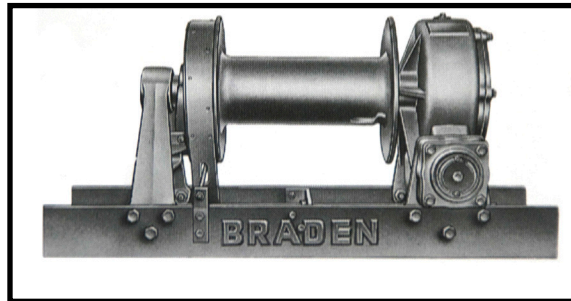
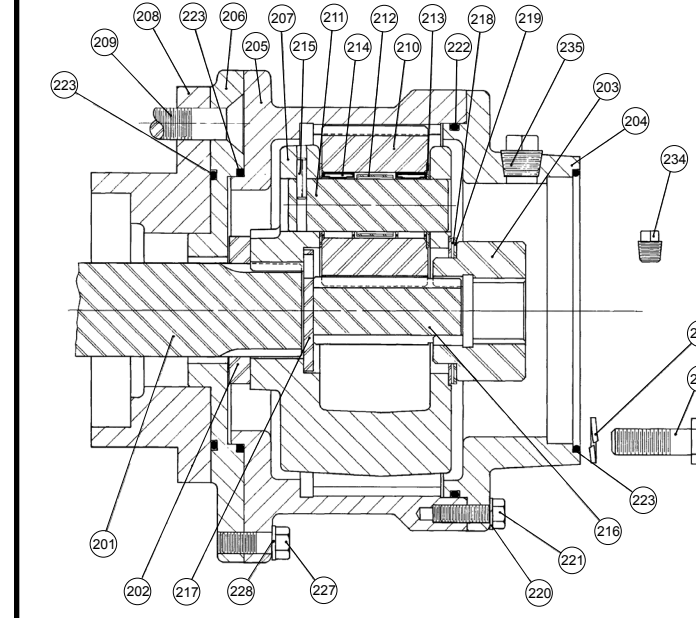


MATERIAL LIST

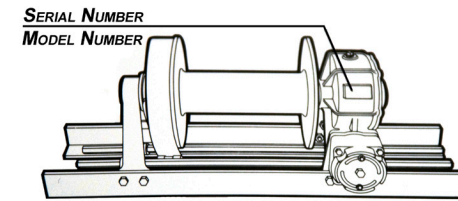
MS30 HS30P



HS30P Hydraulically Driven with Planetary Adapter



ITEM	DESCRIPTION	PART	QTY
201	Worm Shaft	25356	1
202	Spacer	25354	1
203	Motor Coupling	25355	1
204	Motor Adapter	25307	1
205	Housing	25305	1
206	Adapter Plate	25326	1
207	Planet Carrier	25309	1
208	Bearing Container	101485	1
209	Capscrew (3/4-10 X 2-1/2 FH Gr8)	28961	4
210	Planet Gear	26272	3
211	Planet Gear Shaft	24898	3
212	Bearing Spacer	24890	3
213	Thrust Washer	24167	6
214	Roller Bearing	24175	6
215	Rollpin	21049	3
216	Sun Gear	25359	1
217	Thrust Plate	25542	1
218	Thrust Bearing	24950	1
219	Bearing Race	24912	2
220	Lockwasher (5/16)	11024	8
221	Capscrew (5/16-18 X 1 Gr8)	11767	8
222	O-ring	22721	1
223	O-ring	10330	3
225	Capscrew (1/2-13 X 1-1/2 Gr8)	104322	4
226	Lockwasher (1/2)	11026	4
227	Capscrew (3/8-16 X 1-1/4 Gr8)	104132	8
228	Lockwasher (3/8)	27152	8
234	Plug	18009	1
235	Plug	23377	1
236	Hydraulic Motor- Single Speed- Not Shown	25272	1
	Hydraulic Motor- Two Speed- Not Shown	25337	1
200	Planetary Adapter Kit, motor not included	61664	1



Serial Numbers and Model Numbers are stamped into the top of the worm gear housing.

