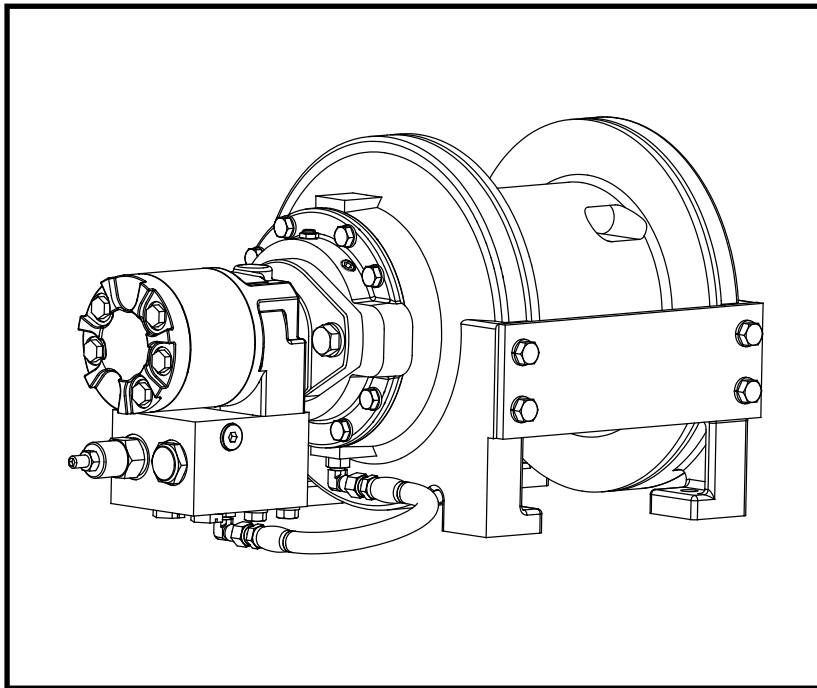


BRADEN®

BG3B

MATERIAL LIST



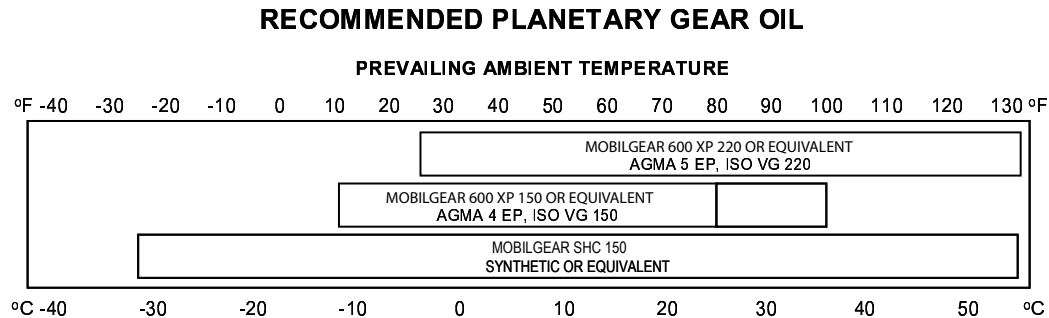
PACCAR WINCH DIVISION
P.O. BOX 547 BROKEN ARROW, OK U.S.A. 74013
PHONE (918) 251-8511 FAX (918) 259-1575
www.paccarwinch.com

RECOMMENDED PLANETARY GEAR OIL

Field experience, supported by engineering endurance tests, indicates the use of the proper gear oil and a program of regular preventive maintenance will help provide extended gear train life and reliable winch brake performance. For this reason, BRADEN has published the following specifications to assist in determining which lubricant is best suited to your application.

For simplicity, BRADEN has listed available products in each temperature range that have 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.



NOTE: SHADED TEMPERATURE RANGE IN THE CHART ABOVE NOT RECOMMENDED FOR SEVERE APPLICATIONS SUCH AS: OFFSHORE CRANES, SUSTAINED FAST DUTY CYCLES OR FREQUENT LIFTING.

