

# **Mi-T-M<sup>®</sup> CORPORATION**

8650 Enterprise Drive, Peosta IA 52068

319-556-7484 / Fax 319-556-1235

## **PARTS LIST FOR JCW-2703-0MIB/OMHB**

**ENGINE OIL GRADE:**

**INTEK I/C:**

**HONDA:**

**ENGINE OIL CAPACITY:**

**PUMP OIL GRADE:**

**PUMP OIL CAPACITY:**

**NOZZLE SIZE:**

**ABOVE 40°F = SAE30/BELOW 40°F = SAE10W-30**

**SAE10W-30**

**20 OZ.**

**Mi-T-M PUMP OIL #AW-4085-0016**

**14 OZ.**

**3.0**

This Parts Listing has been compiled for your benefit. You can be assured your Mi-T-M Cold Water 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, COLD WATER 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 cable from the spark plug. 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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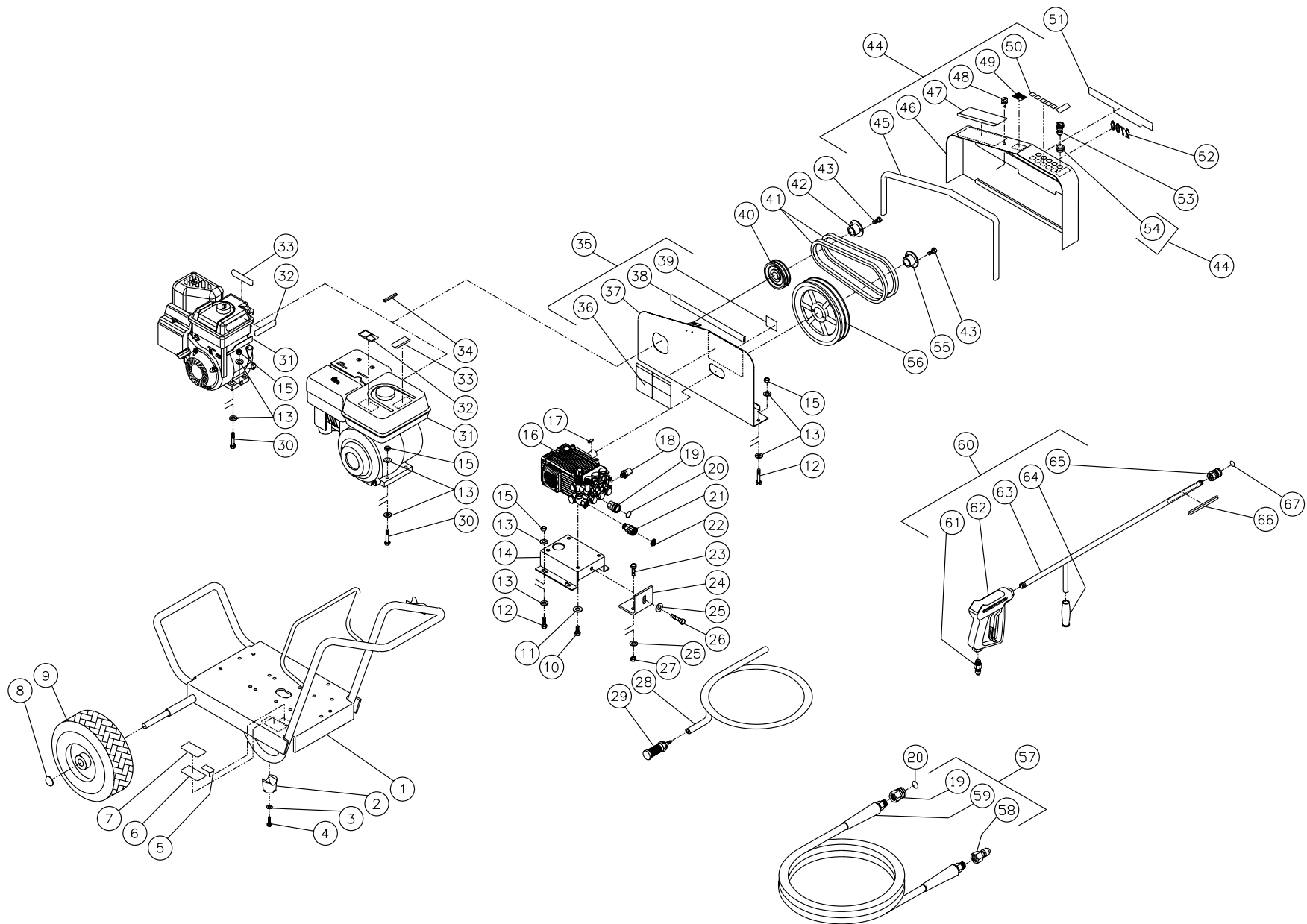
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## SPECIFICATIONS

