 9" w. 6" d.	11-1/2" l. 9-1/4" w. 8" d.	11-1/2" l. 9-1/4" w. 8" d.
Heater	Yes	Yes	No	Yes	No	No	Yes
Built-in Timer	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Fan Cooling	No	No	No	No	Yes	Yes	Yes
Drain Hose Multidirectional w/ Stop Clamp	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lid	Stainless	Plastic	Stainless	Stainless	Stainless	Stainless	Stainless



PARTS BASKETS ... contain and clean small parts or jewelry during your cleaning or rinsing process!

Simply squeeze the handle to open the powerful spring handle

SMALL PARTS BASKET...

◆ 1-3/8" diameter steel mesh ◆ 6" overall length #P-973... \$4.25

LARGE PARTS BASKET... ♦ 6-1/2" overall length

◆ 2-1/16" x 2-1/16" diameter stainless steel mesh #P-1792... \$6.00



162...Cleaning Solutions



HIGH QUALITY L&R WATCH AND CLOCK RINSING SOLUTIONS

CLOCK CLEANING CONCENTRATE

One pint makes a gallon of ammoniated, waterbase cleaner

◆ Non-flammable #P-599...Gallon...\$51.00

NO. 3 WATCH RINSE SOLUTION A specifically refined petroleum distillate which leaves no oily film: non-toxic, quick-drying, non-explosive. Can be used for both watches and clocks. #P-297...Gallon...\$42.00

CLOCK LUBE... A complete clock rinsing and lubricating solution

#P-601... Gallon...\$57.00

ULTRASONIC WATCH RINSE SOLUTION An excellent rinse for watches or clocks

#P-603...Gallon...\$43.00

ULTRASONIC INSTRUMENT RINSING SOLUTION Specially formulated for use with L & R cleaning systems and solutions. It dries rapidly without spotting or streaking. It should not be used with plastic parts. #P-919...Gallon...\$51.00

ULTRASONIC WATERLESS AMMONIATED WATCH CLEANING SOLUTION #111

For use with L & R rinses, this solution was especially formulated for L & R Ultrasonic cleaning machines #P-293...Gallon...\$46.00

L&R EXTRA FINE WATCH CLEANING SOLUTION

(L&R discontinued their NoFome Waterless Watch Cleaning Solution. This new L&R Extra Fine Watch Cleaning Solution has proven to be a more-than-acceptable substitute!)

- Works aggressively: requires 25% less time than comparable cleaning solutions
- cleaning solutions

 Ammoniated #P-2019... \$47.00 gallon

WATERLESS ULTRASONIC INSTRUMENT CLEANING SOLUTION #112

An ammoniated cleaner designed to clean all types of precision parts: ferrous or non-ferrous, adding lustre #P-584...Gallon...\$59.00

WATERLESS ULTRASONIC INSTRUMENT CLEANING SOLUTION #222

A non-ammoniated cleaner which produces brilliant effects. Lasts longer than ammoniated types. #P-597...Gallon...\$59.00

ULTRASONIC CLOCK CLEANING SOLUTION #677

A waterless, non-ammoniated clock cleaning solution

#P-600...Gallon...\$49.00

ULTRASONIC NON-AMMONIATED WATCH CLEANING SOLUTION #566

Lasts longer and imparts a brilliant finish...No ammonia!

#P-602...Gallon...\$49.00

POWER NOFOME INSTRUMENT CLEANING SOLUTION

Dissolves gummed oil and grease on the most minute instrument parts. It's specially formulated for mechanical cleaning using ammoniated soap with auxilliary soaps. Contains no chlorinated solvents. #P-918...Gallon...\$55.00

Buy in case lots (4 gal. each) and deduct \$1.00 per gallon!

"ASTRO CLEAN" AMMONIATED CLOCK CLEANING CONCENTRATE

A professional quality, ammoniated, waterbase concentrate: one pint makes a gallon of fast-acting, ultrasonic cleaner!

◆ Cleans quickly and thoroughly in any brand of ultrasonic! #P-1567... \$39.00 Gallon 4+ gallons... \$37.00 gal.



Cleaning Solutions...163

ELLANAR JEWELRY CLEANER CONCENTRATE

A premium quality cleaner for brilliant and sparkling jewelry: cleans gold, diamonds, precious stones and metals!

- ◆ Mix using a 1 to 7 cleaner to water ratio: One gallon of concentrate makes eight gallons of solution!
- ◆ Ammoniated and designed for the removal of oils, cosmetics, rouge, tripoli and other buffing compounds
- ◆ Biodegradable: contains no phosphates
- ♦ Optimally effective when used with an ultrasonic cleaning machine
- ♦ Not recommended for use on pearls, opals, turquoise, coral stones, rhodium plated silver and painted surfaces #P-1867... Gallon...\$39.00



4+... \$38.00 gal. POLYCHEM® DEOX-007 NONAMMONIATED



CLEANING CONCENTRATE... A mildly alkaline blend for the efficient removal of oils, grease, tarnish, stains, corrosion, and oxidation from brass, bronze, copper, gold and silver

- ◆ Can be safely used in ultrasonics, agitated tanks or manually
- ◆ Provides long-term protection from tarnish, corrosion, and oxidation → No strong odor → Nonhazardous
- ◆ Removes tarnishes and brightens metal parts
- ◆ Use with water in a 7:1 water/concentrate ratio

#P-1513 ... \$31.50 gallon 6+ gallons ...\$29.50 gal.



POLYCHEM® POLYTECT 2CB RINSE Ready-to-use, mildly alkaline, anti-tarnish treatment and corrosion-inhibiting rinse for brass, copper, and bronze parts: imparts a transparent, protective film which bonds to the metal surface providing long-term

After cleaning, rinse parts with water, and immerse them in PolyTech 2CB for 30 seconds. For long-term protection, rinse and air dry following treatment. Lacquer may then be applied if desired.

#P-1514 ...\$28.50 gal. 6+ gal. ...\$26.50 gal.



"ONE-DIP" HAIRSPRING CLEANER & RINSE

Formulated for use as a cleaner and rinse for gummed and dirty hairsprings, jewels and pallet stones

◆ Cleans quickly, efficiently and safely ◆ Protects as it cleans! #P-2181... 8 oz. bottle... \$19.25 #P-2182... 32 oz. can... \$48.50



"DIP-AWAY" DEGREASER HAIRSPRING CLEANER

AND RINSE Cleans rapidly, safely and effectively

- ◆ For gummed and dirty hairspring jewels and pallet stones
- ♦ Non-flammable #P-529D... 16 oz. can (Pint) ...\$22.00



ZENITH® HAIRSPRING CLEANER

Formulated to clean delicate hairsprings perfectly and then dry quickly without an oily film → Non-carcinogenic

♦ Non-Chlorinated or Brominated

#P2027... 250 ml bottle ...\$18.00

ELLANAR® DIP Removes tarnish from the finest sterling or silverplate ♦ No rubbing necessary
♦ Dip, rinse, dry...Admire!!! in seconds

#P-528...16 oz. bottle...\$6.00 #P-528C...Case of 12 bottles...\$66.00





164...Cleaning Solution

Save \$1 per gallon, when you buy 1 case lot (4 gallons)



ZENITH® WATCH & CLOCK ULTRASONIC CLEANING CONCENTRATE

- ◆ For use with ultrasonic or mechanical cleaning machines
- Will not dissolve shellac, varnish or lacquer when mixed and used as directed: 1:7 concentrate/water ratio
- → 3-5 minute cleaning in an ultrasonic
- Cleans metal parts and restores them to their original sheen

P-1966A... Formula #251 ♦ Ammoniated \$43.00 gal. #P-1966... Formula #251NA ♦ Non-Ammoniated \$43.00 gal. One gallon of concentrate makes 8 gallons of solution



ZENITH® WATERLESS 224 ULTRASONIC

RINSING FLUID... for watches and clocks

- ◆ Odorless ◆ Non-reactive with metal watch and clock parts
- ♦ When used properly, leaves no tackiness or film on movement parts #P-1958... \$43.00 gal.



ZENITH® FORMULA 67 WATERLESS ULTRASONIC CLEANING FLUID... For watches and clocks

- ◆ Non-ammoniated, low odor
- ◆ Non-reactive with metal watch and clock parts
- ◆ Cleans metal parts and restores them to their original sheen

#P-1957... \$43.00 gal.



ZENITH® DRIZEBRITE... "The Ultimate final rinse!"

- ♦ Designed to leave watch & clock parts spotless: no oily film!
- ◆ Odorless ◆ Meets all watch and clockmakers requirements

#P-2026... \$43.00 gal.



ZENITH® "RADIANT": PRODUCT NO. 777

A high performance cleaning solution which cleans and shines watch and clock movements simultaneously!

- A superior cleaner formulated by Zenith chemists to restore parts to their original lustre, especially movements manufactured from 1860 to the present that have not been serviced for a long time!
- "Radiant" is formulated to clean and shine movements that contain alloys of beryllium, nickel, copper and zinc with extraordinary results
- ♦ Long-lasting: can be used repeatedly: more than all other solutions
- ♦ A high-end, low-odor, solvent-based cleaning solution
- ◆ Compatible with all Zenith rinse solutions #P-2126... \$49.00 gal.



"THE FINEST ALL-METAL POLISH IN THE WORLD"...

SIMICHROME POLISH A soft paste polish for chrome, silver, brass... virtually any metal

- Quickly cleans and polishes to brilliant shine and leaves a protective film
- A solid, dependable favorite for antiques, brass clock parts, home and automotive uses

#P-1069C... 250 gram can ...\$45.00 ea. 6 cans... \$43.00 ea. #P-1069T... 50 gram tube ...\$12.75 ea. 3+ tubes... \$12.25 ea.



Polishes...165

THE ORIGINAL NEVR-DULL "MAGIC" WADDING POLISH

Restores lustre to all metals → 5 oz. can of the popular, easy-to-use cotton wadding polish that works miracles on tarnished metal surfaces #P-84... 5 oz. can...\$6.50 #P-84C...Case of 12 cans...\$73.00





SHINO POLISHING CLOTH ...for silver, gold, copper, brass & nickel!

Two cloths in one...

- ◆ Red inner cloth polishes with rouge
- ♦ Outer cloth buffs to a high lustre #P-269... \$4.50 ea. 12 for \$45.00

"CRYSTAL-KLEER" BUFFING COMPOUND for renewing

clear plastics: ♦ Specially formulated to remove scuffs and scratches

♦ Buffs out imperfections and polishes making old crystals and plastics like new again • 5 oz. bar (5" x 1" x 1") #P-2183... \$9.25





XXG-TYPE ROYAL VELVET RED ROUGE...

No better compound exists for producing a finer finish on gold or silver #P-845...1/2 lb. stick...\$4.50

SPECIAL FORMULA FABULUSTRE

Provides a high lustre finish on all types of precious and decorative metals

- ◆ Removes light scratches ◆ Produces a fast, mirror-bright final finish
- ◆ Greaseless: dry, but not dusty ◆ Fast easy cleanup with little or no residue
- #P-844...\$5.50 3+...\$5.00 ea. ♦ 1/4 lb. tube





PEEL-A-WAY COMPOUND SET For buffing metals with a wheel polisher: Eliminate mess and broken bars

Assortment of five 1/2 lb. tubes:

- ◆ RED ROUGE...for final color lustre on soft metals.
- YELLOW ROUGE...for hard metals
- ◆ TRIPOLI... a fine abrasive; readies metals for final polish with rouge
- Plastic Compound...for hard plastics only
- ◆ Emery...for removing scratches on ferrous metals #P-846... \$19.50 assortment



MUSLIN WHEEL BUFFS

For use with abrasive compounds

◆ Each buff has a shellac hardened center.

#P-848... 4" dia., 3 rows, 42 ply **...\$2.75 each #P-849...** 6" dia., 4 rows, 50 ply ...\$5.00 each

#P-850... 8" dia., 4 rows, 55 ply ...\$10.00 each

TAPERED SPINDLES FOR STRAIGHT SHAFTS

- ◆ Designed to fit any straight shaft motor
- ♦ Easily mounted and secured with set screws

#P-842R... 3/8" right #P-843R... 1/2" right #P-842L... 3/8" left #P-843L... 1/2" left

YOUR CHOICE... \$17.00 each



166...Polishes

IMPORTED PEG WOOD

Selected 5-3/4" lengths of orange wood for cleaning pivot holes, plugging holes for screws and other uses ◆ Approximately 20 pieces per bundle

#P-1125C3mm dia. \$7.00 #P-1125A......2mm dia............\$6.50

#P-1125D 4mm dia. \$8.50

SHELLAC STICK Just apply heat and fill holes, dents and scratches with this transparent stick. It can also be used to set pallet jewels! ◆ 7" stick

#P-1767... \$29.00 stick

JAX® COPPER & SILVER PLATING SOLUTIONS

Immediately plates copper or silver onto iron, steel, brass and solder

- ◆ Requires no heat or electricity
- ◆ May be applied by brushing or immersing
- ♦ Non-flammable

#P-1962... Copper Plate Solution... 16 oz. bottle ...\$18.00 **#P-1963... Silver Plate Solution...** 4 oz. bottle **...\$29.50**

JAX® MASTER METAL FINISHING SOLUTIONS

Produce authentic looking effects with consistantly realistic results on a variety of metals

Simply... APPLY, RINSE, and ALLOW TO DRY ◆ 16 oz. bottles

JAX® GREEN PATINA: Antique green for use on copper, brass and bronze

JAX GOLD FINISH: Use on brass, copper or bronze JAX® BROWN DARKENER: Use on brass, copper or bronze JAX® BLACK DARKENER: Use on brass, copper or bronze JAX® PEWTER DARKENER: Use on brass, copper, bronze, lead,

nickel, tin/lead alloys and solder JAX® IRON, STEEL, NICKEL BLACKENER: Produces an antique metallic black finish in seconds



#P-1188... \$17.50 #P-1189... \$40.00 #P-1190... \$19.50

#P-1191... \$19.50

#P-1192... \$19.50

#P-1193... \$19.50



DIAL RESILVERING KIT FOR SILVERED BRASS DIALS

Contains genuine silver in a nontoxic mixture

◆This kit allows you to achieve professional results: just follow the directions included with the kit!

#P-1384... \$57.00

HOWARD PINE-OLA® METAL POLISHES

Instant action!... Amazingly fast and easy to use! Quickly cleans and polishes brass & copper or silver, without using acids or harsh abrasives

◆ Special Pine Oil blend retards tarnish for a long-lasting shine

#P-2047A...Copper & Brass Polish

↑ 1/2 pint bottle (8 fl. oz.) ...\$5.25

#P-2046A... Silver Polish

♦ 1/2 pint bottle (8 fl. oz.) ...\$5.25

#P-2046B... Silver Polish

♦ 1 pint bottle (16 fl. oz.) ...\$7.50









Polishes...167



WORLD FAMOUS RESTORATION & WOOD CARE PRODUCTS...

HOWARD RESTOR-A-FINISH®

...Penetrates faded lacquer, shellac or varnish finishes to bring back the original color, blend out white heat rings and water marks. With a simple wipe-on, wipe-off process, many finishes can be restored without the extreme of stripping and refinishing!

- ♦ Restor-A-Finish® contains a small amount of stain to make scratches and blemishes disappear...NO QUICK-FADING DYES! This formula also contains just the right amount of solvent to penetrate finishes without dissolving it: a process that accomplishes much more than temporary scratch cover products.
- ♦ Restor-A-Finish® is the only product on the market which can penetrate and restore a wood finish without removing any of the existing finish
 - ♦ 1 Pint (16 fl. oz. cans)

#P-2042A... Mahogany #P-2042B... Walnut #P-2042D... Golden Oak #P-2042E... Neutral #P-2042G... Dark Walnut #P-2042H... Dark Oak

YOUR CHOICE... \$8.95 can

#P-2042C... Cherry #P-2042F... Maple/Pine



HOWARD ORANGE OIL® FURNITURE POLISH

Clean or polish without drying the wood... Safe for unfinished or oiled woods!

