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HERMLE

GRANDFATHER UNITS

451-030/55, 66, 94, 114
451-033SK/94, 114
451-050H/75, 85, 94, 114
451-050H/75, 85, 94, 114 DB [dead beat]
451-050/75, 85, 94 DBL [dead beat, low bridge]
451-053H/75, 85, 94, 114
451-053H/75, 85, 94, 114 DB [dead beat]
451-053/75, 85, 94 DBL [dead beat, low bridge]
461-053DSK/94, 114
461-053DSK/114 ANSO
461-850CSK/94, 114
461-850CSK/94, 114 ANSO
461-853CSK/94, 114
461-853CSK/94, 114 ANSO
471-050HS/94, 114
471-890/114
1151-050H/85, 94, 114
1151-050SK/94
1151-053/114 DB [dead beat]
1151-053SK/94, 114
1161-053DSK/94, 114
1161-850CSK/94, 114
1161-850/94, 114 Straight*
1161-853/94, 114 Straight*
1161-853CSK/94, 100, 114
1161-853CSK94, 114 ANSO [auto night shut off]
1171-050HS/94, 114
1171-850BS/94, 114

* Winding arbors straight across for the HS models made 1980-83

WALL & MANTLE UNITS:

130-020
130-070
130-080
130-627
130-677 Rear bells, Rear Wind
131-030/21, 32.5, 35, 39, 45, 55
131-080/23, 35, 55
132-071 SE [Swiss escapement]
132-071S SE [Swiss escapement] Schatz retro
141-010/11 DB w/pendulum
141-020/21, 32, 38, 45, front pendulum DB
141-020/21, 52, 75 DB back pendulum
141-023/45 front pendulum DB
141-030K1/31, 34, 38, 45, 48, 55, 66 w/calendar

141-031/32
141-033/38 DB
141-033K/66
141-040/29, 34
141-040K/38, 43, 45, 55 w/calendar
141-041/25, 32, 38, 43, 45
141-043/114
141-050/85
141-070/21, 23
141-080/21 2 bells
150-010
150-070 2 bells rear
150-080 2 bells top
241-030/31, 45, 55, 66, 75, 85
241-033/85
241-040/94
241-043/85
241-080/32, 94
241-840/75, 85, 94
241-843/75
261-030/31, 45, 55
261-080/23, 31, 45
271-053/114
340-020
340-020 NB
340-020K w/calendar
341-020/ 25, 33.5, 35, 38.5, 45
341-020/11 w/ pendulum
341-021/25, 33.5, 35, 38.5, 45
350-020
350-060
351-020/11, 15 w/pendulum
351-020/11, 25, 31, 32, 34, 38, 43, 45, 48, 55, 66, 75
351-021/26.5, 31, 34
351-030A/ 34, 38, 43, 45, 48, 55, 75
351-030AS/66
351-031A/34, 45, 55, 75
351-050/48, 66 75, 85, 94
351-051/34, 43, 48
351-060/15 w/pendulum
351-830/66, 75, 85
351-850/66,85, 114
791.081/16.5
1050-020
1050-020 NB
1050-021
1051-020/15 w/pendulum
1051-020/ 25, 31, 38, 43, 45, 48, 66

