

Mi-T-M[®] CORPORATION

8650 Enterprise Drive, Peosta IA 52068-0050
(319) 556-7484 / Fax 319-556-1235

PARTS LIST FOR JCW-4004-OMVB

ENGINE OIL GRADE:

Above 40°F = SAE 30

ENGINE OIL CAPACITY:

Below 40°F = SAE 10W-30

48 oz. w/o Filter

56 oz. w/Filter

PUMP OIL GRADE:

Mi-T-M #AW-4085-0016

PUMP OIL CAPACITY:

16 oz.

PRESSURE NOZZLE:

4.0

This Parts Listing has been compiled for your benefit. You can be assured your Mi-T-M pressure washer was constructed and designed with quality and performance in mind using over 25 years experience in the pressure washer business. Each component has been rigorously tested to insure the highest level of acceptance.

The contents of this Parts Listing are based on the latest product information available at the time of publication. Mi-T-M reserves the right to make changes in price, color, materials, equipment, specifications or models at any time without notice.

WARNING

THIS IS A PROFESSIONAL HIGH PRESSURE, PRESSURE WASHER. CAUTION SHOULD BE OBSERVED WHEN USING OR REPAIRING THIS UNIT! READ AND FOLLOW THE SAFETY WARNINGS LISTED BELOW BEFORE ATTEMPTING ANY REPAIRS ON THIS PRESSURE WASHER!

SAFETY WARNINGS

- 1. NEVER alter or modify the equipment. Be sure any accessory items and system components being used will withstand the pressure developed. Use only genuine Mi-T-M parts for repair of your pressure washer. Failure to do so can cause hazardous operating conditions and will VOID warranty.
- 2. NEVER make adjustments on machinery while the unit is connected to the engine without first removing the ignition cables from the spark plugs. Turning over the machinery by hand during adjustment or cleaning might start the engine and machinery with it, causing serious injury to the operator.
- 3. Know how to stop and bleed pressures quickly. Be thoroughly familiar with controls.
- 4. Before servicing the unit, turn unit off, relieve the water pressure and allow the unit to cool down. Do not make repairs while the unit is running. Service in a clean, dry, flat area. Block the wheels to prevent the unit from moving. Be especially careful to properly dispose of any flammable materials.
- 5. After testing the machine, DO NOT leave the pressurized unit unattended. Shut off the unit and release trapped pressure before leaving.

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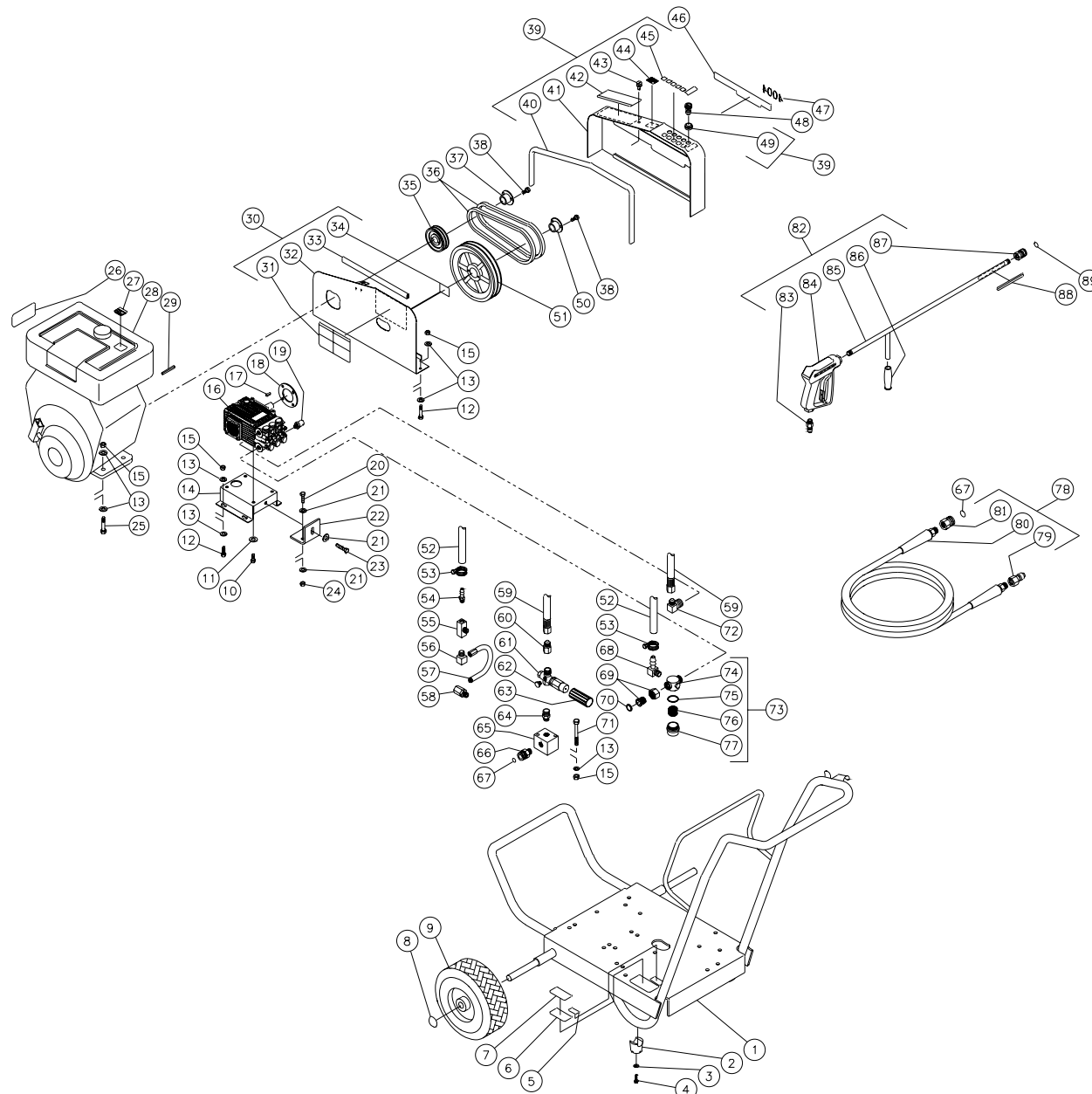
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SPECIFICATIONS