Always refer to the Serial Number and Model Number when requesting information or service parts

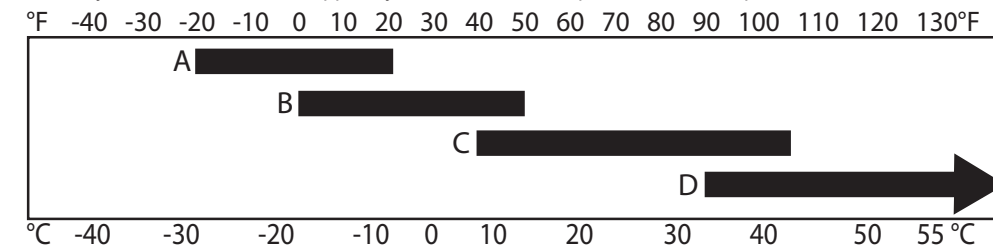
TO ORDER:

- 1) List model and serial numbers of the winch.
- 2) Refer to illustrations and select the component(s) needed and note item number.
- 3) Find item number on material list, show part number, description and quantity on your order.
- 4) Refer to parts price list and show price for each component or assembly.

SPECIFICATIONS

Recommended Worm Gear Oil:

We have published the following specifications to help you determine which lubricant is best suited to your application. For simplicity, Braden has listed one readily available product in each temperature range which has been tested and found to meet our specifications. This is not to say that other lubricant brands would not perform equally as well. If the following lubricant brands are not available in your area, make certain your lubricant vendor supplies you with oil that is equivalent to those products listed below.



- A. AGMA Grade 3 EP; Mobilgear 600xp 100 or equivalent
- B. AGMA Grade 5 EP; Mobilgear 600xp 220 or equivalent
- C. AGMA Grade 7 EP; Mobilgear 600xp 460 or equivalent
- D. AGMA Grade 8 EP; Mobilgear 600xp 680 or equivalent

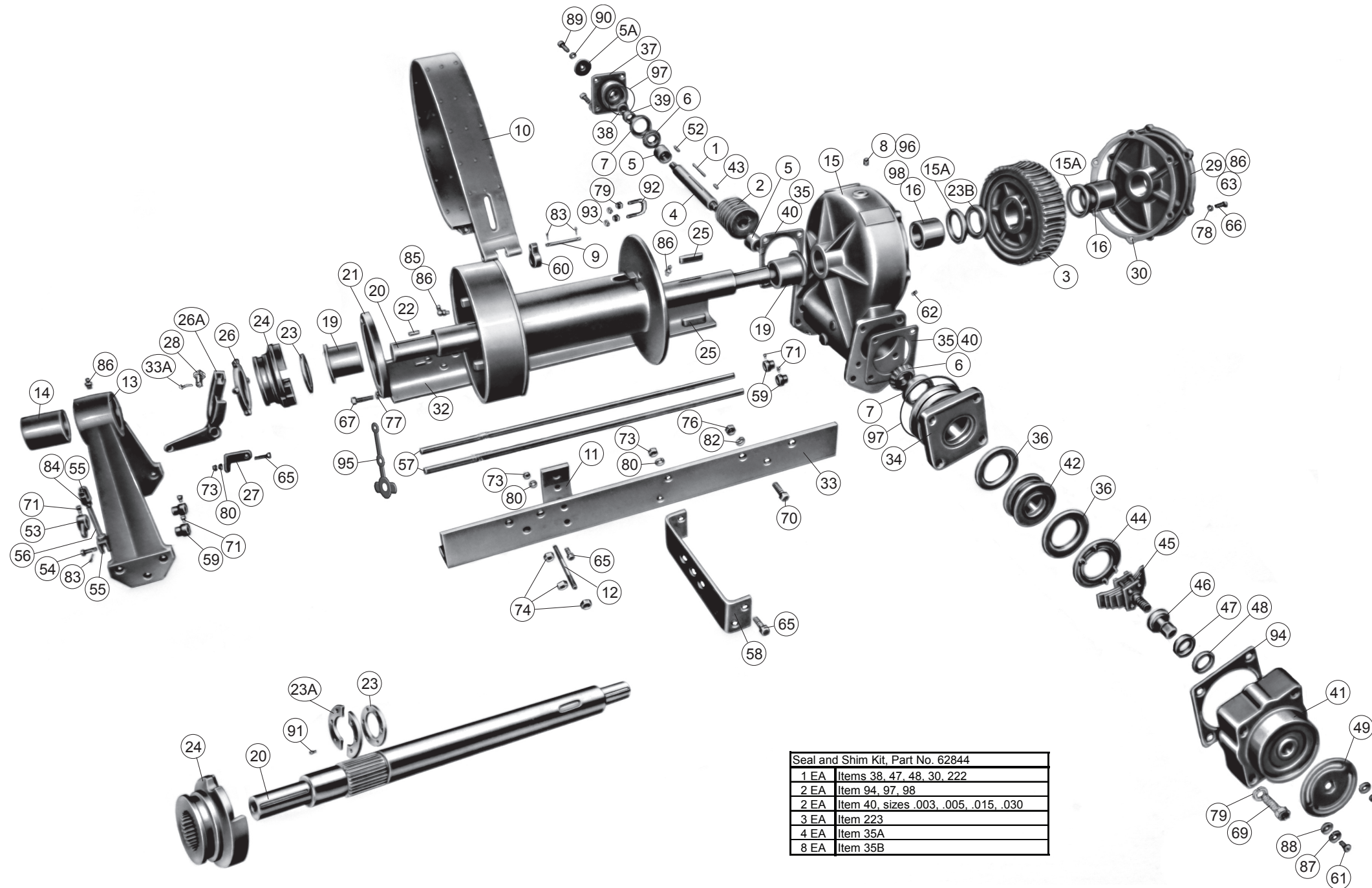
Brand recommendations in tier C climate range:

- MOBIL Mobilgear 600xp 460
- SHELL Omala 460
- CHEVRON Gear Compounds EP460
- TEXACO Meropa 460

⚠ WARNING ⚠

DO NOT use aftermarket additives in worm gear oil. Some additives may contain substances which could cause glazing of the brake discs or impede the firm locking action in the brake rotor assembly. Both Symptoms could reduce load control which may result in property damage, severe personal injury or death

BRADEN MS30, R-LA, L-LA, R-RA, L-RA HS30P - Components



Seal and Shim Kit, Part No. 62844	
1 EA	Items 38, 47, 48, 30, 222
2 EA	Item 94, 97, 98
2 EA	Item 40, sizes .003, .005, .015, .030
3 EA	Item 223
4 EA	Item 35A
8 EA	Item 35B

NOTES:

1) Below SN 9850007 - Use PN 40014 (Item 5); S/N's 9850007 and above - Use PN 101583 (Item 5)

Note: PN 101583 is slightly shorter and may be identified by an indicator groove machined into the O.D. of the part.

2) Below S/N 9850007 - Use PN 22775 (Item 8) only. S/N's 9850007 and above - Use PN 10074 (Item 8) installed in PN 21973 (Item 96) .

3) Below S/N 9850007 - Use Shim Gaskets (Item 35)
 PN 11576 (.015") - 4 A/R
 PN 11577 (.031") - 8 A/R
 S/N's 9850007 and above - Use Shims (Item 40)
 PN 101483 (.003") - 2 A/R
 PN 101484 (.005") - 2 A/R
 PN 101485 (.015") - 2 AR
 PN 101486 (.030") - 2 A/R

4) Below SN 9850007 - Use PN 18009 (Item 62) installed in Gear Housing (Item 15). S/N's 9850007 and above - Use PN 18010 (Item 63) in installed in Gear Housing Cover (Item 29).

5) Beginning with SN 9850007, Bearing Containers (Items 34 & 37) and Worm Housing / Cover Bushings (Item 16) contain seal grooves. These parts are interchangeable for ALL older MS30 winches and may be used without seals on these earlier units. For ALL MS30 winches, SN 9850007 and above, use O'Rings (Item 97) and Quad Rings (item 98) to properly seal winches from leaking gear oil.

6) Beginning mid-year 2000, Clutch Control Shafts (Item 57) were no longer assembled to finished winches. If manual clutch control is required, order Clutch Rod Control Kit 63387.

63387 kit contains: Item 53 (Qty 1), Item 59 (Qty 3), Item 54 (Qty 2), Item 71 (Qty 4), Item 55 (Qty 2), Item 83 (Qty 2), Item 56 (Qty 1), Item 84 (Qty 2), Item 57 (Qty 1), Item 95 (Qty 1)

7) When replacing worm housing / cover bushings (Item 16) or bearing leg bushing (Item 14), inspect the inside diameter of the bushing after press installation. Final Inside Diameter: Worm Housing / Cover bushing (Item 16) - 3.258 / 3.627 in. (82.7 / 83.0 mm), Bearing Leg Bushing (Item 14) - 2.943 / 2.948 in. (74.7 / 74.9 mm).