- ♦ Uses the cleaning power of real orange oil to gently clean and polish
- ◆ Formulated with natural "orange essence oil" from the rind of the orange. Its natural cleaning power replaces the need for harsh chemicals!
- ◆ Safe for wood clock finishes, antiques and unfinished woods.... even oiled wood like teak
- ♦ Enhances the depth, tone and natural beauty of wood grain, while ◆ Contains no silicone or linseed oil preventing drying and cracking #P-2045A... 1/2 pint spray bottle (8 fl. oz.) ...\$6.50

#P-2045B... 1 pint spray bottle (16 fl. oz.) ...\$9.25

HOWARD FEED-N-WAX® WOOD PRESERVER

An original blend of beeswax, carnauba wax and orange oil forms the perfect finish to enhance wood beauty on all woods, finished and unfinished. The perfect follow-up to Howard Restor-A-Finish®!

- ♦ Finished wood: Adds protection and shine. Ideal for protecting cabinets from moisture!
- Unfinished wood: penetrates and replaces natural oils
- ◆ Contains no silicone or linseed oil
- ↑ 1 Pint (16 fl. oz. bottle)
 #P-2043... \$8.25





168... Polishes

HOWARD FINISH FIXER® SEMI-HARD PUTTY STICK

A quick and easy way to fill nail holes, small cracks, repair

minor nicks and abrasions





- Simply rub in the Finish Fixer, remove the excess and buff
- Great for repairing furniture, veneer, antiques, paneling, vinyl, hard leather, etc.
- ♦ No heat or special tools required
- ♦ Fade-resistant ◆ Each stick: 4" long
- Non-bleeding permanent color
- ♦ May be used before or after Howard Restor-A-Finish when working with wood
- YOUR CHOICE... \$3.75 stick

#P-2336A...Neutral #P-2336B...Golden Oak #P-2336C...Walnut #P-2336D...Cherry #P-2336E... Mahogany #P-2336F... Dark Walnut #P-2336G...Dark Oak



METALS: Kotton Klenser cleans,

removes dirt and tarnish from most metals

♦ WOOD: Kotton Klenser products clean, feed finishes, and cover surfaces with a protective, non-oily/non-sticky film. They remove water marks, heat rings, ink stains, wax, and dirt build-up.

Now anyone can clean and restore wood finishes and metals easily and economically ...Kotton Klenser products are essential materials if you are a collector, hobbyist, and love working with wood and metal items. They clean and preserve with a minimum of drudgery.

#P-1265... REGULAR CLEANER: for all wood finishes, paneling, formica, ceramic and plastic tile, vinyl, leather, marble, and painted surfaces + 16 fl.oz. container

♦ Non-abrasive ◆ Non-toxic ◆ Non-flammable ◆ Biodegradable

#P-1266... HEAVY DUTY METAL CLEANER: for all metals: copper, brass, chrome, pewter, tin, aluminum, stainless steel, and nickel alloys...it even cleans marble!

- ♦ Will not remove varnish or lacquer
 ♦ Contains ammonia
 ♦ Non-abrasive
- Non-flammable → Biodegradable → 16 fl.oz. container

#P-1267... PROTECTIVE WOOD FEEDER: A combination of fine oils and conditioners for dried and damaged finishes on wood surfaces. It is amazing in its powers to revitalize finishes which appear to be in poor condition.

◆ NOT for raw wood surfaces: apply to finished surfaces only! ◆ 8 fl.oz. container

#P-1268... LEMON OIL/BEESWAX POLISH for Wood and Metals:

An application of Lemon Oil/Beeswax Polish leaves a protective film on wood that retards water and finger-marking. On metals, this polish leaves a durable finish that is resistant to water, alcohol, acid, and dirt.

◆ Retards tarnishing ◆ Does not leave an oily residue or film ◆ 10 fl.oz. container

Your Choice: Any Kotton Klenser Product ...\$7.75 \$ave ... Any 12 containers ... \$7.00 each

Polishes...169

Wood and Metal Restoration Products from NEW LIFE®



NEW LIFE® METAL POLISHES

One of the most effective metal polishes we've seen in years: formulated to clean and polish metal items throughout your shop and house

- Formulated with cleansers and polishing ingredients that work quickly and gently
- Brings out metal tones and sheens
- 8 fluid ounce bottles

#P-1806... Brass & Copper Cleaner and Polish

Cleans dirt and oxidation from brass and copper surfaces

...\$15.00 each 3+...\$14.00 each



NEW LIFE® CREAM POLISH To enhance the beauty of HIGH GLOSS FINISHES! Use on PIANOS, MARBLE, PAINTED CABINETS...

- Can even be used on Formica, leathers and vinyl!
- ◆ Eliminates fingerprinting
 ◆ Leaves no wax buildup or residue
- Polishes and protects
- → Imparts a lustrous, protective coat 3+...\$16.00
- ♦ 8 fluid ounce bottle #P-1803... \$16.75

NEW LIFE® TUNG OIL SEALER & FINISH

A hard-drying, hand-rubbed oil finish for stripped or sanded wood surfaces such as furniture and floors as well as unglazed tile and slate

- ◆ Creates one of the most beautiful finishes known to man!
- ♦ Hard, lifetime finish is impervious to heat, alcohol and water
- ◆ Use New Life Tung Oil when you want the very best protection coupled with beauty! → 8 fluid ounce bottle

#P-1805... \$19.50



NEW LIFE® WOOD MOISTURIZER

For antiques and fine furniture: cleans, moisturizes, polishes and restores natural beauty with nature's own oils! Puts life and color into wood pieces...

- ◆ Contains super-refined beeswax, natural oils and mineral spirits: NO HARMFUL SILICONES!
- ◆ Leaves no oily residue or wax buildup ◆ Pleasing orange aroma
- ◆ Feeds and protects dry wood ♦ 8 fluid ounce bottle #P-1802... \$16.50 3+...\$15.75

NEW LIFE® FURNITURE MASQUE

Cleans and removes water rings and grime from wood furniture. An excellent cleaner for marble, tile, painted surfaces... liquifies mildew and dirt with gentle action!

- ◆ Simply cleans dirty old furniture easily!
- ◆ Follow cleanup with an application of New Life Moisturizer or New Life Cream Polish
- ♦ Works on hard surfaces, varnished leather and vinyl ♦ 16 fluid ounce container #P-1804... ...\$20.50 3+...\$19.50



Yew

Life

Tung Oil



170... Lubricants/Oil



HIGH QUALITY LACQUER in 12 oz. aerosol cans!

Contains no fluorocarbon propellant

#P-1717... Clear: The finest air-drying lacquer for the protection of tarnishable metals!\$18.00

#P-1718... Gold Colored: Creates a simulated 24 kt. gold color when applied to polished or satin finished brass ...\$19.00



BERGEON® "RODICO" CLEANING COMPOUND

A special watchmaker's compound with multiple uses...

- ◆ Clean balance and train wheel pivots
- → Remove fingerprints and stains from dials, hands, bridges and plates
- ◆ Remove excess oil from watch jewels ◆ Remove broken pivots from jewels

#P-1787... 1.3 ounce stick... \$6.00

POLYWATCH® SCRATCH REMOVER FOR PLASTIC WATCH CRYSTALS

...Removes unsightly scratches from plastic watch crystals with a minimum of effort!

- ◆ A new type of special-purpose polishing paste which removes scratches rapidly and inexpensively... makes your crystal shine like new
- Using a piece of cotton wool, simply apply PolyWatch® to the watch crystal and polish at a right angle to the scratches. The plastic crystal is very slightly dissolved and ground down by tiny abrasive particles. This procedure smooths the edges of the scratch marks and fills the cracks with some of the original plastic from the crystal.
- ◆ 5 ml tube contains enough PolyWatch® for approximately ten crystal applications #P-1537... 5 ml tube ...\$7.25 3+... ...\$6.75 each



and instruments

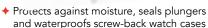
KT-22 MICRO-LUBRICANT

SCREW LOOSENING FLUID

Penetrates between threads to break stubborn bonds

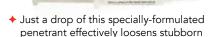


For small gear trains in watches, clocks



- ♦ Will not run, break down or creep
- Fine point plastic syringe applicator for easy application → 6cc (.202 fl.oz.)

#P-2184... \$9.25



- screws by flowing along the threads

 Fine point plastic syringe applicator for easy application
- ♦ 6cc (.202 fl.oz.) #P-2185... \$6.25

MULTIPURPOSE SUPERLUBE® OIL WITH SYNCOLON®

For use on larger movements, electric mechanisms, mainsprings and other situations where a slightly heavier oil is required

◆ Nontoxic and waterproof ◆ All-temperature: stays put where you want it!

#P-1603.4... 4 oz. bottle ...\$5.75 #P-1603.8... 8 oz. bottle ...\$8.50

SUPERLUBE® LIGHTWEIGHT OIL

Perfect for all clock movements!

◆ Stays put: won't run or drip! ◆ Contains no petroleum #P-1604.4... 4 ounce bottle ...\$4.75

#P-1604.8... 8 ounce bottle ...\$7.50

#F-1604.6... 6 Ourice Dottle ...\$7.50

SUPERLUBE® CLOCK OILER

Multipurpose oil also available in a handy pocket oiler #P-1120... .25 fl.oz. pin point applicator

...\$4.00 6+... \$3.50 each



Lubricants/Oil...171

QUICKEN® NANOLUBE A new clock/watch oil with Nano-Diamonds for long-lasting, enhanced lubrication qualities!

- Spherical, synthetic diamonds, NanoDiamonds, act as tiny ball bearings that never wear out. It takes 80,000 NanoDiamonds to span the width of a human hair!
- Lasts longer: will not break down like standard chemical lubricants because Nano-Diamonds will not break down!
- Quicken® NanoLube continues to adhere and lubricate surfaces even after the carrier oil has evaporated, reducing friction and preventing wear

#P-2031A... for clocks (2 ml bottle) ...\$35.75

#P-2031B... for watches (1.5 ml bottle) ...\$35.75





J.D.WINDLES® **CLOCK OIL**

- Specially formulated for all types of clock lubrication
- Large 4 oz. bottle #P-451... \$18.00

J.D.WINDLES® TURRET CLOCK OIL

◆ Large 4 oz. bottle of oil specially formulated for heavy-duty use with tower clocks and mainsprings #P-503... \$13.50

MOEBIUS® SYNTHETIC

ESCAPEMENT OIL Specially formulated for pallets: longer

- ♦ Has the same lubricating properties as a natural oil, but will not gum up, cause corrosion, become acidic, creep or spread
- ◆ Excellent to -68° F (-20 ° C)

lasting than natural lubricants!

◆ 2 ml (.067 oz.) bottle #P-1629... \$41.50



MOEBIUS®

SYNT-A-VISCO LUBE

A synthetic oil ideal for lubricating slower moving movements, large watch movements, staff pivot/ oscillating weights and other automatic watch parts

- ◆ Excellent to -68° F (-20 ° C)
- ◆ 2 ml bottle (.067 oz.)
- → Has the same lubricating properties as a natural oil, but will not gum up, cause corrosion, become acidic, creep or spread #P-1628... \$39.50



#8030 MOEBIUS® OIL

For clocks, music boxes and other movements • 20 ml bottle (.676 oz.) #8040 MOEBIUS® CLOCK #P-1574...\$17.75



Thicker than oil, but not as thick as grease

- ◆ A high quality mainspring lubricant for clocks, alarm clocks and watches
- ◆ 20 ml bottle (.676 oz.) #P-649... \$20.00

NYE® CLOCK OIL #140B



OIL... Ideally suited for larger clocks, but can be used on anything from cuckoos to tower **clocks** → 20 ml bottle (.676 oz.)

#P-811... \$16.75



#8300 MOEBIUS®

GREASE... A heavier lubricant for winding movements and mechanisms

8300

◆ 20 ml bottle (.676 oz.)

◆ A super-refined synthetic clock oil: noncorrosive

8200

♦ Formulated for resistance to temperature changes

#P-1731... ★ 2 ounce bottle \$57.50 each

#P-1927... ◆ 1 pint bottle \$170.00 each



Won't evaporate, gum, or become stringy!

♦ One treatment gives effective, long lasting lubrication **#P-1627...** 2 ounce bottle ...\$47.50



#P-1575... \$20.00



172... Lubricants/Oil



ETSYNTHA® #859 A high quality synthetic oil with outstanding characteristics even under the most adverse conditions!

- Superb stability
- Compatible with steel, brass and plastic bearing materials
- ♦ Outstanding low-friction values; wear is reduced to a minimum
- Multiple applications: clocks, counters, printers, alarm clocks, measuring devices, precision gears and ball bearings up to 3/8" #P-1090... 20 ml bottle ...\$56.50 #P-1089... 3.5 ml bottle ...\$13.75

ETSYNTHA® #859 OILER

With an extra-long 2-1/8" tip!

- Allows for easier placing of oil!
- ♦ A refillable, pressure-sensitive 4 ml oiler filled with high quality Etsyntha #859 oil





POCKET OILERS

Easy to use and refill! → Filled with a high grade, general purpose clock oil

◆ Pressure-sensitive body ejects oil where you want it ◆ Pocket clip and oil included #P-617... \$2.00 12+...\$1.75 each

WITH AN EXTRA LONG 3-1/4" APPLICATOR

The long, blunt-end needle applicator allows easy, yet accurate, application!

#P-1459L...With Oil

\$2.25 ea. 6+...\$1.75 each

#P-1459... Empty so you can fill it with your favorite oil \$2.00 ea. 6+...\$1.50 each

CRC® POWER LUBE A multipurpose lubricant that also prevents corrosion, penetrates, and loosens rusted parts!

- ◆ FAST ACTING: finds and stops squeaks
- ODOR FREE and NONSTAINING
- ◆ Safe on most plastics ◆ Displaces moisture
- ◆ PENETRATES: cuts through rust and scale to loosen frozen parts
- ◆ CONCENTRATED: clings to surfaces to deliver long-lasting lubrication and protection
- → Many uses in the shop, garage and home → 9 oz. aerosol can #P-1892... \$7.25 can 12+...\$6.50 each



MERRITT'S



A superior lubricant for all mainsprings, sliding surfaces, tools and machinery!

- ◆ Formulated not to "creep" or squeeze out under pressure
- ♦ High film strength and outstanding lubricity allows for smooth power flow from your mainspring without rusting or chafing
- ◆ Inhibits rust and oxidation ◆ Displaces moisture ◆ 8 oz. bottle

#P-1735... Medium Weight ...\$10.00 3+... \$9.50 each #P-1769... Light Weight ...\$10.00 3+... \$9.50 each

HEAVY MAINSPRING GREASE

Our heaviest grease: suitable for clock mainsprings and other special applications

 Conveniently packaged in a handy bellows-type dispenser #P-648... \$2.00





Lubricants/Oil...173

REFILLABLE PEN OILER

- Economical, easy to use and refill!
- ♦ 5-1/4" long x 1/2" diameter plastic body with a leak-resistant screw cap
- ◆ Oil not included ◆ Fine tip for precision placement #P-2196... \$4.00

ALUMINUM PRECISION OILER



Place oil and other lubricants precisely!

