



BOOM / HANDGUN SPRAYERS



**OPERATION, SERVICE
& PARTS MANUAL FOR
MODELS: GDL200, GDL400,
GDL600 & GDL800**

April 2011

TABLE OF CONTENTS

| | |
|---------------------------------------|-------|
| Introduction | 1 |
| How To Operate Sprayer | 2 |
| Lubrication | 3 |
| Cleaning and Storage | 4 |
| Suction Filter Servicing | 5 |
| Pump Maintenance | 6 |
| General Safety Information | 7 |
| Troubleshooting | 8 |
| Rate Chart | 9 |
| Tank Assembly 50 Gallon | 10-12 |
| Tank Assembly 100 & 150 Gallon | 13-15 |
| Run of Fluids 50 Gallon | 16-18 |
| Run of Fluids 100 & 150 Gallon | 19-21 |
| Pump Assembly for GDL200 | 22-24 |
| GS40 Valve Assembly for GDL200 | 25-26 |
| Pump Assembly for GDL400 & 600 | 27-29 |
| Valve Assembly for GDL400 & 600 | 30-31 |
| Driveline Assembly | 32 |
| Optional Sprayer Booms | 33-35 |
| Nozzle Spacing | 36 |
| Optional Hose Reel 112-4-75 | 37-38 |
| Optional Hose Reel 1125-4-325 | 39-40 |
| Optional Tommy Gun | 41-42 |
| Limited Warranty | 43 |

Date of Purchase:_____

Model Number:_____

Serial Number:_____

INTRODUCTION

We welcome you as an owner of the Gearmore 3-point hitch sprayer. Before you read on to the operation and maintenance of the sprayer, please read the following general information.

1. POWER SOURCE:

The sprayer is designed to mount to any 540 RPM tractor with a 3-point hitch. The horsepower required will vary depending on the pressure setting of the control valve.

2. PUMP:

The pump on the sprayer is a diaphragm pump. Pistons power the diaphragms that pump the liquid. The unit has protection against corrosion, as the valves are stainless steel.

3. TANK:

The tank comes with a jet agitation system. It also has a sump, so the tank can be completely drained.

4. STRAINERS:

The sprayer is equipped with three strainers. A large filter screen is located under the tank cover. A main strainer located by the side of the pump and a strainer screen in every nozzle assembly. All strainers are easily accessible for cleaning.

TO OPERATE SPRAYER

1. Connect sprayer to tractor 3-point hitch.
2. Connect up the P.T.O. driveshaft, after you have checked to make sure the driveshaft is not too long.
3. Check strainer screen, to make sure it is clean.
4. Check strainer shut-off valve, making sure the handle is in the open position.
5. Refer to calibration page to calibrate the sprayer. Set regulator pressure as required.
Important - The pressure regulator adjusting knob must be unscrewed (turned to left) as far out as possible before operating sprayer. Then gradually screw in (turn to right) to desired pressure. Failure to operate in this manner could cause a sudden surge, which could damage the sprayer. By sliding the control handle left towards the pressure gauge, you can turn the valve one-half a turn to put the valve in bypass position. This would be used for mixing chemicals, etc. It takes the pressure off the pump and sends the liquid back to the tank. Turn the valve in the opposite direction for spraying. By sliding the handle away from the pressure gauge, you can adjust the pressure setting by turning the valve.
6. Engage tractor P.T.O. and run for a couple of minutes to make sure the jet agitator has mixed the chemicals thoroughly. Last, turn the control valve handles to the position required. Either right hand, left hand or both sides spraying.

Remember, it is always best to make a practice run with water to be sure you have the correct rates and coverage.

LUBRICATION

- 1. DRIVESHAFT -** The driveshaft comes not greased, so must be done before sprayer is put into use. After that, grease *every 50 hours*. It is also necessary, from time to time, to untelescope the driveshaft to clean and re-grease tubings.
- 2. PUMP -** The clear oil reservoir should be filled to the indicator mark. If oil is low, add engine oil, non-foaming, non-detergent 30 weight oil. The pump oil must be changed after the first 100 running hours and then at the end of every working season. *(See pump page for more details.)*

GENERAL MAINTENANCE

Carefully follow all instructions as stated in this operators manual. This includes lubrication, maintenance and operation of the sprayer. The sprayer was designed and built for years of reliable service if properly cared for. However, an air blast sprayer is a high R.P.M. machine, thus, daily attention is required.

- 1.** Check all bolts for tightness.
- 2.** Check sprayer for leaks.

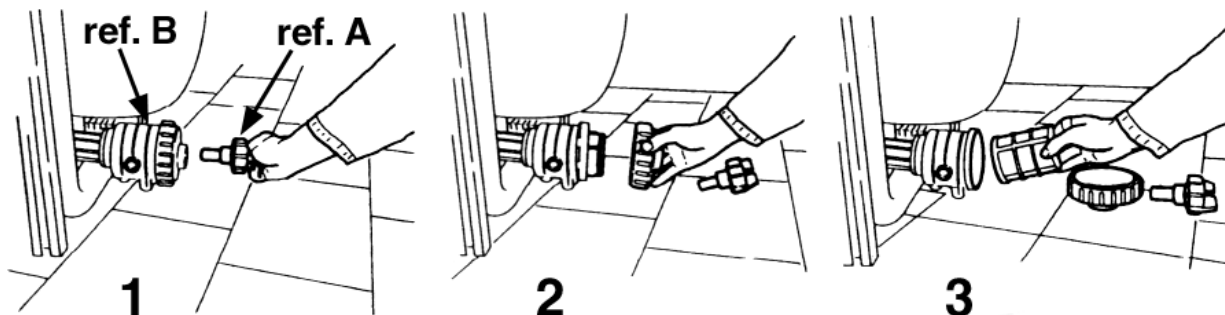
CLEANING & STORAGE

1. Wash and flush out sprayer after completion of each phase of your spraying program.
2. Flush out sprayer when changing chemicals, if there is a possibility of incompatibility.
3. Clean sprayer very thoroughly before storing at the end of the spraying season. If you are in a cold climate, final rinse should be with a sufficiently concentrated anti-freeze to prevent freeze-up in areas that were not thoroughly drained.
4. Check sprayer over for needed repairs before time to spray again.
5. Preparing the sprayer for use in the Spring means completion of all needed repairs, installation of all drain plugs and checking sprayer for leaks with a tank of water.

SAFETY TIPS

- ☐ Sprayer should be operated only by qualified persons.
- ☐ *Always* fill sprayer slowly to avoid spillage.
- ☐ When starting sprayer, maintain a safe distance from moving parts.
- ☐ *Never* run P.T.O. at speeds in excess of 540 R.P.M.
- ☐ *Do not* make adjustments when sprayer is running, unless specifically recommended.
- ☐ *Never* leave sprayer unattended while it is running.
- ☐ Keep hands, feet and clothing away from all moving parts.
- ☐ Handle chemicals carefully; follow the manufacturer's directions for mixing and applying chemicals.

SUCTION FILTER SERVICING



1. Remove the plunger valve (ref. A) from filter assembly (ref. B).
2. Unscrew large ring nut on filter assembly, removing nut and cover.
3. Remove and clean strainer on cartridge, replace if necessary.

PUMP MAINTENANCE

The pump is serviced, tested and ready for use. Nevertheless, before starting the sprayer, we advise checking the oil level.

The oil level should be filled to the mark on the plastic tube.

When adding oil, remove cap and fill to level mark with SAE 30 weight engine oil.

CHANGING THE OIL

1. Remove the pump and drain the oil by turning the pump upside down. To do this remove the filler cap and turn the P.T.O. shaft by hand.
2. Fill the crankcase with mineral (flushing) oil to wash all internal parts. Then drain pump again.
3. Add new oil and at the same time turn the P.T.O. shaft by hand. When the correct oil level has been reached, continue to turn the shaft until all the air bubbles in the oil have disappeared.

DIAPHRAGM AND VALVE REPLACEMENT

I. *Valve & O-ring Replacement*

1. Occasionally debris can cause the valves to not seat properly or damage the o-rings. To check for this problem, follow these steps:
 - a. Remove the check valve manifold. (See parts list for your model.)
 - b. With manifold removed, valves can readily be removed and checked for debris or wear.

To replace valves or o-rings, refer to parts list for appropriate kits.

II. *Diaphragm Replacement*

1. Drain the oil from the pump. Rotate the shaft to remove excess oil.
2. Remove the pump heads.
3. Use a box wrench to remove the diaphragm retaining bolt, support washer and diaphragm.
(To replace diaphragms order appropriate repair kit. See parts list.)
4. Turn the crankshaft to bring the piston to its downstroke and seat the new diaphragm into the sleeve groove. Install retaining washer and tighten bolt.
5. Refill crankcase with 30 weight oil. Rotate the shaft to distribute oil and fill to proper level.

GENERAL SAFETY INFORMATION



WARNING - Do not pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc. Do not use in explosive atmospheres. The pump should be used only with liquids compatible with the pump component materials. Failure to follow this warning may result in personal injury and / or property damage and will void the product warranty.

Use of pressure relief device, on the discharge side of pump, is required to prevent damage from pressure build-up, if the discharge is closed or blocked, while the power source is still running.

Do not operate pump above recommended R.P.M.

Do not pump at pressure higher than the maximum recommended for the pump (*see specifications*).

Operate pump between 45° and 145° F liquid temperatures.

Make certain that the power source conforms to the requirements of your equipment.

Provide adequate protection in guarding around the moving parts, such as the shaft and pulleys.

Disconnect power before servicing.

Release all pressure within the system before servicing any component.

Drain all liquids from the system before servicing.

Secure the discharge lines before starting the pump. An unsecured discharge line may whip, causing personal injury and/or property damage.

Check hoses for weak or worn condition before each use. Make certain that all connections are tight and secure.

Periodically inspect the pump and the system components. Perform routine maintenance as required (*see maintenance section*).

Do not operate a gasoline engine in an enclosed area. Be sure the area is well ventilated.

Use only pipe, hose and fittings rated for maximum rated pressure of pump or pressure at which pressure relief valve is set. Check with local supplier for proper pressure rating. (***Do not use used pipe!***)

Do not use these pumps for pumping water or other liquids for human or animal consumption.

TROUBLESHOOTING

| PROBLEM: | CAUSE: | REMEDY: |
|---|--|--|
| The pump does not draw water. | One or more valves are seating improperly. Suction line is plugged or collapsed. Clogged strainer. | Examine the valve seatings and clean them. Examine suction line. Clean strainer. |
| Pressure gauge fluctuates excessively. | The pump is sucking in air through the suction union or air has not been entirely evacuated from the pump. | Examine the suction hose and make sure it is firmly secured. Run the pump with the outlet hose open to evacuate air from the pump. |
| The liquid flow is irregular. | One or more valves are seating improperly. | Examine the valve seatings and clean them. |
| Output drops and the pump is noisy. | Oil level is too low. | Add oil to correct level (halfway up the sight tube). |
| Oil comes out of the discharge port. | One or more diaphragms split. | Drain the pump of oil. Dismantle the heads and fit new diaphragms. Fill to correct oil level with motor oil (30W). |
| Water is pumped at little or no pressure. | The sealing valve on the pressure control valve is worn. | Replace washer and, if necessary, the valve seat. |

FORMULA & RATE CHART

For Calibrating Gearmore Air Blast Sprayers

These must be known:

1. Tree spacing in feet (swath width)
 2. Tractor speed in feet per minute
 3. Gallons per acre desired
- Note:** (a.) 1 acre = 43,560 sq. ft.
 (b.) 1 MPH = 88 ft./min.

Tree spacing _____ ft. x tractor speed _____ ft./min. x application rate _____ gal./acre ÷ 43,560 = G.P.M. Divide G.P.M. by number of sprayer nozzles to determine G.P.M. per nozzle. Now choose correct nozzle disc and pressure setting from charts. Charts give G.P.M. per nozzle disc.

CALIBRATION FORM

Tree spacing _____ ft.
 Tractor speed _____ ft./min.
 Application rate _____ gal./acre

Tree spacing _____ ft. x tractor speed _____ ft./min. x application rate _____ gal./acre ÷ 43,560 = G.P.M.

