

VIBRATORY PLATE COMPACTOR
P2000 and P5000
PARTS MANUAL

**ARROW-MASTER
INCORPORATED**



ARROW-MASTER, INCORPORATED

1201 Seventh Street • East Moline, IL 61244

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INTRODUCTION

GENERAL

The ARROW MASTER Model P2000 and P5000 Vibratory Plate Compactors are similar in design and construction and alike in principle. Both models employ a single eccentric. On the Model P2000 the eccentric is center mounted and on the Model P5000 the eccentric is mounted inside the forward part of the machine. Additional performance and size differences between the two compactors are tabulated in Table 1 - Specifications.

The Model P2000 compactor is designed to compact asphalt and general purpose fill. The Model P5000 compactor is designed to compact select fill and granular material.

DESCRIPTION

These compactors (see Figure 1) are designed to isolate the vibration within the lower plate area. The operators handle is connected to the lower plate assembly through shock absorbing mounts located at the center of the machine which results in less operator fatigue. Vibration waste in the engine base assembly is reduced through the roll bar design.

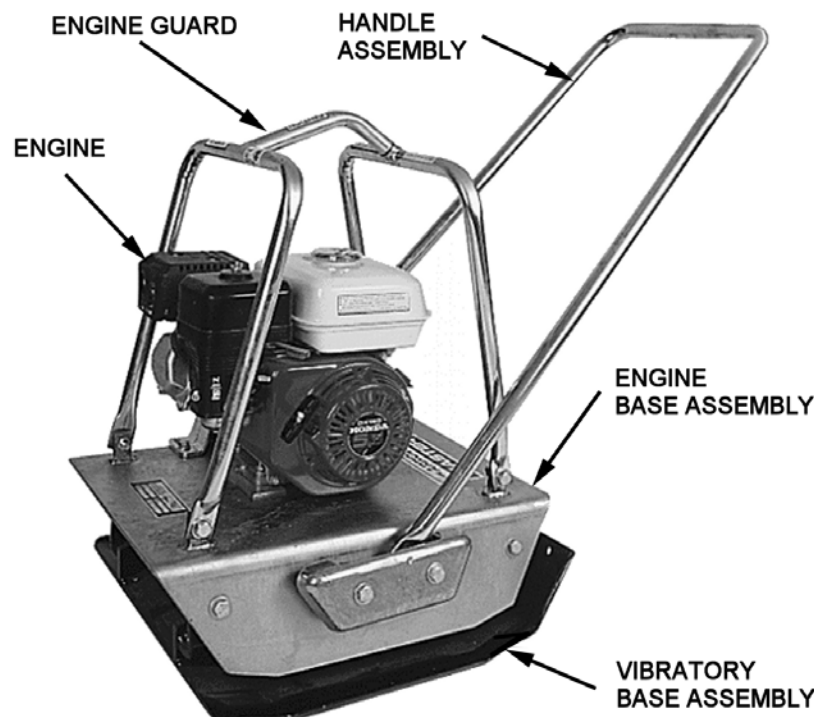
The roll bar configuration completely protects all working parts, engine, fuel tank, and air filter. In addition, this design places the air filter above the dust concentration level. Additionally, these machines feature a self-cleaning

lower plate, retractable starter - backed-up by a sheave mount for rope starting. A multi-force throttle adjustment is also included to adapt the machine to soil conditions.

The engine base is fabricated from heavy sheet steel to which the roll bar is bolted and provides the platform to mount the engine. Resilient mounts connect the engine base to the compactor base which contacts the surface to be worked. An eccentric weight shaft supported by a heavy duty roller bearing at each end is totally enclosed inside the weight tube compartment of the compactor base. The pulley attached to the weight shaft is driven by a V-belt through a centrifugal clutch keyed onto the engine shaft. A belt guard encloses the belt area.

The centrifugal clutch disengages at idle speed and will engage to drive the eccentric weight shaft when the throttle lever is advanced into the compaction force range. As the weight shaft rotates, it transmits a high speed vibratory motion to the base compacting the area under the base. As the surface becomes more firm, the vibratory action will cause the unit to walk forward as it performs its compacting function.