- ◆ Smooth actuator for greater control and accuracy of placement
- ◆ All aluminum construction ◆ Protective screw-on cap incorporates a pocket clip
- ◆ 5-5/8" long ◆ Oil **not** included #P-2127... \$11.00



SYRINGE CLOCK OILER

◆ 4-1/4" plastic oiler with 2cc capacity ◆ Hollow steel needle tip #P-444... \$5.00 each 6+... \$4.50 each

SWISS-STYLE DIP OILERS A set of five oilers with flat steel tips for picking up and depositing oil on touch

Plastic handles are color coded for quick identification:

- ◆ Blue: fine for bracelet watches
- → Black: extra fine for baguette watches into balance assemblies
- ◆ Green: medium for bracelet watches
- ◆ Red: <u>large</u> for pocket watches

♦ Yellow: for forcing oil

#P-1633... \$22.50

3-WELL OIL CUP and LID

◆ 2" diameter plastic oil cup with 3 graduated wells

#P-2071...

\$1.75 each

3-PC. DIP OILER SET

◆ Economical set of 3 oilers with flattened tips for picking up and depositing oil for watches

#P-1826... \$4.00



ANCOR CLOCK OIL

◆ Superfine clock oil #P-2269...for wall and alarm clocks, 20ml ...\$2.50 #P-2270... for wrist watches, 10ml ...\$1.50 Packaging may vary

GREASING PAD

Quickly lubricate "O" rings and gaskets with silicone grease!

♦ 8-1/4" overall length #P-1757... Only \$3.50





WARDLE **CLOCK OIL -75ML MEDIUM VISCOSITY** #P-2275... \$7.50

WARDLE CLOCK OIL

- ◆ Comes in a convenient oiler for precise application ◆ Color may vary
- ♦ Non-toxic, food grade oil which can be used in several different applications
- #P-2276... Low Viscosity, for smaller movements made Swiss, French, German and English
- **#P-2277... Medium Viscosity,** for all medium sized movements including schoolhouse, shelf, and mantle clocks made American, English, German and French
- #P-2278... Heavy Viscocity, for larger movements including grandfather clock movements made American, French, German and English Your Choice... \$10.50 each



174... Solder/Sealants



TIX® SOLDER

Known as the hardest solder on Earth, TIX has a holding power of 4300 pounds per square inch → Twenty 3" sticks #P-741... \$22.00 pk.

TIX® FLUX Specially formulated for Tix solder, but works great with any solder

#P-742... \$5.75 bottle



STAY-CLEAN® SOLDER FLUX

 Unexcelled for use on brass, stainless steel, copper, chrome, galvanized and similar metals
 #P-920... 4 fl. oz. ...\$8.25



STAY-BRITE® SILVER SOLDER

- ◆ Low temp. with 5 times the strength of ordinary solder
- For all metals → Use with iron or torch → Flux included #P-198... \$16.50



CRYSTAL CEMENT

The original cement used in the watch repair industry

- ♦ 9 ml tube with a precision applicator
- ◆ Great for watch crystals, fine screw locking, models, ceramic and plastic repair, plus other shop and home applications.
 ◆ Quick drying #P-292... \$7.50 tube



RESIBOND CLEAR SEALANT

- → Works great for metal and glass
- ♦ Resists tempuratures up to 200 degrees Celcius
- #P-2265... 10 grams ...\$2.00
- #P-2266... 25 grams w/ applicator tip ...\$3.00



MAX PRO® CITRUS POWER INK & ADHESIVE REMOVER

Removes grease, oil, glue, stains, marker, ink, sticker residue, scuff marks, pen, gum and crayons, toner, and printer ink with a natural solvent!

- Made with industrial strengthingredients to handle the toughest cleaning jobs
- ◆ Penetrates quickly: removes adhesives safely
- ◆ Safe on most plastics ◆ 5 oz. container #P-2232... \$7.50

MULTI-PURPOSE SPRAY ADHESIVE

Great for mounting paper clock dials!

- Also bonds plastics, cardboard, fabric, foam, metal and foil
- ◆ Fast tack ◆ Dries quickly and clearly
- → Repositional for one minute before forming a permanent bond
- ◆ Large 16-1/4 oz. can #P-2016... \$13.50



Screws/Display Domes...175

#P-1390

WOOD SCREWS

#P-1390... Steel Wood Screws:

- ◆ Flat head, slotted ◆ 1/2" x #2
- ◆ 100 per pack …\$3.00 pack





#P-1517.22... Steel Wood Screw:

◆ Flat head, slotted ◆ 2" x #8 ◆ 100 per pack ...\$3.00 pack

#P-1517.30... Steel Gong Block Screw: for mounting chime brackets ◆ Slotted ◆ 5/8" x 10-32 ◆ 25 per pack ...\$2.50 pack

#P-1517.31... Steel Machine Screws: → Round head slotted

↑ 1/2" x 10-24, ↑ 25 per pack ...\$2.75 pack

#P-322... Flat Head Wood Screws Ideal for mounting movements in school and kitchen clocks → 3/8" x #8 → 100 pieces ...\$9.50

Brass-Plated Wood Screws ◆ 3/8" x #2 ◆ 100 per pack #P-180... Round head ...\$5.75 pk. #P-181... Flat head ...\$5.50 pk.





MANTEL CLOCK SCREW ASSORTMENT

◆ 100 steel and brass screws ◆ Assorted sizes #P-730...\$4.75



GLASS DOMES + Dome only without a base

♦ High quality glass domes, now in seven versatile sizes

#P-863 4-1/4" high x 2-7/8" diameter. .. **\$7.00 #P-1047** 8" high x 4-1/2" diameter.......\$15.00

#P-1046 10-1/8" high x 5-1/2" diameter...\$23.00 **#P-161** 11" high x 5-1/2" diameter \$26.50 **#P-709**......12" high x 8" diameter\$35.00

Glass... Not plastic imitations!



WATCH DISPLAY DOMES WITH WOODEN BASES AND GLASS DOMES

- ◆ Real glass dome (2-3/4" diameter x 4-1/4" high): NOT plastic!
- ◆ 4-3/4" overall height ◆ Solid wood bases: no plywood/particle board
- ♦ 4-1/16" diameter solid wood base with brass watch hanger

Your Choice... \$15.00 ea. 3+...\$14.25 ea. 12+...\$13.75 ea.

MAHOGANY **FINISH**

#P-1990...

#P-1992... OAK **FINISH**



#P-1227... #P-1991... CHERRY **NEUTRAL FINISH FINISH**



176...Watch Repair Tools

LEATHER-LIKE WATCH POUCHES

Set of three with avelcro closing tab



- → Each is 3-1/2" long x 3-1/2" wide and is lined with soft material to enhance the protective qualities of this pouch
- ◆ Assortments consist of three pouches, one each: brown, black and deep red #P-1791... \$6.50 Set



DRAWSTRING WATCH POUCHES

Pouches with the feel of suede for watches and jewelry!

→ Made of durable, long-lasting material with draw cords

#P-1645... 2" x 3"
...\$1.50 ea. 12+...\$1.00 ea.
#P-1646... 2-3/4" x 3-1/2"
...\$1.75 ea. 12+...\$1.25 each
#P-1647... 3" x 4"
...\$2.00 ea. 12+...\$1.50 each



CLIP-ON POCKET WATCH CHAIN

A rich-looking steel watch chain with a goldtone finish

- ◆ Spring snap securely attaches to your watch
- ◆ Clip attaches to your vest, pocket or belt ◆ 14-1/2" overall length #P-2138... \$4.75

WATERPROOF WATCH CASE OPENER SET

- ◆ COMPLETE... 4 sets of adapter pins enable you to open all screw back watch cases
- EASY... Simply insert the proper adapter pins and adjust to match your case back
- ◆ CONVENIENT... 5-5/8" long tool and all pins store in a handy protective wood case

#P-838... Only \$15.00





WATCH CASE OPENER

An adjustable, pocket-size watch opener for screw back watch cases

◆ 2-3/8" long x 1-5/8" wide

#P-1758... \$7.75 each

Watch Repair Tools ... 177

BERGEON® WATCH CASE OPENER

A blade-style opener with a polished blade

◆ 4-3/8" overall length #P-1637... \$28.75



BERGEON® COMBINATION KNIFE/WATCH CASE OPENER

A blade-style opener with a polished knife blade and watch opener blade!

→ Stainless steel blades → 3-3/8" length unopened

#P-1643... \$27.50



→ Tempered steel blade and hardwood non-roll handle #P-423... \$3.50





RUBBER VACUUM OPENER

- ♦ Opens and closes screw backs and bezels
- ◆ 2" dia. cup fits 0 18 size watches #P-544... \$6.50 each



Open watches without damaging the case

◆ Plastic ◆ 2-1/2" diameter

#P-2268... \$4.50





WATCH CASE OPENER

for snap-type watch cases

◆ An economical tool with an ergonomically designed plastic grip

◆ 3-1/4" long #P-1861... \$5.50

STAINLESS STEEL POCKET WATCH CASE OPENER



- → Convenient size...1-11/16" long
- → Just attach to your key chain

#P-1249... \$1.50 12+...\$1.00

WATCH CASE PRESS WITH NYLON DIES

Newly designed versatile, economical 15-piece set for pressing watch cases together!

- ◆ Inside Dies sizes: 18mm, 20mm, 24mm, 28mm, 30mm, 32mm, 36mm
- Outside Dies sizes: 16mm, 20mm, 24mm, 28mm, 30mm, 32mm, 36mm

#P-1906... \$31.00 each



178... Watch Repair Tools



SLOT ANVIL ... A must for watchmakers! Use as a base for staking, riveting, and drilling small parts!

- Case hardened → Ground flat and smooth → 5 milled slots
- ◆ 9 graduated holes with one size for stumps
- ↑ 1-3/4" long x 1-1/4" wide x 1/2" thick #P-1778... \$21.75



15-PC. WATCH KEY & CHAIN SET

A versatile set with 14 different watch keys, sizes #12 to #00 on a ring. If you work with watches as a repairman or hobbyist, this assortment is perfect for bench work or as a set for your key chain! ◆ Made of brass and steel #P-1476... \$10.25 ea.

3+... \$9.75 ea.

UNIVERSAL WATCH KEY

A nickel-plated key with 5 different sized kevs for watches Available with 2

different sets of sizes:

#P-474A...Sizes #2, 4, 6, 8, and 10 **#P-474B...**Sizes #3, 5, 7, 9, and 11

Your choice ...\$4.75 each Any 2+...\$4.25 each

WATCH KEYS

Available in Sizes:

#00 ---- 2.00mm **#6** ----- 1.40mm **#0**-----1.90mm **#7**----- 1.30mm **#1**-----1.80mm **#8**----- 1.20mm #2-----1.75mm #9----- 1.15mm

#3-----1.65mm **#10** --- 1.05mm #4-----1.60mm #11 --- 1.00mm

#5-----1.50mm #12 --- .95mm (Please specify sizes required)

#P-141... Your Choice... \$1.50 each

\$12.00 dozen (Sizes may be assorted)



FIBERGLASS SCRATCH BRUSH

Removes rust and dirt from metal surfaces and polishes!

- ◆ Fine glass bristles mounted in a plastic holder ◆ Bristles: 1/2" x 3/16"
- ♦ Bristles can be screw-fed as they wear down

#P-1644... \$4.75 #P-1644R... Bristle Refill... \$3.00

SPRING BAR TOOL

Easily remove or insert all types of spring bars

- ◆ Double-ended: flat tip on one end, pointed on the other
- ◆ Knurled handle for grip and control

#P-1620... \$3.50



Watch Repair Tools...179

CRYSTAL LIFT WITH PLATE

Removes and inserts crystals without disassembling your watch: effortlessly remove and insert any round, unbreakable crystal!

- This tool eliminates all rings, wrenches and pliers when removing or installing crystals from 15 to 45mm
- The brass "fingers" will not mar the crystal or lose strength because they are mechanically regulated with a simple turn in motion
- Includes a plate for inserting the crystal

#P-1786... \$17.50



#P-1930W... Spare Wick \$.50





STAINLESS STEEL SPRING BAR GAUGE

Are you tired of guessing the length of your missing spring bar? Do you want to save time replacing broken spring bars?

- ...We are pleased to offer the answer to your troubles and frustrations!
- → This durable stainless steel gauge has inch measurements (in 1/16" increments from 5/16" to 7/8") on one side and millimeter increments, from 8 to 22mm on the other side
- ◆ Convenient 4-3/4" long size, with easy-to-read numerals
- Simply slide the gauge between the lugs of your watch to accurately gauge the length of the spring bar required!

#P-1726... \$4.00



BRACELET HOLDER

Securely holds watch bracelets for pin and screw removal

- An economical tool with four different grooves of various widths to match common bracelet sizes
- ◆ 2-1/16" long x 2-1/16" wide x 1" high #P-1858... \$4.50



PIN PUSHER PLIERS

Remove and replace bracelet pins quickly and with a minimum of effort!

- → This convenient, economical tool comes with two pin pushers: 0.8mm and 1.0mm.

 These versatile sizes allow you to remove and replace bracelet pins without marring the watch case
- ◆ Instructions and durable case included ◆ 6" overall length #P-1857... \$22.00

180... Watch Repair Tools



LINK & SPRING BAR REMOVER

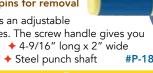
A multipurpose tool for removing stubborn watch links and Westar-type spring bars

- Includes pins of .60, .80, and 1.00 mm to be used with any type of bracelet
 - ◆ Screw drive is 1mm for removing screw-type spring bars #P-1746... \$25.00

BRACELET PIN REMOVER

Easily and accurately punch bracelet pins for removal

- ◆ This convenient, economical tool has an adjustable base to adapt to various bracelet sizes. The screw handle gives you ultimate control over the punch pin. ◆ 4-9/16" long x 2" wide
- ◆ Plastic base to avoid case scratching ◆ Steel punch shaft #P-1862... \$6.00



SPRING-DRIVEN BRACELET PIN REMOVER

With two additional springs of varying strength to apply varying pressure!



100-PC. ECONOMY SPRING BAR ASSORTMENT

◆ 100 assorted spring bars in sizes 9mm to 18mm
#P-1724... \$5.00 Assortment 3+ Assortments... \$4.00 each

450-PC. SPRING BAR ASSORTMENT

- ◆ Includes 8 to 24mm spring bars: twenty-five (25) each size sorted in a convenient partitioned box
- → Stainless steel, double flange spring bars: 1.3mm thickness #P-1842... \$14.50

100 ASSORTED WATER-RESISTANT RUBBER RINGS FOR QUARTZ WATCHES

♦ 100 thin rings

#P-1784...\$4.00 assortment







1000-PC. SCREW ASSORTMENT

Assorted sizes for the repair of eye glasses and watches #P-1827... \$13.50

DUST COVER For watch parts and other small items

- The plastic cover and partitioned base allow you to organize and protect small parts during watch disassembly and cleaning
- ◆ Base: 4-1/8" diameter ◆ Cover: 2-1/2" overall height



Watch Repair Tools/Batteries...181



COMPARTMENTALIZED PLASTIC BOXES

An easy way to organize and store small parts, tools, other repair supplies and jewelry!

#P-1789... 12-Compartment Box w/ snap lock lid

- ◆ Overall size 8-1/4" long x 4-1/4" wide x 1-3/8" deep
- ◆ Each compartment: 2-1/16" long x 1-3/8" wide x 1-1/8" deep ...\$8.00

#P-1790... 18-Compartment Box w/ snap lock lid

- ♦ Overall box size 8-1/4" long x 4-1/8" wide x 1-1/8" deep
- ◆ Each compartment 1-1/4" long x 1-1/4" wide x 1" deep ...\$8.00



ALUMINUM CONTAINERS

With see-through glass tops: perfect for storing watch movements or other small items

Now available in three sizes...