Next: G.P.M. _____ , number of nozzles _____ = _____ G.P.M. per nozzle

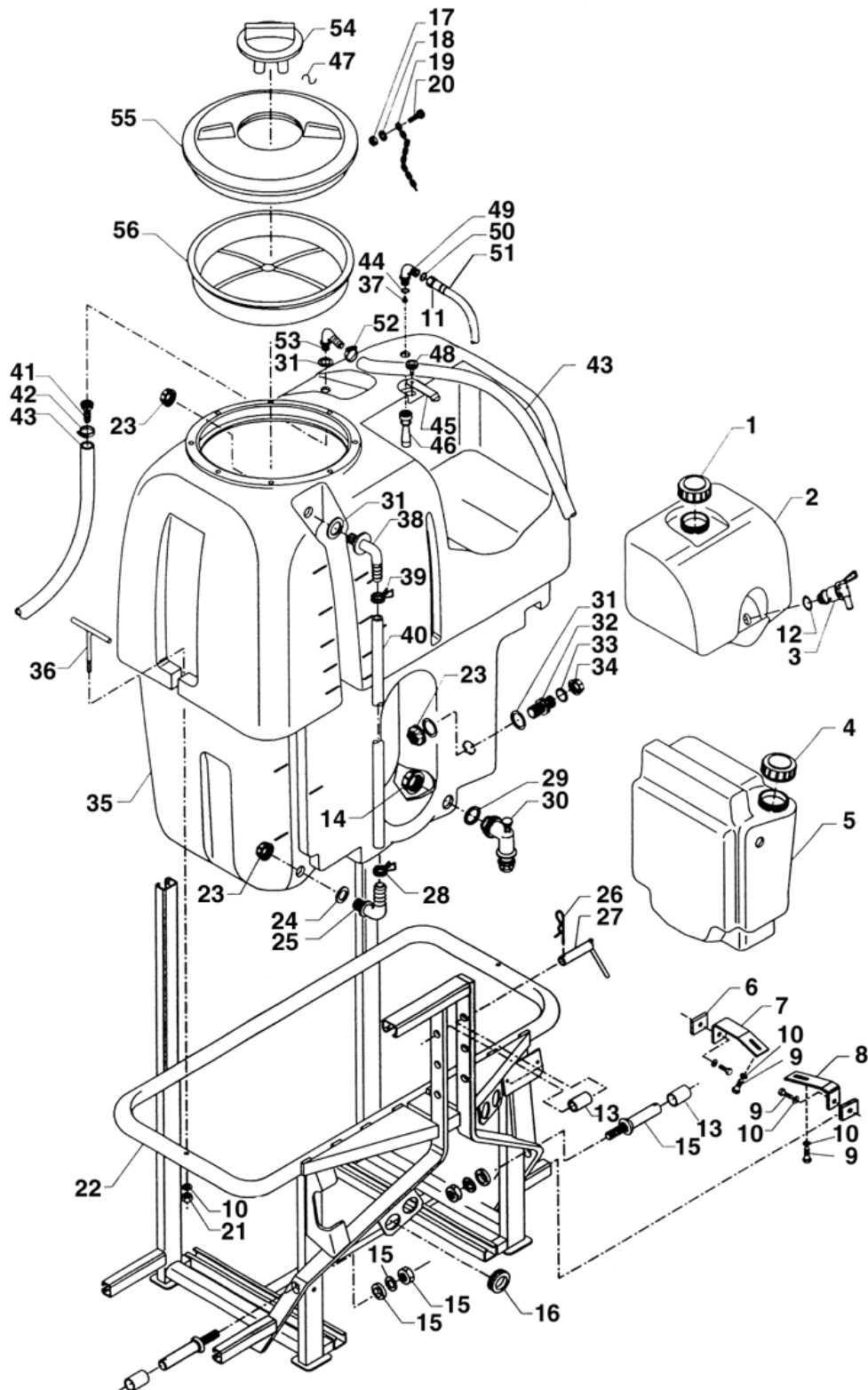
Refer to chart for: Nozzle disc # _____ Swirl plate _____

Pressure setting _____ P.S.I.

RATE CHART FOR SINGLE NOZZLES, WITH SMALL PINK DISC

| DISC SWIRL SIZE PLATE | | PRESSURE (P.S.I.) | | | | | | | | | | |
|--------------------------|--------|-------------------|------|------|------|------|------|------|------|------|------|------|
| | | 50 | 75 | 100 | 125 | 150 | 175 | 200 | 250 | 300 | 350 | 400 |
| 0.8 | 2 hole | .16 | .18 | .20 | .22 | .24 | .26 | .28 | .30 | .34 | .36 | .38 |
| 1.0 | 1.0 | .25 | .30 | .36 | .40 | .44 | .48 | .51 | .58 | .64 | .69 | .72 |
| 1.2 | 1.0 | .40 | .49 | .57 | .63 | .69 | .74 | .78 | .87 | .97 | 1.04 | 1.11 |
| 1.5 | 1.2 | .55 | .64 | .74 | .81 | .90 | .96 | 1.02 | 1.12 | 1.22 | 1.31 | 1.37 |
| 1.8 | 1.5 | .76 | .94 | 1.09 | 1.21 | 1.32 | 1.39 | 1.47 | 1.61 | 1.74 | 1.87 | 1.99 |
| 2.0 | 1.8 | .92 | 1.15 | 1.37 | 1.50 | 1.65 | 1.73 | 1.95 | 2.11 | 2.37 | 2.54 | 2.63 |
| 2.2 | 2.0 | 1.02 | 1.27 | 1.53 | 1.67 | 1.82 | 1.96 | 2.11 | 2.35 | 2.57 | 2.77 | 2.94 |
| 2.5 | 2.2 | 1.57 | 1.81 | 2.05 | 2.26 | 2.45 | 2.63 | 2.81 | 3.03 | 3.29 | 3.53 | 3.72 |

TANK ASSEMBLY 50 GALLON



TANK ASSEMBLY 50 GALLON

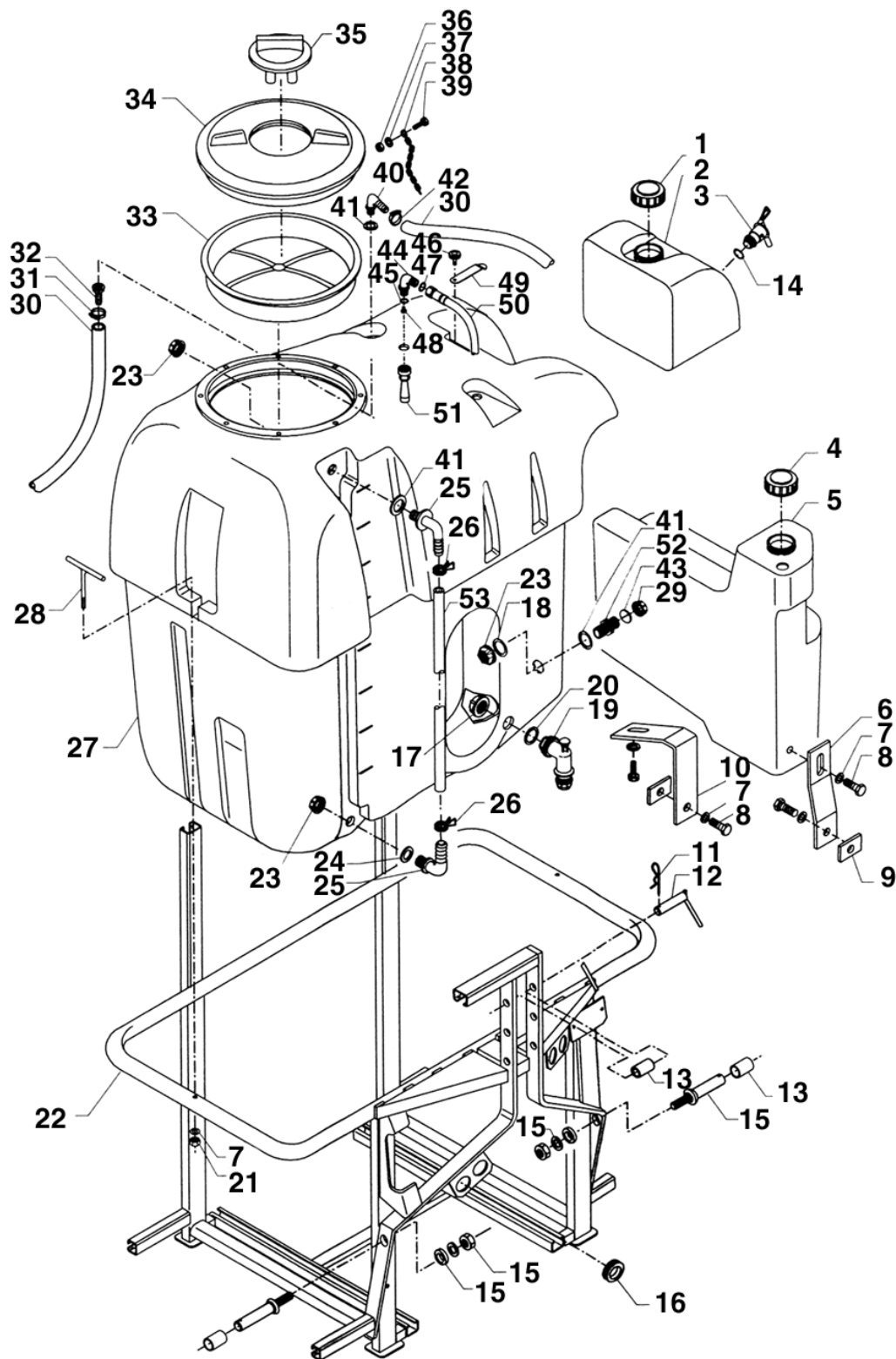
| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|---------------------|
| 1 | 1 | 0600187 | Lid |
| 2 | 1 | 0600189 | Tank, Handwash |
| 3 | 1 | 0600190 | Drain Valve |
| 4 | 1 | 0600187 | Lid |
| 5 | 1 | 0600182 | Tank, Flush |
| 6 | 2 | 0100107 | Plate |
| 7 | 1 | 0101477 | Bracket |
| 8 | 1 | 0101478 | Bracket |
| 9 | 4 | 1800036 | Bolt M10 x 25 |
| 10 | 6 | 1800130 | Washer D.10 |
| 11 | 2 | 1300036 | Fitting Assembly |
| 12 | 1 | 0600191 | Gasket |
| 13 | 4 | 2100135 | Bushing 28.4 x 22.4 |
| 14 | 1 | 1400009 | Nut, Ring |
| 15 | 2 | 2100009 | Lift Pin Assembly |
| 16 | 4 | 2900001 | Protector D.22 |
| 17 | 1 | 1800177 | Nut M5 |
| 18 | 1 | 1800113 | Washer 6.4 x 12.5 |
| 19 | 1 | 1400007 | Chain |
| 20 | 1 | 1800003 | Bolt M5 x 12 |
| 21 | 2 | 1800186 | Nut M.10 |
| 22 | 1 | 0101454 | Frame |
| 23 | 3 | 1400001 | Nut |
| 24 | 1 | 0600014 | Gasket |
| 25 | 1 | 1400130 | Elbow |
| 26 | 1 | 2100001 | Hair Pin |
| 27 | 1 | 0100203 | Pin D.18 |
| 28 | 1 | 1800350 | Clamp D2.9 x 9 |
| 29 | 1 | 1700015 | Gasket |
| 30 | 1 | 1400212 | Drain Valve |
| 31 | 3 | 1700001 | Gasket 33 x 21 x 2 |
| 32 | 1 | 1400002 | Nipple |
| 33 | 1 | 1700021 | Gasket 19 x 4 |
| 34 | 1 | 1400124 | Plug |
| 35 | 1 | 0600184 | Tank 50 Gallon |
| 36 | 2 | 0101476 | T Handle |
| 37 | 1 | 1400204 | Nozzle D.1.5 |
| 38 | 1 | 1400130 | Elbow |
| 39 | 1 | 0600051 | Clamp |

Continued....