JCW-2703-OMIB/OMHB

| MODEL NUMBER                           | JCW-2703-OMIB                                      | JCW-2703-OMHB |
|--|--|---------------|
| <b>Operating Pressure (PSI/Bar):</b>   | 2700/186   |               |
| <b>High Pressure Nozzle:</b>           | 3.0  |               |
| <b>Water Volume (GPM/lpm):</b>         | 2.4/9.0  |               |
| <b>Engine:</b>                         | Intek I/C  | Honda         |
| Horsepower                             | 6.5  |               |
| Engine Type                            | 4 Stroke, Overhead Valve, Single Cylinder          |               |
| Oil Type                               | Above 40 F = SAE30/Below 40 F = SAE10W-30          | SAE10W-30     |
| Oil Capacity (oz./liters)              | 20/.6  |               |
| Low Oil Protection                     | Oil Guard  | Oil Alert     |
| Fuel Type                              | Unleaded Gasoline 86 Octane Minimum                |               |
| Fuel Capacity (gallon/ liters)         | .75/2.85   | .95/3.6       |
| Starting                               | Recoil Rope  |               |
| Maximum No Load RPM                    | 3600 (+/- 100) RPM                                 |               |
| <b>Pump:</b>                           | Direct Driven, Oil Bath, Triplex Piston            |               |
| Oil Type                               | Mi-T-M Pump Oil #AW-4085-0016                      |               |
| Oil Capacity (oz./liters)              | 14/.41   |               |
| Plungers                               | Ceramic  |               |
| Manifold                               | Forged Brass                                       |               |
| Valves                                 | Stainless Steel                                    |               |
| Unloader                               | Adjustable   |               |
| Heat Dump Valve                        | Relieves heated water during unloader bypass stage |               |
| Detergent Injector                     | Adjustable low pressure down stream from pump      |               |
| <b>Unit Net Weight (lbs/Kg)</b>        | 116/53   | 115/52        |
| <b>Unit Shipping Weight (lbs/Kg)</b>   | 158/72   | 157/71        |
| <b>Unit Net Dimension (in/cm)</b>      | 38Lx21Wx21H/93Lx53Wx53H                            |               |
| <b>Unit Shipping Dimension (in/cm)</b> | 40Lx26Wx33H/101Lx66Wx83H                           |               |

