

# OPERATOR'S SAFETY AND SERVICE MANUAL



## GPR160

This manual covers the following serial numbers  
and higher for each model listed:

GPR160 ..... 1600001



## REVERSIBLE VIBRATORY PLATE

**MBW, Inc.**  
250 Hartford Rd • PO Box 440  
Slinger, WI 53086-0440  
Phone: (262) 644-5234  
Fax: (262) 644-5169  
Email: [mbw@mbw.com](mailto:mbw@mbw.com)  
Website: [www.mbw.com](http://www.mbw.com)

**MBW (UK) Ltd.**  
Units 2 & 3 Cochrane Street  
Bolton BL3 6BN, England  
Phone: 01204 387784  
Fax: 01204 387797

**MBW FRANCE S.A.R.L.**  
Z.A. d'Outreville  
11 rue Jean Baptiste Néron,  
60540 BORNEL  
FRANCE  
Phone: +33 (0) 3 44 07 15 96  
Fax: +33 (0) 3 44 07 41 28  
Email: [mbwfrance@free.fr](mailto:mbwfrance@free.fr)

L20325 / 01.12.B  
©MBW, Inc. 2011  
Printed in the USA

# DIESEL MODEL



**CAUTION**

Machine may fall and cause injury or damage if lifted improperly. All weights shown are with 6" wings. Lift only by lift hook.

GPR135H = 878 lbs (398 kg)    GPR160H = 906 lbs (411 kg)  
 GPR135DE = 940 lbs (426 kg)    GPR160DE = 985 lbs (447 kg)

#15853

**WARNING**

OPERATION OF THIS EQUIPMENT MAY CREATE SPARKS THAT CAN START FIRES AROUND DRY VEGETATION. A SPARK ARRESTER MAY BE REQUIRED. THE OPERATOR SHOULD CONTACT LOCAL FIRE AGENCIES FOR LAWS OR REGULATIONS RELATING TO FIRE PREVENTION.

#19791

HYDRAULIC OIL  
15844

#15844

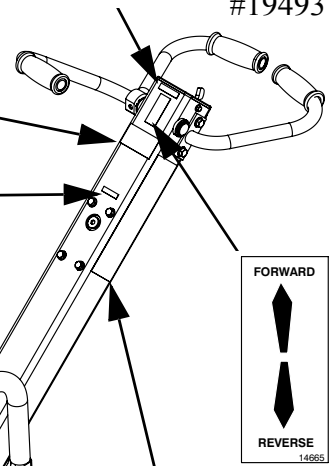
#19493

**GPR160**

#20324



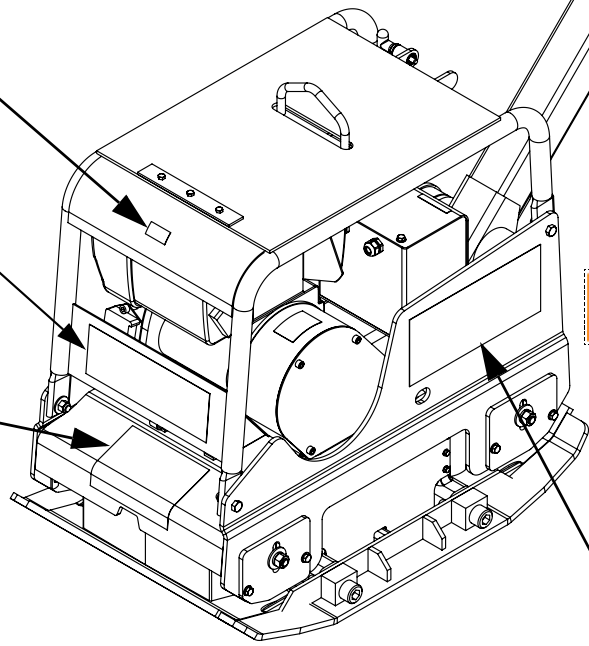
#15874



#14665

**REVERSIBLE**

#20323



**GPR160**

#20322

**WARNING**

ROTATING PARTS can crush and cut. Keep hands away!

#12573

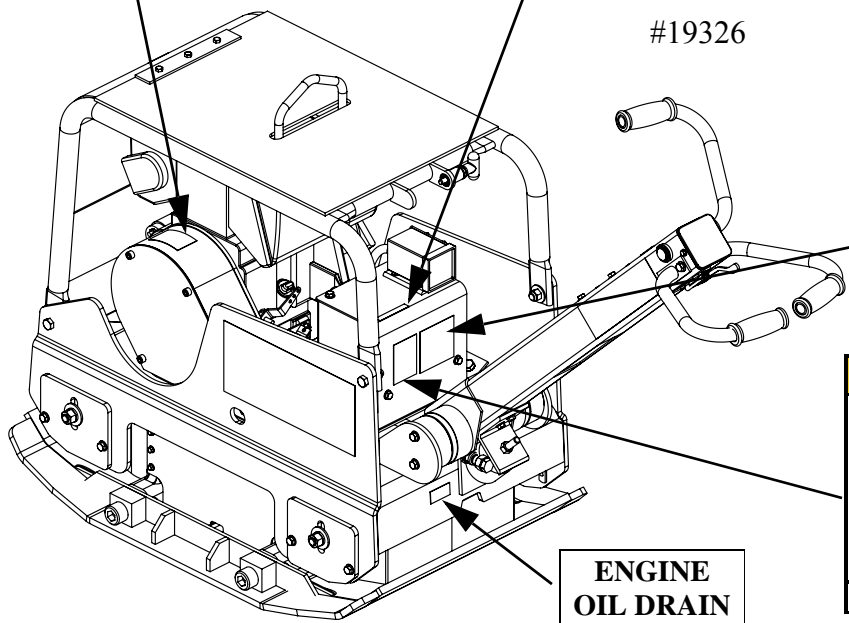
U.S. PATENT 7,165,469  
15826 HYDRAULIC PLATE