TANK ASSEMBLY 50 GALLON

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|-----------------------|
| 40 | As Req'd | 12X17 | Hose 12 x 17 Per Foot |
| 41 | 1 | 1400192 | Fitting |
| 42 | 1 | 1500007 | Clamp |
| 43 | As Req'd | 19X26 | Hose 19 x 26 Per Foot |
| 44 | 1 | 1700006 | O-Ring 36 x 26 x 5 |
| 45 | 1 | 0600192 | Strap |
| 46 | 1 | 1400074 | Agitator |
| 47 | 1 | 2100143 | Hook |
| 48 | 1 | 0600193 | Knob |
| 49 | 1 | 1400075 | Elbow |
| 50 | 1 | 1700010 | Gasket 18 x 12 x 2 |
| 51 | As Req'd | 10X19 | Hose 10 x 19 Per Foot |
| 52 | 1 | 1500003 | Clamp |
| 53 | 1 | 1400062 | Elbow D.20 |
| 54 | 1 | 0600007 | Lid, Vent |
| 55 | 1 | 00.723.010 | Lid |
| 56 | 1 | 00.646.000 | Strainer Basket |

TANK ASSEMBLY 100 & 150 GALLON



TANK ASSEMBLY 100 & 150 GALLON

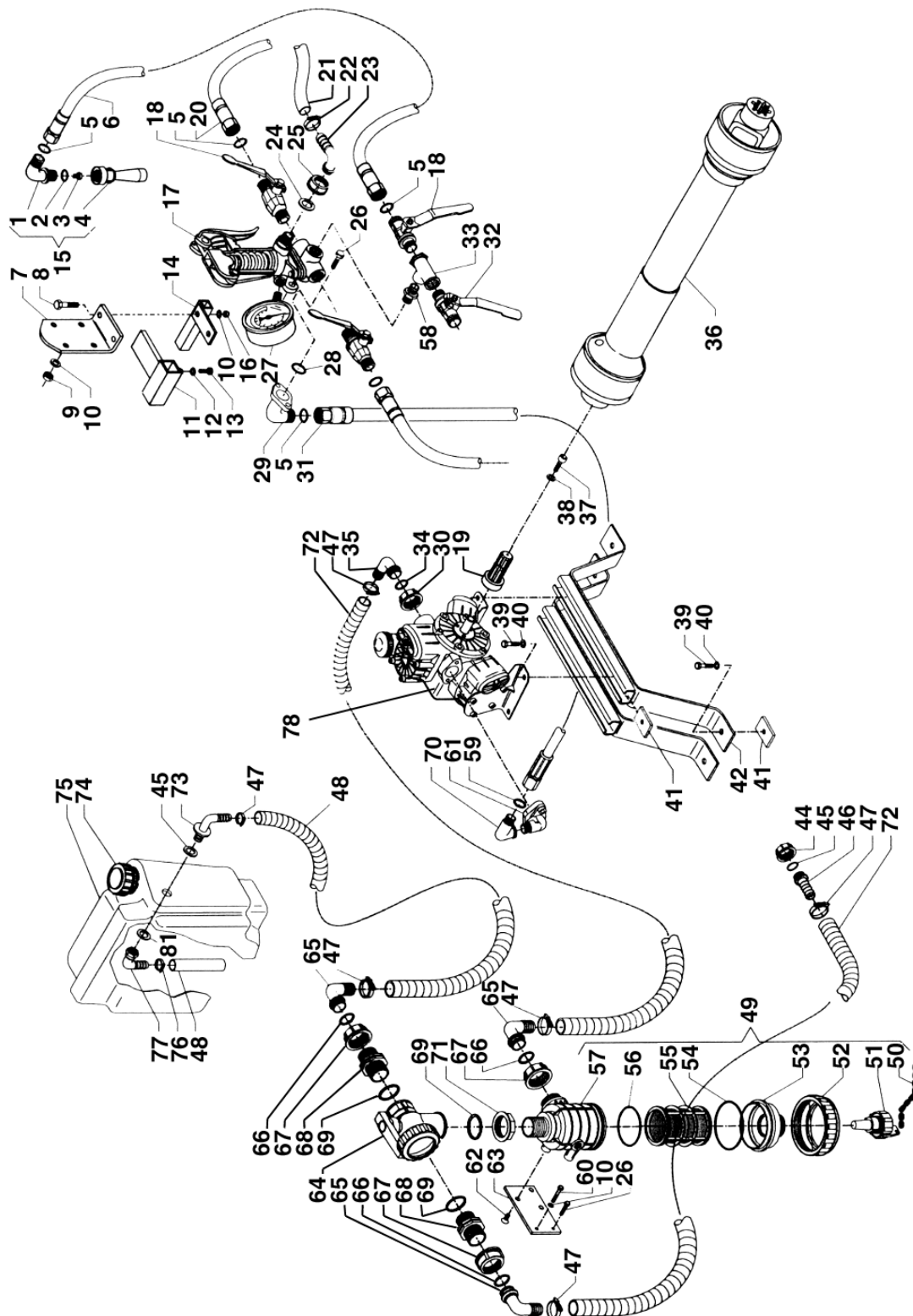
| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|--------------------------|
| 1 | 1 | 0600187 | Lid |
| 2 | 1 | 0600189 | Tank, Handwash |
| 3 | 1 | 0600190 | Valve, Drain |
| 4 | 1 | 0600187 | Lid |
| 5 | 1 | 0600167 | Tank, Flush |
| 6 | 1 | 0101488 | Support |
| 7 | 6 | 1800130 | Washer M.10 |
| 8 | 4 | 1800036 | Bolt M10 x 25 |
| 9 | 2 | 0100107 | Plate, Threaded |
| 10 | 1 | 0101487 | Support |
| 11 | 1 | 2100001 | Hair Pin |
| 12 | 1 | 0100203 | Pin D.18 |
| 13 | 4 | 2100135 | Bushing 28.4 x 22.4 L=45 |
| 14 | 1 | 0600191 | Gasket |
| 15 | 2 | 2100007 | Lift Pin Assembly |
| 16 | 4 | 2900001 | Garment, Rubber D.22 |
| 17 | 1 | 1400009 | Ring Nut |
| 18 | 1 | 0600014 | Gasket |
| 19 | 1 | 1400212 | Drain Plug Assembly |
| 20 | 1 | 1700015 | Gasket 57.5 x 40 x 3 |
| 21 | 2 | 1800186 | Nut M10 |
| 22 | 1 | 0101450 | Frame |
| 23 | 3 | 1400001 | Ring Nut |
| 24 | 1 | 2600009 | Gasket |
| 25 | 2 | 1400130 | Elbow |
| 26 | 2 | 0600051 | Clamp |
| 27 | 1 | 0600185 | Tank 100 Gallon |
| 27 | 1 | 0600186 | Tank 150 Gallon |
| 28 | 2 | 0101476 | T Handle |
| 29 | 1 | 1400124 | Plug |
| 30 | As Req'd | 19X26 | Hose 19 x 26 Per Foot |
| 31 | 1 | 1500007 | Clamp |
| 32 | 1 | 1400192 | Nipple D.20 |
| 33 | 1 | 0600023 | Strainer Basket |
| 34 | 1 | 0600006 | Lid 17 7/8" O.D. |
| 35 | 1 | 0600007 | Vent Lid |
| 36 | 1 | 1800177 | Nut M5 |
| 37 | 1 | 1800113 | Washer 6.4 x 12.5 |

Continued....

TANK ASSEMBLY 100 & 150 GALLON

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|-----------------------|
| 38 | 1 | 1400007 | Chain D3.5 L=300 |
| 39 | 1 | 1800003 | Bolt M5 x 12 |
| 40 | 1 | 1400062 | Elbow D.20 |
| 41 | 3 | 1700001 | Gasket |
| 42 | 1 | 1500003 | Clamp |
| 43 | 1 | 1700021 | Gasket |
| 44 | 1 | 1400075 | Elbow |
| 45 | 1 | 1700006 | Gasket |
| 46 | 1 | 0600193 | Knob |
| 47 | 1 | 1700010 | Gasket |
| 48 | 1 | 1400204 | Nozzle D1.5 |
| 49 | 1 | 0600192 | Strap |
| 50 | 1 | 1600690 | Hose 10 x 19 |
| 51 | 1 | 1400074 | Agitator Body |
| 52 | 1 | 1400002 | Nipple |
| 53 | As Req'd | 12X17 | Hose 12 x 17 Per Foot |

RUN OF FLUIDS 50 GALLON



RUN OF FLUIDS 50 GALLON

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|------------------------|
| 1 | 1 | 1400075 | Elbow |
| 2 | 1 | 1700006 | O-Ring 36 x 26 x 5 |
| 3 | 1 | 1400204 | Nozzle D.1.5 |
| 4 | 1 | 1400074 | Body |
| 5 | 5 | 1700010 | Gasket |
| 6 | 1 | 1600690 | Hose 10 x 19 L=1250 |
| 7 | 1 | 320406 | Support Bracket |
| 8 | 2 | 1800021 | Bolt M8 x 20 |
| 9 | 2 | 1800180 | Nut M8 |
| 10 | 5 | 1800120 | Washer D.8 |
| 11 | 1 | 0100236 | Bracket |
| 12 | 1 | 1800131 | Washer M10 x 30 x 2.5 |
| 13 | 1 | 1800063 | Bolt M10 x 20 |
| 14 | 1 | 0100235 | Support |
| 15 | 1 | 1400200 | Agitator Assembly |
| 16 | 2 | 1800181 | Nut M8 |
| 17 | 1 | GS40I | Control Valve Assembly |
| 18 | 2 | 130491 | Ball Valve R.H. |
| 19 | 1 | 621370 | Adaptor 20 mm |
| 20 | 2 | 1600277 | Hose 10 x 19 |
| 21 | As Req'd | 19X26 | Hose 19 x 26 Per Foot |
| 22 | 2 | 1500003 | Clamp |
| 23 | 1 | 550460 | Elbow D.18 |
| 24 | 1 | OR1554262 | O-Ring 15.54 x 2.62 |
| 25 | 1 | 550450 | Ring Nut |
| 26 | 3 | 1800024 | Bolt M8 x3 5 |
| 27 | 1 | 550545 | Gauge |
| 28 | 2 | 390180 | O-Ring 18.72 x 2.62 |
| 29 | 1 | 450145 | Flange |
| 30 | 1 | 580060 | Ring Nut |
| 31 | 1 | 1600003 | Hose 10 x 19 |
| 32 | 1 | 130492 | Ball Valve L.H. |
| 33 | 1 | 1300035 | Tee |
| 34 | 1 | 390290 | O-Ring 29 x 3 |
| 35 | 1 | 580040 | Elbow D.30 |
| 36 | 1 | 7104056FFT077 | Driveline |
| 37 | 1 | 680350 | Bolt M8 x 35 |
| 38 | 1 | 961340 | Washer D.8.5 |
| 39 | 8 | 1800036 | Bolt M10 x 25 |

Continued....

RUN OF FLUIDS 50 GALLON

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|-----------------------------|
| 40 | 8 | 1800130 | Washer M10 |
| 41 | 4 | 0100107 | Plate |
| 42 | 2 | 0101456 | Support Mount |
| 44 | 1 | 1400026 | Ring Nut |
| 45 | 2 | 1700011 | Gasket 40 x 26 x 2 |
| 46 | 1 | 1400193 | Hose Barb D.25 |
| 47 | 6 | 1500004 | Clamp |
| 48 | As Req'd | 25X37 | Hose 25 x 37 Per Foot |
| 49 | 1 | 1400197 | Filter Assembly |
| 50 | 1 | 1400007 | Chain, Plastic L=300 |
| 51 | 1 | 1400205 | Plug |
| 52 | 1 | 1400206 | Ring Nut |
| 53 | 1 | 1400207 | Cover |
| 54 | 1 | 1400209 | O-Ring 5.34 x 91.44 x 102.1 |
| 55 | 1 | 1400208 | Strainer |
| 56 | 2 | 1700052 | O-Ring 71.1 x 2.6 |
| 57 | 1 | 1400210 | Body |
| 58 | 1 | 1300034 | Nipple |
| 59 | 1 | 0600188 | Gasket |
| 60 | 1 | 1800027 | Bolt M8 x 40 |
| 61 | 1 | 1040760 | Flange |
| 62 | 3 | 1800447 | Bolt M8 x 16 |
| 63 | 1 | 0101475 | Bracket |
| 64 | 1 | 1400362 | Ball Valve |
| 65 | 3 | 1400057 | Elbow D.25 |
| 66 | 3 | 1700012 | O-Ring 31.89 x 26.65 x 2.62 |
| 67 | 3 | 1400013 | Ring Nut |
| 68 | 2 | 1400149 | Nipple 1 1/4" |
| 69 | 3 | 1700009 | O-Ring 48.15 x 37.47 x 5.34 |
| 70 | 1 | 1300001 | Elbow, Brass |
| 71 | 1 | 1400009 | Ring Nut |
| 72 | As Req'd | 30X42 | Hose 30 x 42 Per Foot |
| 73 | 1 | 1400042 | Elbow D.25 |
| 74 | 1 | 0600187 | Lid |
| 75 | 1 | 0600182 | Tank |
| 76 | 1 | 1500008 | Clamp |
| 77 | 1 | 1400141 | Elbow D.25 |
| 78 | 1 | AR403 | Pump Assembly |

This diagram is an exploded view of a mechanical assembly, likely a pump or engine component. It shows various parts separated to illustrate their assembly sequence. The parts are numbered as follows:

- Top Left:** 1, 2, 3, 4, 5, 6, 7, 10, 11, 12, 13, 16, 17, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35.
- Top Right:** 41.
- Middle:** 38, 43, 44, 45, 46, 47, 48, 49, 50, 52, 53, 54, 55, 56, 60, 61, 62.
- Bottom Left:** 37, 40, 57, 58.
- Bottom Center:** 9, 14, 15, 36, 71, 72, 73, 74, 75, 76, 77.
- Bottom Right:** 59, 60, 61, 63, 64, 65, 66, 67, 68, 69, 70.

The diagram includes various components such as bolts, nuts, washers, seals, and structural housings, all labeled with their respective part numbers.