A water tank and piping is available for the P2000. A wheel cart for transporting the compactor is available as an accessory for either model.



PARTS

GENERAL

For your convenience, distributors have been established throughout the country. These distributors carry a supply of parts and all requests for parts should be placed with them. If some particular part is not available the distributor can obtain it promptly from the factory.

Order engine parts from the nearest engine service station. Refer to your engine instruction and parts book for the engine manufacturer's service station nearest you.

When ordering parts, it is absolutely necessary that the following information be furnished:

- A. The model number, specification number, and serial numbers found on the unit nameplate (not engine nameplate).
- B. Quantity.
- C. Part name and number. (Use part numbers from the parts listings. Do Not refer to the key numbers.)

The Illustrated Parts List contains a complete listing of replaceable parts for the models covered in this manual.

ILLUSTRATED PARTS LIST

The Illustrated Parts List contains a breakdown of the equipment into its assemblies, subassemblies and detail parts. Each assembly is followed by its component parts, indented to show their relationship to the assembly.

SERVICE AND REPLACEMENT PARTS

For normal servicing of your Models P2000 or P5000 VIBRATORY PLATE COMPACTOR contact your dealer. Replacement parts are generally available from your dealer.

Where local service is not available, replacement parts may be obtained directly from the factory. Please specify the part number, description, and model number as shown in the Illustrated Parts Section. Include the serial number of your compactor. Do not use key numbers.

Where factory service is required, please send inquiries on service and parts to:

ARROW-MASTER INCORPORATED

1201 7TH STREET

EAST MOLINE, IL 61244

phone: 309-752-1341

e-mail: ps@arrowmaster.com

website: www.arrowmaster.com

DO NOT USE KEY NUMBERS WHEN ORDERING SERVICE PARTS. ALWAYS ORDER COMPONENTS BY PART NUMBER AND DESCRIPTION. INCLUDE MODEL AND SERIAL NUMBER.

Figure 6
GENERAL ASSEMBLY (1994 - ...)