#19326

**DIESEL PLATE OPERATING INSTRUCTIONS**

1. Check engine oil level.
2. Check fuel level.
3. Set engine speed control in the middle position.
4. Move decompression lever (if equipped) to the up position. (Located on top of the engine)
5. Use key (if equipped) or starting handle to start engine (Refer to engine instruction book for proper "Manual Starting" procedure.)
6. After starting return engine speed control to the idle position and allow engine to reach operation temperature.
7. During operation run engine at full throttle, when excessive kickback is noticed maximum compaction has been reached.
8. To stop, return throttle to the idle position and allow engine to idle for one minute then move control to stop position.

#15832



ENGINE OIL DRAIN  
15845

#15845

**CAUTION**

Read the Operating Instructions before operating this piece of equipment.

Keep unauthorized and untrained people away from this equipment.

**ROTATING & MOVING PARTS!** Make sure all guards and safety devices are in place.

Wear approved hearing protection, foot protection, eye protection and head protection.

**SHUT OFF** the motor before servicing or cleaning.

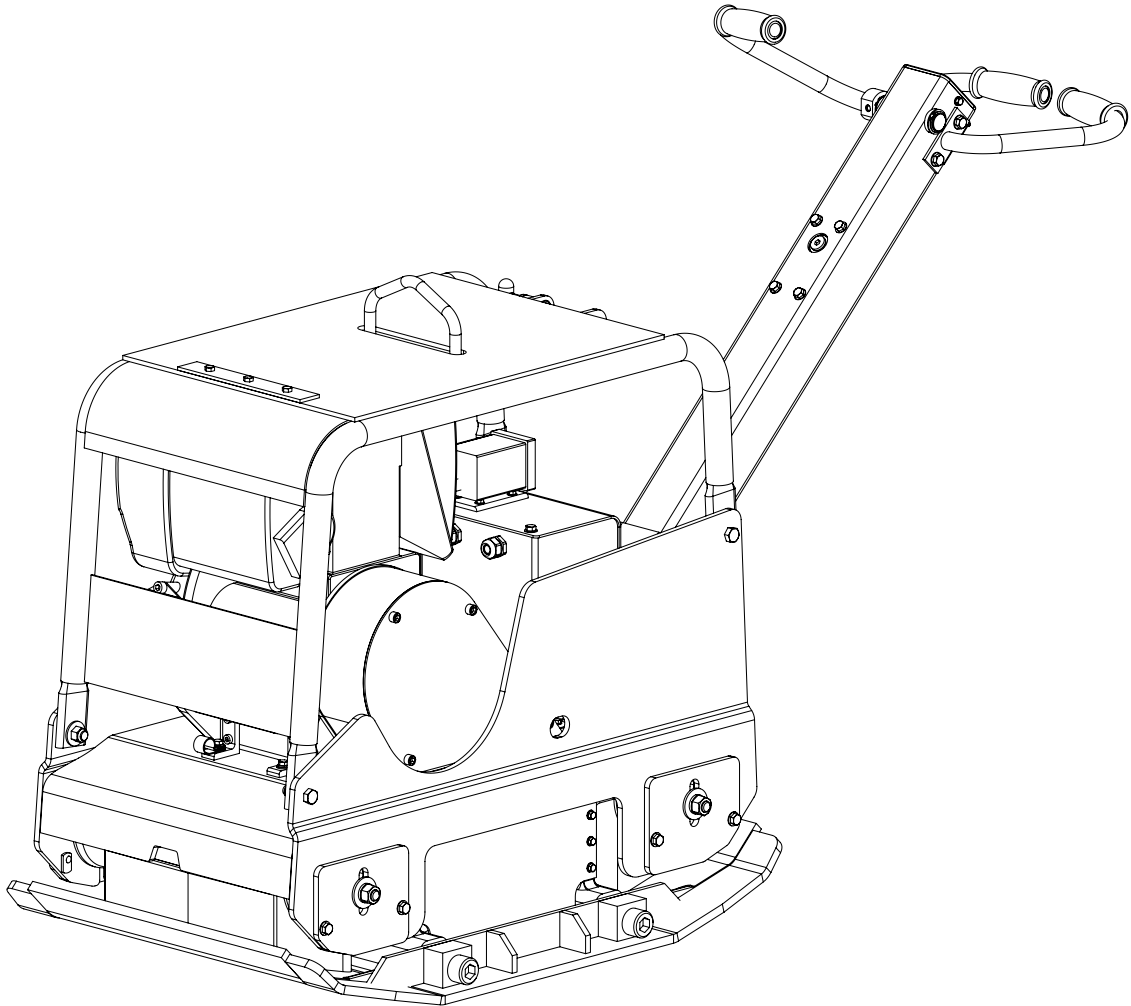
**DO NOT RUN** in an enclosed area. The engine produces carbon monoxide, a **POISONOUS GAS**.

Failure to comply could result in serious bodily injury.