ITEM	DESCRIPTION	PART	QTY	ITEM	DESCRIPTION	PART	QTY	ITEM	DESCRIPTION	PART	QTY	ITEM	DESCRIPTION	PART	QTY
1	Worm Key	11650	1	16	Worm Housing w/ Cover Bushing, see note 7	101481	2	56	Clevis Link	11583	1	80	Lockwasher (3/8)	27152	12
2	Worm, Right	11244	1	18	Cable Drum w/ Bushings	81623	1	57	Control Shaft 52-inch	11667	1	82	lockwasher (7/8)	13447	12
	Worm, Left	11243	1	19	Cable Drum Bushing	12961	1	58	Control Shaft 26-inch	102750	1	83	Cotterpin	18008	4
3	Worm Gear, Right	11246	1	20	Cable Drum Shaft	23523	1	59	Control Shaft Support	11579	1	83A	Cotterpin	13959	1
	Worm Gear, Left	11245	1	21	Clutch Plate	11654	1	60	Control Shaft Collar Bearing	11669	6	84	Hex Nut (5/8-18)	22702	2
4	Worm Shaft	22980	1	22	Clutch Plate Dowel Pin	12769	2	61	Brake Lever	11678	1	85	Grease Fitting	11800	1
5	Worm Spacer, See Note 1	101583	2	23	Retaining Ring	11249	1	62	Safety Brake Rotor Housing	22727	2	86	Grease Fitting	18047	5
		40014		23A	Split Ring	11250	1	63	Serial No. 7208912 & Above	81041	1	87	Lockwasher (1/4)	11015	2
5A	Worm Shaft Sprocket Washer	11651	1	23B	Retaining Ring	11580	1	64	Serial No. 7208913 & Below	81491	1	88	Washer (1/4)	11072	2
6	Bearing Cone	12748	2	24	Clutch	11251	1	65	Rotor Key	81044	1	89	Capscrew (5/16-24 X 3/4 Gr8)	32265	1
7	Bearing Cup	12749	2	25	Worm Gear Key	11572	2	43	Serial No. 7208912 & Above	11586	1	90	Lockwasher (5/16)	11024	1
8	Vent Plug, See Note 2	10074	1	26	Clutch Rider Assembly	61971	1	44	Serial No. 7208913 & Below	10163	1	91	Capscrew (1/4-28 X 3/8 Gr8)	13630	6
9	Brake Band Pin	11569	1	26A	Clutch Shifter fork	11673	1	45	Safety Brake Pressure Plate	22778	1	92	Cable Clamp	29036	1
10	Brake Band Assembly	81590	1	27	Shifter Fork bracket	11656	2	46	Safety Brake Spring Assy (w/ item 46)	81044	1	93	Hex Nut (3/4-10 Jam)	11791	2
11	Brake Band Bracket	12786	1	28	Pivot Pin	11657	1	47	Adjusting Nut	11263	1	94	Safety Brake Housing Gasket	11253	2
12	Brake Band Link	11570	1	29	Worm Housing Cover w/ Bushing	82494	1	48	Adjusting Nut Washer	11600	1	95	Brake/ Clutch Lever Assembly	81208	2
13	Bearing Leg w/ Bushing	81038	1	30	Worm Housing Cover w/ Bushing	82494	1	49	Adjusting Nut Gasket	11601	1	96	Reducer	21973	1
14	Bearing Leg Bushing, See Note 7	12875	1	32	Worm Housing Cover Gasket	11573	3	52	Sprocket Key	11602	1	97	O-ring, See Note 5	31594	2
15	Worm Housing w/ Bushing	82495	1	33	Front Base Angle	11574	1	76	Hex Nut (1/2-20)	22701	4	98	Quad Ring, See Note 5	101494	2
15A	Worm gear Thrust Washer	11571	2	34	Rear Base Angle	11575	1	77	Hex Nut (7/8-9)	22886	12	99	Decal, Clutch Control, Not shown	100600	1
				35	Bearing Container	101482	1	78	Lockwasher (5/8)	102423	8				
					Bearing Container Gasket, See Note 3	-	A/R	79	Seal Washer (5/8)	72146	6				
									Lockwasher (3/4)	13435	10				