MODEL "QT 2500" BATTERY AND PULSE WATCH TESTER

Accurately tests silver oxide, mercury, and lithium batteries in seconds as well as the coil

The newest advance in watch analyzers: You can easily determine whether the movement is working or if the battery is dead without opening the watch!

◆ Requires one 9-volt battery (included) #P-1528... \$48.00

CELL TESTING "TWEEZER"

Simply touch the posts of this "tweezer" to the terminals of any 1.5 volt battery:

- The embedded light will glow brightly for a strongly charged battery, dimly for a weak cell, or not at all if your cell is dead!
- ◆ Use with button cells or other standard batteries
- ♦ 4-3/4" overall length

#P-1756... \$4.00 each



182... Batteries



FOR KUNDO, JUNGHANS AND TRANSISTOR-CONTACT CLOCKS

LONG LIFE BATTERY

- → #8 or #9 size: guaranteed to fit Kundo and Junghans clocks!
- → 3-1/8" wide x 3-3/4" high → x 3/4" thick
 - * add 1/2" to height to allow for terminal height #P-1672... Only \$24.50 each

HOROLOVAR BATTERY ADAPTER

Eliminates the need to purchase special batteries: Just insert two regular "AA" batteries and install the adapter in your clock

Durable metal construction: 3-1/8" wide x 3-3/4" high* x 3/4" thick

* add 5/8" to height to allow for terminal height #P-772... \$28.00



BATTERY SELECTOR DISK

Match your watch, camera or calculator battery to one of the precut battery templates for quick, easy battery identification!

Durable 5-11/16" diameter x 1/16" thick plastic disk with 44 precut templates for batteries ranging from 303 to 399 and CR927 to CR2450N
 #P-2020... \$3.50



The P-1865 starter kit can only be shipped to the continental United States via UPS Ground:

No shipment to Hawaii, Alaska and International, including Canada



SONY® DELUXE WATCH BATTERY STARTER KIT

Everything you need to start a first-class batteryreplacement business!

Included in this kit...

- ♦ 222 Sony watch batteries
- ◆ All batteries are contained in a 60-drawer display cabinet with labels
- ◆ GemOro® Watch Battery Tester for silver oxide, zinc air, alkaline and lithium batteries
- ◆ Spring Bar Tool ◆ Assorted Spring Bars
- → Adjustable Watch Case Opener: screw back → Sony® Store Poster
- → Adjustable Watch Case Opener: snap case type → Battery Size Selector Disk
- Assorted O-rings/gaskets → Scratch Brush Contact Cleaner
 Adjustable Watch Case Holder → Nonconducting Plastic Tweezer
- ◆ 2 Small Jeweler's Screwdrivers: Phillips/Standard heads ◆ Inventory Control Sheet
 - → Watch Selection guide
- #P-1865... Complete Deluxe Kit ...\$355.00

HIGH QUALITY SILVER OXIDE WATCH BATTERIES

High quality batteries which fit many watches, small fit-up movements, calculators, etc.



Order #: Replaces: Each: 5 for:	
201: use #WB357	Order #: Replaces: Each: 5 for:
#WB301 301, 354, 386, SR43S, SR43W	#WB366 366, SR1116SW \$3.25 \$15.75
\$2.75\$11.25	370, SR920W: use our #WB371
#WB393 309, 323, SR754SW \$2.75 \$11.25	#WB371 371, SR920SW \$1.25 \$5.25
313: use our #WB357	#WB373 373, SR916SW \$1.50 \$6.25
#WB315 315, SR715SW \$1.50 \$6.25	#WB377 376, 377, SR626SW\$1.25\$5.25
#WB317 317, SR516SW\$1.50\$6.25	#WB379 379, SR521SW \$1.25 \$5.25
#WB319 319, SR527SW\$1.50\$6.25	#WB381 381, SR1120SW \$1.50 \$6.25
#WB321 321, SR616SW\$1.25\$5.25	384, SR41SW: use our #WB392
323: use our #WB309	#WB387 387, 387S \$3.75 \$17.50
#WB329 329, 388, SR512SW \$1.75 \$7.50	388: use our #WB329
#WB335 335, SR610SW\$2.75 \$11.25	389, SR1130W: use our #WB390
	WALDOOD 200 CD4420CM #4 F0 #4 0F
#WB337 337, SR416SW	#MD204 201 CD1120M
#WB339 339, SR614SW \$2.75 \$12.50	WALDOOD 200 CD44144 #4 05 #5 05
#WB341341\$2.75\$12.50	#WB393 393, SR44W, SR48W
343: use our #WB344	
#WB344 343, 344, SR1136SW \$2.75 \$11.25	#NAID204 204 CD02/CN/ #4 75 #7 F0
#WB346 346, SR712SW \$2.75\$12.50	#WEDOOF 205 200 CD027CW64 25 65 25
#WB357*357, SR44W\$2.50\$11.25	#WB396 396, SR726W\$1.25\$5.25
361, SR721W: use our #WB362	#WB397 397, SR726SW\$1.25\$5.25
#WB362 362, SR721SW \$1.25 \$5.25	#VVD377 377, 317/203VV \$1.23 \$3.23
#WB364 364, SR621SW \$1.25 \$5.25	
#WB365 365, SR1116W \$3.25 \$15.75	
HIGH QUALITY LITHIL	JM WATCH BATTERIES
Order #: Replaces:Each:5 for:	#WBLCR2012 CR2012, L-42 \$1.75 \$7.50
#WBLCR1025 CR1025, L-44 \$1.50\$6.25	#WBLCR2016 CR2016, L-10 \$1.25 \$5.25
	#WBLCR2025 CR2025, L-12 \$1.25 \$5.25
4.44	#WBLCR2032 CR2032, L-14 \$1.25 \$5.25
	#WBLCR2320 CR2320, L-26 \$1.75 \$7.50
4.44	#WBLCR2325 CR2325, L-05 \$1.75 \$7.50
	#WBLCR2430 CR2430, L-20 \$1.75 \$7.50
	#WBLCR2450 CR2450\$2.75 \$12.50
#WBLCR1616 CR/BR1616, L-11 .\$1.25\$5.50	
#WBLCR1620 CR1620, L-08 \$1.25\$5.50	
• · · · · · · · · · · · · · · · · · · ·	



EVEREADY INDUSTRIAL ZERO MERCURY

ALKALINE BATTERIES from Eveready® in three popular sizes!

#P-1434... AA Size \$1.25 ea. 4 for \$4.00 24+...\$.80 ea. #P-1435... C Size \$1.75 ea. 4 for \$6.00 12+...\$1.25 ea. #P-1436... D Size \$2.25 ea. 4 for \$8.00 12+...\$1.75 ea.

184... Batteries/Watch Movements



EVEREADY ENERGIZER® INDUSTRIAL ALKALINE 9-VOLT BATTERY

#P-1779... \$2.50 each 4 for \$9.00

EVEREADY ENERGIZER® "N" SIZE BATTERY

For use in quartz fit-up movements, photographic, and other pieces of electronic equipment

◆ Alkaline ◆ 2 batteries per pack #P-1045... \$4.00 pk.





ECONOMY AAA ALKALINE BATTERIES

Zero Mercury Alkaline batteries less than \$1.00 each! #P-1576... Pack of 4: \$2.50 pack

REPLACEMENT WATCH MOVEMENTS MIYOTA/CITIZEN



Caliber:	Ligne Size:	Thickness:	Features:	Hands:	Order #/	Price each:
1L12(6)	. 6-3/8 x 8	2.71 3	hands, Date (6)	. 120/70/17	.WM1L12(6)	\$7.25
1L22	. 6-3/4 x 8	2.15 2	Hands	. 120/70	.WM1L22	\$6.00
1M02	. 10-1/2	2.94 3	Hands, Day-Date	. 120/70/17	WM1M02	\$7.50
1M12	. 10-1/2	2.71 3	Hands,Date	. 120/70/17	.WM1M12	\$6.50
1M12(6)	. 10-1/2	2.71 3	Hands, Date(6)	. 120/70/17	.WM1M12(6)	\$7.25
1M15	. 10-1/2	2.71 2	Hands, Date	. 170/70	.WM1M15	\$7.25
1N12	. 8-3/4	2.58 3	Hands, Date	. 120/70/17	.WM1N12	\$7.25
2015	. 6-3/4 x 8	4.15 3	Hands,Date	. 120/70/17	.WM2015	\$5.25
2036HCP120	. 6-3/4 x 8	3.15 3	Hands	. 120/70/17	.WM2036HCP	120 \$4.00
2115	. 10-1/2	4.15 3	Hands, Date	. 120/70/17	.WM2115	\$6.50
5R21	. 3-3/4 x 6	1.90 2	Hands	. 80/40	.WM5R21	\$17.50
5R32	. 3-3/4 x 6	2.00 3	Hands	. 100/65/17	.WM5R32	\$14.25
6P27	. 10-1/2	3.45 3	Hands,3 EYE(DAY,DT,24H) .	. 120/70/17	.WM6P27	\$11.25
GM10	. 10-1/2	2.71 3	Hands, Date	. 120/70/17		\$6.00

PULSAR, SHIO JIRI, MORIOKA, TOKEIMI







Caliber:	Ligne Size:	Thickness:	Features:	Hands:	Order #	Price each:
AL21	. 6-3/4 x 8	80.8	.3 Hands	110/65/20	WMAL21 .	\$4.00
PC10	. 5-1/2 x 6-3/4	3.15	.2 Hands	120/70	WMPC10 .	\$5.75
PC20	. 6-3/4 X 8	2.15	.3 Hands	120/70/20	WMPC20 .	\$4.75
PC22	. 6-3/4 X 8	4.15	.3 Hands, Date	120/70/17	WMPC22 .	\$5.00
PC33	. 10-1/2	4.15	.3 Hands, Day-Date	120/70/17	WMPC33.	\$6.50
VB20	. 3-3/4 X 6	2.20	.2 Hands	90/45	WMVB20 .	\$12.00
VC10	. 5-1/2	2.38	.2 Hands	120/70	WMVC10 .	\$8.00
VC11	. 4-3/4	2.38	.3 Hands	120/70/17	WMVC11 .	\$8.00
VJ22	.6 x 8	2.71	.3 Hands,Date	110/65/20	WMVJ22	\$7.25
VJ24	.6 x 8	2.71	.2 Hands,Date	110/65	WMVJ24	\$7.50
VJ34	. 10-1/2	2.71	.2 Hands,Date	110/65	WMVJ34	\$7.50
VX00	. 4-3/4	2.09	.2 Hands	110/65	WMVX00 .	\$8.00
VX01	. 4-3/4	2.39	.3 Hands	110/65/20	WMVX01 .	\$8.00
VX3J	. 10-1/2	3.05	.3 Hands,Date,24Hr Day	110/65/20(21) WMVX3J .	\$14.00

Other watch movements available in limited quantities... call for availability

Watch Mainsprings ... 185

BESTFIT® WHITE-A-LOY MAINSPRINGS FOR AMERICAN WATCHES

Your Choice... \$24.75 Each Any 3+... \$21.75 ea.

For FI	.GIN	Denniso	n	Met	ric	
Item # S			itrength/L		dth/Strengt	h End
JA107	16S6164		_	24" 2.90	_	D.B.& Hole
JA110	125 2339/6093	11	4 2	20" 2.00	mm .19.	D.B.& Hole
JA111	12S 2874	7	4.5 2	20.25" 1.60	mm .185	D.B.& Hole
JA111A	. 10S 6001	7.5	4.5 1	17.5" 1.65	mm .185	D.B.& Hole
JA112	6S 824	10	5 1	17.5" 1.90	mm .18.	D.B.& Hole
JA115	0&3/0S 2097/6095	8	3 1	16.5" 1.70	mm .14.	D.B.& Hole
JA118	4/0S4789/6096	10 1	10 1	15" 1.90	mm .17.	D.B.& Hole
JA120	5/0&6/0S 2890/6098	3.5	10 1	11.5" 1.25	mm .115	D.B.& Hole
JA122	8/055219/6002	7.5		1.65		D.B.& Hole
JA124	10/0S1957/6009	3.5	9.5	9.75" 1.25	mm .12.	D.B.& Hole
JA126	15/0S5550/6003	4	11 1	1.27	mm .10.	D.B.& Hole
JA127	19/05 6330			11.75" 1.53		D.B.& Hole
JA128	20/055015/6100			8.5" 1.15		D.B.& Hole
JA130	21/055327/6004		-	9.25" 1.27		D.B.& Hole
JA131	21/0S6246			9.5" 1.53		D.B.& Hole
JA132	730(15/0) 258730	5.5	7 1	11" 1.45	mm .15.	D.B.& Hole
For H	AMILTON			Dennison	Met	ric
Item #	Size: Factory #	Wi	idth/Strer	ngth/Length	Width/ S	trength End
JA201	18515/18013	19.5	3	21.25"	.2.85 mm	.21T
JA208	165534/718047	19.5	6.375	5 20.75"	.2.85 mm	.165 DB
JA209	1251228/3028/71		5	21.25"	.1.70 mm	.18 DB
JA210	105917/921/923/6		6	17.5"		.17 MB
JA213	6/051721/1921/71		8.5	10.0"	.1.35 mm	.135 T
JA215	6/052321/2521/71					
JA218	8/0S7221/718272.	5	9.5	11.5" 13.5"		.125T
JA216 JA219	8/057221/718272. 8/057221/718271.		11.5 12.5	13.5"		.095T
JA219 JA220	12/0S4128/718400.		9.25	14.5"		.085 T
JA223	12/054128/718400. 14/0S5021/718440.		10	11.25"		.125 I .11 T-BRACE
JA226	18/0S2721/718501.		10	11.0"		.09T
JA229	20/0&21/0S2921/718531 .		13	9.0"		.08 T-BRACE
JA232	22/056221/718601.		14.5	8.0"		.07 T-BRACE
JALUL	22,030221,710001.		14.5	0.0	. 1.40 11111	.or I-BRACE
For H	AMPDEN		Dennison		Meti	ic
Item #	Size: Factory #			:h/Length	Width/ Str	
JA303	185 1696	20	3	21.75"	2.90 mm	.21T
JA304	1851696	20	1	21.75"	2.90 mm	.23T
JA308	16S4697	18	5	21.0"		.18T-BRACE
JA311	12512696	5	5.5	19.0"	1.40 mm.	175T
JA313	3/059696	5.5	6.5	13.0"	1.40 mm	.16T
JA314	8/0S15696	3.5	8	8.25"	1.25 mm	.14T

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BESTFIT® WHITE-A-LOY MAINSPRINGS FOR AMERICAN WATCHES Your Choice... \$24.75 Each Any 3+... \$21.75 ea.