#13483

Safety Decals (Decal Set #16031)

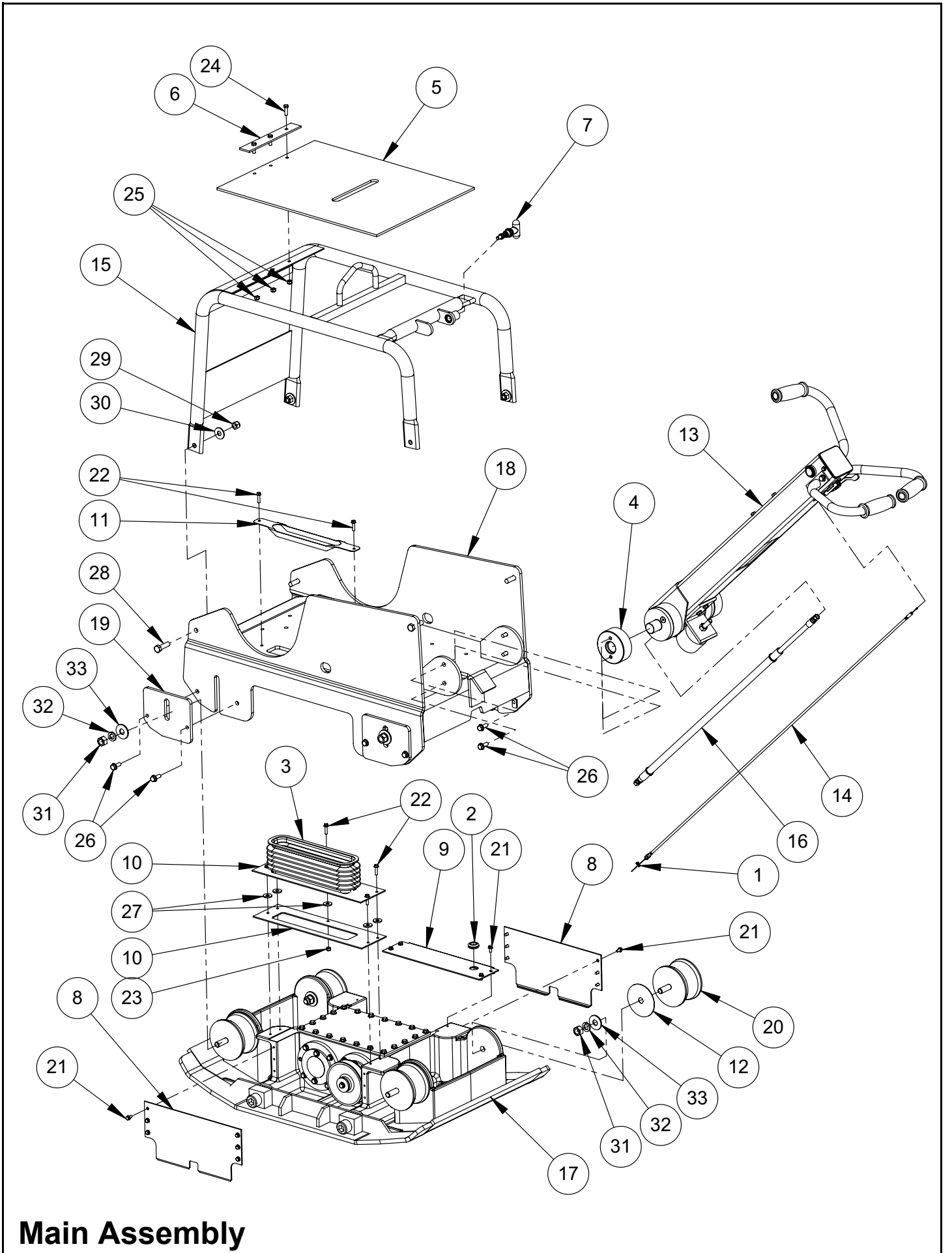
# SPECIFICATIONS



	<b>GPR160DE</b>	
<b>CENTRIFUGAL FORCE</b>	16000 LBF (71 kN)	
<b>EXCITER (VPM)</b>	3840 vpm	
<b>TRAVEL SPEED</b>	80 ft./min. (24 m/min.)	
<b>COMPACTION DEPTH</b>	28 in (71 cm)	
<b>WIDTH x LENGTH</b>	25.6 x 37.3 in. (65 x 95 cm)	
<b>OPERATING WEIGHT</b>	950 lb. (431 kg) 983 lb. (446 kg) 6" Wings	
<b>ENGINE</b>	Hatz 1B40 28.2 in. <sup>3</sup> (462 cm <sup>3</sup> )	
<b>FUEL</b>	Diesel	
<b>ENGINE SPEED</b>	3600 rpm	
<b>STARTER SYSTEM</b>	Electric Start with Recoil	
<b>OPTIONAL PLATE EXTENSIONS</b>	6 in. (15.2 cm)	