JCW-4004-0MVB

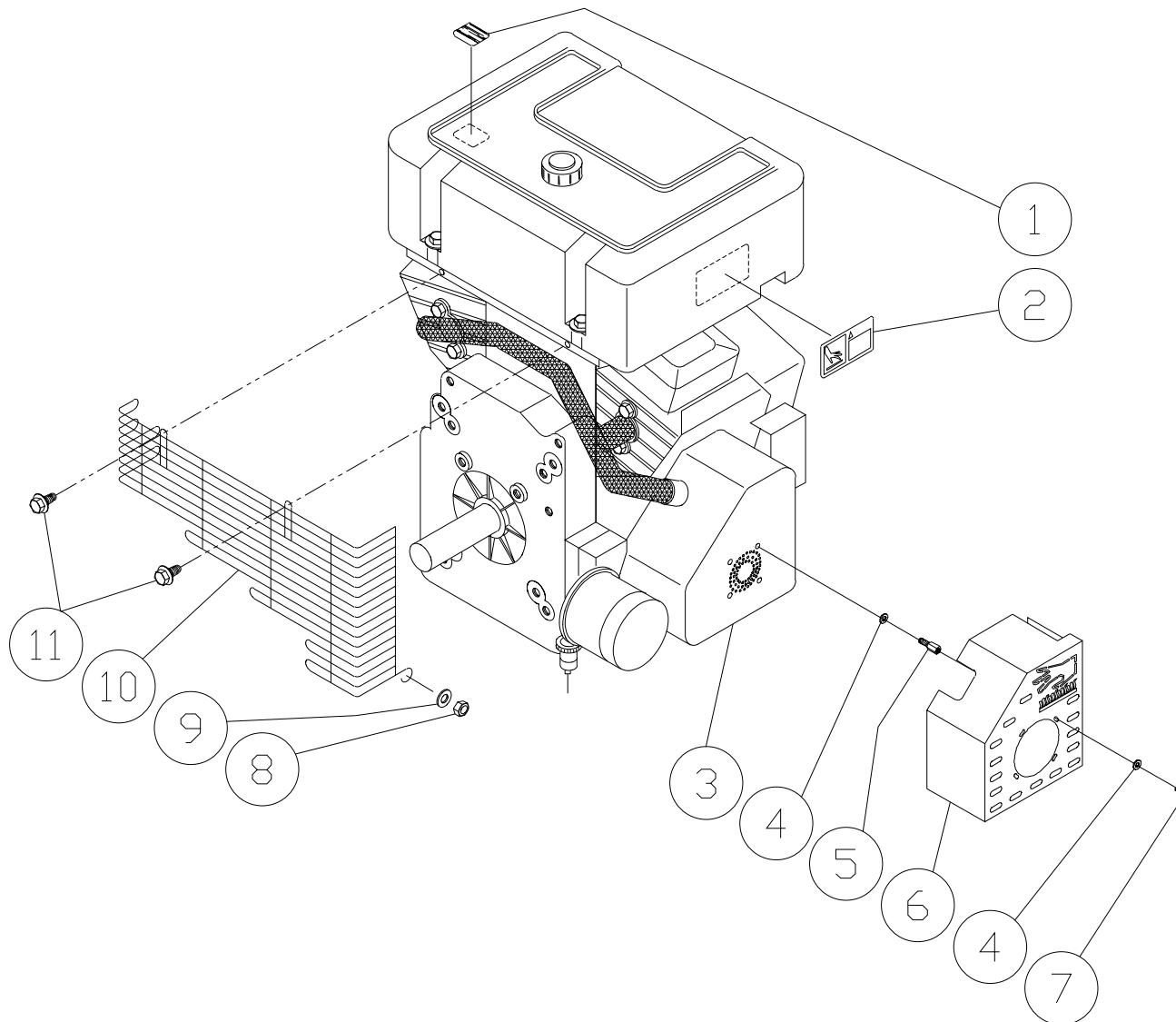
MODEL NUMBER	JCW-4004-0MVB
Operating Pressure (PSI/Bar):	4000/276
High Pressure Nozzle:	4.0
Water Volume (GPM/lpm):	4.0/15.1
Engine:	Briggs & Stratton Vanguard
Horsepower	16.0
Engine Type	4 Stroke, Overhead Valve, Twin Cylinder
Oil Type	Above 40 F=SAE30/Below 40 F=SAE10W30
Oil Capacity w/o Filter (oz./liter)	48/1.4
Oil Capacity w/Filter (oz./liter)	56/1.7
Fuel Type	Unleaded Gasoline 85 Octane minimum
Capacity (Gallon/liter)	2.25/8.5
Starting	Recoil
Maximum No Load RPM	3600(+/- 100)
Pump:	Belt Driven, Oil Bath, Triplex Piston
Oil Type	Mi-T-M Pump Oil #AW-4085-0016
Oil Capacity (oz./liters)	16/.47
Plungers	Ceramic
Manifold	Forged Brass
Valves	Stainless Steel
Unloader	Preset
Heat Dump Valve	Relieves heated water during unloader bypass stage
Unit Net Weight (Lbs/kg)	184/84
Unit Shipping Weight (Lbs/kg)	260/118
Unit Net Dimension (In/cm)	42L x 26W x 28H/106L x 66W x 71H
Unit Shipping Dimension (In/cm)	48L x 30W x 34H/122L x 76W x 86H