RUN OF FLUIDS 100 & 150 GALLON

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|------------------------|
| 1 | 1 | 1400075 | Elbow |
| 2 | 1 | 1700006 | O-Ring D.36 x 26 x 5 |
| 3 | 1 | 1400204 | Nozzle D.1.5 |
| 4 | 1 | 1400074 | Body |
| 5 | 4 | 1700010 | Gasket |
| 6 | 1 | 1600690 | Hose 10 x 19 L=1250 |
| 7 | 4 | 1600277 | Hose 10 x 19 L=2350 |
| 8 | 3 | OR1872262 | O-Ring 18.72 x 2.62 |
| 9 | 1 | 1400049 | Elbow D.30 |
| 10 | 2 | 130491 | Ball Valve R.H. |
| 11 | 1 | 1400210 | Agitator Assembly |
| 12 | 1 | 1150590 | Bracket |
| 13 | 1 | RM40I | Regulator Valve |
| 14 | 1 | 1400362 | Ball Valve |
| 15 | 1 | 00.483.000 | Elbow D.30 |
| 16 | 1 | 1300035 | Tee |
| 17 | 2 | 130492 | Ball Valve L.H. |
| 18 | 1 | 1400048 | Hose Barb D.30 |
| 19 | 1 | 1300034 | Nipple 3/8" |
| 20 | 1 | 0100235 | Support |
| 21 | 3 | 1800120 | Washer M.8 |
| 22 | 2 | 1800180 | Nut M8 |
| 23 | 1 | 0100236 | Support |
| 24 | 2 | 1800131 | Washer 10 x 30 x 2.5 |
| 25 | 2 | 1800063 | Bolt M10 x 20 |
| 26 | 1 | 550545 | Gauge |
| 27 | 2 | 1800021 | Bolt M8 x 20 |
| 28 | 1 | 1040690 | Clip |
| 29 | 1 | 1040770 | Fitting |
| 30 | 2 | 1700025 | O-Ring 22.2 x 16.2 x 3 |
| 31 | 1 | 1600688 | Hose 13 x 23 L=1450 |
| 32 | 2 | 1500003 | Clamp |
| 33 | 1 | 550450 | Ring Nut |
| 34 | 1 | 550460 | Elbow D.18 |
| 35 | 1 | 880830 | O-Ring 15.54 x 16.62 |
| 36 | 2 | 1400149 | Nipple 1 1/4" |
| 37 | 1 | 1400167 | Elbow D.30 |
| 38 | 1 | 961340 | Washer D.8.5 |
| 39 | 1 | 1700051 | O-Ring 31 x 2.5 |

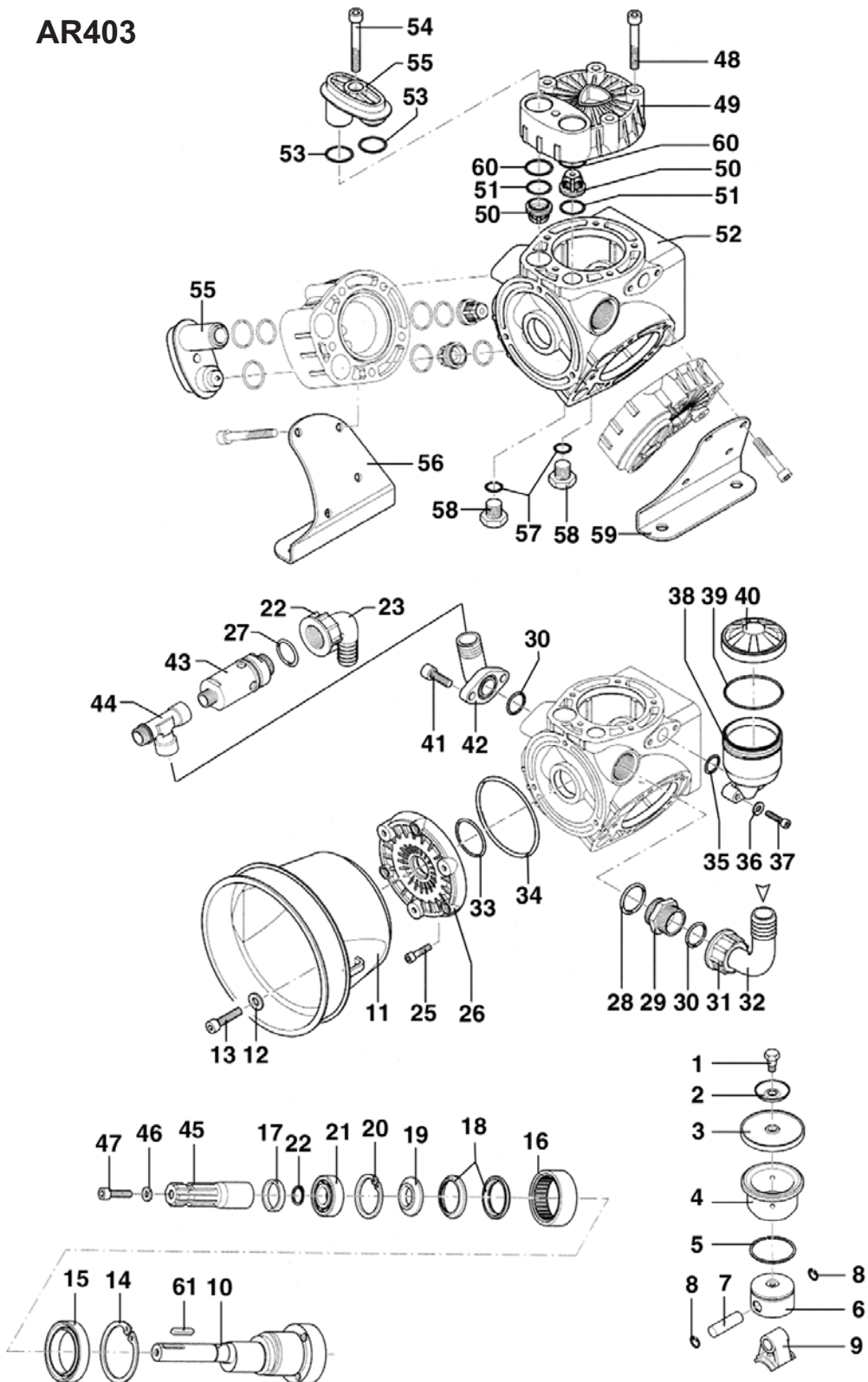
Continued....

RUN OF FLUIDS 100 & 150 GALLON

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|-----------------------------|
| 40 | 5 | 1500004 | Clamp |
| 41 | 1 | 7104056FFT077 | Driveline |
| 42 | As Req'd | 02.215.000 | Hose 30 x 42 Per Foot |
| 43 | 1 | 680350 | Bolt M8 x 35 |
| 44 | 1 | 580040 | Elbow D.30 |
| 45 | 1 | OR293 | O-Ring 29 x 3 |
| 46 | 1 | 580060 | Ring Nut |
| 47 | 1 | 1518 | Adapter 25 mm |
| 48 | 8 | 1800036 | Bolt M10 x 25 |
| 49 | 8 | 1800130 | Washer M10 |
| 50 | 1 | 1400197 | Filter Assembly |
| 51 | 1 | 1800056 | Bolt M8 x 45 |
| 52 | 2 | 0101456 | Support |
| 53 | 4 | 0100107 | Plate, Threaded |
| 54 | 4 | 1040690 | Lock Clip |
| 55 | 1 | 1300019 | Elbow, Brass |
| 56 | 1 | 1040760 | Fitting |
| 57 | 1 | 0600187 | Lid |
| 58 | 1 | 0600167 | Tank |
| 59 | 1 | 1400024 | Ring Nut |
| 60 | 2 | 1700016 | Gasket 45 x 33 x 3 |
| 61 | 2 | 1400129 | Hose Barb D.30 |
| 62 | 1 | AR503 | Pump |
| 63 | 1 | 1400007 | Chain, Plastic L=300 |
| 64 | 1 | 1400205 | Plug |
| 65 | 1 | 1400206 | Ring Nut |
| 66 | 1 | 1400207 | Cover |
| 67 | 1 | 1400209 | O-Ring 91.44 x 102.1 x 5.34 |
| 68 | 1 | 1400208 | Strainer |
| 69 | 2 | OR7112262 | O-Ring 71.12 x 2.62 |
| 70 | 1 | 1400210 | Body |
| 71 | 3 | OR3747533 | O-Ring 37.47 x 5.33 |
| 72 | 1 | 1400009 | Ring Nut |
| 73 | 3 | 1400013 | Ring Nut |
| 74 | 3 | OR2664262 | O-Ring 26.64 x 2.62 |
| 75 | 3 | 1800447 | Bolt M8 x 16 |
| 76 | 1 | 0101475 | Plate, Support |
| 77 | 1 | 1800039 | Bolt M8 x 50 |

PUMP ASSEMBLY FOR GDL200

AR403



PUMP ASSEMBLY FOR GDL200

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|---------------------|
| 1 | 3 | 800090 | Pin, Diaphragm |
| 2 | 3 | 800350 | Washer, Cup |
| 3 | 1 | 2387 | Diaphragm Kit |
| 4 | 3 | 1880050 | Sleeve |
| 5 | 3 | 1880110 | Piston Ring |
| 6 | 3 | 1880060 | Piston |
| 7 | 3 | 1880120 | Pin, Piston |
| 8 | 6 | 380080 | Circlip, Piston |
| 9 | 3 | 1880070 | Rod, Connecting |
| 10 | 1 | 1880160 | Crankshaft |
| 11 | 1 | 1500350 | Shield |
| 12 | 3 | 380241 | Washer D.8.5 |
| 13 | 3 | 850250 | Bolt M10 x 16 |
| 14 | 1 | 620330 | Circlip |
| 15 | 1 | 50X65X8 | Oil Seal |
| 16 | 1 | DHK5020 | Bearing |
| 17 | 1 | 1880190 | Seal Ring |
| 18 | 2 | 1880180 | Ring |
| 19 | 1 | 1880170 | Spacer |
| 20 | 1 | 47247 | Circlip I47 |
| 21 | 1 | 1461430 | Bearing |
| 22 | 1 | 47120 | Circlip E20 |
| 23 | 1 | 550460 | Elbow |
| 24 | 1 | 550450 | Nut |
| 25 | 3 | 780060 | Bolt M6 x 25 |
| 26 | 1 | 1880021 | Manifold |
| 27 | 1 | 880831 | O-Ring 15.54 x 2.62 |
| * 28 | 1 | OR293 | O-Ring 29 x 3 |
| 29 | 1 | 550340 | Nipple 1" |
| * 30 | 2 | 550350 | O-Ring 23.81 x 2.62 |
| 31 | 1 | 550242 | Nut |
| 32 | 1 | 550370 | Elbow |
| * 33 | 1 | 390201 | O-Ring |
| * 34 | 1 | 1880130 | O-Ring |
| * 35 | 1 | OR1872262 | O-Ring 18.72 x 2.62 |
| 36 | 2 | 550331 | Washer D.6.5 |
| 37 | 2 | 1200440 | Bolt M6 x 30 |
| 38 | 1 | 1040310 | Tank, Oil |
| * 39 | 1 | 650920 | O-Ring |

Continued....

PUMP ASSEMBLY FOR GDL200

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|---|
| 40 | 1 | 1040320 | Cap |
| 41 | 2 | 540290 | Bolt M8 x 25 |
| 42 | 1 | 450145 | Flange |
| 43 | 1 | 1433 | Relief Valve |
| 44 | 1 | 1620450 | Tee |
| 45 | 1 | 621370 | PTO Adapter |
| 46 | 1 | 961340 | Washer |
| 47 | 1 | 680350 | Bolt M8 x 35 |
| 48 | 1 | 800860 | Bolt M8 x 55 |
| 49 | 3 | 1880030 | Head |
| 50 | 1 | 2388 | Check Valve Kit (with O-Rings Ref. #51) |
| * 51 | 9 | 1140450 | O-Ring 20.24 x 2.62 |
| 52 | 1 | 1880010 | Housing |
| * 53 | 6 | OR2670178 | O-Ring 26.7 x 1.78 |
| 54 | 3 | 280080 | Bolt M8 x 60 |
| 55 | 3 | 1880040 | Cover |
| 56 | 1 | 1880090 | Bracket L.H. |
| * 57 | 2 | OR14178 | O-Ring 14.1 x 1.78 |
| 58 | 2 | 880530 | Plug |
| 59 | 1 | 1880080 | Bracket R.H. |
| 60 | 6 | 780050 | O-Ring 28.25 x 1.78 |
| 61 | 1 | 620680 | Tempered Key 6 x 6 x 30 |

* KIT 2389

| <u>REF.</u> | <u>QTY.</u> | <u>REF.</u> | <u>QTY.</u> |
|-------------|-------------|-------------|-------------|
| 28 | 1 | 35 | 1 |
| 30 | 2 | 39 | 1 |
| 33 | 1 | 51 | 9 |
| 34 | 1 | 53 | 6 |
| | | 57 | 2 |

This exploded view diagram illustrates the assembly of a gas burner. The components are numbered as follows:

- Legend Box (Top Left):**
 - 22: Small screw
 - 23: Small screw
 - 24: Spring
 - 25: Small screw
- Main Assembly Components:**
 - 1: Gas valve body
 - 2: Gas valve handle
 - 3: Gas valve handle
 - 4: Gas valve handle
 - 5: Gas valve handle
 - 6: Gas valve handle
 - 7: Gas valve handle
 - 8: Gas valve handle
 - 9: Gas valve handle
 - 10: Gas valve handle
 - 11: Gas valve handle
 - 12: Gas valve handle
 - 13: Gas valve handle
 - 14: Gas valve handle
 - 15: Gas valve handle
 - 16: Gas valve handle
 - 17: Gas valve handle
 - 18: Gas valve handle
 - 19: Gas valve handle
 - 20: Gas valve handle
 - 21: Gas valve handle
 - 22: Gas valve handle
 - 23: Gas valve handle
 - 24: Gas valve handle
 - 25: Gas valve handle
 - 26: Gas valve handle
 - 27: Gas valve handle
 - 28: Gas valve handle
 - 29: Gas valve handle
 - 30: Gas valve handle
 - 31: Gas valve handle
 - 32: Gas valve handle
 - 33: Gas valve handle
 - 34: Gas valve handle
 - 35: Gas valve handle
 - 36: Gas valve handle
 - 37: Gas valve handle
 - 38: Gas valve handle
 - 39: Gas valve handle
 - 40: Gas valve handle
 - 41: Gas valve handle
 - 42: Gas valve handle
 - 43: Gas valve handle
 - 44: Gas valve handle
 - 45: Gas valve handle
 - 46: Gas valve handle

Continued....