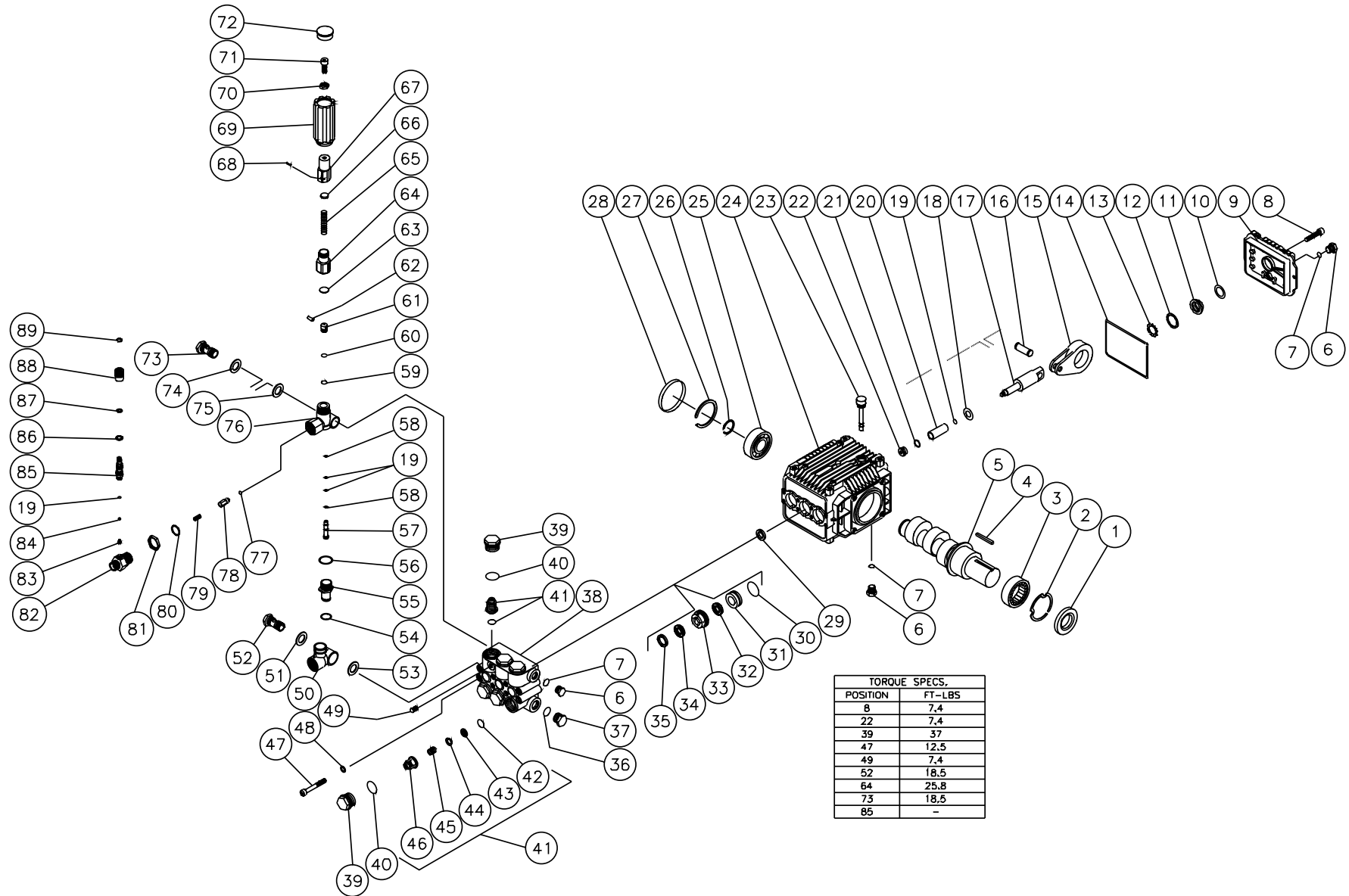
# FRAME ASSEMBLY FOR JCW-2703-0MIB/0MHB



JCW-2703-0MHB/0MIB-011200-RD

| FRAME ASSEMBLY FOR JW-2703-0MIB/0MHB |                         |            |           |           |        |  |          |           |           |                                 |  |            |           |           |
|--------------------------------------|-------------------------|------------|-----------|-----------|--------|--|----------|-----------|-----------|---------------------------------|--|------------|-----------|-----------|
| REF. #                               | DESCRIPTION             | PART #     | OMIB QTY. | 0MHB QTY. | REF. # | DESCRIPTION                                  | PART #   | OMIB QTY. | 0MHB QTY. | REF. #                          | DESCRIPTION                                      | PART #     | OMIB QTY. | 0MHB QTY. |
| 1                                    | Frame Assembly          | 5-0132A01  | 1         | 1         | 26     | Bolt   | 27-0576  | 1         | 1         | 50                              | Decal- Die Cut                                   | 34-0500    | 1         | 1         |
| 2                                    | Isolator                | 14-0066    | 2         | 2         | 27     | Locknut                                      | 30-0159  | 2         | 2         | 51                              | Decal- Beltguard                                 | 34-0777    | 1         | 1         |
| 3                                    | Washer                  | 28-0021    | 2         | 2         | 28     | Detergent Hose *(Four Feet Required)         | 15-0021  | 1         | 1         | 52                              | Decal- 2700 Die Cut                              | 34-0774    | 1         | 1         |
| 4                                    | Screw                   | 27-3096    | 2         | 2         | 29     | Detergent Strainer                           | 19-0050  | 1         | 1         | 53                              | Spray Nozzle- 0003                               | 18-0302    | 1         | 1         |
| 5                                    | Decal- Serial Number    | N/A        | 1         | 1         | 30     | Bolt   | 27-0070  | 4         | 4         | -                               | Spray Nozzle- 1503                               | 18-0150    | 1         | 1         |
| 6                                    | Decal- Data Plate       | N/A        | 1         | 1         | 31     | Engine- 6.5 H.P. Honda                       | 1-0088   | -         | 1         | -                               | Spray Nozzle- 2503                               | 18-0303    | 1         | 1         |
| 7                                    | Decal- Clear Laminate   | N/A        | 1         | 1         | -      | Engine- 6.5 H.P. Briggs & Stratton Intek I/C | 1-0109   | 1         | -         | -                               | Spray Nozzle- 4003                               | 18-0304    | 1         | 1         |
| 8                                    | Hubcap                  | 33-0018    | 2         | 2         | 32     | Decal- Caution: Allow to Cool (E/S)          | 34-0599  | 1         | 1         | -                               | Spray Nozzle- 6540                               | 18-0148    | 1         | 1         |
| 9                                    | Wheel                   | 14-0017    | 2         | 2         | 33     | Decal- Warning: Muffler Hot (E/S)            | 34-0598  | 1         | 1         | 54                              | Grommet  | 33-0001    | 5         | 5         |
| 10                                   | Bolt                    | 27-8884    | 5         | 5         | 34     | Key  | 43-0078  | 1         | 1         | 55                              | Bushing  | 9-0017     | 1         | 1         |
| 11                                   | Washer                  | 29-0054    | 5         | 5         | 35     | Beltguard Back Assembly (Inc. 36-39)         | 851-0312 | 1         | 1         | 56                              | Sheave   | 10-0007    | 1         | 1         |