1051-030A/32, 34, 38, 43, 45, 48, 55, 66, 75
 1051-031A/25, 34, 38, 55
 1051-051/43, 48, 75

KIENINGER GRANDFATHER UNITS

<u>SERIES #</u>	<u>CHIME</u>	<u>CH/CA</u>	<u>BPH</u>	<u>PL(CM)</u>	<u>HS(MM)</u>
HTU 06	9 tube	CABLE	3600	116	56
KKU 26	T	CHAIN	3600	116	47
KSU 50	T-SEQ.	CABLE	4000	116	47
KSU 51	T-SEQ.	CABLE	4000	93	47
KSU 52	T-SEQ	CABLE	3800	100	47
KSU 55	9-BELL BASE	CABLE	3600	116	47
KSU 67	8/4 w/CAROUSEL	CABLE	3600	116	47
KSU 78	T	CABLE	3600	116	47
KSU 79	T	CABLE	3800	100	47
KSU 80	T	CABLE	4000	93	47
MS004	W	CABLE	3800	100	47
MS008	W	CABLE	3600	116	47
MS009	W	CABLE	4000	93	47
MSU05	T	CABLE	4000	93	47
MSU12	Concerto	CABLE	3600	116	47
MSU13	T	CABLE	3600	116	47
RK14	W	CHAIN	4260	80	36
RK32	W	CHAIN	3600	116	48
RK34	[29] W	CHAIN	4000	93	48
RU12	T	CHAIN	4000	93	48
RU13	T	CHAIN	3600	116	48
SKO11	W	CHAIN	3600	116	36
SKO19	W[ANSO]	CHAIN	3600	116	57
SKO37	W	CHAIN	4000	93	36
SKUO1	T	CHAIN	3600	116	36
SKU11	T	CHAIN	4000	93	36
SKS15	S	CHAIN 3600	116	36	
WALL and MANTLE UNITS					
AEL03	WEST	SPRING	18000	BAL	36
AEL12	WEST	SPRING	18000	BAL	32
APL01	WEST	SPRING	6750	35	32
APL03	WEST	SPRING	6750	35	29
APL09	WEST	SPRING	7628	27	29
PS26	GONG	CABLE	4725	65	32
PS27	G	CABLE	4260	80	36
PS37	G	CABLE	4260	80	32
PS38	BIMBAM	CABLE	4260	80	32
PS39	BB	CABLE	4725	65	32
PS40	BB	CABLE	4260	80	36
SEW01	TRIPLE	SPRING	18000	BAL	32
SEW03	TRIPLE	SPRING	“18000	BAL	36
SPS01	WEST	SPRING	5325	54	32
SPS02	WEST	SPRING	5325	54	36
SPS06	WEST	SPRING	5325	54	32
SPV01	TRIPLE	SPRNG	5325	54	32
SPV02	TRIPLE	SPRING	6086	43	32
SPV04	TRIPLE	SPRING	5743	48	
SPV05	TRIPLE	SPRING	5325	54	32 ANSO

URGOS

NEW FACTORY NUMBERS: REFER TO CROSS REFERENCE LIST FOR CONVERSION

<u>UW#</u>	<u>PRICE</u>	<u>CHIME</u>	<u>CHAIN/CABLE</u>	<u>HANDSHAFT</u>	<u>PL.CM</u>	<u>BPH</u>
32302	\$290	W	CHAIN	37MM	116	3600
32316	\$320	T	CHAIN	37	93	4050
32317	\$415	T	CABLE	37	100	3857
32319N	\$290	W	CHAIN	37	80	4320
32320N	\$290	W	CHAIN	49	80	4320
32322	\$290	W	CHAIN	37	100	3857
32325N	\$290	W	CHAIN	65	80	4320
32326N	\$320	T	CHAIN	37	80	4320
32328	\$290	W	CHAIN	65	93	4050
32331	\$320	T	CHAIN	37	110	3728
32333	\$415	T	CABLE	37	93	4080
32334	\$320	T	CHAIN	37	116	3600
32340	\$415	T	CABLE	37	116	3600
32342	\$290	W	CHAIN	37	93	4080
32349	\$320	T	CHAIN	37	100	3857
32359	\$415	T	CABLE	37	110	3728
32363N	\$320	T	CHAIN	65	80	4320
66018	\$475	T	CABLE	49	116	3600
66020	\$475	T	CABLE	49	100	3857
66044	\$475	T	CABLE	49	93	4080
03082	\$570	T	CABLE	53	116	3600
03083	\$1100	9-TUBE	CABLE	53	116	3600
03096	\$500	T	CHAIN	53	116	3600
03101	\$475	W	CHAIN	53	116	3600
03102	\$1090	5-TUBE	CHAIN	53	116	3600
03108	\$1100	9-TUBE	CABLE	53	100	3870
03120	\$475	W	CHAIN	53	100	3870
03121	\$1100	5-TUBE	CABLE	53	116	3600
03123	\$570	T	CABLE	53	100	3870
03124	\$500	T	CHAIN	53	100	3870
03X012	\$1090	5-TUBE	CHAIN	53	100	3870
058	\$295		CABLE		60	5063

NOTE: Pendulum length measured from the suspension point to the tip of the pendulum. It will vary depending on whether the pendulum is wood stick or lyre.

Note 2: N units have low suspension post like the originals.

QUARTZ

Price includes mounting hardware and both open and closed hand nuts.

