General Information

Thank you for purchasing this product. The purpose of this manual is to assist you in operating and maintaining your skid sprayer.

**WARNING:** To reduce the risk of injury, the user must read and understand the operator’s manual before using this product.

**WARNING:** Cancer and Reproductive Harm
www.P65Warnings.ca.gov

Retain a copy of your receipt for your unit, as it will be required to validate any warranty service. Products are warranted against manufacturer or workmanship defects for one year from date of purchase for home owner usage and 90 days for commercial usage.

For technical assistance, visit our website @ www.fimcoindustries.com or call: TOLL FREE @ 1-800-831-0027
Our Technical Support Representatives will be happy to help you.
To obtain prompt, efficient service, always remember to give the following information...

- Correct Part Description and/or part number
- Model #/Serial # of your sprayer

Part descriptions and numbers can be obtained from the illustrated parts list section(s) of this manual.

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**Model: SK-61-4R (5301336)**
(60 Gallon Skid Sprayer w/127cc B&S Engine, 4-Roller Pump & Deluxe Handgun)

Caution: When fully filled with water, this sprayer will weigh approx. 660 lbs. Consult the owner's manual for your vehicle to verify that you are within its load carrying capacity.

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**Technical Specifications**

- 127cc B&S Engine
- 4 Roller Pump—6 G.P.M.
- Pressure Relief Valve
- Deluxe Pistol Grip Handgun W/25’ of Hose
- Optional Trailers & Boom Features Available

**Assembly Instructions**

The sprayer is completely assembled, except for the pressure gauge. The only other time any assembly is required is if you have purchased the optional trailer assembly or optional boom assembly.

**NOTE:**

Add proper oil to the engine crankcase and gasoline to the gas tank. Refer to the engine manual for the correct type and amount.

It is important to test the sprayer with plain water before actual spraying is attempted. This will enable you to check the sprayer for leaks in the plumbing system.

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www.fimcoindustries.com
1000 FIMCO Lane, P.O. Box 1700, North Sioux City, SD  57049
Toll Free Phone: 800-831-0027 : Toll Free Fax: 800-494-0440
[5004589] (11/18)
IMPORTANT:
Remove tank lid and be sure the tank is clean and free of any foreign material. Rinse tank out of any tank residue before filling with water to test.

Testing the Sprayer
1. Fill the tank about 1/2 full with plain water.
2. Open the brass valve in the suction line (See Detail A) and allow water to flow to the pump. The valve is located at this point to enable the strainer to be taken apart for cleaning, while solution remains in the tank.

Detail A
Valve Open

CAUTION:
Always be sure that the water (or solution) has reached the roller pump before starting your sprayer. If the pump is allowed to run dry, serious damage to the pump will result. Do not run your sprayer with the boom/handgun line closed AND the bypass line closed. Doing this will damage the pump.

3. It is always best to start the sprayer at little or no pressure. This sprayer is equipped with a spring loaded pressure relief/bypass valve. Turn the valve knob out to decrease pressure and in for increased pressure.

The bypass valve is the “pressure control” for the entire plumbing system. The more the valve is open, the lower your line pressure. Almost fully closed provides maximum pressure to your boom and/or handgun. NEVER run your system with this valve 100% closed.

4. You may now start the sprayer engine following the engine manufacturers instructions. Let the sprayer run at low pressure until water has reached the handgun and all air has been purged from the system.

Caution:
Care must be taken, being sure the handgun is secured in the operators hand. If this is not done a recoiling action may occur causing damage or personal injury.

Conditions of weather and terrain must be considered when setting the sprayer. Do not spray on windy days. Protective clothing must be worn in some cases

Be sure to read the chemical label(s) before application!

Information About the Sprayer
In this pumping system, solution is drawn from the tank and forced to a planned source, such as boom nozzles or handgun. The pressure is controlled by opening/closing the valve which recirculates solution back into the tank.

Priming the pump
To help prime the pump, keep the inlet or suction line as short as possible with a minimum of bends, elbows and kinks. Make sure all connections are tight and do not leak air. Make sure the line strainer is free of debris. If pump does not self-prime, disconnect suction hose, fill with water and reconnect to liquid source. Often a squirt of oil into the ports of the pump will seal clearances and help priming. Facing the pump, the suction port is on your left.

Maintenance During/After Spraying
Periodically close the suction line valve and check the line strainer and clean the screen.