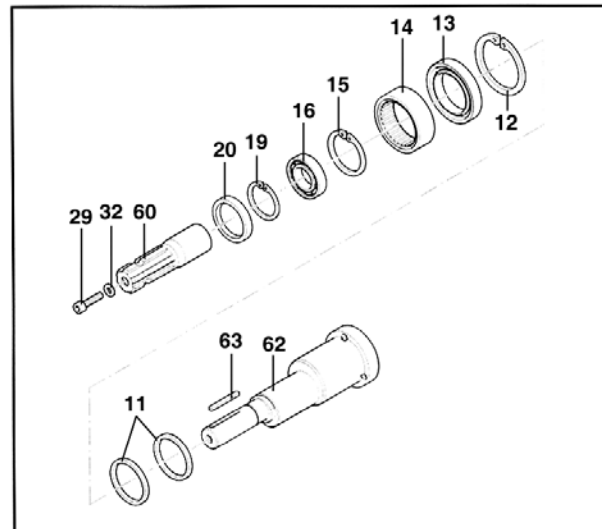
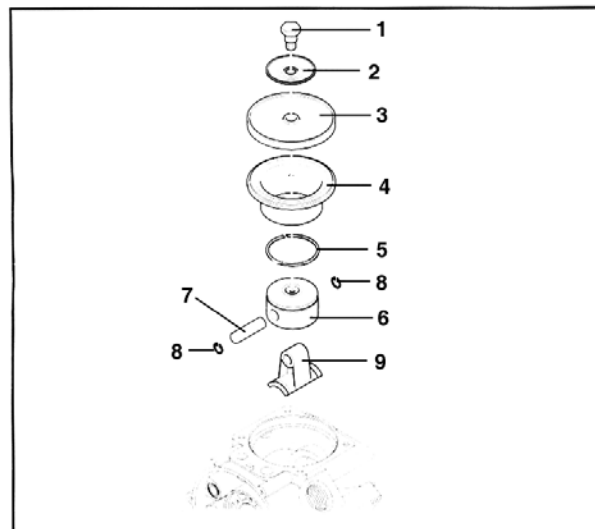
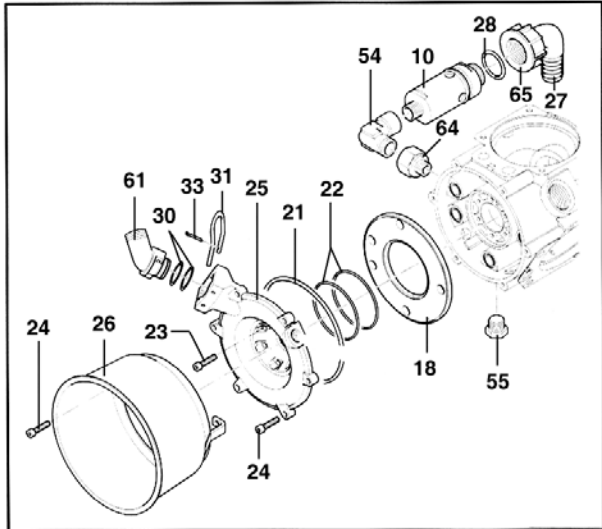
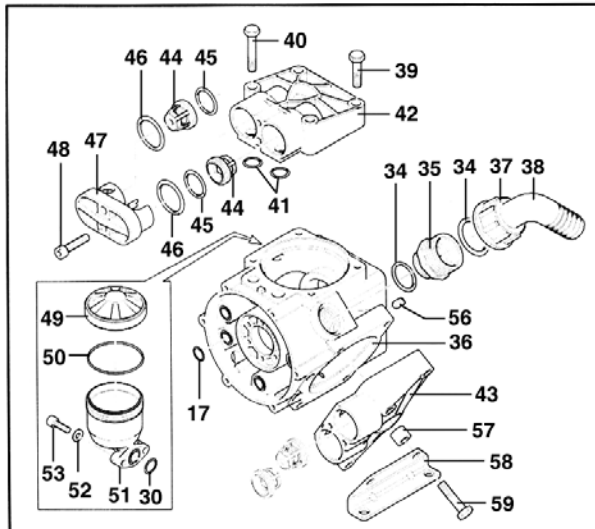
GS40 VALVE ASSY FOR GDL200

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|--------------------|
| 16 | 1 | 550440 | Threaded Adapter |
| 17 | 1 | 320410 | Body, Upper |
| 18 | 2 | 320480 | Pin |
| 19 | 1 | 320460 | Fork |
| 20 | 1 | 320470 | Lever |
| 21 | 1 | 320490 | Locking Clip |
| 22 | 1 | 320450 | Adjustment Nut |
| 23 | 1 | 320440 | Guide |
| 24 | 1 | 110190 | Spring |
| 25 | 1 | 230120 | Seat |
| 28 | 1 | 320406 | Bracket |
| 30 | 1 | 450145 | Flange |
| 31 | 1 | 550450 | Ring Nut |
| 32 | 1 | 110130 | Fitting |
| 33 | 2 | 160660 | Bolt M8 x 35 |
| 36 | 1 | 880830 | O-Ring |
| 38 | 1 | 180101 | O-Ring |
| 43 | 2 | 130492 | Ball Valve L.H. |
| 44 | 1 | 1041210 | Extension |
| 45 | 1 | 1041220 | Adapter |
| 46 | 1 | 881560 | Elbow |

| □KIT 1922 | | θ KIT 1757 | | | |
|-----------|------|------------|------|------|------|
| REF. | QTY. | REF. | QTY. | REF. | QTY. |
| 11 | 5 | 5 | 1 | 13 | 1 |
| | | 10 | 1 | 14 | 1 |
| | | 11 | 1 | | |
| | | 12 | 1 | | |

PUMP ASSY GDL400 & 600

AR503



PUMP ASSY GDL400 & 600

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|----------------------------|
| 1 | 3 | 580360 | Bolt |
| 2 | 3 | 1040180 | Retaining Washer |
| 3 | 1 | 1986 | Diaphragm Kit |
| 3 | 3 | 620081 | Diaphragm Viton (optional) |
| 4 | 3 | 1300110 | Sleeve |
| 5 | 3 | 160230 | Piston Ring |
| 6 | 3 | 620120 | Piston |
| 7 | 3 | 380300 | Pin, Connecting Rod |
| 8 | 6 | 380080 | Retainer Ring |
| 9 | 3 | 1300140 | Connecting Rod |
| 10 | 1 | 1433 | Relief Valve |
| 11 | 2 | 1300120 | Retainer Ring |
| 12 | 1 | 47270 | Circlip I70 |
| 13 | 1 | 55X70X8 | Oil Seal |
| 14 | 1 | HK5520 | Bearing |
| 15 | 1 | 47252 | Circlip I52 |
| 16 | 1 | 6205 | Bearing |
| ⊖ 17 | 5 | OR14178 | O-Ring 14 x 1.78 |
| 18 | 1 | 1300020 | Manifold Plate |
| 19 | 1 | 47125 | Circlip E25 |
| 20 | 1 | 25X35X7 | Oil Seal |
| ⊖ 21 | 1 | 1300270 | O-Ring 126.67 x 2.62 |
| ⊖ 22 | 2 | OR60262 | O-Ring 60 x 2.62 |
| 23 | 6 | 880280 | Bolt M6 x 18 |
| 24 | 6 | 1040370 | Bolt M6 x 22 |
| 25 | 1 | 1300030 | Discharge Manifold |
| 26 | 1 | 1500130 | Shield, PTO |
| 27 | 1 | 00.055.046 | 90 Degree Elbow D.18 |
| 28 | 1 | OR1588262 | O-Ring 15.54 x 2.62 |
| 29 | 1 | 680350 | Bolt M8 x 35 |
| ⊖ 30 | 3 | OR1872262 | O-Ring 18.72 x 2.62 |
| 31 | 1 | 1040690 | Clip |
| 32 | 1 | 961340 | Washer D.8.5 |
| 33 | 1 | 1040950 | Cotter Pin |
| ⊖ 34 | 2 | OR293 | O-Ring 29 x 3 |
| 35 | 1 | 450120 | Adapter 1" - 1 1/4" |
| 36 | 1 | 1300010 | Housing, Pump |
| 37 | 1 | 580060 | Nut 1 1/4 |
| 38 | 1 | 580040 | 90 Degree Elbow D.30 |
| 39 | 4 | 200230 | Bolt M10 x 45 |
| 40 | 4 | 640230 | Bolt M10 x 60 |

PUMP ASSY GDL400 & 600

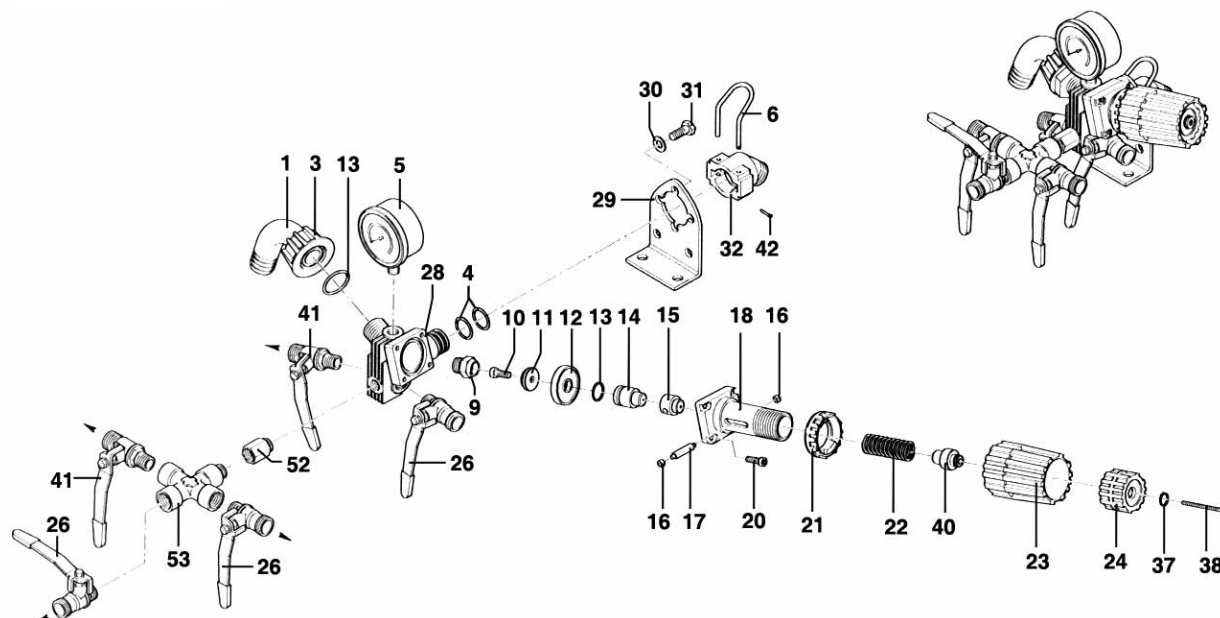
| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|------------------------------------|
| ⊖ 41 | 6 | OR1713262 | O-Ring 17.13 x 2.62 |
| 42 | 2 | 1300101 | Head, Pump R.H. |
| 43 | 1 | 1300102 | Head, Pump L.H. |
| 44 | 1 | 1987 | Valve Kit (includes Ref. #45 & 46) |
| ⊖ 45 | 6 | OR2580353 | O-Ring 25.80 x 3.53 |
| ⊖ 46 | 6 | OR3305178 | O-Ring 33.05 x 1.78 |
| 47 | 3 | 1300190 | Valve Head |
| 48 | 6 | 620610 | Bolt M8 x 30 |
| 49 | 1 | 1040322 | Cap, Oil Bowl |
| ⊖ 50 | 1 | OR5364262 | O-Ring 53.64 x 2.62 |
| 51 | 1 | 1040310 | Oil Bowl |
| 52 | 2 | 550331 | Washer D.6.5 |
| 53 | 2 | 850850 | Bolt M6 x 30 |
| 54 | 1 | 881560 | Elbow |
| 55 | 1 | 880530 | Plug |
| 56 | 1 | 770070 | Plug, Allen Head |
| 57 | 2 | 1300280 | Spacer |
| 58 | 2 | 1300090 | Mount Bracket |
| 59 | 4 | 1300360 | Bolt M10 x 65 |
| 60 | 1 | 1518 | PTO Adapter |
| 61 | 1 | 1040760 | Adapter |
| 62 | 1 | 1300160 | Crankshaft |
| 63 | 1 | 650250 | Key |
| 64 | 1 | 881461 | Adapter |