Planetary hoists are factory filled with Mobilgear 600 XP 150, or equivalent. Consult your oil supplier for other equivalent oils if required.

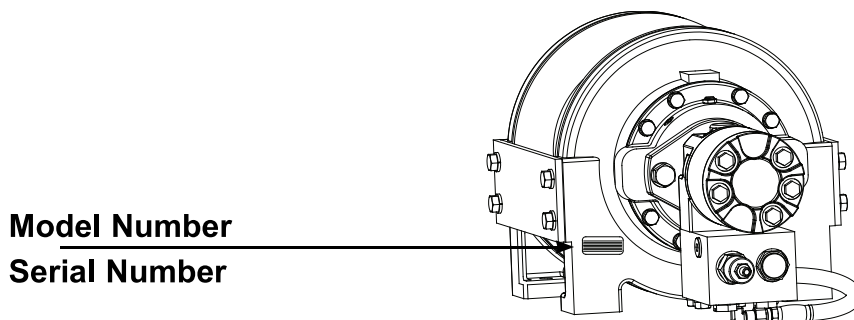
Mobil	Shell	Chevron	Texaco
Mobilgear 600 XP 150	Omala 150	Gear Compounds EP 150	Meropa 150
Mobilgear 600 XP 220	Omala 220	Gear Compounds EP 220	Meropa 220

Unless otherwise specified, it is recommended that the gear oil be changed after the first one hundred (100) hours or thirty (30) days of machine operation, then every one thousand (1,000) hours or twelve (12) months, whichever occurs first. The gear oil should also be changed whenever the ambient temperature changes significantly and an oil from a different temperature range would be more appropriate.

A warm-up procedure is recommended at each start-up and is essential at ambient temperatures below +40°F (4°C).

The prime mover should be run at its lowest recommended RPM with the hydraulic winch control valve in neutral allowing sufficient time to warm up the system. The winch should then be operated at low speeds, forward and reverse, several times to prime all lines with warm hydraulic oil and to circulate gear lubricant through the planetary gear sets.

If you have any questions regarding your BRADEN planetary winch, please contact the BRADEN Product Support Department at 1-918-251-8511, Monday through Friday from 08:00 to 16:30 hours CT, or by fax at 1-918-259-1575.