Proper care and maintenance will keep your pump wear at a minimum and will keep it running smoothly and trouble-free for a long time and prolong the life of your sprayer.

After use, fill the sprayer tank part way with water. Start the sprayer and allow the water to pump through the entire plumbing system and nozzles. Drain and then refill half full with plain water, add the recommended amount of good quality tank cleaner such as FIMCO Sprayer Tank Neutralizer and Cleaner. (If no tank cleaner is available, you may substitute dish soap for this step.) Turn sprayer on and circulate through system for 15 minutes and then spray out through handgun nozzle (and boom nozzles if applicable). Refill tank half way with clean water and repeat. Follow the chemical manufacturer’s disposal instructions of all wash or rinsing water.

For the boom (if applicable) remove the tips and screens from the nozzle assemblies. Wash these items out thoroughly. Blow the orifice clean and dry. If the orifice remains clogged, clean it with a fine bristle (NOT WIRE) brush or with a toothpick. Do not damage the orifice. Water rinse and dry the tips before storing.

Flush the pump after each use. One of the common causes of faulty pump performance is “gumming” or corrosion inside the pump. This prevents the rollers from moving freely. Flush the pump with a solution that will neutralize liquid pumped. A rust inhibitor can also be squirted into the ports of the pump. Turn shaft several times to draw protective liquid through pump and coat entire inner surface.

WARNING: Never pump corrosive or abrasive liquids as these will cause rapid wear or deterioration of body, rotor, shaft and seals in the pump. Never run pump dry. Some chemicals will damage the pump valves if allowed to soak untreated for a length of time! ALWAYS flush the pump as instructed after each use. DO NOT allow chemicals to sit in the pump for extended times of idleness. Failure to follow this warning will void the product warranty.

Follow the chemical manufacturer’s instructions on disposal of all waste water from the sprayer.

Winter Storage
Prepare the sprayer for end-of-season storage by draining all water out of your sprayer, paying special attention to the pump, handgun and valve(s). These items are especially prone to damage from chemicals and freezing weather.

The sprayer should be winterized before storage by pumping a solution of automotive antifreeze (containing a rust inhibitor) through the entire plumbing system. This antifreeze solution should remain in the plumbing system during the winter months. When spring time comes and you are preparing your sprayer for the spray season, rinse the entire plumbing system out, clearing the lines of the antifreeze solution.

Proper care and maintenance will prolong the life of your sprayer.

It is nearly impossible to drain all of the water from the sprayer and any trapped water can freeze in cold weather and damage parts of the sprayer. Pumping the antifreeze through the system will displace the water and help prevent this damage.
Exploded View
SK-61-4R (5301336)
Refer to Parts List next page for Part Numbers

1/2" Bulkhead Fitting
TF50DTN
(Ref. #1.1)

Valve Sub-Assembly
(5278065)

18
19
20
28
4
5

Loom Cable Clamp for Handgun Hose

See Page 5 for Engine/Pump Assembly Parts List

See Next Page for Exploded View of Plumbing Components

Intake from Pump
Handgun Hose Connection
Bypass Line Connection
Parts List: SK-61-4R (5301336)

Ref. # | Part # | Description | Qty
---|---|---|---
1 | 5169249 | 60 Gallon Elliptical Tank (White) | 1
1.1 | TFS0DTN | 1/2" Bulkhead Fitting Assembly | 2
2 | 5273895 | Deluxe Pistol-Grip Handgun w/X-26 Tip | 1
2.1 | 5018331 | Brass Handgun Tip (X-26) | 1
3 | 5038775 | Handgun Bracket | 1
4 | 5020527 | Hose, 3/8"-1 Brd. x 25 Ft. | 1
5 | 5051144 | Hose Clamp, 3/8" | 4
6 | 5058188 | Tank Lid w/Lanyard | 1
7 | 5274939 | Tank Valve Assembly | 1
7.1 | 5006209 | Poly Knurled Swivel Nut, 3/4" FGHT | 1
7.2 | 5149037 | Poly Swivel, 3/4" Flat Seat Hose Barb | 1
7.3 | 5016066 | Garden Hose Washer | 1
7.4 | 5005196 | Poly Adapter, 3/4" MNPT x 3/4" MGHT | 1
7.5 | 5143190 | 3/4" "T-800" Brass Ball Valve | 1
7.6 | 5011147 | Poly Reducing Nipple, 3/4" MNPT x 1/2" MNPT | 1
7.7 | 5010243 | Poly Street Elbow, (90 Deg) 1/2" MNPT x 1/2" FNPT | 1
8 | 5095366 | Manifold Mount (Briggs) | 1
9 | 5278061 | Engine/Pump Assembly | 1
9.1 | 5277100 | Engine/Pump [5.5-4R] | 1
9.1.1 | 5152107 | (B & S) 5.5 Gross Torque Engine (5/8" Shaft) | 1
9.1.2 | 5273020 | 4-Roller Pump (Cast Iron) | 1
9.1.3 | 5274705 | Shield Assembly | 1
9.1.4 | 5034108 | H.H.C.S., 5/16"-24 x 5/8" | 2
9.1.5 | 5016026 | Lockwasher, 5/16" | 2
9.2 | 5067126 | Poly Fitting, 3/4" MNPT x 5/8" HB | 1
9.3 | 5116322 | 3/4" Black Poly Strainer | 1
9.3.1 | 5072229 | EPDM Gasket | 1
9.3.2 | 5116323 | 40 Mesh Screen | 1
9.4 | 5011140 | Poly Close Nipple, 3/4" MNPT | 1