| 12                                   | Bolt                    | 27-0067    | 7         | 7         | 36     | Decal- Warning/Caution (E/S)                 | 34-0812  | 1         | 1         | 57                              | High Pressure Hose Assembly (Inc. 19, 58, 59)    | 851-0007   | 1         | 1         |
| 13                                   | Washer                  | 28-0003    | 22        | 22        | 37     | Beltguard Back                               | N/A      | 1         | 1         | 58                              | Quick Connect Plug                               | 17-0006    | 1         | 1         |
| 14                                   | Bracket                 | 5-0133A01  | 1         | 1         | 38     | Edging *(Two Feet Required)                  | 33-0020  | 1         | 1         | 59                              | High Pressure Hose                               | 15-0003    | 1         | 1         |
| 15                                   | Locknut                 | 30-0157    | 11        | 11        | 39     | Decal- Warning: Beltguard in Place (E/S)     | 34-0826  | 1         | 1         | 60                              | Gun Assembly (Includes 61-65)                    | 851-0095   | 1         | 1         |
| 16                                   | Pump                    | 3-0170     | 1         | 1         | 40     | Sheave                                       | 10-0029  | 1         | 1         | 61                              | Quick Connect Plug                               | 17-0005    | 1         | 1         |
| 17                                   | Key w/Pump              | 46-0601    | 1         | 1         | 41     | Belt   | 11-0031  | 2         | 2         | 62                              | Gun  | 16-0001    | 1         | 1         |
| 18                                   | Heat Dump Valve         | 22-0005    | 1         | 1         | 42     | Bushing                                      | 9-0009   | 1         | 1         | 63                              | Wand w/Handle                                    | 16-0120A01 | 1         | 1         |
| 19                                   | Quick Connect Socket    | 17-0004    | 2         | 2         | 43     | Bolt   | 27-0015  | 4         | 4         | 64                              | Grip   | 7-0002     | 1         | 1         |
| 20                                   | O-ring (Replacement)    | 25-0123    | 2         | 2         | 44     | Beltguard Cover Assembly (Inc. 45-50, 54)    | 851-0313 | 1         | 1         | 65                              | Quick Connect Socket                             | 17-0001    | 1         | 1         |
| 21                                   | Garden Hose Swivel      | 23-0095    | 1         | 1         | 45     | Edging *(Three Feet Required)                | 33-0020  | 1         | 1         | 66                              | Decal- Warning: Risk of Injection (English Only) | 34-0572    | 1         | 1         |
| 22                                   | Garden Hose Filter      | 19-0001    | 1         | 1         | 46     | Beltguard Cover                              | N/A      | 1         | 1         | 67                              | O-ring (Replacement)                             | 25-0122    | -         | -         |
| 23                                   | Bolt                    | 27-0118    | 2         | 2         | 47     | Decal- Operating Instruction (E/S)           | 34-0813  | 1         | 1         | *Must Order in One Foot Lengths |  |            |           |           |
| 24                                   | Brace Tightener Bracket | 13-0005A01 | 1         | 1         | 48     | Fastener                                     | 33-0197  | 1         | 1         |                                 |  |            |           |           |
| 25                                   | Washer                  | 28-0023    | 3         | 3         | 49     | Decal- American Flag                         | 34-0521  | 1         | 1         |                                 |  |            |           |           |