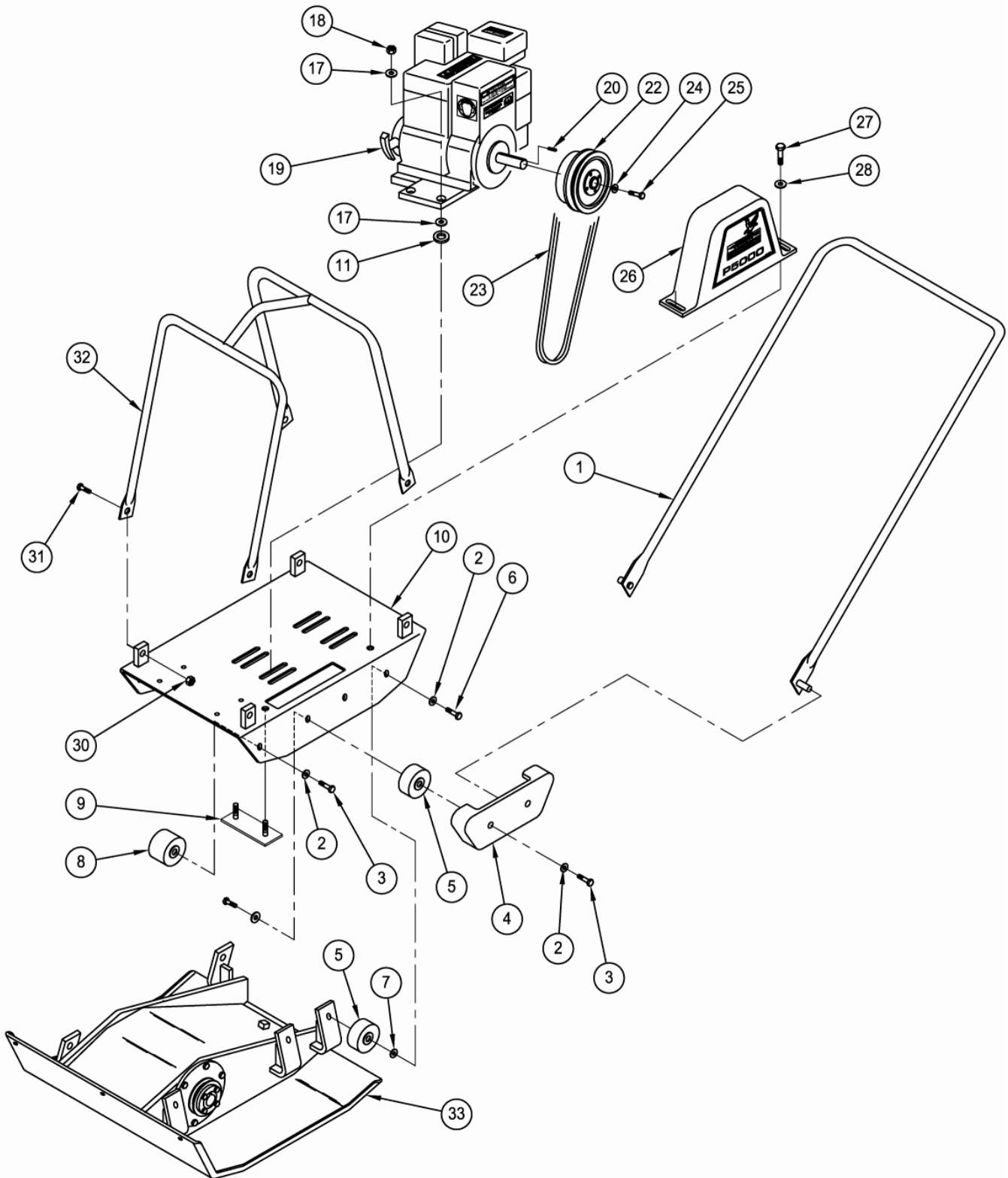


Figure 5-6 GENERAL ASSEMBLY (1994 - . . .)

ITEM	PART NO.	DESCRIPTION	QTY
1	M48354	Handle Assy.	1
2	WP-8C	1/2" Flat Washer (P2000)	12
3	H5C8-6C	1/2-13 X 3/4" Hex Hd. Screw	17
4	M23042	Handle Mount	2
5	M17885	Shock Isolator	5
6	H5C8-8C	1/2-13 X 1" Screw	1
7	WF-8C	1/2" Flatwasher	2
8	M22583	Shock Isolator (P2000)	3
	M22583	Shock Isolator (P5000)	4
9	M45865	Bar & Screw Assy.	2
10	M46129-01	Engine Base Weldment P2000	1
	M46129-02	Engine Base Weldment P5000	1
11	805433	Washer	4
12	1000416-15	Throttle Wire	1
13	1000417-24	Throttle Wire Housing	1
14	NEF-3C	10-32 Esna Nut	2
15	M8838	Throttle Control	1
16	RF3-12C	10-32 X 1-1/2" Rd. Hd. Screw	2
	WP-3C	10-32 Flat Washer	2
17	WP-5C	5/16" Flat Washer	4
18	NTC-5Z	5/16-18 Torque Nut	4
19	M32678	Robin Gasoline Engine	1
	M33008	Honda Engine	1
	M48199	Kohler Engine (1994 -)	1
	M46547	Briggs & Stratton Engine	1
	M48636	Kawasaki Engine	1
20	K3-12	3/16 X 1-1/2" Square Key	1
21			
22	M48769	Centrifugal Clutch	1
	M48769-30	Clutch Springs	2
23	M46858	V Belt	1
24	805433	Special Washer (Honda, B&S, Kohler, Kawasaki)	1
	805433-3	Special Washer (Robin)	1
25	H8F5-8C	5/16-24 X 1" Hex Hd. Screw	
		(Honda, B&S, Kohler, Kawasaki)	1
	H8F6-8C	3/8-24 X 1" Hex Hd. Screw (Robin)	1
26	M45856	Belt Guard	1
27	H5C6-8C	3/8-16 X 1" Hex Hd. Screw	4
28	WF-6C	3/8" Flat Washer	4
30	NEC-8C	1/2-13 Esna Nut	4
31	H5C8-16C	1/2-13 X 2" Hex Hd. Screw	4
32	M22267-02	Engine Guard	1
33	Base Assembly (See Figure 8 & 9)	1