FRAME ASSEMBLY



FRAME ASSEMBLY													
REF. #	DESCRIPTION	PART#	QTY.		REF. #	DESCRIPTION	PART#	QTY.		REF. #	DESCRIPTION	PART#	QTY.
1	Frame Assembly	5-0129A01	1		32	Beltguard Back	N/A	1		60	Adapter	24-0150	1
2	Isolator	14-0066	2		33	Edging *(Two Feet Required)	33-0020	1		61	Unloader	8-0480	1
3	Washer	28-0021	2		34	Decal- Warning: Beltguard in Place (E/S)	34-0826	1		62	Plug	39-0017	1
4	Screw	27-3096	2		35	Sheave- Engine	10-0065	1		63	Heat Shrink *(One Foot Required)	33-0272	1
5	Decal- Serial Number	N/A	1		36	Belt	11-0004	2		64	Nipple	24-0010	1
6	Decal- Data Plate	N/A	1		37	Bushing- Engine	9-0005	1		65	Manifold	51-0020	1
7	Decal- Clear Laminate	N/A	1		38	Bolt	27-0015	4		66	Quick Connect Socket	17-0007	1
8	Hubcap	33-0018	2		39	Beltguard Cover Assembly (Inc. 40-45,49)	851-0313	1		67	O-ring	25-0123	2
9	Wheel	14-0017	2		40	Edging *(Three Feet Required)	33-0020	1		68	Elbow	23-0119	1
10	Bolt	27-8884	4		41	Beltguard Cover	N/A	1		69	Hose Swivel	23-0095	1
11	Washer	29-0054	4		42	Decal- Operating Instructions (E/S)	34-0813	1		70	Gasket	26-0001	1
12	Bolt	27-0067	7		43	Fastener	33-0197	1		71	Bolt	27-0074	2
13	Washer	28-0003	24		44	Decal- American Flag	34-0521	1		72	Elbow	24-0092	1
14	Bracket	5-0130A01	1		45	Decal- White Die Cut	34-0500	1		73	Filter Assembly (Inc. 74-77)	19-0096	1
15	Locknut	30-0157	13		46	Decal- Beltguard	34-0777	1		74	Strainer Body	19-0105	1
16	Pump (See Exploded Drawing)	3-0190	1		47	Decal- White Die Cut	34-0261	1		75	Strainer Gasket	25-0056	1
17	Key	46-0601	1		48	Spray Nozzle- 0004	18-0028	1		76	Screen	19-0104	1
18	Isolator Pump	33-0202	1		-	Spray Nozzle- 1504	18-0029	1		77	Strainer Bowl	19-0103	1
19	Heat Dump Valve	22-0005	1		-	Spray Nozzle- 2504	18-0030	1		78	High Pressure Hose Assembly (Inc. 79-81)	851-0006	1
20	Bolt	27-0118	2		-	Spray Nozzle- 4004	18-0031	1		79	Quick Connect Plug	17-0006	1
21	Washer	28-0023	5		49	Gromet	33-0001	5		80	High Pressure Hose	15-0004	1
22	Bracket	13-0005A01	1		50	Bushing- Pump	9-0017	1		81	Quick Connect Socket	17-0004	1
23	Bolt	27-0576	1		51	Sheave- Pump	10-0007	1		82	Gun Assembly (Inc. 83-88)	851-0095	1
24	Locknut	30-0159	2		52	Hose *(Three Feet Required)	15-0007	1		83	Quick Connect Plug	17-0005	1
25	Bolt	27-0070	4		53	Screw Clamp	42-0011	2		84	Gun (See Exploded Drawing)	16-0001	1
26	Decal- Warning: Muffler Hot (E/S)	34-0598	1		54	Barb	23-0105	1		85	Wand	16-0120A01	1
27	Decal- Caution: Allow to Cool (E/S)	34-0599	1		55	Branch T	23-0117	1		86	Grip	7-0002	1
28	Engine- 16.0 HP (See Exploded Drawing)	851-0201	1		56	Elbow	23-0324	1		87	Quick Connect Socket	17-0001	1
29	Key	43-0078	1		57	Hose	15-0140	1		88	Decal- Warning: Risk of Injection	34-0572	1
30	Beltguard Back Assembly (Inc. 31-34)	851-0312	1		58	Easy Start Valve	22-0242	1		89	O-ring	25-0122	2
31	Decal- Warning/ Caution (E/S)	34-0812	1		59	Hose	15-0177	1		*Must Order in One Foot Lengths			