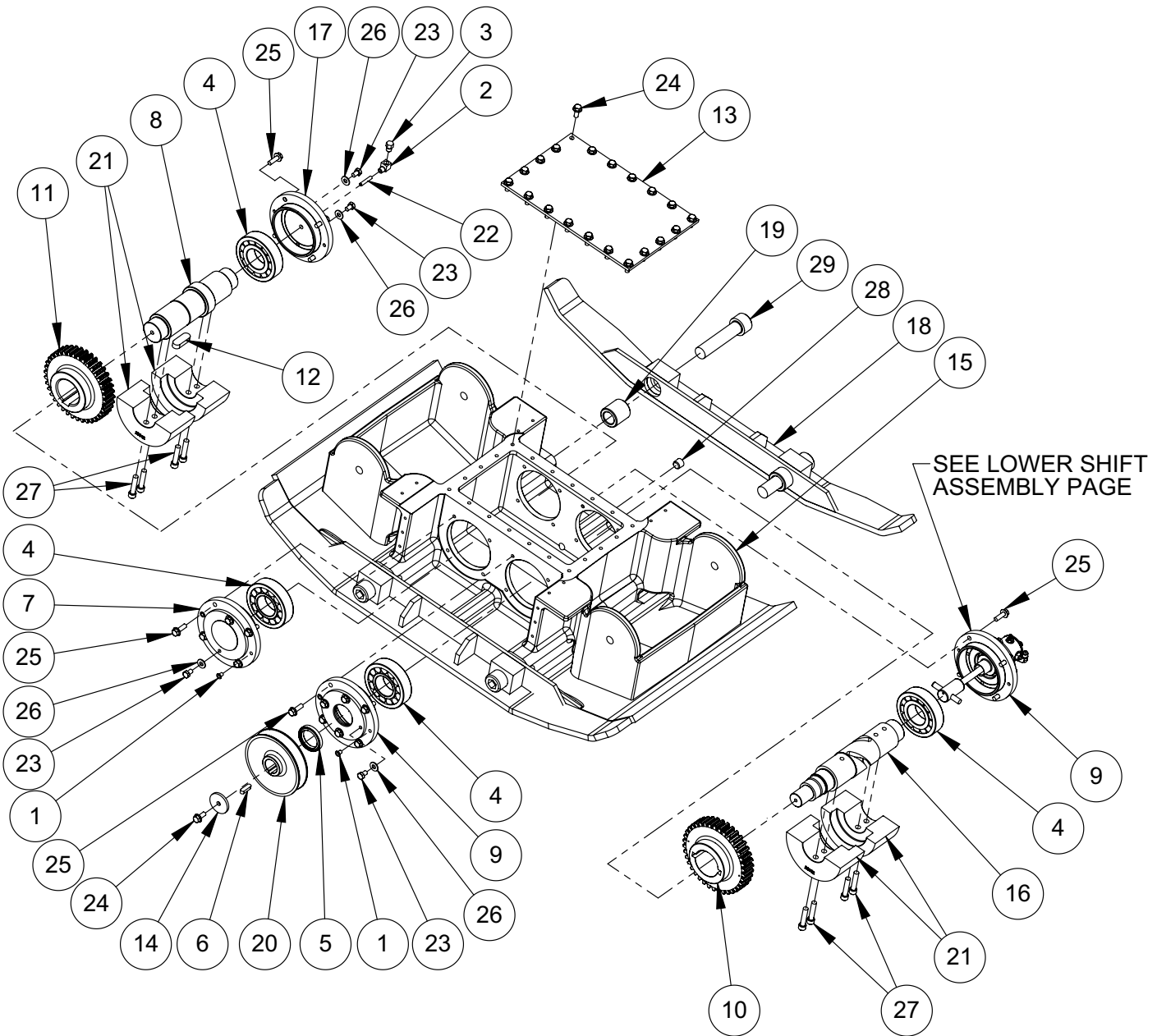
Specifications subject to change without notice

No universal method or formula has been accepted for determining "Compaction Force". All manufactures employ their own method or formula.