Figure 6
BASE PLATE ASSEMBLY - P2000

ITEM	PART NO.	DESCRIPTION	QTY
	M46027-01	Base Plate Assembly	1
1	M25868-1	Base Plate Weldment	1
2	M46557	Weight Shaft Assembly (Includes #4)	1
3	KW606	3/16" X 3/4" Woodruff Key	1
4	M6952	Bearing Cone	2
5	M48583	Magnetic Pipe Plug	1
6	M46556	Open Weight Cap Assembly (Includes # 9)	1
7	WS-5C	5/16" Structural Washer	12
8	SHC5-8C	5/16"-18 X 1" Screw	12
9	M22599	Oil Seal	1
10	M22291	Pulley	1
11	M18000	Bushing & Screws	1
12	M46555	Closed Weight Cap Assembly	1
13	M22602-1	0.005 Blue Gasket	A/R
	M22602-2	0.010 Brown Gasket	A/R
	M22602-3	0.020 Yellow Gasket	A/R
	M22602-4	0.002 Red Gasket	A/R

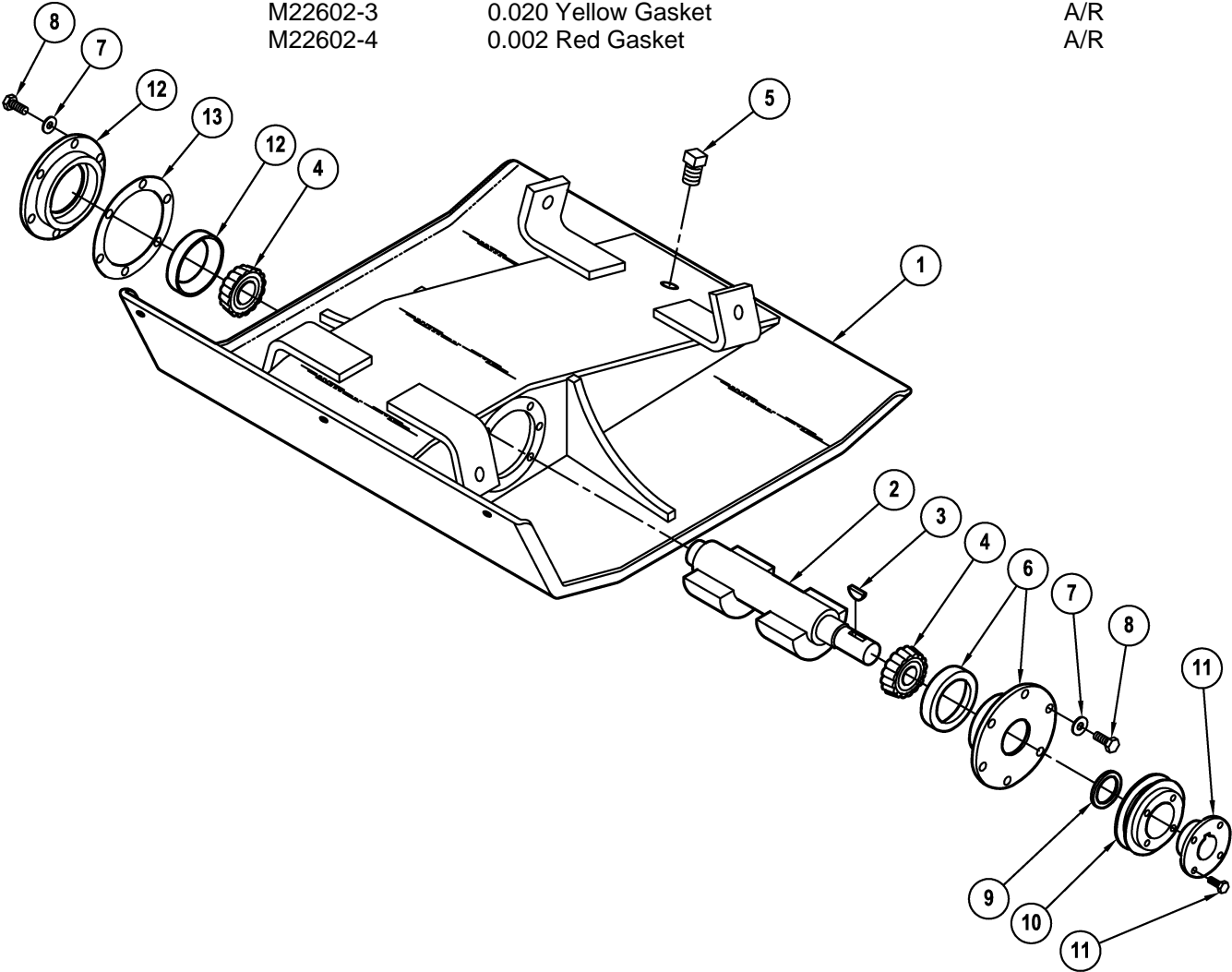


Figure 7
BASE PLATE ASSEMBLY - P5000

ITEM	PART NO.	DESCRIPTION	QTY
	M46027-02	Base Plate Assembly	1
1	M48583	Magnetic Pipe Plug	1
2	M19614	Bushing & Screws	1
3	M22748	Pulley	1
4	SHC5-8	5/16"-18 X 1" Screw	12
5	WS-5C	5/16" Structural Washer	12
6	M22262	Oil Seal	1
7	M46559	Open Weight Cap Assembly (Included #6)	1
8	M46558	Closed Weight Cap Assembly	1
9	M22369-1	0.005 Blue Gasket	A/R
	M22369-2	0.010 Brown Gasket	A/R
	M22369-4	0.002 Red Gasket	A/R
10	M31467-01	Base Plate Weldment	1
11	M9201	Bearing Cone	2
12	KW807	1/4" X 7/8" Woodruff Key	1
13	M46560	Weight Shaft Assembly (Includes #11)	1