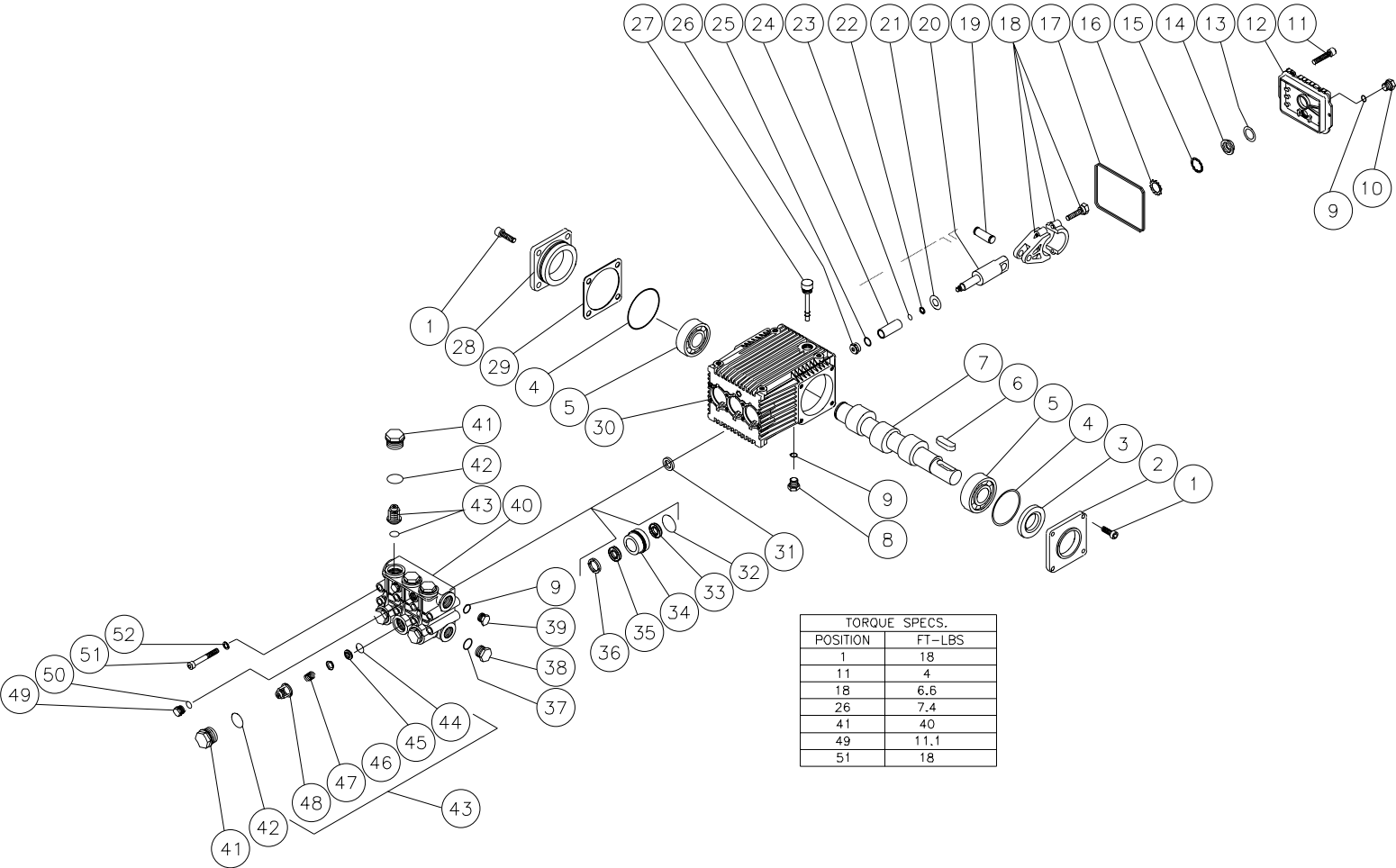
ENGINE ASSEMBLY (851-0201)