	OWARD			Denr			etric	
Item # S		Factory #		/idth/Strer	ngth/Length	Width/ 9	_	End
JA350	185	. 55	19	3	23.5"2.8	30 mm	.205	HOLE
JA352	16S	. 328	18	6	21.5" <mark>27</mark>	5 mm	.165	HOLE
JA354	125	. 552	9	7	19.5"1.8	30 mm	.15	HOLE
JA355	125	. 553	9	6.5	19"1.8	30 mm	.16	Т
JA356	10S	.796	6	7	16"1.5	50 mm	.15	ноок
Car N	EW VODI	K STANDA	DD	_				
Item #					nnison		etric	End
JA502		Factory # 2190		viatn/Strei 1	ngth/Length 20"2.9	Width/ St	.23	
JA508 JA509		. 4284			18"1.8 19"1.9		.20	
		4144		2			.22	
JA511	105	. 7080	6	4	17"1.!	50 mm	.19	ONGUE
For RO	OCKFOR	D	Denni	son			Metric	:
Item # S			idth/Streng	th/Length		Width/ S	trength E	ind
JA550	185	644	20	2	22"2.9	0 mm .	22T	
JA551	165	822	18	3	20.5" 2.7	0 mm .	205T	
	'ALTHAM		Denn	ison		Met		
Item # S		•	Vidth/Streng	th/Length			Strength	
JA713	165	2218/226	7 19	4	25"2.8	30 mm	.19	HOLE
JA715		2247/226		5	19.5"2.6	50 mm	.17	DB&HOLE
JA718	14S(COLR)	2252/226	9 7	4	19"1.0	52 mm	.17	HOLE
JA720	125	2224A/22	79 12.5	6.375	19.25"2.	15 mm	.16	HOLE
JA725	6S	2215	10	3	16"1.9	90 mm	.21	Т
JA726	6S	2217	10	4	16"1.9	90 mm	.19	Т
JA727	6S	2219	12	7	16"2.	10 mm	.15	HOLE
JA729	os	2220	6	7	16"1.		.15	HOLE
JA731	os	2228	8	9	15"1.3	70 mm	.13	HOLE
JA733		2230/227	8 11.75	9	15"2.0		.13	
JA737	6/0S		4	9	13.5"1		.13	
JA738	6/0S		6	13.5	9.5"1.		.12	
JA743		2237/226	_	6	19.25"1.		.165	
JA746		2238/227		10.375	12"1.		.11	
JA748		2239/227		11	9.75"1.0		.10	
JA750		2240/226		12	8"1.		.09	
JA751	7.5L(750B)		2.5	10.5	11.25"1.		.11	
JA751	8.75L		5	12.5	8.5"1.		.085	
JA756		2242	_	11.5	13"1.		.10	
JA758		2234/226		14.2	7.75"1.		.065	
JA750 JA759	16S		1 3 5.5	6.25	17"1.		.165	
JA760		2248/226		11	12"1.!		.10	
JA761		2248/226		10.375	12"1.!		.11	
JA762		75 2249/226		14.5	7.5"1.		.065	
JA763		78 2251/226		13	9.5"1.3		80.	
JA764	8.75/L-870	2253	4	12.5	9"1.3	30 mm	.085	DB&HOLE
For SO	OUTHBEN	VD	Denni	son		Metric	:	
Item #	Size:	Factory #		/Strength/	Length Wie	dth/ Stren		End
JA600	185		20.5	3.75	21.5"2.		.195	
JA602	16S		19	4	21.75"2.		.19	
JA602	125		11	5.5	19"1.		.175	
37303	. 23			5.5	17	, 5 11111	,	

Watch Mainsprings...187

BESTFIT® WHITE-A-LOY MAINSPRINGS FOR AMERICAN WATCHES Your Choice...\$24.75 Each Any 3+... \$21.75 ea.

For IL	LINOIS		Denniso	n	Metric	:
Item # S	Size: Factory #	Width	/Strength	/Length	Width/ Str	ength End
JA404	18547303	. 20	2	21.5"	2.90 mm	.22T
JA406	16S47309	. 21	6.5	27"	3.00 mm	.155 DB
JA410	16S47315	. 18	4.5	20.5"	2.70 mm	.185 T-BRACE
JA412	16S47317	. 18	3	20.5"	2.70 mm	.21T-BRACE
JA414	16547321	. 18	5	22.5"	2.70 mm	.18T-BRACE
JA415	16S (Bunn Spec.)47326/7	. 18	5.5	22.5"	2.70 mm	.175 MB
JA416	16S47331	. 18	5.5	22.5"	2.70 mm	.175 DB
JA419	16S47333	. 20	3.5	20.5"	2.90 mm	.20T
JA421	16S47334	. 16	3	20"	2.50 mm	.21T
JA422	12547337	. 5	5	18.5"	1.35 mm	.18 MB
JA425	12S 47344	. 11	5	18.5"	2.00 mm	.18T-BRACE
JA428	0S & 3/0S 47358	. 8	9	13"	1.70 mm	.13T
JA432	6/0S47364	. 3	9	10.5"	1.20 mm	.13T-BRACE
JA434	6/0S47371	. 5	10	12.5"	1.40 mm	.11T-BRACE
JA436	18/0S47383	. 3	12	10.5"	1.20 mm	.09T-BRACE

BESTFIT® WHITE-A-LOY WHITE UNBREAKABLE MAINSPRINGS: AUTOMATIC WITH ATTACHED BRIDLES

Your Choice... \$18.50 Ea. Any 3+... \$18.00 ea.

	DENNISONFOR:		DENNISON FOR:
	005 X 14 X 7.75 UNIVERSAL 24		4 X 13.5 X 7.5 Eta 1216
WA2	00 X 14 X 8 LECOULTRE 493		4 X 13.5 X 10.5 LONGINES 19A
WA3	05 X 11.5 X 12.5 BUREN 1000,1002,1003		
	05 X 15 X 8.5 OMEGA 670		4 X 14 X 11 KURTH 19.45,19.451
	1 X 9.5 X 12.5 A.SCHILD 1716,1717		4 X 15 X 8.5 A.SCHILD 1635
	1 X 12 X 13 BUREN 1280		4.5 X 9.5 X 14.5 ENICAR 1124,1145
	1.5 X 11 X 12.5 MOVADO 395		4.5 X 10 X 13.5 Eta 2451, 2452
	1.5 X 14 X 9.25 UNIVERSAL 25		4.5 X 10.375 X 14.1875 MOVADO431A, 436, 438
	2 X 8 X 17 LECOULTRE 497		4.5 X 12 X 9.25 MIDO 917, 917P
	2 X 9.75 X 12.5 FONT 65		4.5 X 13 X 8.75 A.SCHILD 1250
	2 X 11.5 X 12.25 OMEGA 28,10,330		4.5 X 13 X 10 TAVANNES 420
WA43	2.5 X 9.5 X 12.5 A.SCHILD 1748	WA92	4.5 X 13.5 X 11.125 ROLEX 520,530
WA5	2.5 X 9.75 X 12.5 PUW 1260,1261	WA50	4.5 X 14 X 8 FELSA 382
	2.5 X 9.75 X 13.5 MOVADO 531	WA93	4.5 X 14.25 X 8.5 MOVADO 165
	2.5 X 12 X 9.5 GRUEN 480		5 X 11 X 13.5 PUW 54
WA88	2.5 X 14 X 9.5 ROLEX 420	WA58	5 X 11 X 13.75 MOVADO 220,221,224
	3 X 10.5 X 10.75 DUROWE 562,565		5 X 11.5 X 12 DUROWE 1162
WA33	3 X 10.5 X 12.5 ROLEX 1030		5 X 12.5 X 11 LONGINES 22A
WA32	3 X 10.5 X 13 A.SCHILD 1580		5 X 14 X 7.5 Eta 2425, 2428
WA35	3 X 11 X 12 A.SCHILD 1673,1674	WA7	5 X 14 X 8.5 MIDO 707
WA66	3 X 12 X 13 LECOULTRE 812	WA95	5.5 X 9 X 12.5625 A.SCHILD 1590
	3 X 13 X 14.75 BETTLACH 1575	WA40	5.5 X 10 X 12.5 FELSA 415,690
WA27	3 X 16 X 8.75 OMEGA 455	WA41	5.5 X 10 X 13.75 FELSA 410
WA9	3.5 X 9.5 X 14.25 Eta 2520,2521	WA49	5.5 X 10 X 14.75 Eta 2375
WA80	3.5 X 11 X 10.5 TISSOT 28.1,28-21	WA44	5.5 X 10.5 X 13.5 A.SCHILD 1712
WA85	2.5 X 12 X 13.25IWC 85	WA96	5.5 X 11 X 13.375 PARRENIN 1901
WA59	4 X 10 X 11.5 KURTH 28,45	WA14	5.5 X 11 X 10.5 A.SCHILD 1336,1361
WA86	4 X 11 X 11.75 MOVADO 115,116,118	WA12	5.5 X 12.5 X 9.5 A.SCHILD 1320,1323
WA8	4 X 11 X 13 SEIKO SPORTOMATIC	WA23	6 X 10.75 X 10.5 Eta 1256
WA87	4 X 12 X 9LANGENDORF 1033	WA25	6 X 11.5 X 10.75 A.SCHILD 1302,1315
WA48	4 X 13 X 8.25 Eta 2365	WA17	6 X 14.5 X 8.5 A.SCHILD 1477
WA30	4 X 13 X 19 Eta 2250	WA76	6.5 X 10.5 X 12.25 ROLEX 720
WA46	4 X 13 X 10 FELSA 700,705	WA10	7 X 13.5 X 9 A.SCHILD 1171,1173
WA89	4 X 13 X 11.75UNIVERSAL 215	WA20	7.5 X 11 X 11.5 A.SCHILD 1191,1192
		WA22	8.5 X 12 X 11 A.SCHILD 1298

188... Watch Mainsprings

BESTFIT® WHITE-A-LOY WHITE UNBREAKABLE REGULAR MAINSPRINGS...

Your Choice... \$18.50 Each Any 3+... \$18.00 ea.

ITE		DENNISON	METRIC	ITEM#	DENNISON	METRIC	ITEM#	DENNISON	METRIC
GL1		00 X 12.5 X 8	.80 X .085	314E	3 X 14 X 9.5	1.20 X .07	565X	5 X 6.5 X 19	1.40 X .16
401 011		0000 X 11 X 8.5 0 X 11 X 10.5	.58 X .10 .90 X .10	315A 315E	3 X 15 X 7.5 3 X 15 X 9.5	1.20 X .06 1.20 X .06	57R 58Z	5 X 7 X 18.5 5 X 8 X 22	1.40 X .15 1.40 X .14
012		0 X 11 X 10.3	.90 X .10		3 X 15.5 X 11.5	1.20 X .055	595M	5 X 9.5 X 12.5	1.40 X .14
059		.5 X 9.75 X 11.5	.95 X .115	359Z	3.5 X 9 X 19.5	1.25 X .13	510E	5 X 10 X 9.5	1.40 X .11
195	Р	1 X 9.5 X 13.5	1.00 X .12	3595K	3.5 X 9.5 X 11.5	1.25 X .12	510H	5 X 10 X 10.5	1.40 X .11
110		1 X 10 X 10.5	1.00 X .11	3595R	3.5 X 9.5 X 13	1.25 X .12	510K	5 X 10 X 11.5	1.40 X .11
110		1 X 10 X 13.5	1.00 X .11	3510E	3.5 X 10 X 9.5	1.25 X .11	510M	5 X 10 X 12.5	1.40 X .11
112 112		1 X 12 X 9.5 1 X 12 X 14	1.00 X .09 1.00 X .09	3510J 3511E	3.5 X 10 X 11 3.5 X 11 X 9.5	1.25 X .11 1.25 X .10	510P 511E	5 X 10 X 13.5 5 X 11 X 9.5	1.40 X .11 1.40 X .10
112	.п.	1 X 12 X 14	1.00 X .07	3511E	3.5 X 11 X 10.5	1.25 X .10	511H	5 X 11 X 10.5	1.40 X .10
151	зн	1.5 X 13 X 10.5	1.05 X .08	3511R	3.5 X 11 X 14	1.25 X .10	511K	5 X 11 X 11.5	1.40 X .10
24V		2 X 4 X 16	1.10 X .19	3512E	3.5 X 12 X 9.5	1.25 X .09			
28P		2 X 8 X 13.5	1.10 X .14	3512R	3.5 X 12 X 18.5	1.25 X .09	511P	5 X 11 X 13.5	1.40 X .10
295		2 X 9.5 X 13	1.10 X .12	3513C	3.5 X 13 X 8.5	1.25 X .08	512C	5 X 12 X 8.5	1.40 X .09
210 210		2 X 10 X 9.5 2 X 10 X 10.5	1.10 X .11 1.10 X .11	3513E 3514E	3.5 X 13 X 9.5 3.5 X 14 X 9.5	1.25 X .08 1.25 X .07	512E 512H	5 X 12 X 9.5 5 X 12 X 10.5	1.40 X .09 1.40 X .09
211		2 X 10 X 10.3 2 X 11 X 9.5	1.10 X .11	3515A	3.5 X 14 X 7.75	1.25 X .07	512K	5 X 12 X 10.5 5 X 12 X 11.5	1.40 X .07
211		2 X 11 X 10.5	1.10 X .10	47X	4 X 7 X 16.5	1.30 X .15	512M	5 X 12 X 12.5	1.40 X .09
211	K	2 X 11 X 11.5	1.10 X .10	48T	4 X 8 X 15	1.30 X .14	512P	5 X 12 X 13.5	1.40 X .09
211		2 X 11 X 12.5	1.10 X .10	485Z	4 X 8.5 X 20	1.30 X .135	512S	5 X 12 X 14.5	1.40 X .09
212		2 X 12 X 7.5	1.10 X .09	407	4 × 0 × 4 = 0 =	4 20 V 42	513C	5 X 13 X 8.5	1.40 X .08
212 212		2 X 12 X 8.5 2 X 12 X 9.5	1.10 X .09 1.10 X .09	49T 494K	4 X 9 X 15.25 4 X 9.5 X 11.5	1.30 X .13 1.30 X .12	513E 513H	5 X 13 X 9.5 5 X 13 X 10.5	1.40 X .08 1.40 X .08
213		2 X 12 X 7.3 2 X 13 X 6.5	1.10 X .09	494P	4 X 9.5 X 13.75	1.30 X .12 1.30 X .125	514A	5 X 14 X 7.5	1.40 X .00
213		2 X 13 X 7.5	1.10 X .08	410E	4 X 10 X 9.5	1.30 X .11	514C	5 X 14 X 8.5	1.40 X .07
213	C	2 X 13 X 8.5	1.10 X .08	410H	4 X 10 X 10.5	1.30 X .11	514E	5 X 14 X 9.5	1.40 X .07
213		2 X 13 X 9.5	1.10 X .08	410K	4 X 10 X 11.5	1.30 X .11	514K	5 X 14 X 11.5	1.40 X .07
214		2 X 14 X 6.5	1.10 X .07	410M	4 X 10 X 12.5	1.30 X .11	515A	5 X 15 X 7.25	1.40 X .06
214 214		2 X 14 X 7.5 2 X 14 X 8.5	1.10 X .07 1.10 X .07	4105P 411C	4 X 10.5 X 13.5 4 X 11 X 8.5	1.30 X .105 1.30 X .10	515C 5535R	5 X 15 X 8.5 5.5 X 3.5 X 14.5	1.40 X .08 1.45 X .20
258		2.5 X 8 X 18	1.15 X .14	411E	4 X 11 X 9.5	1.30 X .10	5510X	5.5 X 10 X 19	1.45 X .20
259		2.5 X 9.5 X 13.5	1.15 X .12	411H	4 X 11 X 10.5	1.30 X .10	WV98	5.5 X 10 X 20	1.45 X .11
				411K	4 X 11 X 11.5	1.30 X .10	55105R	5.5 X 10.5 X 14.5	1.45 X .105
251		2.5 X 10 X 10	1.15 X .11	411M	4 X 11 X 12.5	1.30 X .10	5512E	5.5 X 12 X 9.5	1.45 X .09
251		2.5 X 10 X 10.5	1.15 X .11	411P	4 X 11 X 13.5	1.30 X .10	5516W	5.5 X 16 X 6.5	1.45 X .05
251 251		2.5 X 10 X 13.5 2.5 X 11 X 9.5	1.15 X .11 1.15 X .10	412C 412E	4 X 12 X 8.5 4 X 12 X 9.5	1.30 X .09 1.30 X .09	65V 665Y	6 X 6 X 16 6 X 6.5 X 17	1.50 X .17 1.50 X .16
251		2.5 X 12 X 10	1.15 X .09	412H	4 X 12 X 10.5	1.30 X .09	67P	6 X 7 X 13.5	1.50 X .15
251		2.5 X 14 X 8.5	1.15 X .07	412K	4 X 12 X 11.5	1.30 X .09	69M	6 X 9 X 12	1.50 X .13
34Y		3 X 4 X 17	1.20 X .19	413A	4 X 13 X 7.5	1.30 X .08	69P	6 X 9 X 13.5	1.50 X .13
36Y		3 X 6 X 17	1.20 X .17	413C	4 X 13 X 8.5	1.30 X .08	695H	6 X 9.5 X 10.5	1.50 X .12
365		3 X 6.5 X 22	1.20 X .16	413E	4 X 13 X 9.5	1.30 X .08	695M	6 X 9.5 X 12.5	1.50 X .12
38T 38Z		3 X 8 X 15.5 3 X 8 X 23.5	1.20 X .14 1.20 X .14	413H 413M	4 X 13 X 10.5 4 X 13 X 12	1.30 X .08 1.30 X .08	WV101 610E	6 X 9.5 X 17 6 X 10 X 9.5	1.50 X .12 1.50 X .11
39N		3 X 9 X 12	1.20 X .13	414A	4 X 14 X 7.5	1.30 X .07	610H	6 X 10 X 10.5	1.50 X .11
310		3 X 10 X 9.5	1.20 X .11	414C	4 X 14 X 8.5	1.30 X .07	610K	6 X 10 X 11.5	1.50 X .11
310		3 X 10 X 10.5	1.20 X .11	414E	4 X 14 X 9.5	1.30 X .07	610M	6 X 10 X 12.5	1.50 X .11
310		3 X 10 X 11.5	1.20 X .11	414H	4 X 14 X 10.5	1.20 X .07	610P	6 X 10 X 13.5	1.50 X .11
310 310		3 X 10.5 X 9.75 3 X 10.5 X 12.5	1.20 X .105 1.20 X .105	415A 415C	4 X 15 X 7 4 X 15 X 8.5	1.30 X .06 1.30 X .06	611E 611H	6 X 11 X 9.5 6 X 11 X 10.5	1.50 X .10 1.50 X .10
311		3 X 10.5 X 12.5	1.20 X .103	4565T	4.5 X 6.5 X 15	1.35 X .16	611K	6 X 11 X 10.5	1.50 X .10
311		3 X 11 X 9.5	1.20 X .10	4575V	4.5 X 7.5 X 16	1.35 X .145	611M	6 X 11 X 12.5	1.50 X .10
311		3 X 11 X 10.5	1.20 X .10	458R	4.5 X 8 X 14.5	1.35 X .14	611P	6 X 11 X 13.5	1.50 X .10
311		3 X 11 X 11.5	1.20 X .10	459S	4.5 X 9.5 X 12.7		612C	6 X 12 X 8.5	1.50 X .09
311		3 X 11 X 13	1.20 X .10	4595P	4.5 X 9.75 X 13.		612E	6 X 12 X 9.5	1.50 X .09
312 312		3 X 12 X 7.5 3 X 12 X 8	1.20 X .0 1.20 X .09	4513AA	4.5 X 13 X 7 4.5 X 13 X 8.5	1.35 X .08 1.35 X .08	612H 612K	6 X 12 X 10.5 6 X 12 X 11.5	1.50 X .09 1.50 X .09
312		3 X 12 X 8.5	1.20 X .09	4513D	4.5 X 13 X 9	1.35 X .08	612M	6 X 12 X 12.5	1.50 X .09
312		3 X 12 X 9.5	1.20 X .09	4513E	4.5 X 13 X 9.5	1.35 X .08	612P	6 X 12 X 13.5	1.50 X .09
313		3 X 13 X 7.5	1.20 X .08	4513F	4.5 X 13 X 10	1.35 X .08	613C	6 X 13 X 8.5	1.50 X .08
313		3 X 13 X 8	1.20 X .08	4513G	4.5 X 13 X 10.25		613E	6 X 13 X 9.5	1.50 X .08
313 313		3 X 13 X 8.5 3 X 13 X 9.5	1.20 X .08 1.20 X .08	4513H 4514C	4.5 X 13 X 10.5 4.5 X 14 X 8.5	1.35 X .08 1.35 X .07	613H 613K	6 X 13 X 10.5 6 X 13 X 11.5	1.50 X .08 1.50 X .08
313		3 X 13 X 9.5 3 X 13 X 10.5	1.20 X .08 1.20 X .08	4514C 4514H	4.5 X 14 X 8.5 4.5 X 14 X 10.5	1.35 X .07 1.35 X .07	614A	6 X 13 X 11.5 6 X 14 X 7.5	1.50 X .08 1.50 X .07
314		3 X 14 X 6.5	1.20 X .07	4514K	4.5 X 14 X 11.5	1.35 X .07	614E	6 X 14 X 9.5	1.50 X .07
314	AA	3 X 14 X 7	1.20 X .07	45135A	A 4.5 X 14.5 X 7	1.35 X .065	614H	6 X 14 X 10.5	1.50 X .07
314		3 X 14 X 7.5	1.20 X .07		4.5 X 15 X 6.25	1.35 X .06	615A	6 X 15 X 7.5	1.50 X .06
314	C	3 X 14 X 8.5	1.20 X .07	54V 55R	5 X 4 X 16.5 5 X 5 X 18.5	1.40 X .19 1.40 X .18	615C	6 X 15 X 8.5	1.50 X .06
				JJ1(3 X 3 X 10.3	1. 4 0 A .10			