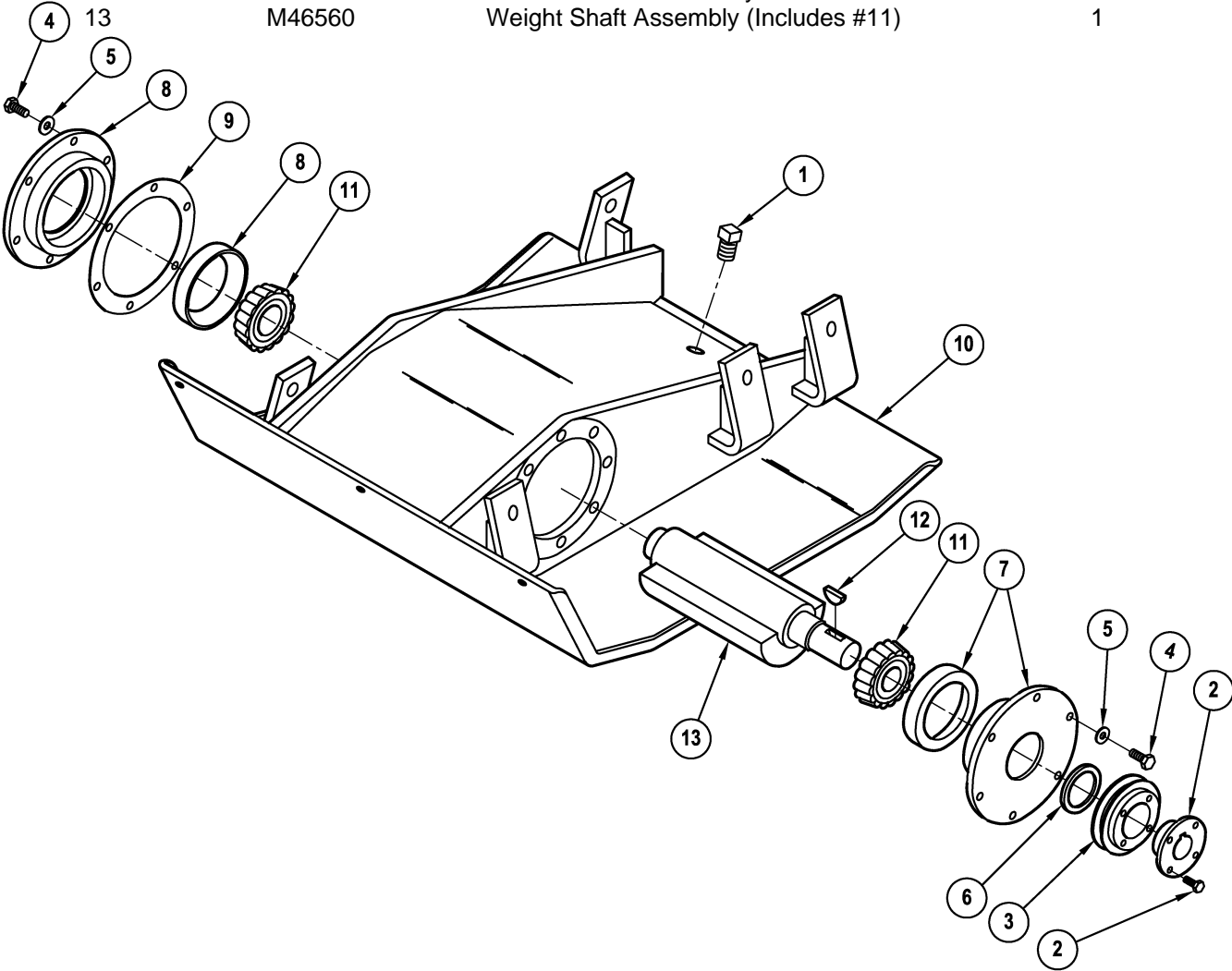
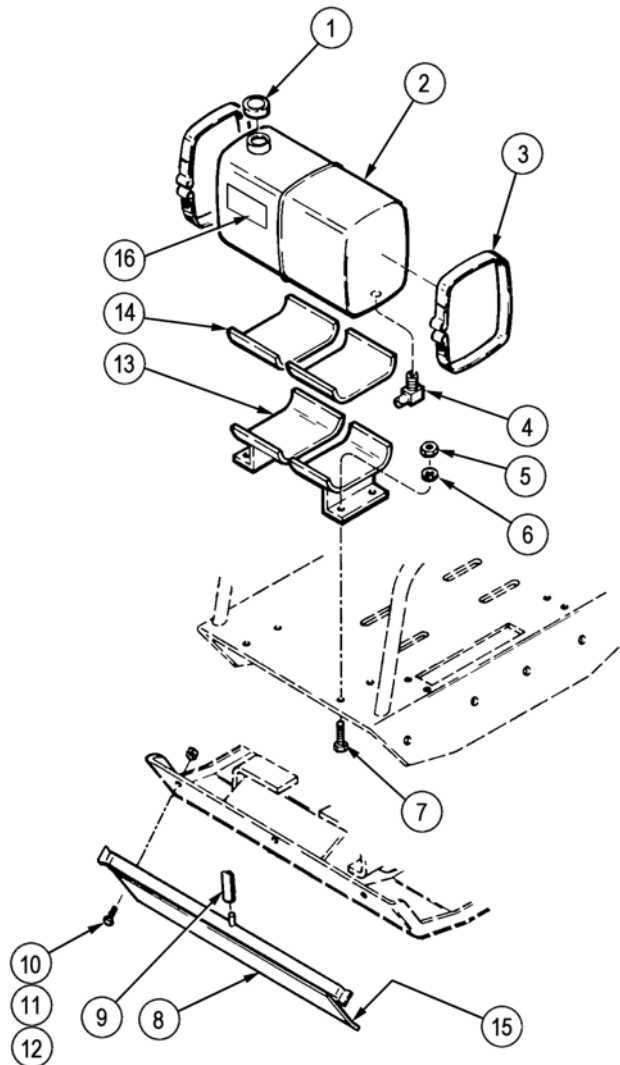


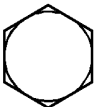
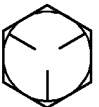
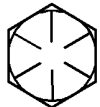
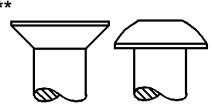
Figure 8
WATER TANK KIT ASSEMBLY - Option
(M46028-01 Ref.)