851-0201-0111499-DCE

ENGINE ASSEMBLY (851-0201)			
REF. #	DESCRIPTION	PART #	QTY.
1	Decal- Caution: Allow to Cool (E/S)	34-0599	1
2	Decal- Warning: Exhaust Hot (E/S)	34-0598	1
3	Engine- 16HP	N/A	1
4	Washer	28-0010	8
5	Stand Off	31-4246	4
6	Muffler Guard	20-0459A01	1
7	Screw	27-2771	4
8	Locknut	30-0157	1
9	Washer	28-0003	1
10	Exhaust Guard	6-0066	1
11	Screw	45-0019	2

PUMP ASSEMBLY (3-0190)

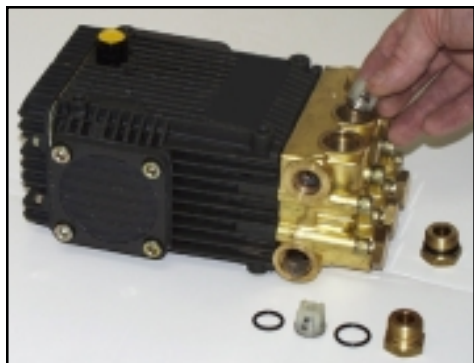


3-0190-012099-RD

PUMP ASSEMBLY (3-0190)											
REF. #	DESCRIPTION	PART#	QTY.	REF. #	DESCRIPTION	PART#	QTY.	REF. #	DESCRIPTION	PART#	QTY.
1	Bolt	27-8884	8	20	Plunger Rod	46-0699	3	38	Plug	39-0103	1
2	Shaft Cover	46-0691	1	21	Washer	46-0700	3	39	Plug	39-0104	1
3	Oil Seal	26-0188	1	22	Backup Ring	25-0404	3	40	Manifold	46-0813	1
4	O-ring	25-0380	2	23	O-ring	25-0382	3	41	Valve Cap	39-0105	6
5	Roller Bearing	48-0061	2	24	Piston	46-0701	3	42	O-ring	25-0160	6
6	Key	43-0091	1	25	Washer	26-0191	3	43	Single Valve Assembly (Inc. 41-45)	N/A	6
7	Crankshaft	46-0692	1	26	Nut	30-6020	3	44	O-ring	25-0386	6
8	Plug	39-0102	1	27	Oil Dipstick	39-0090	1	45	Valve Seat (See 70-0179)	N/A Sep.	6
9	O-ring	25-0325	3	28	Bearing Cap	46-0703	1	46	Valve Plate (See 70-0179)	N/A Sep.	6
10	Plug	39-0086	1	29	Shim (Quantity Varies 1-3)	46-0704	-	47	Valve Spring (See 70-0179)	N/A Sep.	6
11	Bolt	27-8885	6		Shim (Quantity Varies 1-3)	46-0705	-	48	Valve Cage (See 70-0179)	N/A Sep.	6
12	Crankcase Cover	46-0812	1	30	Crankcase	46-0811	1	49	Plug	39-0096	2
13	O-ring	25-0370	1	31	Oil Seal	26-0190	3	50	O-ring	25-0387	2
14	Oil Sight Glass	46-0670	1	32	O-ring	25-0384	3	51	Bolt	27-8440	8
15	Reflector	46-0824	1	33	Low Pressure Seal (See 70-0177)	N/A Sep.	3	52	Lockwasher	29-0154	8
16	Retainer	46-0671	1	34	Packing Retainer	46-0708	3		High Pressure Seals (Three each 32, 33, 35)	70-0177	
17	O-ring	25-0398	1	35	V-packing (See 70-0177)	N/A Sep.	3		Support Rings (Three each 36)	70-0178	
18	Connecting Rod	46-0697	3	36	Support Ring (See 70-0187)	N/A Sep.	3		Valves (Three each 44-48)	70-0179	
19	Piston Pin	46-0698	3	37	O-ring	25-0372	1				

PUMP SERVICE GUIDE

USE THE PARTS LIST ON THE PREVIOUS PAGE TO REORDER PARTS NEEDED TO SERVICE YOUR PUMP.



REPLACING THE VALVE ASSEMBLY:

1. In order to maintain optimum pump performance, replace all the valves at one time. The valve assemblies can be replaced without disrupting plumbing.
2. Remove the valve cap from the manifold.
3. Inspect the o-ring on the valve cap for deterioration. Replace if necessary.
4. Remove the valve assembly from the valve cavity.
5. Remove the o-ring inside the bottom of the valve cavity. Check for signs of severe deterioration of the o-ring. This could reflect excessive wear in the valve cavity of the manifold which is a *normal* occurrence in pumps with an extended life (over 1000 hours). Check the manifold and replace if necessary. (Note: *Normal* wear in the manifold is not covered under warranty.)
6. Install the new o-ring into the bottom of the valve cavity, then place the new valve assembly into the valve cavity.
7. Reinstall the valve cap and torque to specifications listed on the pump drawing in your parts list.