NON-CHIMING QUARTZ with sweep second using I shaft hands [not included]

Time Only [TOSH]

Time and pendulum [TP]:

Total shaft length [mm] and dial thickness

TOSH/TP1: 12mm for 4/32" dial or 2mm

TOSH/TP2/: 15mm for 6/32" dial or 5mm

TOSH/TP3: 18mm for 9/32" dial or 8mm

TOSH/TP4: 20mm for 12/32" dial or 10mm

TOSH/TP5: 23mm for 16/32" dial or 13mm

TOSH/TP6: 28mm for 20/32" dial or 18mm

TOSH/TP7: 31mm for 26/32" dial or 21mm

CHIMING QUARTZ:

Quad

All Quad have "tubular chime" sound, playing Westminster both 4/4 and 1/4, Ave Maria, bim-bam, and single hammer on gong, pendulum execution, have external speaker, use I-shaft hands and 2 "C" batteries. Switchable auto night shut off. Volume control.

Triple

Like the Quad except it has a separate [AA] battery for the time and does not have gong sound.

TrueSound

Same size as the Original Hermle and Kieninger and same hand shaft lengths as the Quad above. It plays Westminster with both the rod and tubular chime sounds, Ave Maria, gong with full hour and once on the half hour, 4 Christmas tunes that rotate on the hour and has switchable auto night off and volume control. Pendulum execution. Uses 2 Cells.

	Dial thickness	Hand shaft total length
#1	1/4"	18 mm
#2	3/8"	21 mm
#3	5/8"	27 mm

CUCKOO MOVEMENTS

REGULA

		Pend. L.	Dancer Table Height from top..
R25 (73x63mm)	2 wt 1 day	19.1 cm	
R25L	2 wt 1 day	23.5	
R25XL	2 wt 1 day	28.5	
R25/24	3 wt 1 day	19.1	24 mm from top
R25/24L	3 wt 1 day	23.5	24 mm
R25/41	3 wt 1 day	23.5	41 mm
R25/41S	3 wt 1 day	19.1	41 mm
R25/41 BL	3 wt 1 day	23.5	41 mm
R25/51	3 wt 1 day	23.5	51 mm
R34 (85x76mm)	2 wt 8 day	19.1	
R34 LP	2 wt 8 day	19.1	long post 45mm
R34 ASO	2 wt 8 day	23.5	long post, 1 weight inside
R34L ASO	2 wt 8 day	28.5	as above
R34XL ASO	2 wt 8 day	40.0	as above
R34/44	3 wt 8 day	28.5	47 mm
R34/46	3 wt 8 day	23.5	47 mm
R34/59	2 wt 8 day	40.0	
R34/63	2 wt 8 day	23.5	
R34/63 LP	2 wt 8 day	23.5	long post 45mm
R34/66	2 wt 8 day	28.5	

NOTE:

1. PENDULUM MEASURED FROM SUSPENSION POST TO CENTER OF STICK.
2. DANCER TABLE MEASURED FROM TOP OF MOVEMENT TO TABLE.

CONVERSIONS:

19.5cm = 7 ¾"
 23.5cm = 9 ¼"
 28.5cm = 10 ½"
 40.0cm = 15 ¾"

CONVERSION KITS

The following three weight Hermle units retrofit for Jauch chain wind units. The retrofits will include Hermle movement, hands, seat board screws, shims where needed, pendulum hook, and chime weight filler where needed.

For Jauch movements measuring approximately 5" x 5":

J-61 (West. marked pl 61cm) uses 451-053/75cm:
J-64 (West. marked pl 64cm) uses 451-050/84cm:
J-77 (West. marked "77") uses 451-050/94cm:
J77T (triple chime as above) uses 1151-050/94cm
J-78 (West. marked pl 78cm) uses 451-053/94cm
J78T (triple marked pl 78cm) uses 1151-053hs/94

For Jauch movements measuring approximately 6" x 9"

J-93 (West. marked pl. 93 or 96cm) uses 471-050/94
J-93T (triple chime as above): 1171-050/94
J-110 (West. marked 110cm): 471-050/114
J-110T (triple chime as above): 1171-050/114
J-116 (West. marked 116cm): 471-050/114
J-116T (triple as above): 1171-050/114

For Urgos movements UW 7 series

KIT UW7/28 241-030/45 + hands, pendulum hook
KIT UW7/29 241-030/66 +
KIT UW7/30 241-030/85 +
KIT UW7/53 241-030/45 +
KIT UW7/67 241-030/85 +
KIT UW7/71 241-033/85 +
KIT UW7/73 241-030/55 +

NOTES:

- 1. The dial must be attached to the clock case for all conversions.**
- 2. The moon dial flipper for the J-77 is available at \$10.**
- 3. *A new chime block is supplied for the triple chime models**
- 4. ** The pendulum needs lengthened 2"**

THE BUTTERWORTH BEARING SYSTEM
ButterBearing®

“Give me the perfect bushing, and I’ll give you the perfect clock.” In my career as a tradesman, I specialized in the bushing of clocks and the polishing of pivots. I’ve seen bushings fail in both new and repaired clocks over time. The problem lies both in the bushing and the pivot. The steel pivot becomes imbedded with dirt, the dirt acts to destroy the bushing, and the pivot itself becomes rough, grooved, and pitted. Having the pivot mirror polished was the only hope for success- until now.

It’s not a bushing; it’s a bearing. Bearings are the standard for endurance and low friction. They can be found in astronomical regulators costing thousands of dollars. Finally, a low cost system for pivots with a size from 0.50-9.00mm

Never file, polish, or pivot a wheel again. The condition of the pivot is immaterial. The brass sleeve inside the inner ring is reamed to size for the pivot. The inner ring turns with the pivot against the ball race and with the outer ring. The hole is drilled in the plate for the bearing the same as it would be for a bushing.

Warranted for life from bearing wear or failure. If it fails under normal operating conditions, I will send you a replacement bearing no charge.

Pricing: \$18 per 6 pack. The customer will be delighted to pay this price for something with advantages so obvious.

Part #	Pivot sizes	Bearing O.D.	Bearing Height
B 2.00	0.50-1.00mm	5mm	2.0mm
B 3.00	0.90-2.00	6	2.0
B 4.00	1.90-3.00	7	2.0
B 5.00	2.90-4.00	8	2.0
B 6.00	3.90-5.00	10	2.5
B 7.00	4.90-6.00	11	2.5
B 8.00	5.90-7.00	12	2.5
B 9.00	6.90-9.00	14	3.0
T 1	Thrust bearing for Urgos tubular chime roll.		

Note: the pricing includes a bushing or sleeve to fit the bearing to accommodate all in between sized pivots. The bushing or sleeve may need broached to fit the pivot.

BUTTERBEARING® KITS

BUSHINGS BORED TO SIZE AND INSTALLED IN BEARINGS

DRILLS

Hermle chain wheels	6 pieces	\$24	BK1A	7mm
Hermle cable drums f & r	6 pieces	\$24	BK1B	8,11
Hermle 2 nd wheels all	6 pieces	\$24	BK1C	6
Hermle 3 rd wheels c/t/s	6 pieces	\$24	BK1D	6,7,8
Hermle 3 rd wheels t/s	4 pieces	\$16	BK1E	6,7
Hermle spring barrels	6 pieces	\$24	BK1F	12
Herschede 9 tube winding arbors	6 pieces	\$24	BK5A	11, 12
Herschede 9 tube pulleys	3 pieces	\$24	BK5B	8
Jauch 61/78 chain wheels	6 pieces	\$24	BK2A	6
Jauch 61/78 2 nd wheels	6 pieces	\$24	BK2B	6
Jauch 61/78 3 rd wheels	6 pieces	\$24	BK2C	6,7,8
Jauch 77 chain wheels	6 pieces	\$18	BK2D	6
Jauch 77 2 nd wheels	6 pieces	\$24	BK2E	6
Jauch 77 3 rd wheels	5 pieces	\$20	BK2F	6,7
Jauch 93/96/110/116 chain wheels	6 pieces	\$24	BK2G	
Jauch 93/96/110/116 2 nd wheels	6 pieces	\$24	BK2H	6
Jauch 93/96/110/116 3 rd wheels	6 pieces	\$24	BK2I	6,7,8,12
Kieninger J 2 nd wheels	6 pieces	\$24	BK3A	
Kieninger J 3 rd wheels	6 pieces	\$24	BK3B	
Kieninger K chain wheels	6 pieces	\$18	BK3C	6
Kieninger K cable drums f & r	6 pieces	\$21	BK3D	
Kieninger K 2 nd wheels	6 pieces	\$18	BK3E	
Kieninger K 3 rd wheels	6 pieces	\$24	BK3F	
Kieninger P cable drums	4 pieces	\$14	BK3G	8,11
Kieninger P 2 nd wheels	4 pieces	\$12	BK3H	5
Kieninger P 3 rd wheels	4 pieces	\$16	BK3I	6,8
Kieninger R chain wheels	6 pieces	\$24	BK3J	
Kieninger R 2 nd wheels	6 pieces	\$24	BK3K	
Kieninger R 3 rd wheels	6 pieces	\$24	BK3L	
Kieninger SKS chain wheels	6 pieces	\$18	BK3M	6
Kieninger SKS 2 nd wheels	4 pieces	\$12	BK3N	5
Kieninger SKS 3 rd wheels	6 pieces	\$24	BK3O	6,7,8
Kieninger pulleys fits all 2 per pulley	6 pieces	\$18	BK3P	7
UW03 chain wheels	6 pieces	\$24	BK4A	8
UW03 2 nd wheels	6 pieces	\$24	BK4B	7,8
UW03 time 2 nd wheel front	6 pieces	\$24	BK4C	8
UW03 3 rd wheels	6 pieces	\$24	BK4D	6,7
UW6 2 nd wheels	6 pieces	\$24	BK4E	
UW6 3 rd wheels	6 pieces	\$24	BK4F	6,7,8
UW7 chain wheels	4 pieces	\$16	BK4G	8
UW7 2 nd wheels	4 pieces	\$16	BK4H	6
UW7 3 rd wheels	4 pieces	\$16	BK4I	6,8
UW32 chain wheels	6 pieces	\$24	BK4J	8
UW32 2 nd wheels	6 pieces	\$24	BK4K	6
UW32 3 rd wheels	6 pieces	\$24	BK4L	6,7,8
UW03 cable drums	6 pieces	\$24	BK4M	8, 10
UW6 winding arbors	6 pieces	\$24	BK4N	8,11