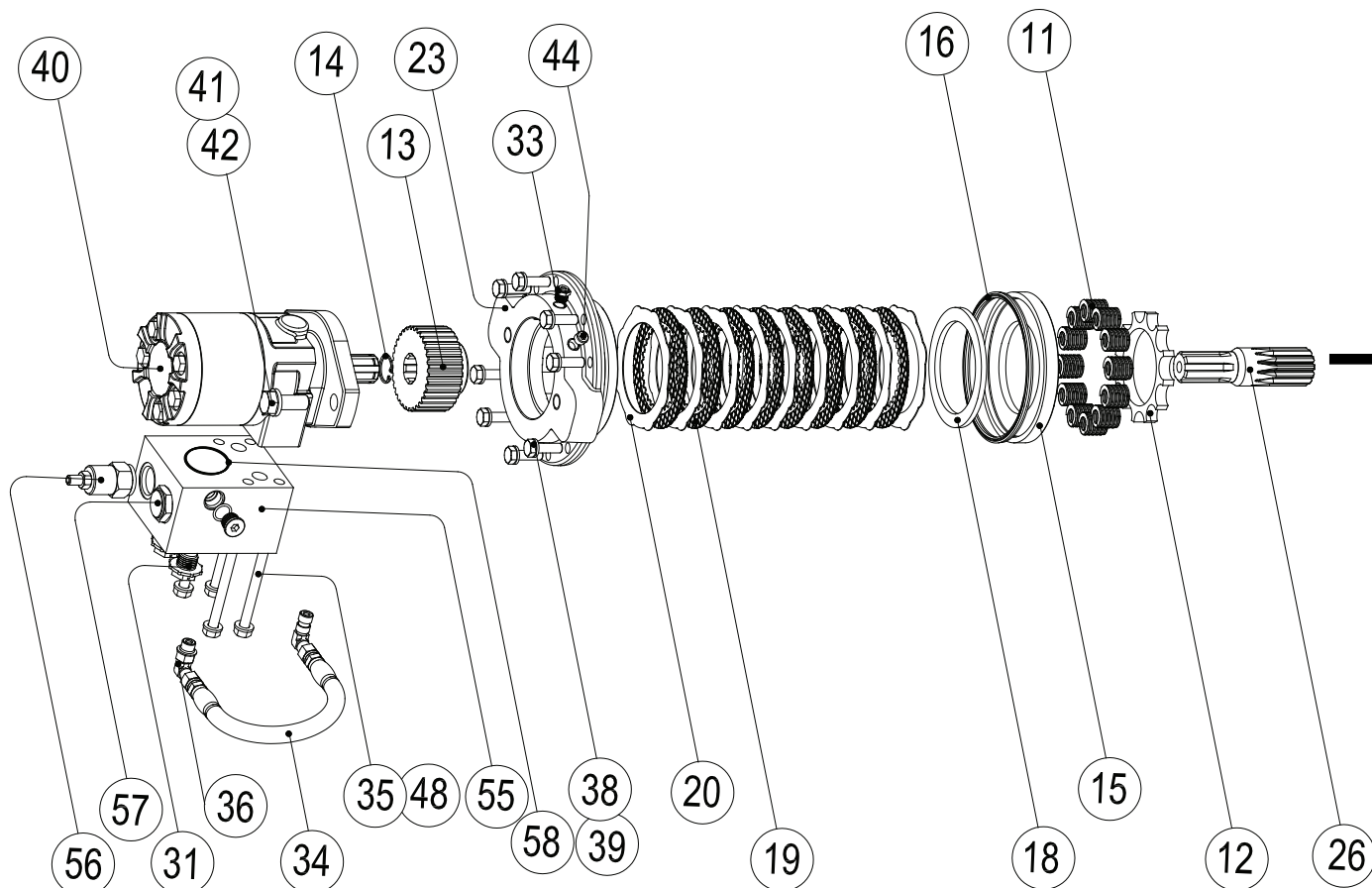


The BRADEN BG3B winch has the model and serial numbers stamped into the brake cylinder endplate. Always reference both of these numbers when ordering replacement parts. Our goal is to ship the correct parts, the first time.