REMOVING THE MANIFOLD:

1. Remove the head bolts on the manifold.



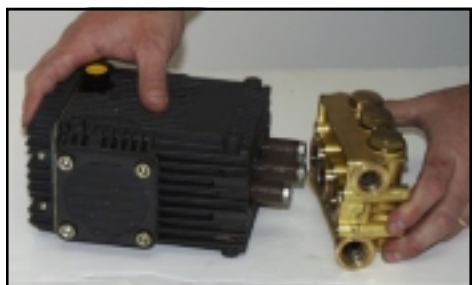
CAUTION

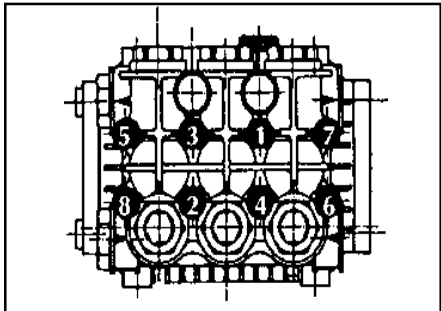
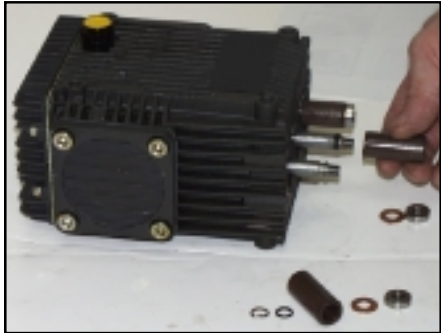
RISK OF DAMAGE

USE CAUTION NOT TO DAMAGE THE PLUNGERS WHEN REMOVING THE MANIFOLD HEAD FROM THE CRANKCASE .

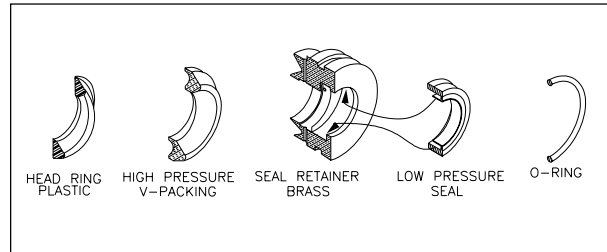
2. Pull the manifold head from the crankcase. Rotate the crankshaft or tap the manifold head lightly with a rubber mallet to loosen if necessary.

NOTE: *The V-packing assemblies may come off with the manifold head. If this happens, reinsert the V-packings in the order given in the "V-Packing Cross Section" illustration shown on the following page.*





V-PACKING CROSS SECTION



REPLACING V-PACKINGS:

1. In order to maintain optimum pump performance, replace all the V-Packings at one time. The manifold must be removed from the crankcase before performing this procedure. Use of an extractor is highly recommended for V-packing removal.
2. Insert the extractor through the center of the V-packing and pull the V-Packing from the manifold.

3. Install the V-Packings in the order shown in the drawing at left.

NOTE: A film of grease on the o-rings ensure easier installation.

4. Move on to replace plungers if necessary. If plungers do not need replacing, reinstall the manifold head as described in "Reinstalling the Manifold".

REPLACING PLUNGERS:

1. Remove piston nut and washer from the piston rod.
2. Examine the plungers for cracks and wear. Replace if necessary.
3. Remove the plunger. If the slinger washer comes off with the plunger, replace it before installing the new plunger.
4. Install the replacement parts over the piston guide in the order given:
-Anti-extrusion ring, O-ring, Plunger, Washer.

NOTE: A film of grease on the o-ring ensures easier installation.

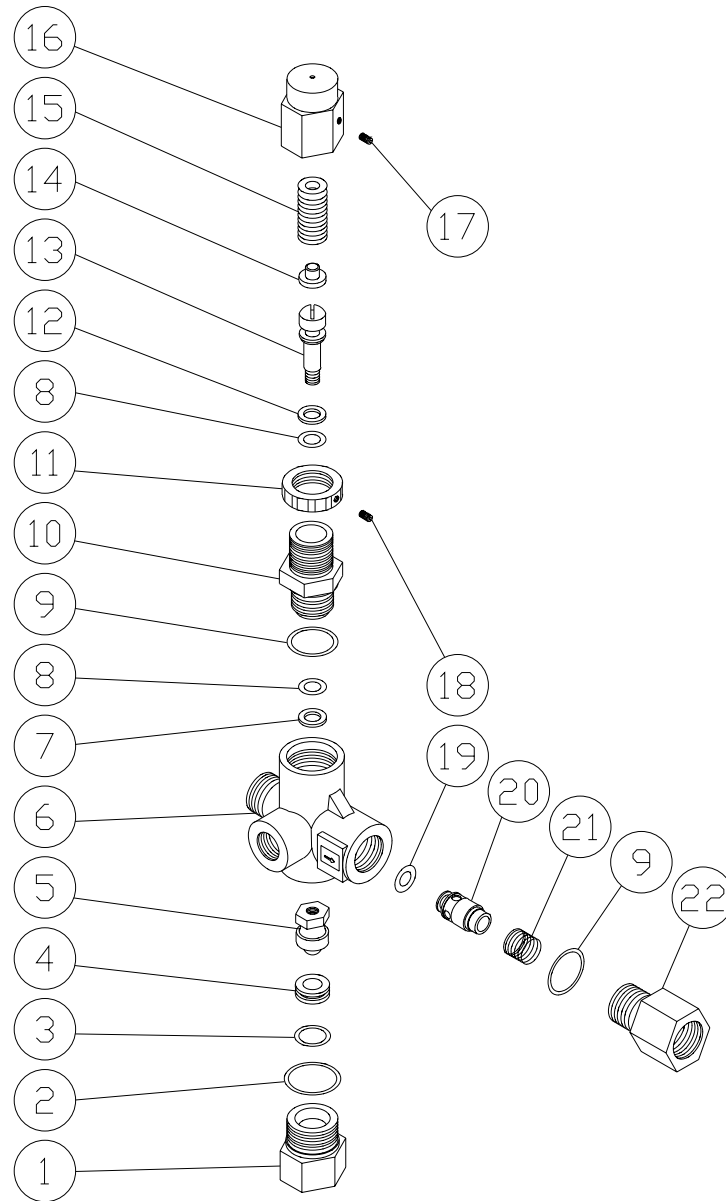
5. Apply thread sealant to the piston guide threads.
6. Install the piston nut and torque to the specifications listed on the pump drawing in your parts list.