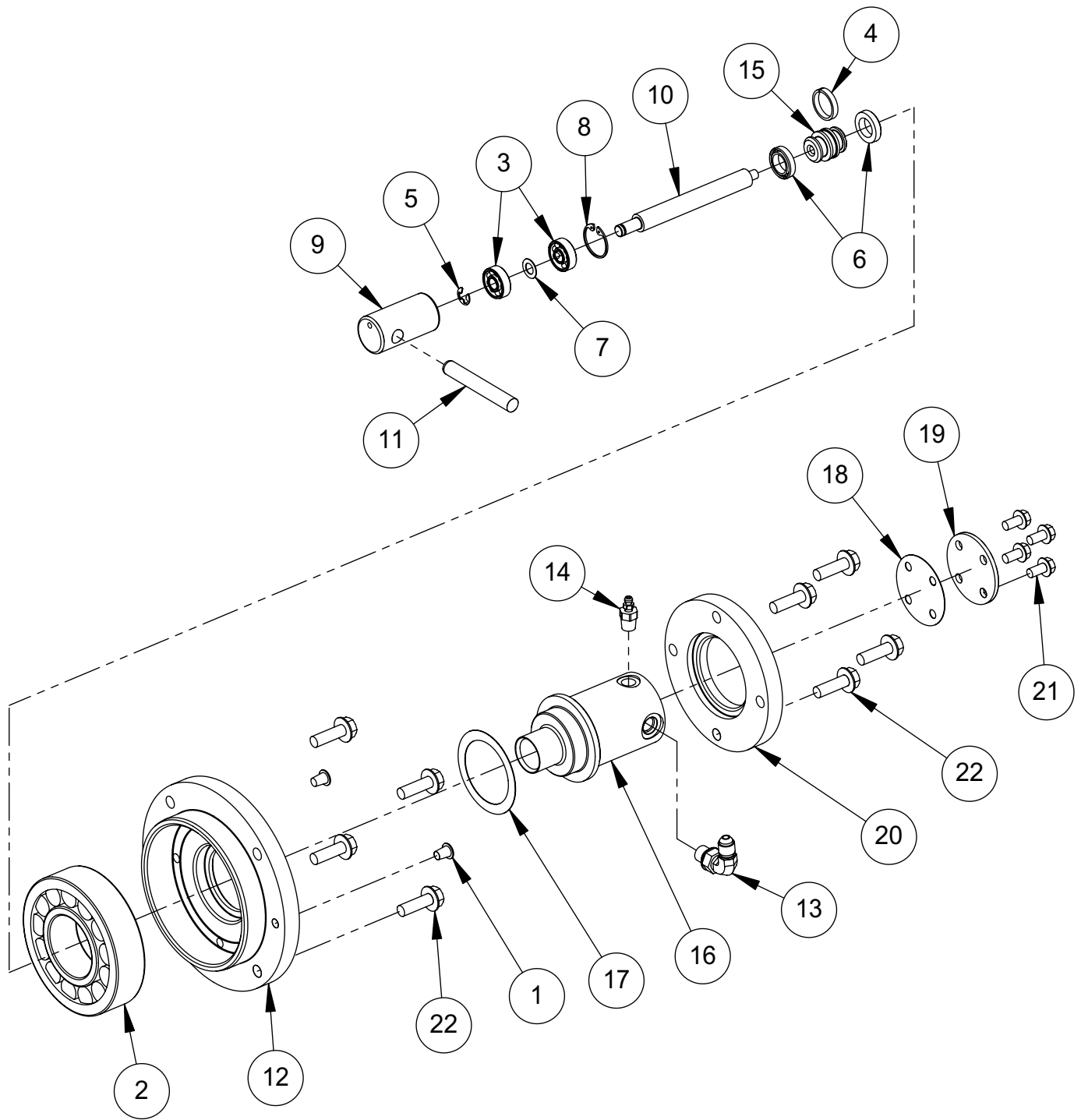
**Main Assembly**

ITEM	PART NO.	DESCRIPTION	160DE
1.	05477	SWIVEL, THROTTLE CABLE	
2.	10088	GROMMET	1
3.	16442	BELLOWS	1
4.	16543	HANDLE MOUNT	2
5.	16653	RUBBER MAT	1
6.	16654	MOUNTING PLATE, RUBBER MAT	1
7.	17340	POP-PIN	1
8.	17434	COVER, SIDE	2
9.	17435	GUARD, HYDRAULIC COVER	1
10.	17436	GUARD, BELLOWS MOUNT	2
11.	17462	RETAINER, BELLOWS	1
12.	17997	SHIM, SHOCKMOUNT (AS REQUIRED)	
13.	19445	HANDLE COMPLETE	1
14.	19479	THROTTLE CABLE	1
15.	19535	ROLLCAGE	1
16.	19790	HOSE, HYDRAULIC	1
17.	20311	BASE PLATE ASSEMBLY, GPR160	1
18.	20317	ENGINE DECK	1
19.	20319	PLATE MOUNT, ENGINE DECK	4
20.	20320	SHOCKMOUNT, GPR160	4
21.	F042004FWS	FWS, 1/4-20 x 1/2, ZP	16
22.	F042008FWS	FWS, 1/4-20 x 1.0, ZP	7
23.	F0420ELN	LOCKNUT, 1/4-20, NYLOC, ZP	1
24.	F051808HCS	HHCS, 5/16-18 x 1.0 GRD 5, ZP	3
25.	F0518ELN	LOCKNUT, 5/16-18, NYLOC, ZP	3
26.	F061608FWS	FWS, 3/8-16 x 1.0, ZP	12
27.	F06SW	WASHER, 25/64 x 1.0 x 1/4, ZP	5
28.	F081314HCS	HHCS, 1/2-13 x 1-3/4 GRD 5, ZP	4
29.	F0813ELN	LOCKNUT, 1/2-13, NYLOC, ZP	4
30.	F08SW	WASHER, 8/16 x 1-3/8 x 12 GA., ZP	4
31.	F1011HN	HEX NUT, 5/8-11, ZP	8
32.	F10LW	LOCKWASHER, 5/8, ZP	8
33.	F10SW	WASHER, 5/8 x 1-1/4 x 12 GA., ZP	8