Watch Mainsprings...189

BESTFIT® WHITE-A-LOY WHITE UNBREAKABLE REGULAR MAINSPRINGS...

Your Choice... \$18.50 Each Any 3+... \$18.00 ea.

ITEM#	DENNISON	METRIC	ITEM#	DENNISON	METRIC	ITEM#	DENNISON	METRIC
			713C	7 X 13 X 8.5	1.60 X .08	910K	9 X 10 X 11.5	1.80 X .11
615E	6 X 15 X 9.5	1.50 X .06	713D	7 X 13 X 9	1.60 X .08	910N	9 X 10 X 13.75	1.80 X .11
6511J	6.5 X 11 X 11	1.55 X .10	713E	7 X 13 X 9.5	1.60 X .08	911K	9 X 11 X 11.5	1.80 X .10
6511S	6.5 X 11 X 14.125	1.55 X .10	713H	7 X 13 X 10.5	1.60 X .08	911M	9 X 11 X 12.5	1.80 X .10
65115	6.5 X 11.5 X 12.25	1.55 X	713L	7 X 13 X 12	1.60 X .08	911P	9 X 11 X 13.5	1.80 X .10
.095			714C	7 X 14 X 8.5	1.60 X .07	912M	9 X 12 X 12.5	1.90 X .09
6514C	6.5 X 14 X 8.5	1.55 X .07	714E	7 X 14 X 9.5	1.60 X .07	9511H	9.5 X 11 X 10.5	1.85 X .10
6514F	6.5 X 14 X 10	1.55 X .07	714H	7 X 14 X 10.5	1.60 X .07	WV97	9.5 X 13.5 X 12.5	1.85 X
75R	7 X 5 X 18.5	1.60 X .18	715E	7 X 15 X 9.5	1.60 X .06	.075		
77V	7 X 7 X 16.5	1.60 X .15	715H	7 X 15 X 10.5	1.60 X .06	915C	9 X 15 X 8.5	1.90 X .06
77Z	7 X 7 X 25.5	1.60 X .15	759Z	7.5 X 9 X 28.5	1.65 X .13	102X	10 X 2 X 19.5	1.90 X .22
78P	7 X 8 X 13.5	1.60 X .14	83T	8 X 3 X 15.5	1.70 X .21	103X	10 X 3 X 19.5	1.90 X .21
785V	7 X 8.5 X 16.75	1.60 X	835V	8 X 3.5 X 16.25	1.70 X .20	104Z	10 X 4 X 22	1.90 X .19
.135			845	8 X 4 X 14.5	1.70 X .19	105U	10 X 5 X 21	1.90 X .18
79Y	7 X 9 X 17	1.60 X .13	86R	8 X 6 X 18.5	1.70 X .17	1012L	10 X 12 X 12	1.90 X .09
710H	7 X 10 X 10.5	1.60 X .11	865T	8 X 6.5 X 15	1.70 X .16	113Z	11 X 3 X 21.5	2.00 X .21
710K	7 X 10 X 11.5	1.60 X .11	WV96	8 X 9 X 15	1.70 X .13	WV99	11 X 14 X 17.5	2.00 X .07
710M	7 X 10 X 12.5	1.60 X .11	89P	8 X 9.5 X 13.5	1.70 X .12	115Z	11 X 5 X 20	2.00 X .18
710P	7 X 10 X 13.5	1.60 X .11	810H	8 X 10 X 10.5	1.70 X .11	122R	12 X 2 X 8.5	2.10 X .22
7105J	7 X 10.5 X 11	1.60 X	810N	8 X 10 X 13	1.70 X .11	126X	12 X 6 X 19.5	2.10 X .17
.105			811K	8 X 11 X 11.5	1.70 X .10	1111L	12 X 11 X 12	2.10 X .10
711E	7 X 11 X 9.5	1.60 X .10	811M	8 X 11 X 12.5	1.70 X .10	134Z	13 X 4 X 20	2.20 X .19
711H	7 X 11 X 10.5	1.60 X .10	811P	8 X 11 X 13.5	1.70 X .10	143X	14 X 3 X 19.5	2.30 X .21
711M	7 X 11 X 12.5	1.60 X .10	812H	8 X 12 X 10.5	1.70 X .09	164Z	16 X 4 X 20	2.50 X .19
711P	7 X 11 X 13.5	1.60 X .10	812K	8 X 12 X 11.5	1.70 X .09	165Z	16 X 5 X 20	2.50 X .18
712C	7 X 12 X 8.5	1.60 X .09	812Z	8 X 12 X 28.5	1.70 X .09	183Z	18 X 3 X 23.5	2.70 X .21
712E	7 X 12 X 9.5	1.60 X .09	8512F	8.5 X 12 X 9.375				
712H	7 X 12 X 10.5	1.60 X .09	92R	9 X 2 X 8	1.80 X .22			
712K	7 X 12 X 11.5	1.60 X .09	95X	9 X 5 X 19.5	1.80 X .18			
712M	7 X 12 X 12.5	1.60 X .09						

BESTFIT® WHITE-A-LOY WHITE UNBREAKABLE MAINSPRINGS: SPECIAL ENDS

Your Choice... \$18.50 Ea. Any 3+... \$18.00 ea.

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Ī	ITEM#	DENNISONFOR:End:	ITEM#	DENNISON FOR: End:
	WZ525	0 X 12.12 X 11ZENITH 525	WC1	4.5 X 15 X 9 DB & H
	W195	0.5 X 5 X 19.5IWC 95DB & H	W183	5 X 9.5 X 13 DB & H
	W190	0.5 X 14 X 8.5IWC 99, 92DB & H	WT2	5 X 14 X 8.5 WITTNAUER 5S TEE
	WC4	1.5 X 10.5 X 13.5 LECOULTRE 11LO DB & H	W188	5.5 X 9.75 X 14IWC 88 DB & H
	WL4	1.5 X 12 X 10LONGINES 8LTEE	WT9	5.5 X 11 X 11.75 WITTNAUER 11 ES TEE
	W160	2 X 10 X 12.25 IWC 60	665Y	6 X 6.5 X 7 OMEGA 140 DB & H
	W162	2 X 12 X 13IWC 62DB & H	W189	6 X 9.75 X 14 1WC 89 DB & H
	W176	2.5 X 9.75 X 11.5 IWC 76.86	WL7	6 X 11 X 15.5 TEE
	WV194	2.5 X 10 X 15LECOULTRE 489 TIME DB & H	WV402	6 X 10 X 18VULCAIN 402 W/BRIDLE .
	WZ88	2.5 X 13 X 12ZENITH 88	WT7	6 X 11.5 X 13 WITTNAUER 10T TEE
	W151	2.5 X 15.5 X 7.5 IWC 51 DB & H	WT4	6 X 13 X 11 WITTNAUER 87 TEE
	WT10	3 X 6.75 X 19TEE	L100	6 X 15 X 7 DB & H
	WL3	3 X 14 X 10LONGINES 5LTEE	WZ124	6.5 X 10.5 X 14ZENITH 12.4 DB & H
	357T	3.5 X 8 X 15.5 EXPARK 40 SPEC.	WT6	7 X 11 X 11.5 WITTNAUER 10E
	END		WL8	7 X 11.5 X 13.5 LONGINES 10L TEE
	WT5	3.5 X 11.5 X 10.5 WITTNAUER 9WTEE	WL9	8.5 X 9.75 X 15 LONGINES 12L TEE
	WC2	4 X 8 X 16.5LECOULTRE 449DB & H	WV95	11 X 14 X 15LECOULTRE 489 ALARM . DB & H
	WT8	4 X 11 X 12.75WITTNAUER 10TNTEE	L135	13 X 6 X 22.5 DB & H
	WC3	4 X 11.5 X 13.5LECOULTRE 480 DB & H	WZ193	18.5 X 4 X 21.25 ZENITH 525 DB & H
	WL1	4 X 5 X 7.5LONGINES 4LLTEE		
	4510KS	4.5 X 10 X 11.5 KIROWSKIE A-2000 DB & H		
	WI 5	4.5 X 13 X 10LONGINES 8LNTEE		

190... Closeout Items

LIMITED QUANTITIES AVAILABLE

1171-850/94CM HERMLE **OLD-STYLE FLAGSHIP MOVEMENT ONLY**

- ♦ 39-1/2" from the centershaft to the bottom of the rating assembly
- ◆ Automatic night shut-off
- ◆ Direct drive second hand

Specifications:

- ♦ Plate size: 8-5/8" wide x 6" high x 3/32" thick
- → Weight requirement: (1) 9.9 lbs., (2) 7.7 lbs.; each 11" long x 2-3/8" diameter



- ♦ Minimum depth: 9" from the dial to the backboard
- → Minimum width: 16-7/8" for pendulum swing
- ♦ Minimum height: 46-5/8" from the bottom of the seatboard to base for 8-day operation



MORBIER DIALS



#CO247.1...

- → 6-1/8" diameter→ 5-1/2" chapter ring



- #CO247.2...
- ♦ 9" diameter
- ♦ 8" chapter ring



CO522P... \$450.00

- #CO247.3...
- ♦ 10-1/4" diameter
- ♦ 8-3/4" chapter ring



#CO247.4...

- ♦ 10-1/8" diameter
- ♦ 8-3/4" chapter ring



#CO247.5...

- 10-1/4" diameter8-3/4" chapter ring

Your Choice... \$25.00 each

Closeout Items ... 191

LIMITED QUANTITIES AVAILABLE



"NEW OLD STOCK" BRASS BEZELS

- → Complete with an installed latch, hinge, and glass clips
- ◆ Made to fit movements of Chinese origin
- May have minor blemishes or imperfections related to extended storage

#CO510B... 10-1/2" diameter ...\$19.00 each #CO510C... 8-1/2" diameter ...\$17.00 each



PLASTIC STAG HEAD

- ♦ No antlers
- ◆ 1-5/8" high #CO530A...