REINSTALLING THE MANIFOLD:

1. Apply a coat of grease to each plunger and reinstall the manifold head, taking care not to damage the plungers.
2. Install and tighten the head bolts as shown in the sequence at left. Use your fingers first, then at half the torque specified for your pump. Perform a final torque to the specifications listed on the pump drawing in your parts list.

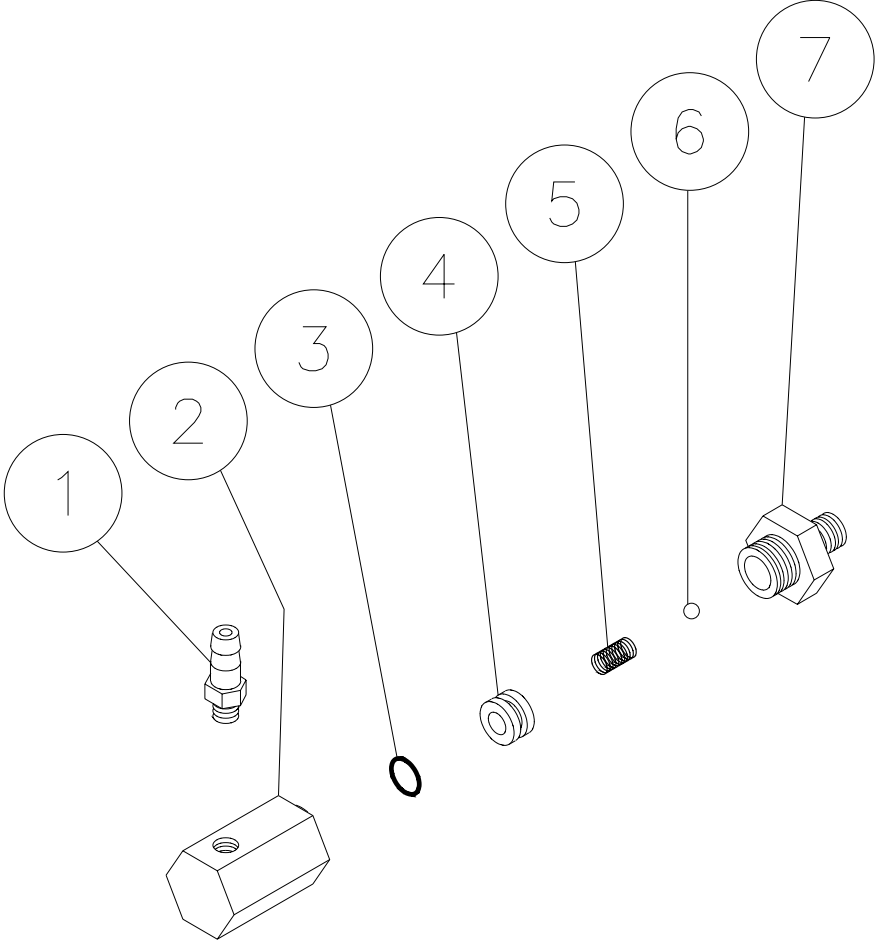
UNLOADER ASSEMBLY (8-0480)

OMGEN265-101597-DCE



UNLOADER ASSEMBLY (8-0480)			
REF. #	DESCRIPTION	PART #	QTY.
1	Bypass Cap	39-0083	1
2	O-ring (See 70-0207)	N/A Sep.	1
3	O-ring (See 70-0207)	N/A Sep.	1
4	Bypass Seat (See 70-0207)	N/A Sep.	1
5	Valve and Ball Assy. (See 70-0207)	N/A Sep.	1
6	Unloader Body	8-0481	1
7	Back-up Ring (See 70-0207)	N/A Sep.	1
8	O-ring (See 70-0207)	N/A Sep.	2
9	O-ring (See 70-0207)	N/A Sep.	2
10	Piston Retainer	8-0482	1
11	Locknut	30-6023	1
12	Back-up Ring (See 70-0207)	N/A Sep.	1
13	Piston Stem	8-0483	1
14	Spring Retainer	8-0484	1
15	Spring	49-0133	1
16	Adjustable Cap	39-0099	1
17	Set Screw	8-0485	1
18	Set Screw	8-0408	1
19	O-ring (See 70-0207)	N/A Sep.	1
20	Flow Balancer	8-0486	1
21	Spring	49-0118	1
22	Outlet Fitting	8-0487	1
	O-ring Kit (2-5, 7-9, 12, 19)	70-0207	