# PUMP ASSEMBLY (3-0170)



3-0170-011200-RD

| PUMP ASSEMBLY (3-0170) |                                 |          |      |        |  |          |      |        |   |          |      |
|------------------------|---------------------------------|----------|------|--------|--|----------|------|--------|---|----------|------|
| REF. #                 | DESCRIPTION                     | PART #   | QTY. | REF. # | DESCRIPTION                                      | PART #   | QTY. | REF. # | DESCRIPTION                                     | PART #   | QTY. |
| 1                      | Oil Seal                        | 26-0192  | 1    | 33     | Packing Retainer                                 | 46-0728  | 3    | 65     | Spring  | 49-0132  | 1    |
| 2                      | Retaining Ring                  | 46-0667  | 1    | 34     | V-packing (See 70-0181)                          | N/A Sep. | 3    | 66     | Spring Button                                   | 8-0475   | 1    |
| 3                      | Bearing                         | 48-0059  | 1    | 35     | Support Ring (See 70-0182)                       | N/A Sep. | 3    | 67     | Adjustment Barrel                               | 8-0476   | 1    |
| 4                      | Key                             | 43-0091  | 1    | 36     | O-ring   | 25-0372  | 1    | 68     | Pin   | 8-0477   | 1    |
| 5                      | Crankshaft                      | 46-0754  | 1    | 37     | Plug   | 39-0088  | 1    | 69     | Unloader Knob                                   | 7-0141   | 1    |
| 6                      | Plug                            | 39-0086  | 3    | 38     | Manifold   | 46-0730  | 1    | 70     | Nut   | 30-3025  | 1    |
| 7                      | O-ring                          | 25-0325  | 3    | 39     | Valve Cap  | 39-0087  | 6    | 71     | Bolt  | 27-8433  | 1    |
| 8                      | Bolt                            | 27-8888  | 6    | 40     | O-ring   | 25-0160  | 6    | 72     | Cap   | 7-0142   | 1    |
| 9                      | Crankcase Cover                 | 46-0719  | 1    | 41     | Single Valve Assembly (Inc. 42-46) (See 70-0161) | N/A Sep. | 6    | 73     | Adaptor   | 8-0448   | 1    |
| 10                     | O-ring                          | 25-0370  | 1    | 42     | O-ring   | 25-0386  | 6    | 74     | Washer  | 8-0449   | 1    |
| 11                     | Oil Sight Glass                 | 46-0670  | 1    | 43     | Valve Seat (See 70-0161)                         | N/A Sep. | 6    | 75     | Washer  | 8-0450   | 1    |
| 12                     | Reflector                       | 46-0824  | 1    | 44     | Valve Plate (See 70-0161)                        | N/A Sep. | 6    | 76     | Unloader Body                                   | 8-0451   | 1    |
| 13                     | Retainer                        | 46-0671  | 1    | 45     | Valve Spring (See 70-0161)                       | N/A Sep. | 6    | 77     | O-ring  | 25-0437  | 1    |
| 14                     | O-ring                          | 25-0398  | 1    | 46     | Valve Cage (See 70-0161)                         | N/A Sep. | 6    | 78     | Check Valve                                     | 8-0454   | 1    |
| 15                     | Connecting Rod                  | 46-0720  | 3    | 47     | Head Bolt  | 27-8875  | 8    | 79     | Spring  | 49-0123  | 1    |