\$5.00 each



"NEW OLD STOCK" BRASS IVORY DIAL

- ◆ Made to fit movements of Chinese Origin
- ◆ Roman numerals
- May have minor blemishes or imperfections related to extended storage
- Predrilled for centershaft winding arbors
- → Time Ring 7"
- ◆ Centershaft to arbor 1-5/8"
- ◆ Winding arbor to winding arbor - 2-7/8"

#CO511B... \$10.00 each



WOODEN KITCHEN CLOCK *CASE ONLY*

- Clock case constructed from solid oak with an oak veneered, laminated back board
- ◆ Completed dimensions 21 7/8" tall x 14" wide x 5" deep
- All parts are precut and presanded, ready for assembly and finishing
- Assembly is required using glue, clamps and simple tools
- ◆ Case kits are supplied without instructions
- Includes all wood case parts, hinges, door latch, screws, and dial grommets
- Dial, dial pan, gong, gong base and glass are not included but are available separately
- ◆ <u>Case ONLY</u> movement shown not included and no longer available

#CO420CB... \$60.00 each

192... Closeout Items

LIMITED QUANTITIES AVAILABLE



HERMLE GROMMETS

- ◆ 12/7mm out diameter
- ♦ 7.9mm inner diameter
- ♦ 7.9mm depth
- ↑ 12 pack

#CO536... \$2.00 pack



ECONOMY GLASS DOME WITH HOOK

- ♦ 4-1/8" tall x 2-13/16" inside diameter
- ◆ Perfect to protect small dolls and other memorabilia, or to house dried flower arrangements
- ◆ Complete with a brass watch hanger
- ◆ Glass may have some minor imperfections (i.e. small bubbles, waves, etc...)



CORNER SHELF

- ♦ 8-7/8" wide x 6-1/4" tall x 4-1/4" deep
- Mahogany with a dark, natural finish

#CO273A... \$9.50 each





CHIME ROD SCREWS

- ♦ 15/16" long
- ♦ 100 per pack #CO534...
- \$5.50 pack



CLAMP NAILS

- ♦ #1 American made steel wood fastening nails
- ♦ 1 pound of nails per pack (80 ct.)
- ♦ 1-3/4" long x 5/16" wide
- ♦ Use to secure mitre and other joints on furniture, arandfather clocks, etc.
- #CO463B...

\$4.00 each



MORBIER SIDE DOORS

- ♦ 12" tall x 5-3/8" wide
- Embossed just like the antique originals
- ♦ Sold in pairs

#CO5A4... \$3.00 each



WOOD FRET

- ♦ Unfinished
- ♦ 6-1/8" wide x 9-5/16" high

#CO236F...

\$2.00 each

PENDULUM STABILIZER STRAP ASSORTMENT

- ◆ For use when transporting a pendulum movement ◆ One dozen assortment
- ◆ Stablizes the pendulum leader and crutch
- 2 sizes for shelf, grandmother, and grandfather movements

#COH3... \$1.00 pack



Closeout Items ... 193

LIMITED QUANTITIES AVAILABLE







CO317J * 1-3/4" wide



CO317K * 1-7/16" wide



CO317L * 1-3/8" wide

PRESSED BRASS **ORNAMENTS**

Your choice... \$1.50 Each



COLUMN BASE ORNAMENT

- Predrilled mounting holes
- Cast metal with an antique brass finish
- ↑ 1-1/2" tall x 2-3/8" wide

#CO439C... \$1.50 pair



PLAIN COLUMN **BASE ORNAMENT**

- ◆ Rectangular pillar base
- Cast metal with a brass plated finish
- ◆ 2-1/16" long x 15-16"high x 1-13/16" deep

#CO236D... \$1.50 pair

SERPENTINE STYLE ESCUTCHEON

 Ideal for tall case clocks, chests-of drawers. blanket chests, cupboards and other applications

♦ 6" long x 13/16" wide Polished

#CO188D...

\$.50 each



3" HARDWOOD FINIAL

- Unlacquered and undrilled (mounting dowel not included)
- ◆ Ready for a light sanding and the finish of your choice
- ♦ 3" tall

#CO219... \$.67 each

1" MINIATURE **HANGER**

- ↑ 1" overall length
- Sold in packs of 25

#COH51... \$2.00 pack



194... Closeout Items



CORNER **ORNAMENTS** (4-PC.) #COH43...

\$1.00 pack

LIMITED QUANTITIES AVAILABLE



1/2" ECONOMY BRASS KNOB

- ♦ 7/8" overall length with a brass screw shank
- ♦ 7/16" threaded screw
- ◆ Knob: 3/8" high x 1/2" diameter
- ◆ Ready for final polishing if desired

#CO504A... \$1.50 each



CUCKOO HAND NUTS & WASHERS

♦ 6 washers and 6 hand nuts

#CO538... \$1.00 pack



KIENINGER PENDULUM LEADER #CO432M... \$7.00 each

#CO514B... \$3.50 each



MOUNTING FEET (4-PC.)



1-5/8" VIENNA **PULLEY FOR KIENINGER MOVEMENT** #CO432L... \$7.50 each

LIFT CAMS

#CO311C... Kieninger Grandmother ...\$1.50 each

#CO311D... Urgos Grandfather ...\$2.50 each



PULLEY FOR KIENINGER RWS #CO432G... \$7.50 each

12-1/4" PENDULUM

- ◆ Brass bob w/ white overlay
- ♦ 12-1/4" long x 2-3/4" diameter bob

#CO431K... \$6.50 each



"NEW OLD STOCK" **BRASS R/A PENDULUM**

- ◆ Made to fit movements of Chinese origin
- ◆ May have minor blemishes or imperfections related to extended storage
- ♦ 3-1/2" bob

#CO512B... \$7.00 each



3-1/8" PENDULUM BOB

♦ 3-1/8" polished brass pendulum bob with an embossed circle #CO431L... \$3.50 each

HERMLE **PENDULUM**

- **♦** 2-1/4" diameter bob
- Length 6-1/4'
- Polished brass bob
- ♦ Brass rod pendulum

#CO496P... \$3.00 each



WOOD PENDULUM STICK

→ 30" long x 1" wide → Pack of six #CO144D... \$1.75 pack



Closeout Items ... 195

LIMITED QUANTITIES AVAILABLE

31-DAY KOREAN KITCHEN **CLOCK PENDULUM**

- ◆ Cast brass pendulum for 9-1/2" drop kitchen clock movements
 - ◆ Cast brass bob with an aluminum hook, rod, and rating assembly ◆ Sunburst design
 - ♦ 6-13/16" overall length #CO496E... \$4.00 each



- ◆ Steel with a black finish
- ◆ 2-7/16" long hour hand has a brass bushina
- ◆ 3-7/16[®] long minute hand has an oblong hole

#CO432C... \$1.00 pair



KOREAN KITCHEN PENDULUM

- → 3-7/8" polished brass bob
- ♦ 6-3/4" length walnut color
- wood stick

#CO496N... \$1.00 each



"NEW OLD STOCK" STEEL SPADE HANDS FOR CHINESE MOVEMENTS

- Made to fit movements of Chinese origin
- ♦ May have minor blemishes or imperfections due to extended storage
- Minute hand: 2"
- ♦ Hour hand: 1-3/8"
- #CO513B... \$2.00 pair











#CO473A... #CO473C... #CO473D... #CO473E... #CO473H...

METAL TESTING SOLUTIONS

- ◆ Sold in .5 fl oz. bottles
- ◆ CANNOT be shipped via USPS <u>OR</u> outside of the U.S. Must be shipped via UPS or FedEx

#CO473A... 10K Gold Testing Solution ...\$3.50

#CO473C... 18K Gold Testing Solution ...\$3.50

#CO473D... 22K Gold Testing Solution ...\$3.50

#CO473E... Silver Testing Solution ...\$3.50

#CO473H... Platinum Testing Solution ...\$3.50

#CO473F... Natural Stone for Gold Testing ...\$11.50

#CO473G... Porcelain Tile for Gold Testing ...\$3.00





196... Closeout Items

LIMITED QUANTITIES AVAILABLE



4-1/4" FANCY METAL DIAL #CO614 ...\$4.25 each



11-5/32" IVORY SCHOOLHOUSE METAL DIAL #CO615 ...\$3.00 each

9-1/2" IVORY SCHOOLHOUSE METAL DIAL #CO616 ...\$2.75 each



4-1/2" GOLD SPUN METAL DIAL #CO617 ...\$1.00 each



6" GOLD SPUN METAL DIAL #CO618 ...\$1.50 each



RECTANGULAR THERMOMETER FIT-UP

- ↑ 1-5/8" tall x 1-15/16" wide
- ◆ Gold bezel

#CO622 ...\$2.00 each



SILVER BEZEL QUARTZ FIT-UP MOVEMENT

- ♦ 1-1/2" wide
- ◆ 1-3/8" mounting diameter
- ♦ White dial with Arabic numerals

#CO612 ...\$1.75 each



QUARTZ FIT-UP WITH ALARM

- ♦ 2-3/4" diameter
- ◆ Gold colored bezel
- Ivory dial with Arabic numerals

#CO611 ...\$4.00 each



SQUARE QUARTZ FIT-UP MOVEMENT

- ♦ 2-13/16" wide
- ◆ Gold colored bezel
- White dial with Roman numerals

#CO613 ...\$3.50 each

Closeout Items/Novelty Clocks...197

LIMITED QUANTITIES AVAILABLE



QUARTZ CUCKOO MOVEMENT W/ BIRD

- ♦ A decorative quartz cuckoo clock movement complete with chains, acorn weights, hands, 1-5/8" diameter metal dial, and pendulum
- ◆ 3-7/8" tall x 2-11/32" wide x 1-1/2"deep movement
- ◆ 2-15/16" pendulum ◆ On/Off switch for cuckoo
- ◆ Plays Westminster or cuckoo call on the hour
- Requires two AA batteries (not included)

#CO610 ...\$10.00 each

MOVING DISC CLOCK KIT

- ◆ A kit to design your own moving clock ◆ Includes a clock case and movement, blank dial, blank moving dial, hands, plastic cover, and a stand
 - ◆ Clock case measures 8" in diameter
 - ◆ Requires one AA battery (not included)

#CO623 ...\$5.00 each





ORIGINAL BLACK KIT-KAT CLOCK

- ◆ Traditional animated, non-jeweled black and white mold case
- ↑ 15-1/4" overall length x 4" wide
- ◆ Quartz movement

#KC1Q ...\$39.50 each







BLACK KITTY-CAT CLOCK

- ◆ Traditional animated, non-jeweled black and white mold case
- ↑ 12-1/4" overall length x 3-1/4" wide
- Quartz movement

#KC1RS ...\$29.50 each





- ♦ 6-1/2" wide x 6" tall ♦ Rear set
- ◆ Black case ◆ Time only
- ◆ Requires one "AA" battery (not included)

#6081 ...\$4.00 each



198... Novelty Clocks



BIRD HOUSE CLOCK

- → Moving bluebirds
- ◆ Overall length: 14"
- ♦ Overall width: 6-1/4"
- Beautifully lithographed on flat plastic stock
- Reliable quartz movement with sweep second hand
- Movement runs on (2) AA batteries (not included)

#BH927 ...\$15.00 each



NOVELTY NOAH'S ARK CLOCK

- Moving dolphins, giraffes and raccoons in the window of the ark
- ◆ Overall length: 13-1/2" ◆ Overall width: 8-3/4"
- → Beautifully lithographed on flat plastic stock
- Reliable quartz movement with sweep second hand
- → Movement runs on (2) AA batteries (not included)

#NA927 ...\$15.00 each



◆ Overall length: 16"◆ Overall width: 5"

 Beautifully lithographed on flat plastic stock
 Reliable quartz movement with sweep

second hand

Movement runs on (2) AA batteries (not included)

#CT927 ...\$15.00 each



Novelty Clocks ... 199



CUCKOO STYLE NOVELTY CLOCK

- Quality miniature clock with 6-1/2" long hand-carved case
- 1-day time-only pendulum movement

#20P ...\$23.50 each



BOUNCING CABIN DOLL CLOCK

- Genuine Black Forest cabin with bobbing birds and "bouncing doll" pendulum
- Handpainted in traditional Black Forest style, accented by gilded nonfunctional weights and chains
- ♦ 11" 12" overall length
- → 30-hour spring-driven movements

#BD59S ...\$29.75 each



BOUNCING CHALET DOLL CLOCK

- → Genuine Black Forest chalet with bobbing birds and "bouncing doll" pendulum
- Handpainted in traditional Black Forest style, accented by gilded nonfunctional weights and chains
- ♦ 11" 12" overall length
- → 30-hour spring-driven movements

#BD54S ...\$29.75 each



BOUNCING CHALET DOLL CLOCK

- Genuine Black Forest chalet with bobbing birds and "bouncing doll" pendulum
- Hand-painted in traditional Black Forest style, accented by gilded nonfunctional weights and chains
- ♦ 11" 12" overall length
- → 30-hour spring-driven movements

#BD61S ...\$26.25 each



BLACK FOREST WEATHER STATION

- During wet weather a man with his umbrella comes out of the classic Black Forest Chalet
- When the weather becomes dry, a

woman in a Black Forest dress appears

- ♦ 5-3/8" high x 5" wide
- Thermometer included between the doors of the chalet

#40WS ...\$14.50 each

200... Reproduction Cuckoos



- ◆ 10" long wooden chalet style case
- 1-day weight driven movement with cuckoo, gong, and animated deer and rabbit on the hour and 1/2 hour
- ◆ Traditional cast iron pine cone weights
- Chime shut off



GERMAN SCHNEIDER BLACK FOREST CUCKOO CLOCK

- ♦ 8" long chalet style case
- 1-day weight driven cuckoo with gong, cuckoo and animated chimney sweep on half and full hour
- Antique brown finish with hand painted flower highlights
- ♦ Wooden hands ♦ Chime shut off
- ◆ Traditional cast iron pine cone weights

#7063-10 ...\$Call

GERMAN SCHNEIDER BLACK FOREST BEER DRINKER CUCKOO CLOCK

- ◆ 9" long wooden chalet style case
- ◆ 1-day weight driven movement with cuckoo, gong, and animated beer drinker on the hour and 1/2 hour
 - Antique brown finish case with handpainted flower highlights
 - ◆ Traditional cast iron pine cone weights
 ◆ Chime shut off

#1103-10 ...\$Call

Reproduction Cuckoos...201



GERMAN SCHNEIDER WOODCUTTER CUCKOO CLOCK

- The animated waterwheel and wood cutter move and the dancers turn when the cuckoo calls on the hour and half hour
- 1-day weight driven musical movement
- ◆ Chime shut off
- → 12" long chalet style case
- ◆ Antique brown finish with handpainted flower highlights
- ◆ Traditional cast iron pine cone weights
- ♦ Wooden hands

#1103-10 ...\$Call

GERMAN SCHNEIDER BLACK FOREST 1-DAY CUCKOO CLOCK

- 1-day movement with cuckoo call and gong strike on half and full hour
 - → 12" long → Chime shut off
- ♣ Includes all wooden case, dial and cuckoo bird
 ♣ Antique brown finish with cuckoo bird & 5 grape leaf motif
 - → Traditional style with cast pine cone weights

#90-9 ...\$Call





GERMAN SCHNEIDER 1-DAY CUCKOO CLOCK

- ♦ 1-day movement with wooden hands
- ♦ 12" long case
- ◆ Antique brown finish
- → Traditional style with cast pine cone weights
- ◆ Cuckoo call and gong strike on the hour and 1/2 hour
- Carved wooden case with handpainted flower highlights, a bird, and 5 grape leaf motif
- ◆ Chime shut off

#90-10 ...\$Call

202... Reproduction Cuckoos



SCHNEIDER MUSICAL 1-DAY CUCKOO CLOCK

- ♦ 13" long carved wooden case with a bird and grape leaf motif
- ♦ Antique brown finish
- ♦ 1 day weight driven movement with cuckoo, music and dancers on the hour and 1/2 hour.
- ♦ Wooden hands ♦ Chime shut off
- ◆ Traditional cast iron pine cone weights