EASY START VALVE (22-0242)

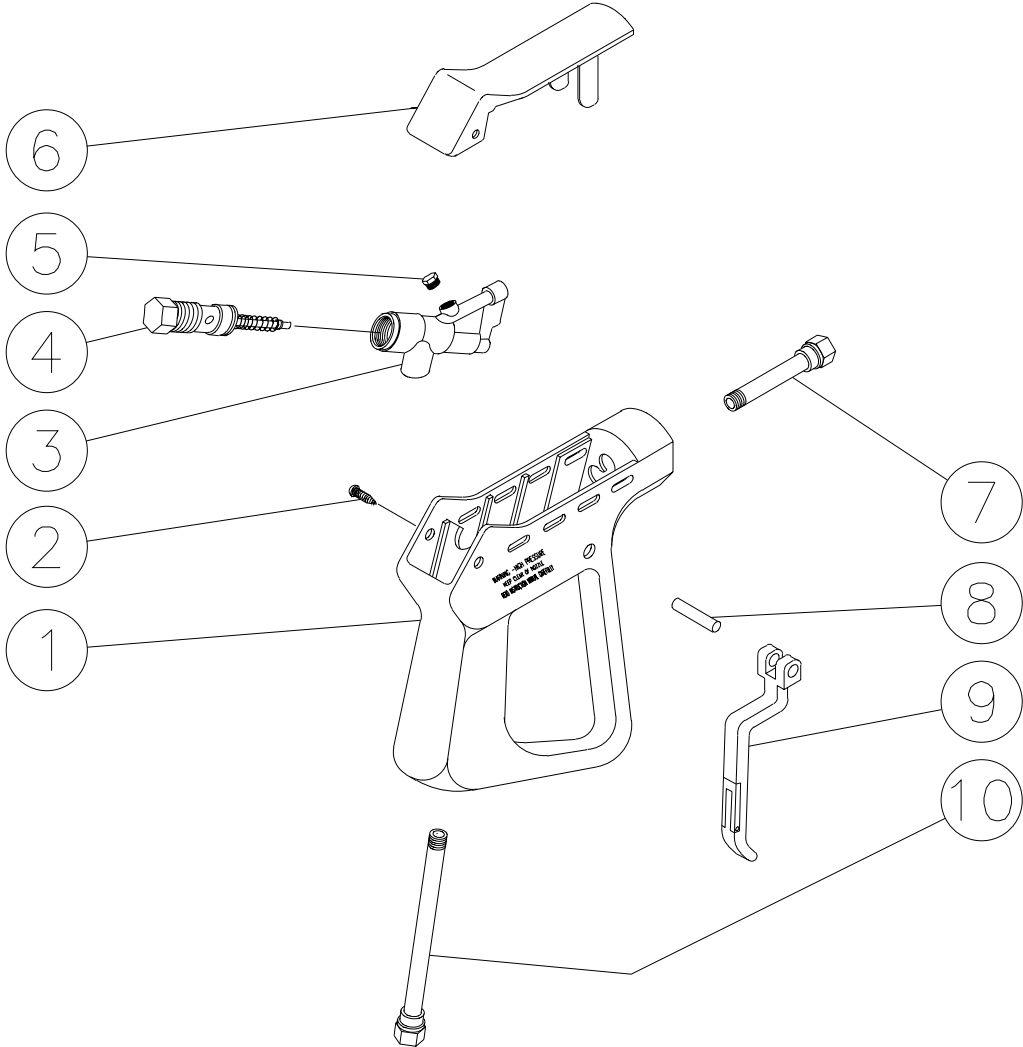


OMGEN267-102197-DCE

EASY START VALVE (22-0242)			
REF. #	DESCRIPTION	PART #	QTY.
1	Hose Barb	23-0141	1
2	Body-Easy Start	23-0337	1
3	O-ring	25-0366	1
4	Ball Seat	23-0338	1
5	Spring	49-0136	1
6	Ball-Check Valve	23-0339	1
7	Inlet Fitting	23-0340	1

OMGEN267-102197-DCE

GUN ASSEMBLY (16-0001)



OMGEN013-080294-BAR

GUN ASSEMBLY (16-0001)			
REF. #	DESCRIPTION	PART #	QTY.
1	Plastic Housing	16-0008	1
2	Screw	27-3230	2
3	Brass Housing	16-0012	1
4	Gun Repair Kit	70-0055	1
5	Brass Plug	39-0024	1
6	Plastic Cover	16-0009	1
7	Pipe Assembly	16-0013	1
8	Trigger Pin	16-0063	1
9	Trigger/Safety Lock-off	16-0010	1
10	Pipe Assembly- Inlet	16-0016	1
	Complete Gun Assembly	16-0001	1