| 16                     | Piston Pin                      | 46-0721  | 3    | 48     | Lockwasher                                       | 29-0153  | 8    | 80     | O-ring  | 25-0372  | 1    |
| 17                     | Plunger Rod                     | 46-0722  | 3    | 49     | Plug   | 39-0097  | 1    | 81     | Tightener Nut                                   | 8-0497   | 1    |
| 18                     | Washer                          | 28-1022  | 3    | 50     | Inlet Bypass Adaptor                             | 8-0437   | 1    | 82     | Injector Adapter                                | 8-0498   | 1    |
| 19                     | O-ring (See 8-0456)             | 25-0371  | 6    | 51     | Washer   | 8-0440   | 1    | 83     | Detergent Injector Spring                       | N/A Sep. | 1    |
| 20                     | Piston                          | 46-0723  | 3    | 52     | Adaptor  | 8-0438   | 1    | 84     | Ball  | N/A Sep. | 1    |
| 21                     | Washer                          | 26-0187  | 3    | 53     | Washer   | 8-0439   | 1    | 85     | Barb  | 8-0499   | 1    |
| 22                     | Nut                             | 30-6016  | 3    | 54     | O-ring (See 8-0456)                              | N/A Sep. | 1    | 86     | O-ring  | N/A Sep. | 1    |
| 23                     | Oil Dipstick                    | 39-0090  | 1    | 55     | Nipple   | 8-0441   | 1    | 87     | O-ring  | N/A Sep. | 1    |
| 24                     | Crankcase                       | 46-0724  | 1    | 56     | O-ring (See 8-0456)                              | N/A Sep. | 1    | 88     | Knob  | 7-0152   | 1    |
| 25                     | Bearing                         | 48-0063  | 1    | 57     | Piston   | 8-0442   | 1    | 89     | Snap Ring                                       | N/A Sep. | 1    |
| 26                     | Retaining Ring                  | 46-0732  | 1    | 58     | Back-up Ring (See 8-0456)                        | N/A Sep. | 2    |        | High Pressure Seals (Inc. 3 each 30, 32, 34)    | 70-0181  |      |
| 27                     | Retaining Ring                  | 46-0676  | 1    | 59     | O-ring (See 8-0456)                              | N/A Sep. | 1    |        | Support Rings (Inc. 3 each 35)                  | 70-0182  |      |
| 28                     | Bearing Cap                     | 46-0725  | 1    | 60     | Back-up Ring (See 8-0456)                        | N/A Sep. | 1    |        | Valves (Inc. 6 each 42-46)                      | 70-0161  |      |
| 29                     | Oil Seal                        | 26-0193  | 3    | 61     | Poppet   | 8-0443   | 1    |        | Unloader (Inc. 19, 50-79)                       | 8-0456   |      |
| 30                     | O-ring (See 70-0181)            | 25-0399  | 3    | 62     | Pin  | 8-0444   | 1    |        | Unloader Repair (Inc. 19, 54, 56, 58-60, 77)    | 70-0180  |      |
| 31                     | Retainer                        | 46-0726  | 3    | 63     | Spring Button                                    | 8-0445   | 1    |        | Injector (Inc. 19, 80-89)                       | 70-0232  |      |
| 32                     | Low Pressure Seal (See 70-0181) | N/A Sep. | 3    | 64     | Guide Spring                                     | 8-0474   | 1    |        | Injector Repair (Inc. 19, 80, 83-84, 86-87, 89) | 70-0233  |      |