#MT6100-9 ...\$Call

SCHNEIDER MUSICAL 1-DAY CUCKOO CLOCK

- plays when the cuckoo calls on the hour and half hour
 - 1-day weight driven musical movement
- ◆ Antique brown finish with hand painted flower highlights
 - ♦ Wooden hands
 - Chime shut off
 - ◆ Traditional pine cone cast iron weights
 - ◆ 13" long case

#MT6100-10 ...\$Call

Reproduction Cuckoos ... 203

GERMAN SCHNEIDER 8-DAY MUSICAL CUCKOO CLOCK

- ♦ 16-1/2" long carved wooden case with a bird, nest and grape leaf motif
 - ◆ Antique brown finish with hand painted flower highlights
- 8-day weight driven movement with cuckoo, music, and dancers on the hour and 1/2 hour
 - The birds on the left and right side move during the strike sequence
 - ♦ Wooden hands ♦ Chime shut off

Traditional pine cone cast iron weights #8TMT176-10 ...\$Call





GERMAN SCHNEIDER 8-DAY MUSICAL CUCKOO CLOCK

- ↑ 16-1/2" long carved wooden case with a bird, nest and grape leaf motif
- 8-day weight driven movement with cuckoo, music, and dancers on the hour and 1/2 hour
- ◆ The birds on the left and right side move during the strike sequence
- ♦ Wooden hands ♦ Chime shut off
- Antique brown finish
- ◆ Traditional pine cone cast iron weights

#8TMT176-9 ...\$Call



- 8-day movement with cuckoo calls on the hour and half hour
- ↑ 12" long case
- ◆ Antique brown finish
- Traditional style with cast pinecone weights
- Carved wooden case with a bird and 5 grape leaf motif
- ◆ Chime shut off

#8T90-9 ...\$Call

204... Reference Tables

HERMLE YEAR-OF-MANUFACTURE STAMPS

- ◆ Up to the year 1987: the movement was stamped with the last two digits of the year of manufacture: a movement built in 1980 would be stamped "80"
- ◆ After 1987: letters were used to identify the year of manufacture. The letters and their corresponding years are:

```
1988: A 1989: B
                 1990: C
                          1991: D
1992: E
       1993: F
                1994:G
                          1995: H
        1997: J
                 1998: K 1999: L
1996: I
2000: M 2001: N
                 2002:O 2003: P
2004: Q 2005: R 2006: S 2007: T
                 2010: W 2011: X
2008: U 2009: V
2012: Y 2013: Z
                 2014: AA 2015: AB
2016: AC 2017: AD 2018: AE 2019: AF
2020: AG 2021: AH
```

MAINSPRING SIZES FOR HERMLE® MOVEMENTS (MM)

```
Barrel No. Mainspring Dimensions
10.....17 x .45 x 1490
11.....17 x .42 x 1500
20.....17 x .38 x 1200
21.....17 x .40 x 1200
31.....12 x .34 x 1150
32.....12 x .42 x 1100
33.....12 x .32 x 1150
40.....17 x .38 x 1100
41.....21 x .40 x 1550
42.....17 x .40 x 1100
50.....17 x .40 x 1200
52.....17 x .42 x 1200
54.....21 x .42 x 1900
55.....21 x .45 x 1800
56.....17 x .38 x 1200
```

HERMLE® WEIGHT REQUIREMENTS (POUNDS):

KECOIKLIVIE	1412 (COND	٠).
Movement Type			
		Train	Train
241 Chain	4.42.	4.42	
241 Cable	7.95	7.95	
261 Chain	2.21	2.21	
351 Cable	6.07		
451 Chain	4.70	4.7	6.6
451 with sec. han	d or lyr	e pendulur	n
	6.60	4.7	6.6
461 Chain	5.70	5.7	7.7
461 Cable	7.70	7.7	9.9
471 Chain	7.70	7.7	9.9
471 Cable	7.70	7.7	9.9
781 Cable	7.95		
791 Chain	4.42		
1051 Cable	6.07		
1151 Chain w/16	5mm ly	re pendulu	m
	4.7 .	4.7	7.3
1151 Chain w/ se	c. hand	and/or 16	5mm lyre
pendulum	3.00	4.7	7.3
1161 Chain	5.70	5.7	9.9
1161 Cable	7.70	7.7	9.9
1171 Chain	7.70	7.7	9.9
1171 Cable	7.70	7.7	9.9
1171 Cable-Tubul	ar 7.7	7.7	18.5
2071-850 Cable (
		9.9	13.2

KIENINGER® WEIGHT REQUIREMENTS (POUNDS):

				•	•
Movement	Туре	Т	ime Train	Strike Train	Chime Train
H	Chain,	Westminste	r 8.8	8.8	8.8
HK	Chain,	Triple Chime	e 8.8	8.8	11.0
HTU	Cable,	9-Tube	11.0	8.8	14.5
KK	Chain,	Westminste	r7.7	6.6	6.6
KKU	Chain,	Triple Chime	e 7.7	6.6	7.7
		Triple Chime			
		Bim-bam			
PS	Cable,	Gong	8.8	6.9	
RK	Chain,	Westminste	r 6.6	6.6	6.6
		Triple Chime			
	-				

URGOS® WEIGHT REQUIREMENTS (POUNDS):

Movement	Туре	Time Train	Strike Train C	Chime Train
UW 32	Chain, Westminster	4.5	4.5	6.6
UW 32	Chain, Triple Chime	4.5	4.5	7.5
UW 32	Cable, Triple Chime	6.5	6.5	.11.0
	Chain, Triple Chime			
	Chain, Westminster			
UW 030	Cable, Triple Chime	7.75	7.75	8.5
	Cable, Westminster			
UW 030	Chain, 5-Tube	7.75	7.75	.13.25
UW 030	Cable, 5-Tube	7.75	7.75	.13.25
UW 030	Cable, 9-Tube	7.75	7.75	.17.5
	Cable, Triple Chime			
	•			

Reference Tables ... 205

SETH THOMAS MOVEMENT CONVERSION CHART

Cath Thamas # Fastama Namelan	Seth Thomas # Factory Number
Seth Thomas # Factory Number	
205-000 140-010, 141-010/11	403-011 351-030/48
205-001 141-020/52	403-012 351-030/75
205-002 141-020/21	403-013 1151-053HS/94
205-003 141-020/21	403-014 451-050/85, 451-053/85
205-005 141-020/52	403-015 451-050/94,114 & 451-053/85,94
206-000 130-020	403-018 351-020/34
206-001 130-020 & 130-070	403-019 351-020/43
206-002 130-020 & 130-627	403-020 1151-053HS/94
206-004 130-020 & 130-627	403-021 1151-050HS/94, 1151-053/94
206-005140-010	403-024 351-020/66
206-007 130-627	403-025 1051-020/43
206-010 131-030/35	403-027 351-020/43
206-011 130-020	403-029 451-053/94
206-012 131-030/21	403-030 451-053H/94
206-013 131-030/45	403-031 1151-053/94, 451-053/94
206-014 131-030/55	404-001 351-023K/85
207-000 132-071	404-010 350-023
207-005 132-017	406-000 UW32320
208-000 141-031/32, 140-010,	406-001 UW32319
141-010/11	406-007 UW32320
208-001 140-010 & 141-020/52 banjo	407-002A 1161-853BS/114
208-002 141-020/21	409-000 241-030/55
208-005 141-010 & 141-020/52 banjo	415-001 1161-853HS/114
208-006 141-020/32 & 141-023/45	415-002 1161-053HS/114
208-007 141-020/45 & 141-023/45	415-003 1161-853HS/94
208-008 141-031/32	415-011 1161-853BS/114
208-009 141-031/31	415-013 1161-853BS/94
208-010141-033/38	415-015 1161-853BS/94
208-012 141-030/48	415-016 461-853BS/114
208-014 141-020/27	429-703 351-020/43
208-015141-030/38	429-705 1051-020/43
215-012 131-030/21	450-006 132-071
305-002 1050-020	450-007 131-030/35
305-004 1050-020	450-008 131-030/55
	450-009 340-020
400-000 350-020 & 351-020/15	450-011 350-060
400-001 350-060, 351-020/15 and	
351-060/15	450-012 1050-020
401-000341-020/11	451-002 KSU033 (116 cm)
401-001 350-020, 351-020/15	451-003 KSU038 (93 cm)
401-002 351-060/15	451-004 KSU033 (116 cm)
401-003 340-020	451-006 KSU (116 cm)
401-004340-020	460-001 RWS (80 cm)
401-005 340-020 & 140-010	468-310 350-023/K2
402-000 351-020/15, 351-020	468-314 141-020/52
402-003 351-060/85	468-318 451-050/114, 341-020K/35
402-004 351-020/15	468-323 132-071
402-005 350-020	468-325 132-071
402-006 350-060	468-326 J1213 Kieninger
	468-328 132-071
403-000 350-060	497-212 340-020
403-001 350-060	
403-002 1050-020	497-218 1051-030/34
403-007 451-050/85	497-220 1051-031/34
403-008 451-053/85 & 451-053/94	502-002 1050-020
403-009 1151-053HS/94 and	
1151-053HS/114	

403-010......451-053/94

206... Reference Tables

FRACTIONAL AND DECIMAL INCHES TO MILLIMETERS

```
Fraction: Dec.: Millimeters: Fraction: Dec.: Millimeters:
                                                                              Fraction: Dec.: Millimeters:
                                       7/32" ..... .2187" ..... 5.5562
1/64" ..... .0156" ..... 0.3969
                                                                              27/64" .....4219" ..... 10.7155
1/32" ..... .0313" ..... 0.7938
                                       15/64" .... .2344" ..... 5.9530
                                                                              7/16" ......4375"..... 11.1124
3/64" ..... .0469" ..... 1.1906
                                       1/4" ...... .2500" ..... 6.3499
                                                                              <mark>29/64" ......4531"</mark>..... 11.5092
                                       17/64" .... .<mark>2656"</mark> ..... 6.7468
                                                                              <mark>15/32" ...</mark>...<mark>4687"</mark>.....11.9061
1/16" ..... .0625" ..... 1.5875
<mark>5/64" ....</mark>.. .<mark>0781"</mark> ..... 1.9843
                                       9/32" ..... .2812" ..... 7.1437
                                                                              31/64" .....4844" ..... 12.3030
                                       19/64" .... .2969" ..... 7.5405
3/32" ..... ... .0937" ..... 2.3812
                                                                              1/2" ...... 12.6999
                                       5/16" ..... .3125" ..... 7.9374
7/64" ..... .1094" ..... 2.7781
                                                                              17/32" .....5312" ..... 13.4924
1/8" ...... .1250" ..... 3.1750
                                       21/64" .... .3281" ..... 8.3343
                                                                              35/64" .....5468" ..... 13.8887
                                       <mark>11/32" ..</mark>.. .<mark>3438"</mark> ..... 8.7312
<mark>9/64" ....</mark>.. .<mark>1406"</mark> ..... 3.5718
                                                                              9/16" .......5625" ..... 14.2875
                                       23/64" .... .3594" ..... 9.1280
<del>5/32" ....</del>.. .<mark>1562"</mark> ..... 3.9687
                                                                              37/64" ......5781"..... 14.6837
                                                                              <mark>19/32" ...</mark>...<mark>5937"</mark> ..... 15.0799
11/64" ..... 1719" ..... 4.3656
                                       3/8" ...... .3750" ..... 9.5249
                                       <mark>25/64" ..</mark>...<mark>3906"</mark> .....9.9217
                                                                              39/64" ......6093" ..... 15.4762
3/16" ..... .1875" ..... 4.7624
13/64" .... .2031" ..... 5.1593
                                       13/32" .... .4062" ..... 10.3186
                                                                              5/8" ...... 15.8750
```

LIST OF OTHER REGULATED MATERIAL FOR DOMESTIC TRANSPORT (ORM-D)

PLEASE NOTE: Due to U.S. government regulations the products listed below:

◆ CAN NOT be shipped through the U.S. Mail (USPS)

the Canadian provinces.

- ◆ CAN NOT be shipped to destinations outside the United States of America
- ◆ MAY be shipped by United Parcel Service (UPS) Ground or FEDEX Ground

```
#P- 198 ... Staybrite
                                                 #P-1867 ... ... Ellanar Jewelry Cleaner Conc.
#P- 293 ... L&R #111 Watch Solution
                                                 #P-1892 ... ... Power Lube
#P- 297 ... L&R #3 Watch Rinse
                                                 #P-1957 ... ...Zenith Formula 67 Solution
#P- 528 ... Ellanar "Dip"
                                                 #P-1958 ......Zenith Waterless 224 Rinse
                                                #P-1961 ... ...JAX Rust Remover
#P- 584 ... L&R #112 Waterless Inst. Solution
#P- 597 ... L&R #222 Inst. Cleaning Solution
                                                 #P-1962 ... ... JAX Copper Plate
#P- 599 ... L&R Clock Cleaning Conc.
                                                 #P-1963 ... ... JAX Silver Plate
#P- 600 ... L&R #677 Clock Cleaning Solution
                                                 #P-1966 ... ... Zenith 251NA
                                                              Non-Ammoniated Concentrate
#P- 601 ... L&R ClockLube
#P- 602 ... L&R #566 Non-Ammoniated Cleaner #P-1966A. ... Zenith 251
#P- 603 ... L&R Watch Rinse
                                                             Ammoniated Concentrate
#P- 650 ... Finish Feeder
                                                 #P-2016 ......Spray Adhesive
#P- 918 ... L&R Power No-Fome
                                                 #P-2019 ......L&R X-tra Fine Cleaning Sol.
#P- 919 ... L&R Instrument Rinse
                                                 #P-2026 ......Zenith Drizbrite
                                                 #P-2027 ...... "Ultimate" Hairspring Cleaner
#P- 920 ... Stay Clean Soldering Flux
#P-1092 ... Blazer Butane Refill
                                                 #P-2042A.....Restor-A-Finish: Mahogany
#P-1188 ... JAX: Green Patina
                                                 #P-2042B ..... Restor-A-Finish: Walnut
#P-1189 ... JAX: Gold
                                                 #P-2042C.....Restor-A-Finish: Cherry
#P-1190 ... JAX: Brown
                                                 #P-2042D.....Restor-A-Finish: Golden Oak
                                                 #P-2042E ..... Restor-A-Finish: Neutral
#P-1191 ... JAX: Black
#P-1192 ... JAX: Pewter Darkener
                                                 #P-2042F .....Restor-A-Finish: Maple-Pine
#P-1193 ... JAX: Iron/Steel/Nickel Darkener
                                                 #P-2042G ....Restor-A-Finish: Dk. Walnut
#P-1567 ... Astro-Clean Concentrate
                                                 #P-2042H.....Restor-A-Finish: Dk. Oak
#P-1717 ... Spray lacquer - Clear
                                                 #P-2044A.....Howard Paste Wax: Clear
#P-1718 ... Spray lacquer - Gold
                                                 #P-2044B ..... Howard Paste Wax: Golden Oak
#P-1851 ... Blow-Off Air Can
                                                 #P-2044C.....Howard Paste Wax: Walnut
                                                 #P-2044D.....Howard Paste Wax: Mahogany
#P-1865 ... Sony® Watch Battery Kit*
                                                 #P-2043 ......Feed N' Wax
* Due to recent Federal regulations
                                                 #P-2109 ...... Evapo-Rust
pertaining to Lithium batteries, the
                                                 #P-2126 ... ... Zenith "Radiant" No 77
#P-1865 Watch Battery Kit can only be
                                                 #P-2181 ... ... One Dip
sent via UPS Ground to the 48 continental
                                                 #P-2182 ... ... One Dip
states of the U.S.
* No shipments to Alaska, Hawaii or any of
```

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400-Day Beat Setting Tool	Clam
132	Clea
400-Day Blocks/Forks96	Click
400-Day Clock Feet106	Click
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