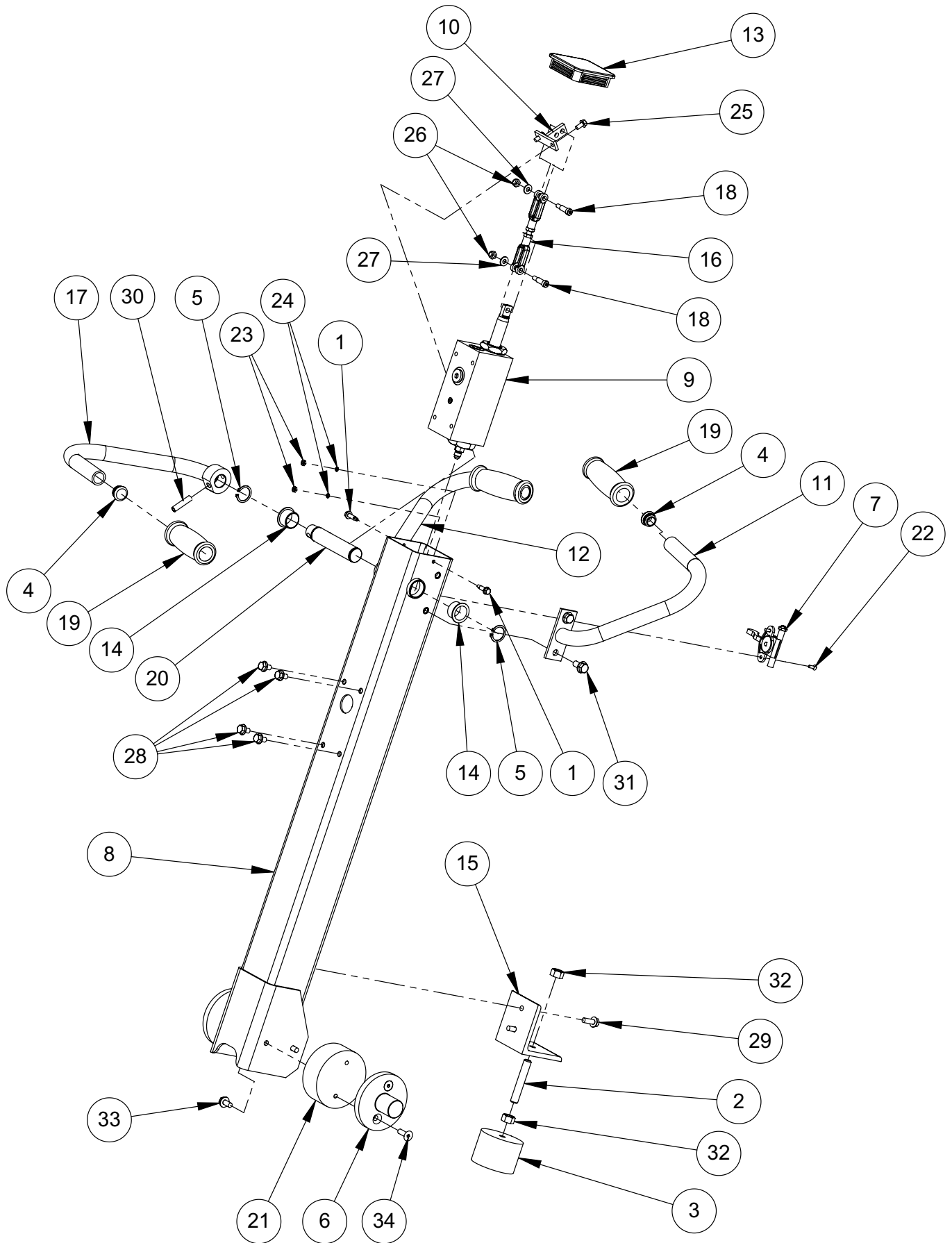
# Baseplate Assembly

ITEM	PART NO.	DESCRIPTION	
1.	05559	CAP PLUG	8
2.	09748	FITTING, PIPE, 90 DEGREE	1
3.	09749	PLUG, BREATHER	1
4.	16228	ROLLER BEARING, 100 x 45	4
5.	16232	SHAFT SEAL	1
6.	16259	KEY, METRIC, 8 x 7 x 28, ROUND ENDS	1
7.	16262	BEARING COVER, EXCITER	1
8.	16263	EXCITER SHAFT	1
9.	16264	BEARING COVER, EXCITER	2
10.	16265	IN-PUT GEAR	1
11.	16266	IDLER GEAR	1
12.	16321	KEY, METRIC, 16 x 10 x 45, ROUND ENDS	1
13.	16322	COVER PLATE, EXCITER	1
14.	16328	WASHER, 11/32 x 1-3/4 x 3/16, ZP	1
15.	16331	BASEPLATE, MACHINED	1
16.	16599	INPUT SHAFT	1
17.	17104	BEARING COVER, EXCITER, BREATHER	1
18.	17326	EXTENSION PLATE, 3" WING	2
19.	17335	BUSHING, EXTENSION PLATE	4
20.	17502	EXCITER PULLEY	1
21.	20312	EXCITER WEIGHT, (GPR160)	4
22.	F0410SP	SPIROL PIN, 1/4 x 1-1/4	1
23.	F051804HCS	HEX HEAD SCREW, 5/16-18 x 1/2, ZP	8
24.	F051806FWS	FLANGE HEAD SCREW, 5/16-18 x 3/4, ZP	21
25.	F051808FWS	FLANGE HEAD SCREW, 5/16-18 x 1.0, ZP	12
26.	F05BFW	BRASS FLAT WASHER, 5/16	8
27.	F061614SCS	SOCKET HEAD CAP SCREW, 3/8-16 x 1-13/4, GR 8	8
28.	F0618SPP	PIPE PLUG, 3/8-16 NPT	1
29.	F160816SCS	SOCKET HEAD CAP SCREW, -18 x 2.0, GR 8, ZP	4
	20311	BASEPLATE, COMPLETE, GPR160, (CONTAINS ITEMS ABOVE)	