## PUMP SERVICE GUIDE

FIG. A

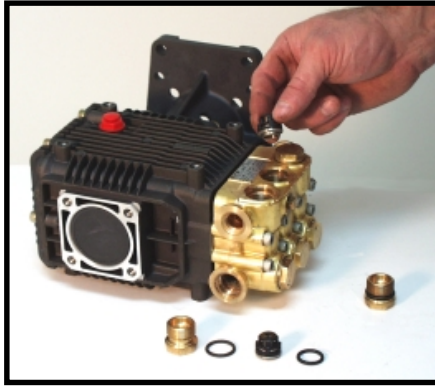


FIG. B

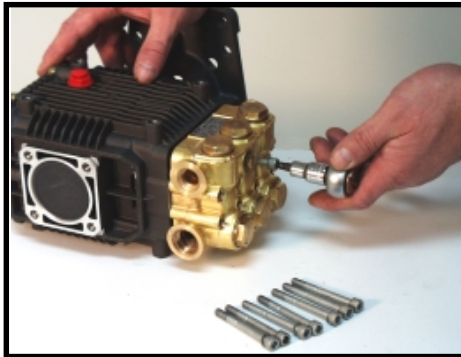
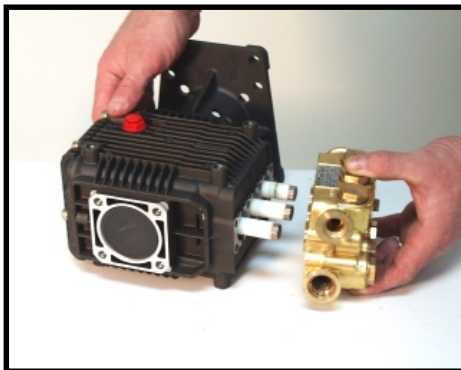


FIG. C



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 (Fig. A).
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 37 Ft-lbs (444 in-lbs).

### REMOVING THE MANIFOLD:

1. Remove the head bolts on the manifold (Fig. B).

### 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 (Fig. C). 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.



FIG. D



FIG. E



FIG. F



FIG. G

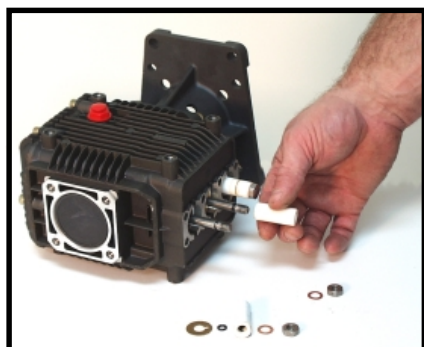
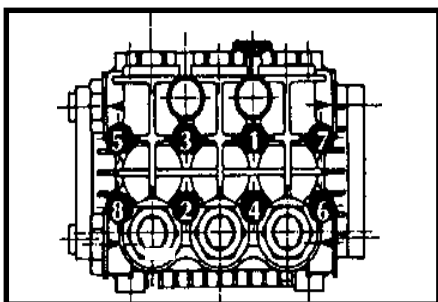
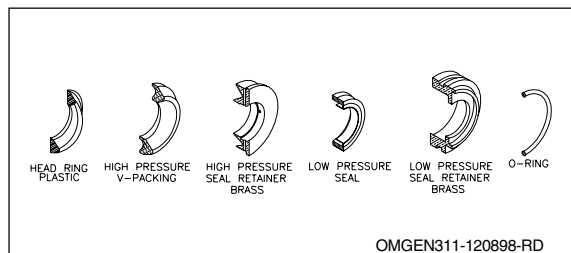


FIG. H



### 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 (Fig. D) and pull the V-Packing from the manifold (Fig. E).
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" (Fig. F).

### 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 (Fig. G). 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.