ButterBearing® KIT INSTRUCTIONS

Tools:

Metric drill bit for drilling brass
Loctite

Instructions:

Drill hole in plate
Sparingly apply Loctite inside hole with toothpick
Insert bearing and wipe off excess Loctite without getting it into bearing.
You are done!

ButterBearing® SYSTEM INSTRUCTIONS

Tools:

Cutting broach set or reamers [required]
Loctite or equivalent [required]
Drills

1. Determine the pivot size by caliper, pivot gauge, or matching to a bushing.
2. Broach out the sleeve or bushing to fit the pivot.
3. Snap the sleeve into the bearing using the pliers. You can also use a press with stump [gently].
4. Use our special drill to drill hole in the plate.
5. Apply Loctite [red] in plate w/toothpick, etc. Use sparingly
6. Push in bearing w/thumb w/ball side on top.
7. You're done!

PARTS AND ACCESSORIES- WE HAVE THE FOLLOWING

Cable for Hermle, Kieninger, and Urgos in both stainless steel and brass

Chain for Keininger

Dr. Tillwich lubricants- watch and clock greases and oils

Gongs for all 3 grandfather units

Hand nuts small and large fit all 3 brands

Hermle accessories including pendulums

MainSpring barrels complete for Kieninger

Platform escapements both 5j and 11j for Kieninger

Suspension springs small and large fits all 3 brands

Verges for Kieninger

SHERLINE LATHE AND MILL PACKAGES

We can sell you anything, price includes shipping to US addresses and a 5% discount. To see what is included go to www.sherline.com

THE ROLLIMAT PIVOT POLISHER

The Rollimat pivot polisher from Austria is the finest in the world, polishing any pivot [0.03-3.6 mm] in less than a minute. It produces a perfect square shoulder from the arbor to pivot and a perfect cylindrical pivot. Very easy to use, simply measure the pivot size and put in the proper index slot in the tool. No chance of breaking a pivot like happens with the lathe. It will pay for itself in labor savings and produce a beautiful finish.

Its advantages:

1. Simplicity of setup and use- learn to polish like a pro in 15 minutes.
2. It is the only one in which the work piece is stationary, and the polishing/burnishing tool revolve around it. This allows the ease of polishing pivots for escape and fly wheels where the wheel and/or pinion is very close to the pivot. It will even polish verge and arbor pivots.
3. There is very little to break and it will last for a lifetime if not generations.
4. Price includes both the fine and the coarse carbide burnishing wheels.

TimeTrax timing machine



The TimeTrax 185 clock timer is easy to use. It reads out in beats per hour and is also used to put the movement into beat. It will count from 2,000-19,999 bph. The money saved in being able to regulate the clock in minutes instead of days or weeks will pay for it in one week.