⊖KIT 1984 O-RING KIT

| <u>REF.</u> | <u>QTY.</u> |
|-------------|-------------|
| 17 | 6 |
| 21 | 1 |
| 22 | 2 |
| 30 | 3 |
| 34 | 2 |
| 41 | 6 |
| 45 | 6 |
| 46 | 6 |
| 50 | 1 |

VALVE ASSY GDL400 & 600

RM40S



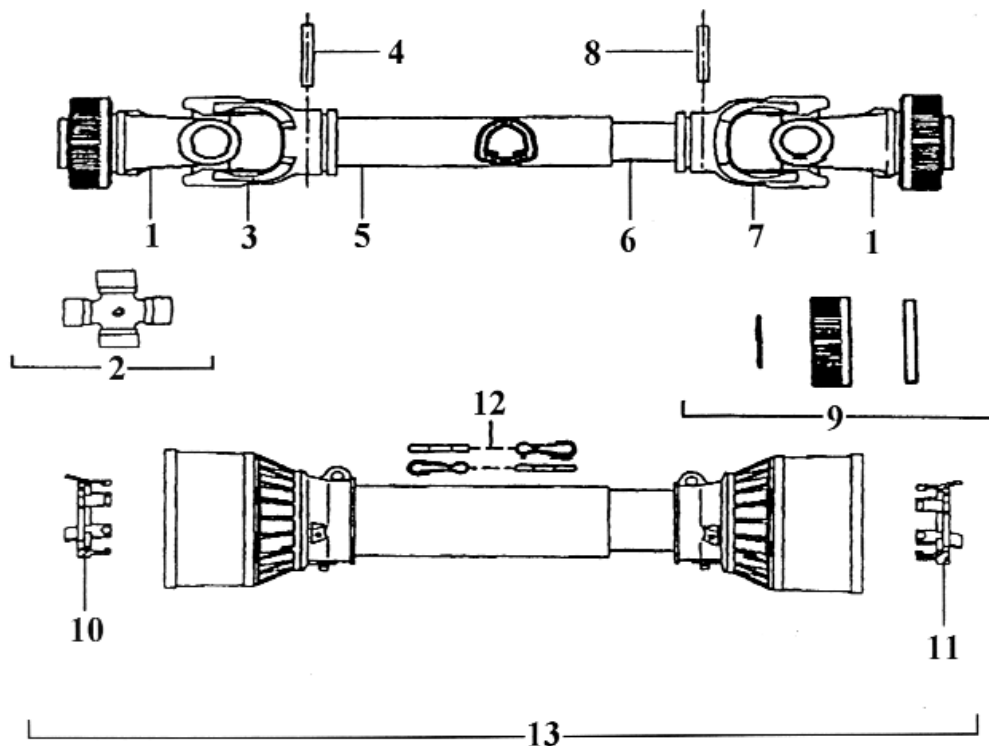
| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|--------------------------|
| 1 | 1 | 550460 | Elbow 18 |
| 3 | 1 | 550450 | Nut Plastic 3/4" GAS |
| Δ ● 4 | 7 | 390180 | O-Ring 3075 18.72 x 2.62 |
| 5 | 1 | 550545 | Pressure Gauge |
| ● 6 | 1 | 1040690 | Lockclip |
| ● 9 | 1 | 1150520 | Valve Seat |
| 10 | 1 | 680560 | Bolt, 6 x 15 Allen |
| ● 11 | 1 | 1040640 | Valve Seat |
| ● 12 | 1 | 1040631 | Diaphragm |
| Δ ● 13 | 2 | 1988 | O-Ring 3062 15.54 x 2.62 |
| 14 | 1 | 1040620 | Piston |
| ● 15 | 1 | 1150560 | Spacer |
| 16 | 2 | 1150600 | Bushing |
| ● 17 | 1 | 1150540 | Roll Pin |
| 18 | 1 | 1150510 | Valve Body |
| 20 | 4 | 780330 | Bolt, 6 x 20 Allen |
| ● 21 | 1 | 1150530 | Control Nut |
| ● 22 | 1 | 394760 | Spring |

VALVE ASSY GDL400 & 600

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|--------------------|
| ●23 | 1 | 1150550 | Control Knob |
| ●24 | 1 | 1150570 | Control Knob |
| 26 | 3 | 130491 | Ball Valve 3/8 |
| 28 | 1 | 1150500 | Valve Body |
| 29 | 1 | 1150590 | Mounting Bracket |
| 30 | 2 | 390311 | Washer 8.5 |
| 31 | 2 | 180431 | Bolt, 8 x 16 |
| 32 | 1 | 1040770 | Fitting Pressure |
| 37 | 1 | 480550 | Circlip |
| 38 | 1 | 1150650 | Allen Bolt M3 x 60 |
| 40 | 1 | 1150660 | Spacer |
| 41 | 2 | 130492 | Left Valve |
| 42 | 1 | 1040950 | Split Pin |
| 52 | 1 | 1041210 | Extension |
| 53 | 1 | 1041220 | Adapter |

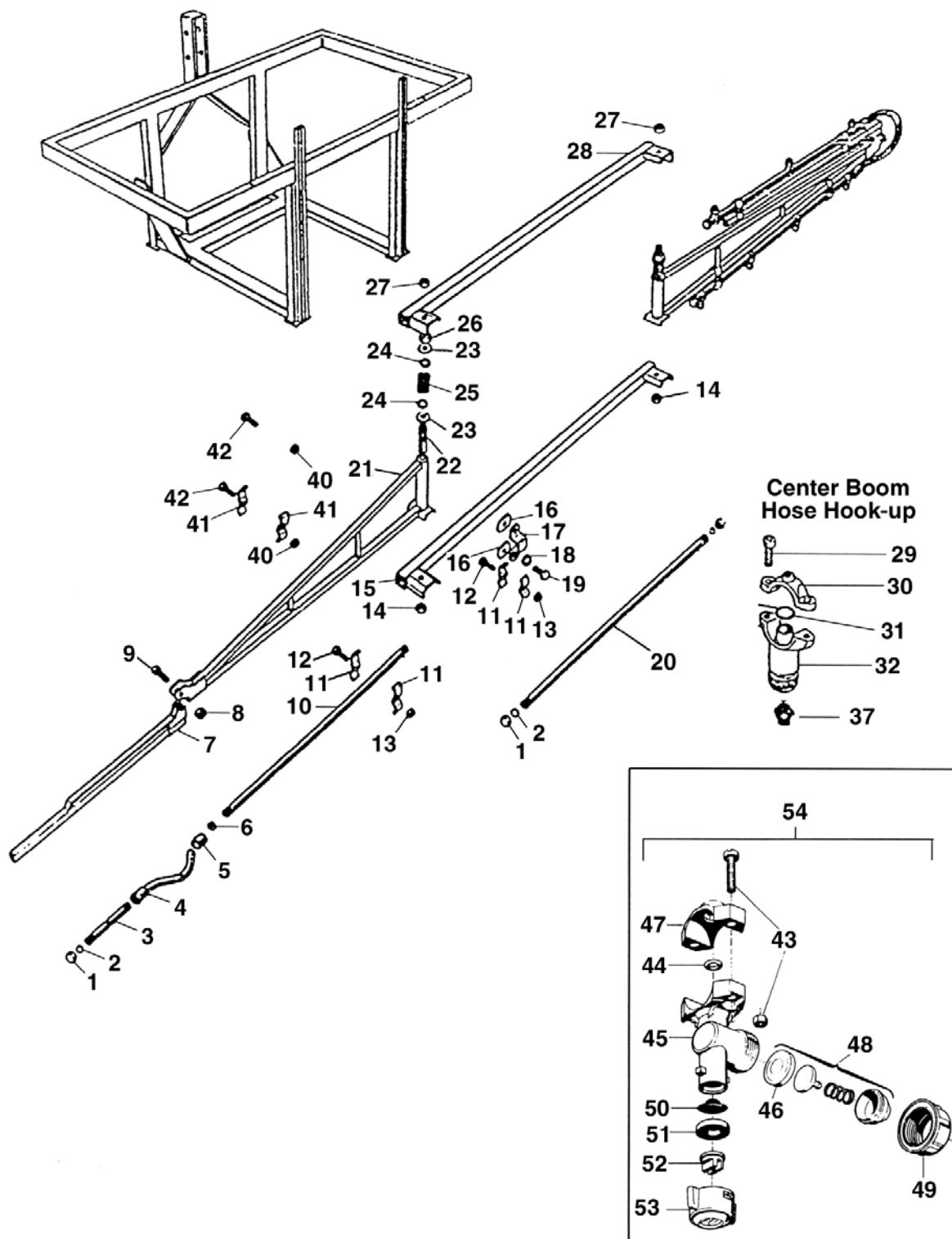
| △ KIT 1988 O-RING | | ● KIT 1989 VALVE | | | |
|----------------------|------|---------------------|------|---------|------|
| REF. | QTY. | REF. | QTY. | REF. | QTY. |
| 390180 | 7 | 390180 | 4 | 1150530 | 1 |
| 880830 | 2 | 394760 | 1 | 1150540 | 1 |
| | | 480550 | 1 | 1150550 | 1 |
| | | 880830 | 1 | 1150560 | 1 |
| | | 1040630 | 1 | 1150570 | 1 |
| | | 1040640 | 1 | 1150650 | 1 |
| | | 1040690 | 1 | 1150660 | 1 |
| | | 1150520 | 1 | | |

DRIVELINE ASSEMBLY 7104056FFT077



| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|----------------------------|
| 1 | 2 | 572040351 | RS Yoke 1 3/8 6 Spline |
| 2 | 2 | 41204R | #4 Cross Kit |
| 3 | 1 | 204046851 | Outer Tube Yoke |
| 4 | 1 | 341038000 | Roll Pin O.T. |
| 5 | 1 | 225120860 | Outer Drive Tube 860 mm |
| 6 | 1 | 225100860 | Inner Drive Tube 860 mm |
| 7 | 1 | 204046852 | Inner Tube Yoke |
| 8 | 1 | 341048000 | Roll Pin I.T. |
| 9 | 2 | 240002451 | RS Collar Kit |
| 10 | 1 | 255040005 | Shield Bearing Outer |
| 11 | 1 | 255040006 | Shield Bearing Inner |
| 12 | 2 | 252000001 | Safety Chain |
| 13 | 1 | 5F04086F6 | Complete Shield w/Bearings |

OPTIONAL SPRAYER BOOMS



OPTIONAL SPRAYER BOOMS

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|----------------------------------|
| 1 | 4 | 0100097 | Blind Plug 1/2 |
| 2 | 4 | 1700021 | Gasket 19 |
| 3 | 2 | 2000011 | S S Tube 20/500 G28B 41 1/2 |
| 4 | 2 | 1600024 | Complete Hose 10 x 19 l=620 |
| 5 | 4 | 1300003 | Self Lock Nut Connector 10 x 19 |
| 6 | 4 | 1700010 | Gasket |
| 7 | 2 | 0100111 | Support G28B |
| 8 | 2 | 1800186 | Self Lock Nut M10 |
| 9 | 2 | 1800041 | Bolt M10 x 45 |
| 10 | 2 | 2000018 | Stainless Steel Tube G14B |
| 10 | 2 | 2000002 | Stainless Steel Tube G20B |
| 10 | 2 | 2000011 | Stainless Steel Tube G28B |
| 11 | 12 | 0100098 | Plate |
| 12 | 6 | 1800059 | Bolt M8 x 25 |
| 13 | 6 | 1800180 | Nut M8 |
| 14 | 2 | 1800200 | Nut M16 |
| 15 | 1 | 0100102 | Inferior Support G14B & G20B |
| 16 | 8 | 0100107 | Plate |
| 17 | 4 | 0100108 | Clamp |
| 18 | 8 | 1800130 | Washer 10 |
| 19 | 8 | 1800036 | Bolt M10 x 25 |
| 20 | 1 | 2000012 | Stainless Steel Tube G14B & G28B |
| 20 | 1 | 2000003 | Stainless Steel Tube G20B |
| 21 | 2 | 0100118 | Support G14B |
| 21 | 2 | 0100104 | Support G20B |
| 21 | 2 | 0100110 | Support G28B |
| 22 | 2 | 0100105 | Pin |
| 23 | 4 | 0100106 | Washer 20 x 55 |
| 24 | 4 | 1800165 | Washer 20 |
| 25 | 2 | 2500002 | Spring |
| 26 | 2 | 1800212 | Nut M20 x 1.5 |
| 27 | 2 | 1800195 | Nut M14 |
| 28 | 1 | 0100103 | Superior Support G14B & G20B |
| 36 | 9-12-17 | 1700022 | Gasket 10 |
| 37 | 1 | 1300022 | Nipple MF 1/2 - 3/8 |
| 40 | 6 | 1800179 | Nut M6 |
| 41 | 2 | 0100112 | Support |
| 42 | 6 | 1800014 | Bolt M6 x 20 |
| 43 | 18-34 | P3400100 | Bolt & Nut |

Continued....