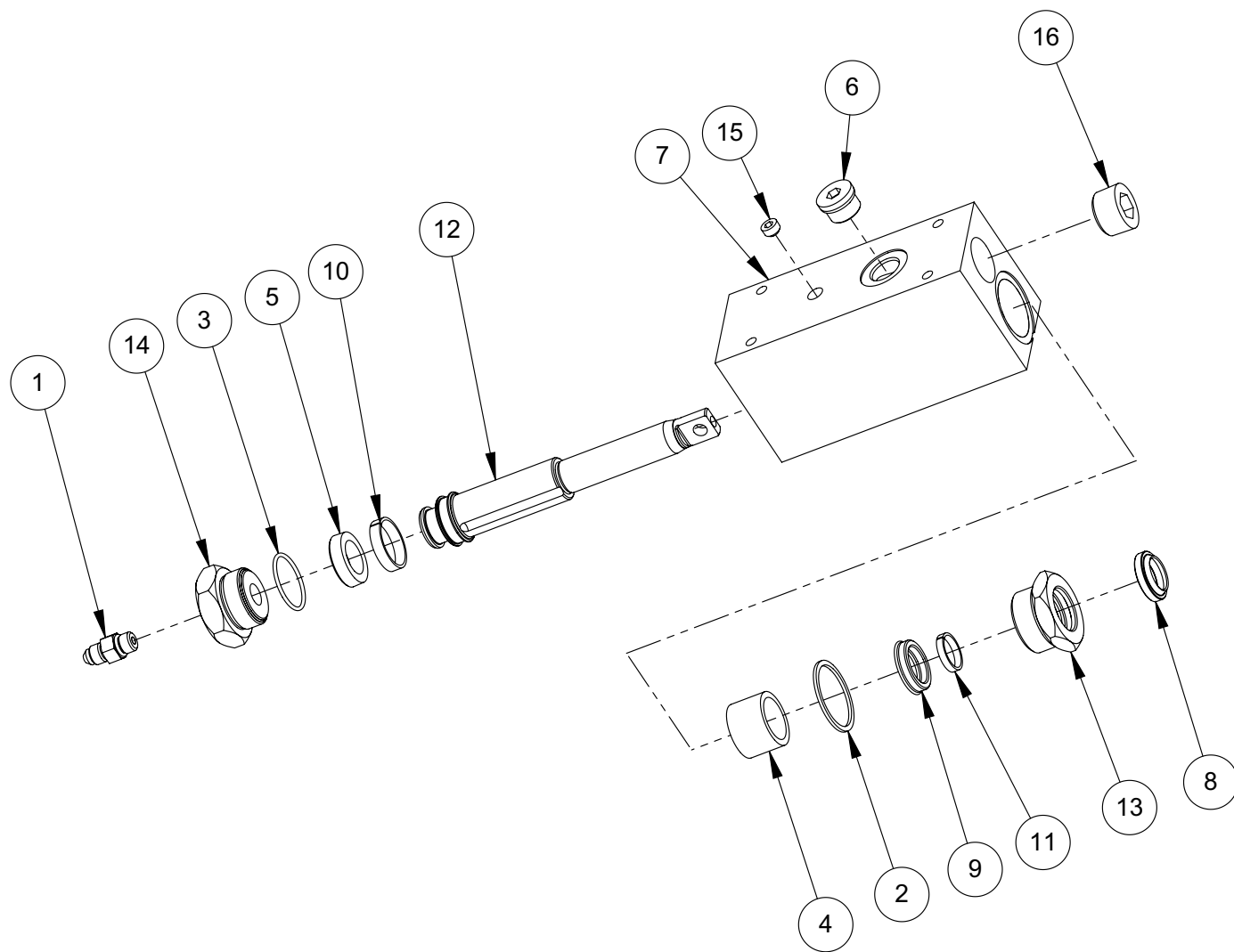
**Lower Shaft Assembly**





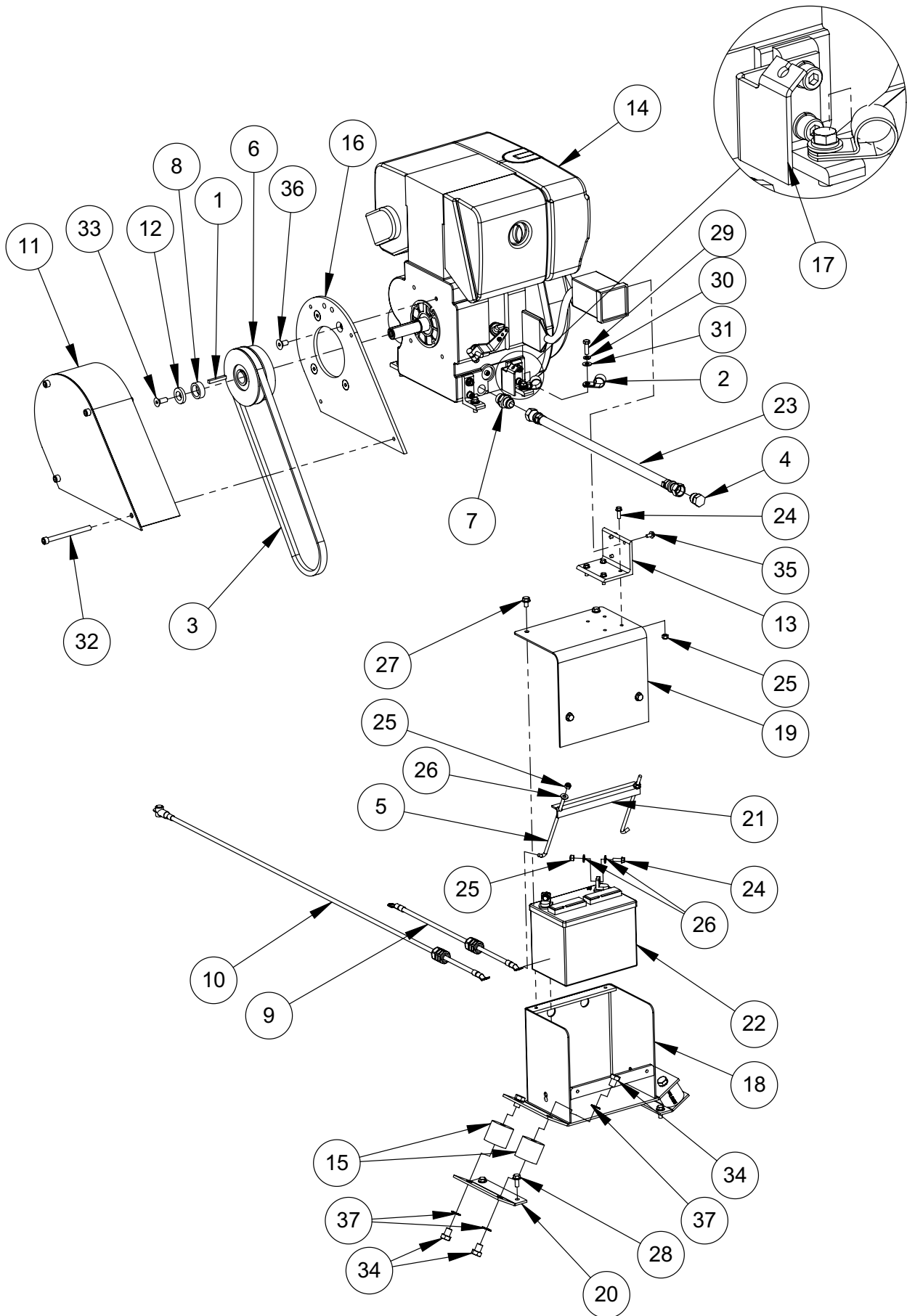
**Handle Assembly**

ITEM	PART NO.	DESCRIPTION	QTY
1.	11162	SCREW, 1/4 x 1.00, TEKS	2
2.	16410	THREADED ROD, 1/2-13 x 3.00, PLATED	1
3.	16493	HANDLE BUMPER	1
4.	17058	TUBE CAP, ROUND	3
5.	17177	RETAINING RING, EXTERNAL, 1.00	2
6.	17402	SPINDLE HANDLE MOUNT	2
7.	19268	THROTTLE LEVER	1
8.	19411	TUBE, HANDLE	1
9.	19412	HYDRAULIC CONTROL HEAD, COMPLETE	1
10.	19414	BRACKET, SHIFT HANDLE	1
11.	19415	HANDLE BAR, LEFT	1
12.	19416	HANDLE BAR, RIGHT	1
13.	19417	TUBE CAP, SQUARE, 3-1/2	1
14.	19418	PLAIN BEARING, 1.00 I.D.	2
15.	19419	BRACKET, BUMPER MOUNT	1
16.	19420	SHIFT LINKAGE ASSEMBLY	1
17.	19422	CONTROL HANDLE	1
18.	19442	SHOULDER BOLT, 5/16 x 3/4, 1/4-20	2
19.	19519	HANDLE GRIP, 1.00 I.D. x 4-1/2, FOAM	3
20.	19526	SHAFT, CONTROL	1
21.	19533	SHOCK MOUNT, HANDLE	2
22.	F023204FSS	FLAT SOCKET HEAD SREW, #8-32 x 1/2, PLATED	2
23.	F0232HN	HEX NUT, #8-32, PLATED	2
24.	F02LW	LOCKWASHER, #8, PLATED	2
25.	F042004FWS	FLANGE LOCK SCREW, 1/4-20 x 1/2, PLATED	2
26.	F0420ELN	LOCK NUT, 1/4-20, PLATED	2
27.	F04PW	WASER, 1/4, PLATED	2
28.	F051804FWS	FLANGE LOCK SCREW, 5/16-18 x 1/2, PLATED	4
29.	F051807FWS	FLANGE LOCK SCREW, 5/16-18 x 7/8, PLATED	2
30.	F0612SP	SPIROL PIN,	1
31.	F061606FWS	FLANGE LOCK SCREW, 3/8-16 x 3/4, PLATED	4
32.	F0813HN	HEX NUT, 1/2-13, PLATED	2
33.	M08C016FWS	FLANGE LOCK SCREW, M8 x 16, PLATED	4
34.	M08C025FSS	FLAT SOCKET HEAD SCREW, M8 x 25, PLATED	4