See Page 3 for:
Valve Sub-Assembly Exploded View (Item #11)
See Below for:
Tank Valve Assembly Exploded View (Item #7)
**Engine/Pump Assembly (5278061)**

**Strainer Gasket & Screen**

Items #24 & #25 are not part of the engine/pump assembly. See page 4 for part numbers.

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### Cast Iron 4-Roller Pump Assembly

#5273020 (Hypro Mfg. Part #: 4101C-01)

**For electric motor drive:**
- Output to 9 GPM, Pressure to 150 psi,
- Speed to 1800 RPM, Temperature to 140°F.

**For gas engine drive:**
- Output to 7 GPM, Pressure to 150 psi,
- Speed to 2600 RPM, Temperature to 140°F.

---

**Warning:**

DO NOT USE PUMP IN AN EXPLOSIVE ENVIRONMENT: DO NOT USE TO PUMP FLAMMABLE/COMBUSTIBLE FLUIDS, GASOLINE, KEROSENE, FUEL, OIL, ETC.

---

### Ref. # | Part # | Description | Qty
--- | --- | --- | ---
9 | 5278061 | Engine/Pump Assembly | 1
9.1 | 5277100 | Engine/Pump [5.5-4R] | 1
9.1.1 | 5152107 | (B & S) 5.5 Gross Torque Engine (5/8" Shaft) | 1
9.1.2 | 5273020 | 4-Roller Pump (Cast Iron) | 1
9.1.3 | 5274705 | Shield Assembly | 1
9.1.4 | 5034108 | H.H.C.S., 5/16"-24 x 5/8" | 2
9.1.5 | 5016026 | Lockwasher, 5/16" | 2
9.2 | 5067126 | Poly Fitting, 3/4" MNPT x 5/8" HB | 1

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### Ref. # | Part # | Description | Qty
--- | --- | --- | ---
9.3 | 5116322 | 3/4" Black Poly Strainer | 1
9.3.1 | 5072229 | EPDM Gasket | 1
9.3.2 | 5116323 | 40 Mesh Screen | 1
9.4 | 5011140 | Poly Close Nipple, 3/4" MNPT | 1
9.5 | 5010249 | 45 Degree Poly Street Elbow, 3/4" NPT | 1
9.6 | 5067127 | Poly Fitting, 3/4" MNPT x 3/4" HB | 1

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* = Parts Available ONLY in Repair Kit #7771796 (Mfg. #3430-0390)
Consists of Rollers, O-Ring & Viton Seals

♦♦ = Only Available in Complete Assembly

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### Ref. # | Part # | Mfg. Part # | Description | Qty
--- | --- | --- | --- | ---
1 | - - - | - - - | Pump Model Sticker/Label | 1
2 | 5017481 | 2300-0021 | Bearing Cover | 1
3 | 5031113 | 2000-0010 | Ball Bearing (Sealed) | 2
4* | 5110052 | 2107-0002 | Seal (Viton) | 2
5 | ♦♦ | 0200-4101C | Endplate (Cast Iron) w/Seal | 1
6 | ♦♦ | 2220-0018 | 1/4"-20 x 5/8" Socket Head Cap Screw | 4
7* | 5072220 | 1720-0104 | O-Ring Gasket for Endplate | 1
8 | 5172127 | 0300-4101C | Rotor & Shaft Assembly | 1
8.1 | 0500-6600 | 0500-6600 | Shaft (Only) | 1
9* | 5112029 | 1005-0002 | Super Roller (Standard) | 4
10 | ♦♦ | 2230-0002 | 1/4"-20 x 3/8" Set Screw | 1
11 | ♦♦ | 0100-4101C | Body (Cast Iron) w/Seal | 1
12 | 5017480 | 2300-0023 | Shaft Bearing Cover | 1
13 | 5005175 | 1320-0016 | Adapter & Kit (Coupler) | 1
Roller Pump General Safety Information