OPTIONAL SPRAYER BOOMS

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|-------------------------------|
| 44 | 9-12-17 | 400020.030 | O-Ring D.6 x 2.5 |
| 45 | 9-12-17 | 402225.010 | Nozzle Body |
| 46 | 9-12-17 | 00226010 | Diaphragm, Anti-Drip |
| 47 | 9-12-17 | 400020.020 | Nozzle Clamp |
| 48 | 9-12-17 | 00226011 | Anti-Drip Assembly |
| 49 | 9-12-17 | 00226002 | Nut 3/4" GAS |
| 50 | 9-12-17 | 02311000 | Filter |
| 51 | 9-12-17 | 02309010 | Gasket |
| 52 | 9-12-17 | 30-04F80RE | Jet 80° (Red) |
| 52A | 9-12-17 | 30-03F110UB | Jet 110° (Blue) |
| 53 | 9-12-17 | 402900 | Cap, Quick Coupling |
| 54 | 9-12-17 | 402225C | Complete Nozzle Assembly (96) |

Quantity Count:

G14B

9

G20B

12

G28B

17

NOZZLE SPACING

$$\text{GPM (Per Nozzle)} = \frac{\text{GPA} \times \text{MPH} \times \text{W}}{5940}$$

$$\text{GPA} = \frac{5940 \times \text{GPM (Per Nozzle)}}{\text{MPH} \times \text{W}}$$

GPM - Gallons Per Minute

GPA - Gallons Per Acre

MPH - Miles Per Hour

- W - Nozzle spacing in inches for broadcast spraying
 - Spray width in inches for single nozzles, band spraying or boomless spraying
 - row spacing in inches divided by the number of nozzles per row for directed spraying

Tractor Speeds

| Speed in MPH (Miles Per Hour) | Time Required in SECONDS to Travel a Distance of: | | |
|----------------------------------|---|----------|----------|
| | 100 feet | 200 feet | 300 feet |
| 3.0 | 23 | 45 | 68 |
| 3.5 | 20 | 39 | 58 |
| 4.0 | 17 | 34 | 51 |
| 4.5 | 15 | 30 | 45 |
| 5.0 | 14 | 27 | 41 |
| 6.0 | | 23 | 34 |
| 7.0 | | 19 | 29 |
| 7.5 | | 18 | 27 |
| 8.0 | | 17 | 26 |
| 9.0 | | 15 | 23 |

If the nozzle spacing on your boom is different than those tabulated, multiply the tabulated GPA coverages by one of the following factors.

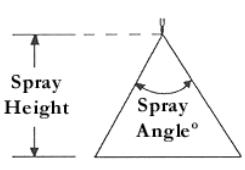
Where Tables Are Based on 20" Nozzle Spacing

| Other Spacing | 8" | 10" | 12" | 14" | 16" | 18" | 22" | 24" | 30" |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Conversion Factor | 2.5 | 2 | 1.7 | 1.4 | 1.3 | 1.1 | 0.9 | 0.8 | 0.7 |

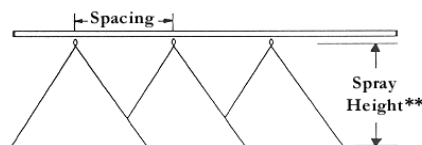
Where Tables Are Based on 40" Nozzle Spacing

| Other Spacing | 28" | 30" | 32" | 34" | 36" | 38" | 42" | 44" | 48" |
|-------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Conversion Factor | 1.4 | 1.3 | 1.3 | 1.2 | 1.1 | 1.1 | 1 | 0.9 | 0.8 |

SUGGESTED MINIMUM SPRAY HEIGHTS

| Spray Angle | Spray Height |  |
|-------------|--------------|---|
| | 20" Spacing | |
| 65 | 22" to 24" | |
| 73 | 20" to 22" | |
| 80 | 17" to 19" | |
| 110 | 10" to 12" | |

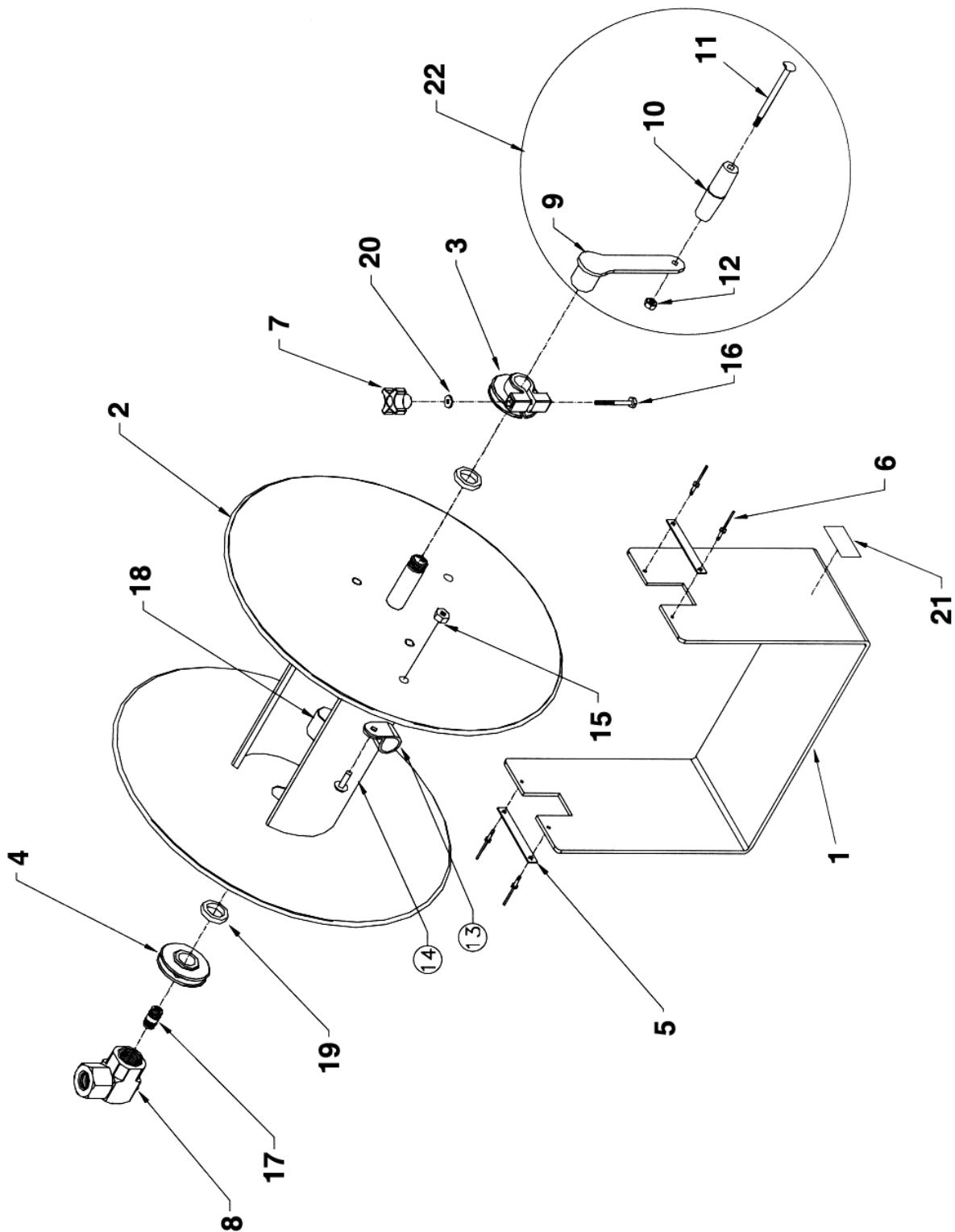
*Spray angles apply to flat spray tips spraying at rated pressure of 40 P.S.I. Lower pressures will result in reduced spray angles, except for the XR Teejet.



**Adjust spray height in the field to overlap approximately 30% of each edge of pattern.

| Tip Color | Tip No. (Strainer Screen Size) | Liquid Pressure in PSI | Capacity 1 Nozzle in GPM | Gallons Per Acre - 20" Spacing | | | |
|-----------|--------------------------------------|------------------------------|--------------------------------|--------------------------------|-------|-------|-------|
| | | | | 4 MPH | 5 MPH | 6 MPH | 7 MPH |
| Orange | 8001 LP (100 Mesh) | 15 | .10 | 7.4 | 5.9 | 5.0 | 4.2 |
| | | 20 | .12 | 8.6 | 6.9 | 5.7 | 4.9 |
| | | 30 | .14 | 10.5 | 8.4 | 7.0 | 6.0 |
| | | 40 | .16 | 12.1 | 9.7 | 8.1 | 6.9 |
| Green | 80015 LP (50 Mesh) | 15 | .15 | 11.1 | 8.9 | 7.4 | 6.4 |
| | | 20 | .17 | 12.9 | 10.3 | 8.6 | 7.4 |
| | | 30 | .21 | 15.8 | 12.6 | 10.5 | 9.0 |
| | | 40 | .24 | 18.1 | 14.5 | 12.1 | 10.4 |
| Yellow | 8002 LP (50 Mesh) | 15 | .20 | 14.9 | 11.9 | 9.9 | 8.5 |
| | | 20 | .23 | 17.2 | 13.7 | 11.4 | 9.8 |
| | | 30 | .28 | 21.0 | 16.8 | 14.0 | 12.0 |
| | | 40 | .33 | 24.0 | 19.4 | 16.1 | 13.8 |
| Blue | 8003 LP (50 Mesh) | 15 | .30 | 22 | 17.8 | 14.9 | 12.7 |
| | | 20 | .35 | 26 | 21.0 | 17.2 | 14.7 |
| | | 30 | .42 | 32 | 25.0 | 21.0 | 18.0 |
| | | 40 | .49 | 36 | 29.0 | 24.0 | 21.0 |
| Red | 8004 LP (50 Mesh) | 15 | .40 | 30 | 27 | 19.8 | 17.0 |
| | | 20 | .46 | 34 | 27 | 23.0 | 19.6 |
| | | 30 | .57 | 42 | 34 | 28.0 | 24.0 |
| | | 40 | .65 | 48 | 39 | 32.0 | 28.0 |
| Brown | 8005 LP (50 Mesh) | 15 | .50 | 37 | 30 | 25 | 21 |
| | | 20 | .58 | 43 | 34 | 29 | 25 |
| | | 30 | .71 | 53 | 42 | 35 | 30 |
| | | 40 | .82 | 61 | 48 | 40 | 35 |
| Grey | 8006 LP (No Strainer) | 15 | .60 | 45 | 36 | 30 | 25 |
| | | 20 | .69 | 51 | 41 | 34 | 29 |
| | | 30 | .85 | 63 | 50 | 42 | 36 |
| | | 40 | .98 | 73 | 58 | 48 | 42 |
| White | 8008 LP (No Strainer) | 15 | .80 | 59 | 48 | 40 | 34 |
| | | 20 | .92 | 69 | 55 | 46 | 40 |
| | | 30 | 1.10 | 84 | 67 | 56 | 48 |
| | | 40 | 1.30 | 97 | 78 | 65 | 55 |
| | 8010 LP (No Strainer) | 15 | 1.0 | 74 | 59 | 50 | 42 |
| | | 20 | 1.2 | 86 | 69 | 57 | 49 |
| | | 30 | 1.4 | 105 | 84 | 70 | 60 |
| | | 40 | 1.6 | 121 | 97 | 81 | 69 |