FOR BEST RESULTS, ALWAYS USE GENUINE BRADEN REPLACEMENT PARTS

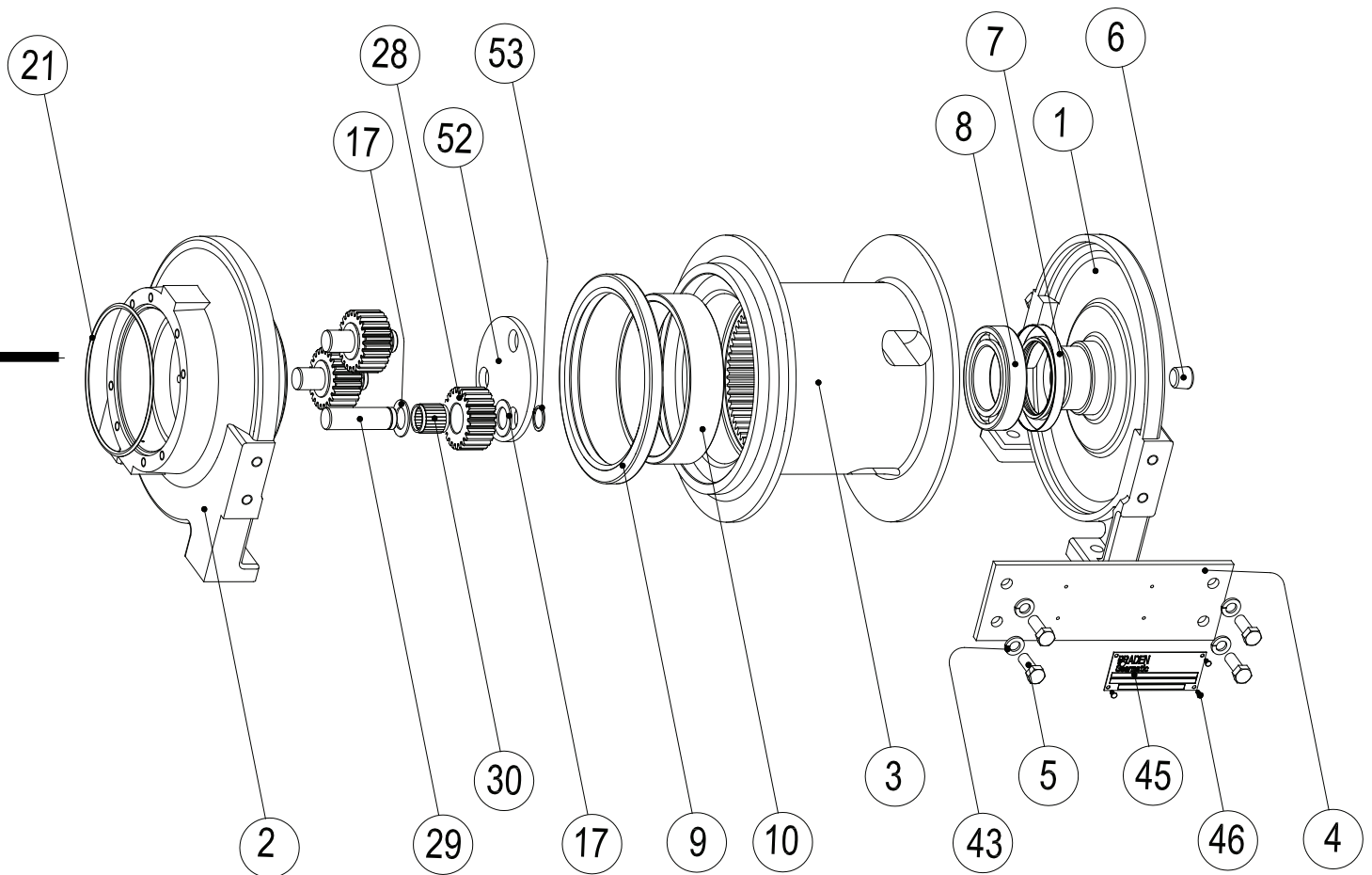
TO ORDER PARTS:

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



ITEM	DESCRIPTION	PART NO	QTY
1	BEARING SUPPORT ENDPLATE	105722	1
2	BRAKE CYLINDER ENDPLATE	105724	1
3	CABLE DRUM	105723	1
4	TIEPLATE	105758	2
5	CAPSCREW 3/8-16 X 1 HEX HEAD GD8	104309	8
6	PLUG, PIPE 1/2-14	19045	1
7	OIL SEAL	25582	1
8	BALL BEARING	25917	1
9	OIL SEAL	105960	1
10	BUSHING- PRESSED IN DRUM	105789	1
11	SPRING	26094	12
12	SPRING LOCATOR	100136	1
13	BRAKE COUPLING	29929	1
14	SNAP RING	27535	1
15	SPRING PLATE	25552	1
16	U-CUP SEAL	25594	1
17	BEARING RACE-THRUST	24913	6
18	BRAKE PLATE SPACER	25550	1
19	FRICTION DISC	25541	8
20	BRAKE DISC	102314	9
21	O-RING	70138	1
22	GASKET, MOTOR MOUNT	23108	1
23	MOTOR ADAPTER	105706	1
26	SUN GEAR	105783	1
28	PLANET GEAR	100001	3
29	PLANET PIN	105781	3

NOTE: To improve clarity of drawing, all quantities of some parts are not shown. (i.e. springs, brake plates, capscrews and washers)