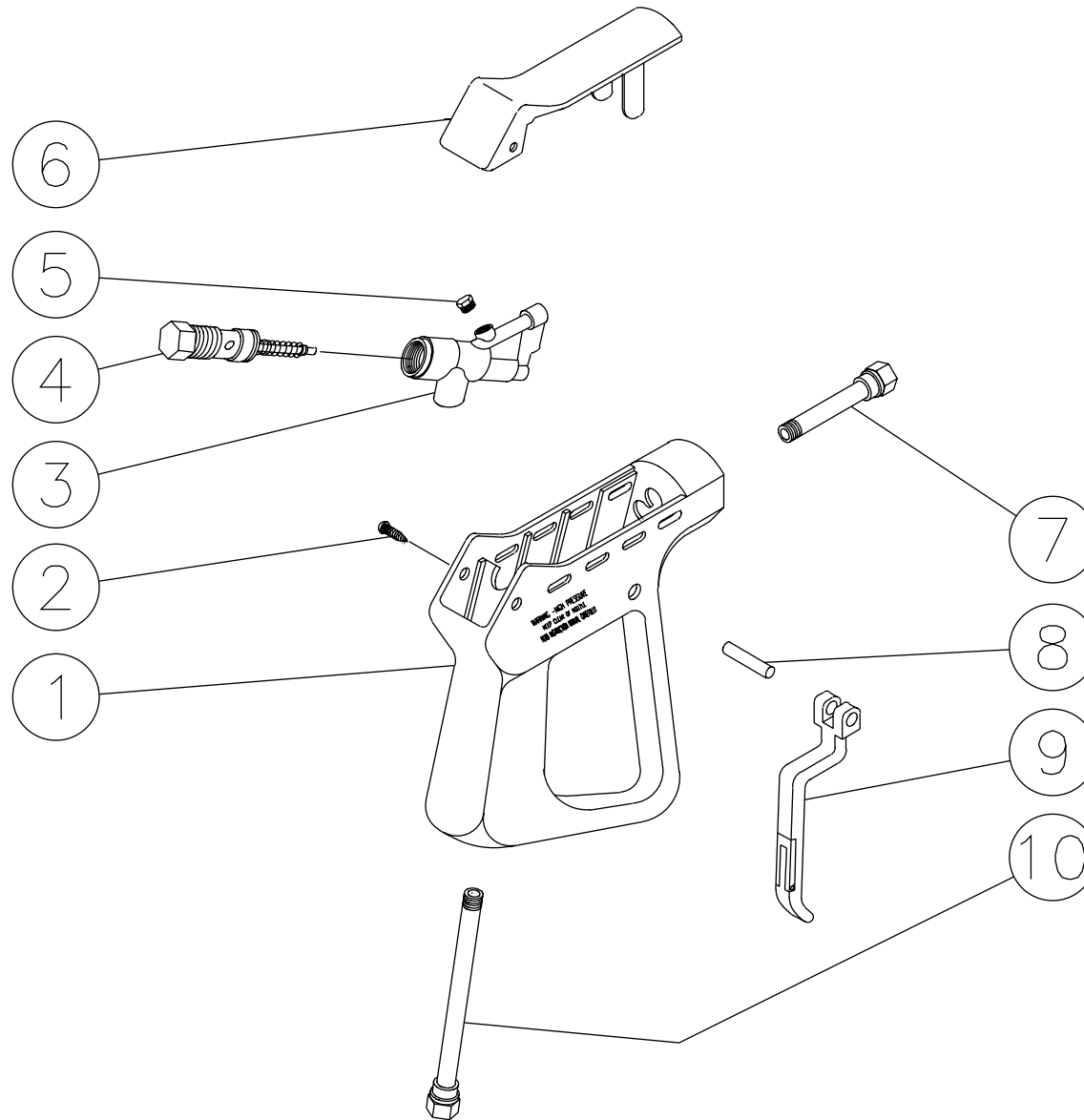
**NOTE:** A film of grease on the o-ring ensures easier installation.

5. Apply thread sealant to the piston guide threads.
6. Install the piston nut and torque to 7.4 Ft-lbs (89 in-lbs).

### 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 (Fig. H). Use your fingers first, then at half the torque specified for your pump. Perform a final torque to 12.5 Ft-lbs (150 in-lbs).

## GUN ASSEMBLY (16-0001)



16-0001-110399-RD

| 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    |