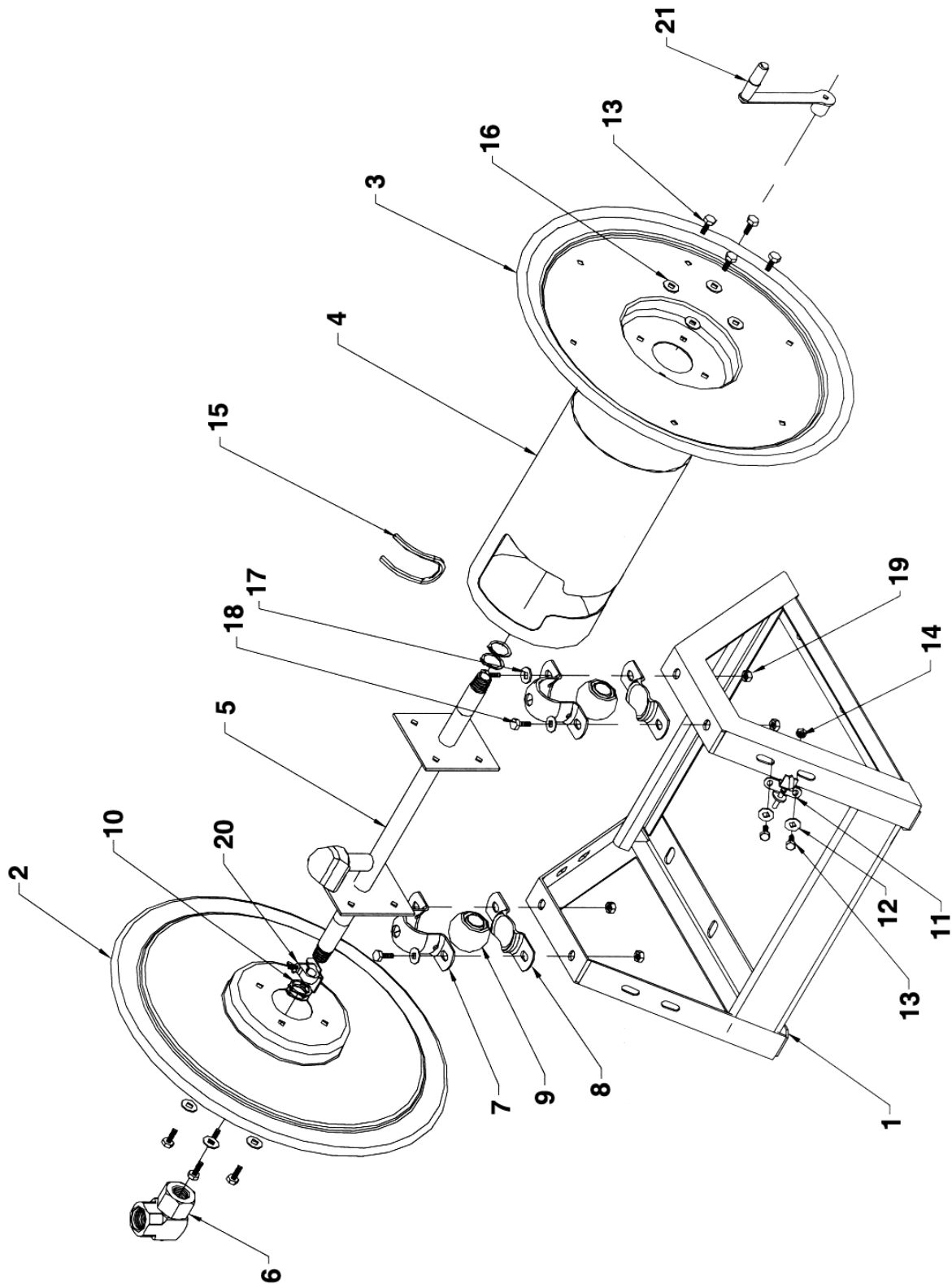
OPTIONAL HOSE REEL 112-4-75



HOSE REEL 112-4-75

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|---------------------------------------|
| 1 | 1 | 6304-1-12.5 | Frame, "U" |
| 2 | 1 | 7108-1-12.5 | Drum Assembly 1/2" NPT, 5.5" x 12.5"W |
| 3 | 1 | 6329-1-1 | Bearing, Crank Side |
| 4 | 1 | 6328-1-1 | Bearing, Plumbing Side |
| 5 | 2 | 15711-1 | Plate, Keeper Bearing |
| 6 | 4 | 7105 | Rivet, Pop Aluminum |
| 7 | 1 | 15719 | Knob, Black |
| 8 | 1 | 439 | Swivel, 1/2" NPT |
| 9 | 1 | 7107 | Crank Arm |
| 10 | 1 | 6333 | Crank Handle |
| 11 | 1 | 1621 | Shoulder Bolt 5/16 - 18 |
| 12 | 1 | 111-1 | Nut, Lock 5/16 - 18 |
| 13 | 1 | 383 | Hose Clamp |
| 14 | 1 | 245 | Screw 10-32 x 3/8" |
| 15 | 1 | 130 | Nut |
| 16 | 1 | 7146 | Hex Bolt 1/4-20 x 2 1/4" Gr. 5 |
| 17 | 1 | 7115 | Nipple 3/8 - 18 |
| 18 | 1 | 7116 | Axle, Plumbing 1/2 - 14 Coupling |
| 19 | 2 | 7145 | Spacer |
| 20 | 1 | 688 | Flat Washer 1/4" SAE |
| 21 | 1 | 10925-5 | Nameplate, Product, Std Decal |

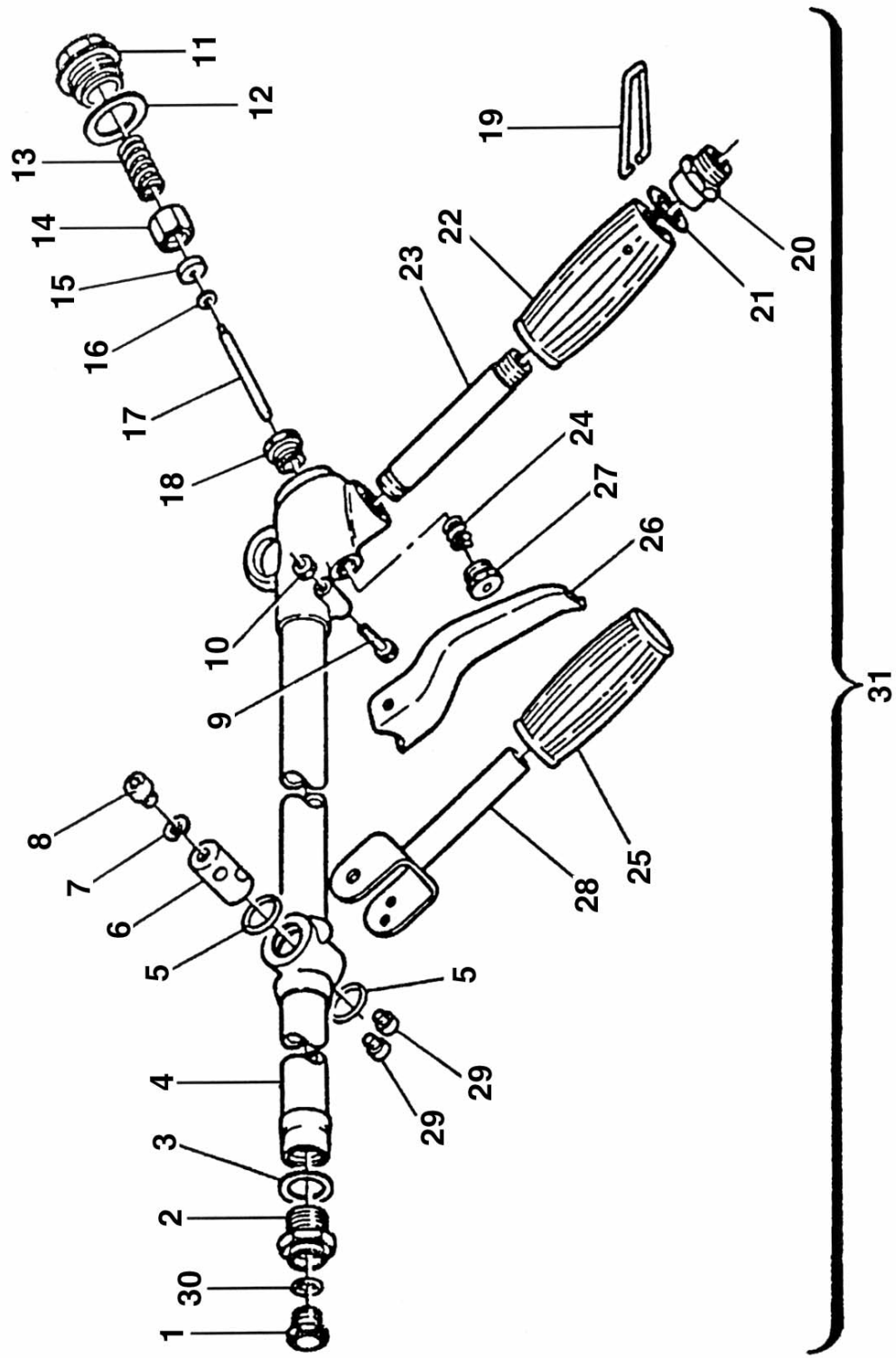
OPTIONAL HOSE REEL 1125-4-325



OPTIONAL HOSE REEL 1125-4-325

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|---------------------------|
| 1 | 1 | 7455-18 | Frame |
| 2 | 1 | 7415 | Disc, Swivel Side |
| 3 | 1 | 7416 | Disc, Crank Side |
| 4 | 1 | 7414-18 | Center Drum |
| 5 | 1 | 7408-18 | Axle Assembly |
| 6 | 1 | 439 | Swivel |
| 7 | 2 | 20064-T | Pillow Block, Mtg, Top |
| 8 | 2 | 20064-B | Pillow Block, Mtg, Bottom |
| 9 | 2 | 20649 | Bearing |
| 10 | 4 | 153 | Ring |
| 11 | 1 | 20843 | Lock Pin Assembly |
| 12 | 2 | 20171 | Flat Washer 5/16" |
| 13 | 10 | 312 | Bolt 5/16 - 18 x 3/4" Lg |
| 14 | 2 | 111 | Locking Nut 5/16" |
| 15 | 1 | 7460-9.75 | Trim |
| 16 | 8 | 112 | Lock Washer 5/16" |
| 17 | 4 | 157 | Flat Washer 3/8" |
| 18 | 4 | 20016 | Bolt 3/8 x 16 x 1" Lg |
| 19 | 4 | 435 | Locking Nut 3/8" |
| 20 | 1 | 7429-4 | Drag Brake |
| 21 | 1 | 7419-1 | Hand Crank |

OPTIONAL TOMMY GUN (GHT)



OPTIONAL TOMMY GUN (GHT)

| <u>REF #</u> | <u>QTY.</u> | <u>PART NO.</u> | <u>DESCRIPTION</u> |
|--------------|-------------|-----------------|--------------------|
| 1 | 1 | 0800080 | Nozzle 1.5 |
| 1 | 1 | 0800081 | Nozzle 1.8 |
| 1 | 1 | 0800082 | Nozzle 2.0 |
| 1 | 1 | 0800083 | Nozzle 2.8 |
| 1 | 1 | 0800084 | Nozzle 3.0 |
| 1 | 1 | 0800085 | Nozzle 3.5 |
| 2 | 1 | 0800086 | Jet Support |
| 3 | 1 | 0800087 | Gasket |
| 4 | 1 | 0800088 | Body |
| 5 | 2 | 0800089 | Gasket |
| 6 | 1 | 0800090 | Bushing |
| 7 | 1 | 0800091 | Washer |
| 8 | 1 | 0800092 | Bolt |
| 9 | 1 | 0800093 | Bolt |
| 10 | 1 | 0800094 | Nut |
| 11 | 1 | 0800095 | Plug |
| 12 | 1 | 0800096 | Gasket |
| 13 | 1 | 0800097 | Spring |
| 14 | 1 | 0800098 | Nut |
| 15 | 1 | 0800099 | Washer |
| 16 | 1 | 0800100 | Washer |
| 17 | 1 | 0800101 | Pin |
| 18 | 1 | 0800102 | Nut |
| 19 | 1 | 0800103 | Spring |
| 20 | 1 | 0800104 | Plug |
| 21 | 1 | 0800105 | Gasket |
| 22 | 1 | 0800106 | Handle |
| 23 | 1 | 0800107 | Shaft |
| 24 | 1 | 0800108 | Gasket |
| 25 | 1 | 0800109 | Handle |
| 26 | 1 | 0800110 | Lever |
| 27 | 1 | 0800111 | Plug |
| 28 | 1 | 0800112 | Fork |
| 29 | 2 | 0800113 | Bolt |
| 30 | 1 | 0800114 | Gasket |
| 31 | 1 | GHT | Complete Handgun |

LIMITED WARRANTY



GEARMORE, INC., warrants each new Gearmore product to be free from defects in material and workmanship for a period of twelve (12) months from date of purchase to the original purchaser. This warranty shall not apply to implements or parts that have been subject to misuse, negligence, accident, or that have been altered in any way.

Our obligation shall be limited to repairing or replacement of any part, provided that such part is returned within thirty (30) days from date of failure to Gearmore through the dealer from whom the purchase was made, transportation charges prepaid.

This warranty shall not be interpreted to render us liable for injury or damages of any kind or nature, direct, consequential or contingent, to person or property. This warranty does not extend to loss of crops, loss because of delay in harvesting or any other expenses, for any other reasons.

Gearmore in no way warrants engines, tires, or other trade accessories, since these items are warranted separately by these respective manufacturers.

Gearmore reserves the right to make improvements in design or changes in specification at any time, without incurring any obligations to owners or units previously sold.

GEARMORE, INC.
13477 Benson Ave.
Chino, CA 91710

Always refer to and heed machine operating warning decals on machine.

The serial number of this product is stored in our computer database, thus submitting a warranty registration card is not required.