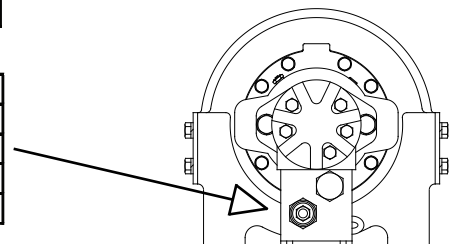


ITEM	DESCRIPTION	PART NO	QTY
30	ROLLER BEARING	27717	3
31	SHIPPING PLUG	29965	2
33	RELIEF VALVE 7.5-15 PSI	18062	1
34	HOSE ASSY	25936	1
35	CAPSCREW, 5/16-18 X 3 HEX HEAD GD8	106032	4
36	ELBOW FITTING	25302	2
38	CAPSCREW, 5/16-18 X 1 HEX HEAD GD8	11767	8
39	LOCKWASHER , 5/16 SPLIT	11024	8
40	HYD MOTOR	101214	1
41	CAPSCREW, 1/2-13 X 1 1/4 HEX HEAD GD8	104174	2
42	LOCKWASHER, 1/2 SPLIT	11026	2
43	LOCKWASHER, 3/8 SPLIT	27152	8
44	PLUG, PIPE 1/8-27	22374	2
45	NAMEPLATE	76381	1
46	DRIVE SCREW	11842	4
48	WASHER, 5/16 HARDENED	100858	4
52	PLATE, PLANET RETENSION	105759	1
53	SNAP RING	25589	3
-	BRAKE VALVE ASSY(PARTS 55, 56, 57 BELOW)	106180	1
55	MANIFOLD	105192	1
56	CBV CARTRIDGE	106684	1
57	PILOT OPERATED CHECK VALVE	106204	1
-	CABLE WEDGE (NOT SHOWN)	26095	1
58	O-RING	12273	2

SEAL KIT PN 63982			
ITEM	DESCRIPTION	PART #	QTY
7	SEAL	25582	1
9	SEAL	105960	1
16	SEAL	25594	1
21	O-RING	70138	1
22	GASKET	23108	1
58	O-RING	12273	1

IF WINCH SERIAL NUMBER IS 0553231 AND LOWER BRAKE VALVE MAY BE

ITEM	DESCRIPTION	PART #	QTY
55	VALVE BLOCK	40045	1
56	COUNTERBALANCE CARTRIDGE	27258	1
57	PILOT CHECK CARTRIDGE	100963	1
-	SEAL KIT FOR #27258 & #100963	29872	2