1. Use a pressure relief device on the discharge side of the pump to prevent damage from pressure buildup when the pump discharge is blocked or otherwise closed and the power source is still running.
2. WARNING: Never pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc. Never use in explosive atmospheres. The pump should be used only with liquids compatible with pump component materials. Failure to follow this warning can result in personal injury and/or property damage and will void the product warranty.
3. Never pump acids (i.e. acid fertilizer) with Super Rollers!
4. Never run the pump faster than maximum recommended speed.
5. Never pump at pressures higher than the maximum recommended pressure.
6. Never pump liquids at temperatures higher than the recommended maximum temperatures (140°F/60°C).
7. Make certain that the power source conforms to the requirements of your equipment.
8. Provide adequate protection in guarding around the moving parts such as the shaft and pulleys.

Roller Pump Operation & Maintenance

WARNING: Never pump corrosive or abrasive liquids as these will cause rapid wear or deterioration of the body, rotor, shaft and seals in the pump. The pump should be used on with liquids compatible with pump component materials. Never exceed maximum specified rpm and pressure. Never run pump dry. Failure to follow this warning will void the product warranty.

Priming the Pump:
To help prime the pump, keep the inlet or suction line as short as possible with a minimum of bends, elbows and kinks. Make sure all connections are tight and do not leak air. Make sure line strainer is free of debris. If pump does not self-prime, disconnect suction hose, fill with water and reconnect to liquid source. Often a squirt of oil into the ports of the pump will seal clearance and help priming.

Care of the Pump:
Proper care and maintenance will keep your pump wear at a minimum and will keep it running smoothly and trouble-free for a long time.

Flush the Pump After Each Use
One of the common causes of faulty pump performance is "gumming" or corrosion inside the pump. This prevents rollers from moving freely in their rotor slots. Flush the pump with a solution that will neutralize liquid pumped, mixed according to manufacturer's directions.

To Prevent Corrosion:
After cleaning pump as above, flush it with a 50-50 solution of permanent-type automotive antifreeze (containing a rust inhibitor) and water. A rust inhibitor can also be squirted into the ports of the pump. Turn shaft several times to draw protective liquid through pump and coat entire inner surface. Drain pump and plug ports to keep out air during storage. For short periods of idleness, noncorrosive liquids may be left in the pump, but air must be kept out. Plug ports or seal port connections.

### Troubleshooting

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Probable Cause(s)</th>
<th>Corrective Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pump Does Not Prime</td>
<td>Leak in suction line</td>
<td>Check hose and fittings for leaks and correct</td>
</tr>
<tr>
<td></td>
<td>Obstruction in suction line</td>
<td>Inspect hose for debris or loose inner liner in hose</td>
</tr>
<tr>
<td></td>
<td>Suction hose sucked to bottom or side of tank</td>
<td>Cut a notch or &quot;V&quot; in end of suction hose</td>
</tr>
<tr>
<td></td>
<td>Rollers stuck in pump</td>
<td>Disassemble pump and inspect rollers</td>
</tr>
<tr>
<td></td>
<td>Pump seals leaking air</td>
<td>Replace seals</td>
</tr>
<tr>
<td>Loss of Pressure</td>
<td>Clogged suction strainer</td>
<td>Check strainer and clean it regularly</td>
</tr>
<tr>
<td></td>
<td>Kinked or blocked suction hose</td>
<td>Inspect suction hose and repair as necessary</td>
</tr>
<tr>
<td></td>
<td>Air leak in inlet side plumbing</td>
<td>Check hose and connections for leaks</td>
</tr>
<tr>
<td></td>
<td>Relief valve setting too low or weakened spring</td>
<td>Use pipe joint sealant and retighten connections</td>
</tr>
<tr>
<td></td>
<td>Faulty Gauge</td>
<td>Replace gauge</td>
</tr>
<tr>
<td></td>
<td>Pump seals leak air</td>
<td>Replace seals</td>
</tr>
<tr>
<td></td>
<td>Nozzle orifices worn</td>
<td>Replace nozzles</td>
</tr>
<tr>
<td></td>
<td>Pump worn</td>
<td>Repair pump</td>
</tr>
<tr>
<td>Pump will not turn</td>
<td>Corrosion (rust), scale or residue</td>
<td>Loosen endplate bolts. Squirt oil into ports to help free rotor. Retighten bolts.</td>
</tr>
<tr>
<td></td>
<td>Solid object lodged in pump</td>
<td>Disassemble pump and remove objects</td>
</tr>
</tbody>
</table>
‘Directo Valve’ – Manually Operated Control Valve