ITEM	PART NO.	DESCRIPTION	QTY
1	M11151	Water Tank Cap	1
2	M22750	Water Tank	1
3	M22653	Clamp	2
4	M24205	Water Valve	1
5	NEC-5C	5/16"-18 Lock Nut	4
6	WP-5C	5/16" Washer	4
7	H5C5-6C	5/16"-18 X 3/4" Hex Hd. Screw	4
8	M45859	Water Tube Assy.	1
9	M14929-3	8" Water Hose	1
10	HFC6-10C	3/8"-16 X 1-1/4" Hex Hd. Screw	2
11	NTC-6C	3/8"-16 Lock Nut	2
12	WS-6C	3/8" Washer	2
13	M22652-1	Tank Support Assy.	1
14	M22752	Pad	2
15	M45852	Foam Water Tube Gasket (Fits inside item #8)	1
16	M22751	Decal, Water Only	1



Bolt and Cap Screw Torque Specifications

Table 4 - Bolt and Cap Screw Torque Specifications

MATERIAL SPEC AND MARKING	Hex Head Bolts & Hex Head Cap Screws						Socket Head Cap Screws						
	SAE Grade 2 ASTM A307 (No Mark)			Grade 5* ASTM A449				Grade 8* ASTM A354				Grade 8	

* Manufacturer's marks may vary

** For Flat and Button Head Socket Cap Screws, use Grade 5 minimum recommended torque values.

Size (inches)	Grade 2 Recommended Torque ***				Grade 5 Recommended Torque ***				Grade 8 Recommended Torque ***			
	lb-ft		N•m		lb-ft		N•m		lb-ft		N•m	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
1/4	5	6	6.8	8.1	9	11	12.3	14.9	12	15	16.3	20.3
5/16	10	12	13.6	16.3	17	21	23.1	28.5	24	29	32.5	39.3
3/8	20	23	27	31	35	42	48	57	45	54	61	73
7/16	30	35	41	47	54	64	73	87	70	85	95	115
1/2	45	52	61	70	80	96	108	130	110	125	149	170
9/16	65	75	88	102	110	125	149	170	160	175	217	237
5/8	95	105	129	142	150	175	203	237	220	245	298	332
3/4	150	185	203	251	270	300	366	407	380	425	515	576
7/8	160	200	217	271	400	450	542	610	600	660	814	895
1	250	300	339	406	580	680	786	922	900	990	1220	1342
1-1/8					800	880	1085	1193	1280	1440	1736	1953
1-1/4					1120	1240	1519	1681	1820	2000	2468	2712
1-3/8					1460	1635	1980	2217	2380	2720	3227	3688
1-1/2					1940	2180	2631	2956	3160	3560	4285	4827

*** Use minimum recommended torque value when threads are coated with lubricant, such as engine oil, or fasteners with phosphate and oil coatings. Use maximum recommended torque value for dry fasteners or zinc plated fasteners without any lubricant.

- NOTES:
1. This specification is intended to be a general guideline for coarse threaded hardware in ferrous materials (steel, Cast-iron).
 2. Thread engagements in non-ferrous materials (aluminum, brass, plastic, etc.) may not be adequate to allow torque specified above.
 3. Where a particular application gives specific torque values, use them in lieu of those given above.

**CALIFORNIA PROPOSITION 65 WARNING:
Operation of this equipment and/or engine
Exhaust from this product contains chemicals
Known to the State of California to cause cancer,
Birth defects, or other reproductive harm.**