# Control Head Assembly





## Diesel Engine Assembly

ITEM	PART NO.	DESCRIPTION	QTY
1.	00808	SQUARE KEY, 1/4 x 1-3/4	1
2.	01428	CABLE CLAMP, BATTERY	2
3.	08511	V-BELT, B-45	1
4.	16523	FITTING, PLUG, HYDRAULIC	1
5.	16556	J-BOLT, 1/4-20 x 6-1/2	2
6.	16576	CLUTCH	1
7.	16578	FITTING, ADAPTER, HYDRAULIC	1
8.	16580	SPACER, CLUTCH	1
9.	16600	BATTERY CABLE, BLACK, 4 GA. x 19"	1
10.	16604	BATTERY CABLE, RED, 4 GA. x 48"	1
11.	16621	BELT GUARD	1
12.	16665	WASHER MOUNT	1
13.	16969	MOUNTING BRACKET, IGNITION BOX	1
14.	17144	ENGINE, HATZ DIESEL, 1B40	1
15.	17170	SHOCK MOUNT,	4
16.	17468	MOUNT, BELT GUARD	1
17.	19483	BRACKET, THROTTLE, ENGINE	1
18.	19540	BATTERY BOX	1
19.	19545	COVER, BATTERY BOX	1
20.	19547	MOUNT, BATTERY BOX	2
21.	19549	BRACKET, BATTERY HOLD-DOWN	1
22.	19551	BATTERY, 12 VOLT, SIZE-U1, 300CCA	1
23.	19624	HYDRAULIC HOSE, OIL DRAIN, 1/2 x 22	1
24.	F042006FWS	FWS, 1/4-20 x 1, ZP	6
25.	F0420ELN	LOCKNUT, 1/4-20, NYLOC	8
26.	F04PW	WASHER, 1/4, ZP	6
27.	F051804FWS	FWS, 5/16-18 x 1/2, ZP	4
28.	F051806FWS	FWS, 5/16-18 x 3/4, ZP	4
29.	F051808HCS	HCS, 5/16-18 x 1, GR. 5, ZP	4
30.	F05LW	LOCKWASHER, 5/16, ZP	4
31.	F05SW	WASHER, 5/16, ZP	4
32.	F061636SCS	SCS, 3/8-161 x 4-1/2 GR. 8, ZP	4
33.	F062408FSS	FSS, 3/8-24 x 1, ZP	1
34.	F081305HCS	HHCS, 1/2-13 x 5/8, GR. 5, ZP	8
35.	M06C012FWS	FWS, M6 x 1.0 x 12, ZP	3
36.	M10C020FSS	FSS, M10 x 1.5 x 20. ZP	4
37.	M12ETLW	LOCKWASHER, M12, EXTERNAL TOOTH	8
	H50484100	AIR FILTER, HATZ DIESEL 1B40 (Not Shown)	
	H01635210	FUEL FILTER (INSIDE TANK) HATZ DIESEL	
	H50404900	KEY, STARTER, HATZ	
	17751	CONTROL BOX, HATZ	