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METRIC CONVERSION TABLE

English to Metric			Metric to English		
LINEAR					
inches (in.)	X 25.4	= millimeters (mm)	millimeters (mm)	X 0.3937	= inches (in.)
feet (ft.)	X 0.3048	= meters (m)	meters (m)	X 3.281	= feet (ft.)
miles (mi.)	X 1.6093	= kilometers (km)	kilometers (km)	X 0.6214	= miles (mi.)
AREA					
inches ² (sq.in.)	X 645.15	= millimeters ² (mm ²)	millimeters ² (mm ²)	X 0.000155	= inches ² (sq.in.)
feet ² (sq.ft.)	X 0.0929	= meters ² (m ²)	meters ² (m ²)	X 10.764	= feet ² (sq.ft.)
VOLUME					
inches ³ (cu.in.)	X 0.01639	= liters (l)	liters (l)	X 61.024	= inches ³ (cu.in.)
quarts (qts.)	X 0.94635	= liters (l)	liters (l)	X 1.0567	= quarts (qts.)
gallons (gal.)	X 3.7854	= liters (l)	liters (l)	X 0.2642	= gallon (gal.)
inches ³ (cu.in.)	X 16.39	= centimeters ³ (cc)	centimeters ³ (cc)	X 0.06102	= inches ³ (cu.in.)
feet ³ (cu.ft.)	X 28.317	= liters (l)	liters (l)	X 0.03531	= feet ³ (cu.ft.)
feet ³ (cu.ft.)	X 0.02832	= meters ³ (m ³)	meters ³ (m ³)	X 35.315	= feet ³ (cu.ft.)
fluid ounce (fl.oz.)	X 29.57	= milliliters (ml)	milliliters (ml)	X 0.03381	= fluid ounce (fl.oz.)
MASS					
ounces (oz.)	X 28.35	= grams (g)	grams (g)	X 0.03527	= ounces (oz.)
pounds (lbs.)	X 0.4536	= kilograms (kg)	kilograms (kg)	X 2.2046	= pounds (lbs.)
tons (2000 lbs.)	X 907.18	= kilograms (kg)	kilograms (kg)	X 0.001102	= tons (2000 lbs.)
tons (2000 lbs.)	X 0.90718	= metric tons (t)	metric tons (t)	X 1.1023	= tons (2000 lbs.)
tons (long) (2240 lbs.)	X 1013.05	= kilograms (kg)	kilograms (kg)	X 0.000984	= tons (long) (2240 lbs.)
PRESSURE					
inches Hg (60 °F)	X 3600	= kilopascals (kPa)	kilopascals (kPa)	X 0.2961	= inches Hg (60°F)
pounds/sq.in. (PSI)	X 6.895	= kilopascals (kPa)	kilopascals (kPa)	X 0.145	= pounds/sq.in. (PSI)
pounds/sq.in. (PSI)	X 0.0703	= kilograms/sq.cm. (kg/cm ²)	kilograms/sq.cm. (kg/cm ²)	X 14.22	= pounds/sq.in. (PSI)
pounds/sq.in. (PSI)	X 0.069	= bars	bars	X 14.5	= pounds/sq.in. (PSI)
inches H ₂ O (60°F)	X 0.2488	= kilopascals (kPa)	kilopascals (kPa)	X 4.0193	= inches H ₂ O (60°F)
bars	X 100	= kilopascals (kPa)	kilopascals (kPa)	X 0.01	= bars
POWER					
horsepower (hp)	X 0.746	= kilowatts (kW)	kilowatts (kW)	X 1.34	= horsepower (hp)
ft.-lbs./min.	X 0.0226	= watts (W)	watts (W)	X 44.25	= ft.-lbs./min.
TORQUE					
pound-inches (in.-lbs.)	X 0.11298	= newton-meters (N-m)	newton-meters (N-m)	X 8.851	= pound-inches (in.lbs.)
pound-feet (ft.-lbs.)	X 1.3558	= newton-meters (N-m)	newton-meters (N-m)	X 0.7376	= pound-feet (ft.-lbs.)
pound-feet (ft.-lbs.)	X .1383	= kilograms/meter (kg-m)	kilogram/meter (kg-m)	X 7.233	= pound-feet (ft.-lbs.)
VELOCITY					
miles/hour (m/h)	X 0.11298	= kilometers/hour (km/hr)	kilometers/hour (km/hr)	X 0.6214	= miles/hour (m/h)
feet/second (ft./sec.)	X 0.3048	= meter/second (m/s)	meters/second (m/s)	X 3.281	= feet/second (ft./sec.)
feet/minute (ft./min.)	X 0.3048	= meter/minute (m/min)	meters/minute (m/min)	X 3.281	= feet/minute (ft./min.)
TEMPERATURE					
°Celsius = 0.556 (°F - 32)			°Fahrenheit = (1.8 X °C) +32		
COMMON METRIC PREFIXES					
mega	(M)	= 1,000,000 or 10 ⁶	deci	(d)	= 0.1 or 10 ⁻¹
kilo	(k)	= 1,000 or 10 ³	centi	(c)	= 0.01 or 10 ⁻²
hecto	(h)	= 100 or 10 ²	milli	(m)	= 0.001 or 10 ⁻³
deka	(da)	= 10 or 10 ¹	micro	(µ)	= 0.000.001 or 10 ⁻⁶