- Corrosion Resistant Materials: Wetted Parts Polypropylene, 316SS and Polyethylene
- Maximum Pressure = 150 p.s.i.
- Large Capacity - 12.5 G.P.M. @ 5 p.s.i. Pressure Drop
- 3/4” NPT (F) Inlet Connection
- 1/2” NPT (F) Spray Line Connection
- 3/4” NPT (F) Continuous By-Pass Connection
- Valves may be connected w/close nipples for multiple section spray control

Piston Type Pressure Relief/Regulating Valves

Bypasses excess fluid. Adjustable to maintain control of line pressure at any pressure within the valve operating range. Selected pressure setting firmly held in place by locknut. Extra large passages to handle large flows.

- Polypropylene with stainless steel spring
- Excellent chemical resistance
- EPDM O-Rings
- Fore pressure to 150 p.s.i.
- 1/4” port for pressure gauge
- Choice of 1/2” or 3/4” NPT (M) inlet & (F) outlet connections

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**Available only in Repair Kit**

* ♦: Only Available in Complete Assembly
LIMITED WARRANTY FOR NEW FIMCO, IND. EQUIPMENT

WHO MAY USE THIS LIMITED WARRANTY. This limited warranty (the “Limited Warranty”) is provided by Fimco, Ind. to the original purchaser (“you”) of the Equipment (as defined below) from Fimco, Ind. or one of Fimco, Ind.’s authorized dealers. This Limited Warranty does not apply to any subsequent owner or other transferee of the Equipment. THIS LIMITED WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

WHAT THIS LIMITED WARRANTY COVERS AND FOR HOW LONG. Fimco, Ind. warrants that any new Equipment will be free from defects in material and workmanship for a period of one (1) year (homeowner), 90 days (commercial user), after delivery of the Equipment to you (the “Warranty Period”). The Warranty Period is not extended if Fimco, Ind. repairs or replaces the Equipment.

WHAT IS NOT COVERED BY THIS LIMITED WARRANTY. This Limited Warranty does not apply to: (1) used Equipment; (2) any Equipment that has been altered, changed, repaired or treated since its delivery to you, other than by Fimco, Ind. or its authorized dealers; (3) damage or depreciation due to normal wear and tear; (4) defects or damage due to failure to follow Fimco, Ind.’s operator’s manual, specifications or other written instructions, or improper storage, operation, maintenance, application or installation of parts; (5) defects or damage due to misuse, accident or neglect, “acts of God” or other events beyond Fimco, Ind.’s reasonable control; (6) accessories, attachments, tools or parts that were not manufactured by Fimco, Ind., whether or not sold or operated with the Equipment; or (7) rubber parts, such as tires, hoses and grommets.

HOW TO OBTAIN WARRANTY SERVICE. To obtain warranty service under this Limited Warranty, you must (1) provide written notice to Fimco, Ind. of the defect during the Warranty Period and within thirty (30) days after the defect becomes apparent or the repair becomes necessary, at the following address: Fimco, Ind., 1000 Fimco Lane, North Sioux City, SD 57049; and (2) make the Equipment available to Fimco, Ind. or an authorized dealer within a reasonable period of time. For more information about this Limited Warranty, please call: 800-831-0027.

WHAT REMEDIES ARE AVAILABLE UNDER THIS LIMITED WARRANTY. If the conditions set forth above are fulfilled and the Equipment or any part thereof is found to be defective, Fimco, Ind. shall, at its own cost, and at its option, either repair or replace the defective Equipment or part. Fimco, Ind. will pay for shipping and handling fees to return the repaired or replacement Equipment or part to you.

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