

# **SR-850 Extreme Trailer Operator's and Parts Manual**

# **Unit Information**

Model: SR-850 Extreme Trailer	
Year:	
Serial Number:	_
Pump: Wilden 2" P8	
Motor: Honda GX390	
Air Compressor: Jenny GII	

Seal-Rite Inc. 1374 State Road M Auxvasse, MO 65231 (573) 387-4491 www.seal-rite.com sales@seal-rite.com

# **Safety Precautions**

- -Failure to follow all safety precautions can result in serious injury or death.
- -Seal-Rite Inc. assumes no liability for any accident or injury incurred through improper use of machine.
- -Read Operator's Manual fully before operating machine.
- -Observe all caution and warning signs on machine.
- -Always wear ear protection, eye protection and gloves when operating machine.
- -Do not leave unattended when running.
- -Never point the spray wand at another person.
- -Use of parts other than Seal-Rite parts may impair the safety or reliability of your equipment and nullifies any warranty.
- -Keep manway safety screen in place at all times. Keep tank lid closed when agitating at a fast speed.
- -Keep all body parts out of lid opening when unit is running.
- -Keep hands and arms clear while opening and closing lid.
- -Do not let sealer freeze or dry in the unit's plumbing.
- -Never enter the tank with sealer inside.
- -Always let residual sealer dry or freeze before entering the tank.
- -Always disconnect the battery before entering the tank to prevent accidental agitation.
- -All ball valves must be fully opened or closed for correct use.
- -Replace any hoses which show wear, fraying or splits. Be sure all joints are leak proof.
- -Shut down and allow compressor engine to cool prior to refilling gas tank.
- -Trailer must be connected to a tow vehicle when loading.
- -Safety breakaway system will not operate unless connected to a power source equivalent to or greater than auto type 12 volt 12 amp hour wet cell battery.
- -The safety breakaway system needs to be kept in working order at all times.
- -Trailer is not to be towed unless brakes are working and safety chains are securely attached to towing vehicle.
- -Make sure the load is safely secured before towing, and that the trailer is not overloaded.
- -Make sure all lights and electrical connections are working properly.
- -Always close hitch before towing. Check daily for wear or distortion.
- -Make sure receiver hitch is securely fastened to the tow vehicle.
- -Secure all gates and latches before moving trailer.
- -Continued on next page.

- -Inflate tires to recommended pressure. This information is found on the tire sidewall.
- -Check wheel lugs before towing. Use original equipment manufacturer's recommendation on torque. Found in axle operators manual.
- -Always turn the gas off on your Honda motor before towing.
- -Never operate near an open flame, or use any type of flame to unclog the plumbing.
- -Always secure safety chains before towing.
- -Raise the jack to its highest position and secure crank handle before towing.
- -Check all operation manuals for warnings, cautions and to ensure proper maintenance and use.
- -Operation manuals can be found in the 'Resources' section of our website: www.seal-rite.com/operation-manuals/

# **Warranty Procedure**

- -Contact Seal-Rite regarding the problem.
- -If the item is warrantable, the following instructions may be given:
  - -Seal-Rite will ask you to return the damaged item so that a replacement can be sent to you. If you need the replacement sooner, you can purchase it, to be refunded upon receipt of the damaged item.
  - -Seal-Rite is not responsible for warranty shipping costs.
  - -Certain products are subject to review before they can be deemed a warranty item.
  - -NEVER throw away any replaced parts until the warranty is entirely settled.
  - -If the item cannot be sent back (i.e. damage to the unit itself), photographs will be required.
  - -Should your warranty work require the help of a professional to repair, reimbursement for the labor cost is at the discretion of Seal-Rite. A valid receipt of all work will be required.
- -If the item is covered under the original equipment manufacturer's warranty, we can help connect you with the OEM.
- -In the event that your item is not warrantable, Seal-Rite strives to keep all replacement parts in stock.

# **Operating Instructions**

#### **Before Starting**

- -Walk around the unit and visually inspect to make sure everything is in good working order.
- -At the back of your unit, make sure all eight (8) ball valves are closed.
- -Check fluids in the Honda motor, air compressor pump, and the hydraulic oil tank.

#### To Start the Unit

- -Make sure hydraulic control valve is in neutral position.
- -Stand pilot unloader valve up. This makes it easier for the Honda motor to start. When the pilot unloader valve is in the up position, the motor will have a low idle over which you will have no control. When you flip the pilot unloader valve down, the motor will go into a high idle and will stay there until it reaches approximately 150 psi. It will then return to a low idle.
- -To start the Honda motor, you will need to make sure the gas is on and choke it. Once your motor is running, let it warm up for a few minutes. Make sure the throttle is wide open. Once warm, it is now safe to drop down the pilot unloader valve.
- -Once the pilot unloader valve is down and the motor is at a high idle, engage the hydraulic control valve to desired speed by pushing or pulling the control valve handle.
- -If you are only agitating, dump your compressor's air by opening a ball valve drain, so that the Honda can run wide open to more efficiently agitate the tank.

# **End of Day Recommendations**

- -If you are not sealcoating within 24 hours, Seal-Rite recommends you flush your plumbing with water to prevent clogs and damage to your components (see Spray System Functionality for instructions)
- -Clean your filter pot
- -Drain your air compressor and air filter/regulator at least daily. Fluid buildup can negatively affect the compressor, air filter/regulator and pump.
- -Turn the gas off on your Honda motor prior to transport to prevent gas seepage.

# **Troubleshooting Guide**

#### **Common Problems**

- -Check to make sure all of your valves are closed, especially the hidden (S) Suck-Back Valve.
- -Clean your filter pot.
- -Check for clogs in Valve 3.
- -Make sure your compressor is at 150psi and air regulator is at the recommended setting for the tip.
- -Pump should be quiet if no material is circulating and wand is off!
- -When was the last time you checked for leaks on the pump?

Problem	Possible Cause	Solution
Air compressor won't start	Pilot unloader valve is down	Stand pilot unloader valve up
	Hydraulic agitation is on	Shut hydraulics off
Air compressor will not build or maintain air pressure	Pump is cycling, causing air to be used	Check valves to ensure correct valves are open
	Pilot unloader valve is flipped up and compressor is unable to go into high idle	Flip pilot unloader valve down, see diagram 1A
Tank will not agitate when loaded	Relief valve on control valve is set too light	Increase relief valve, see diagram 1B
Pump does not have much pressure and you have not used valve 3 lately	Valve 3 is full of sand and is backing up into valve 2, blocking flow of material to spray wand	Clean out valve 3 by loading material off or by removing valve 3 and the associated plumbing and cleaning out clog. Make sure the system is not pressurized when performing this maintenance.
All correct valves are turned on, spray tip and bushing are out, and the system will not suck back	Collapsed hose	Shut pump off, wait 1-2 minutes for hose to open up. Turn air pressure all the way down, then slowly bring pressure back up until pump starts to cycle. It may take up to 5 minutes to suck a 5 gallon bucket empty.
Pump has no pressure	Dry firing the pump and then letting it sit, causing sealer to dry on the balls and seats, thus preventing balls from sitting correctly on the seats.	Circulate pump with water to prevent sealer from sticking to the balls and seats. If problem persists, balls and seats may need to be replaced.
Pump is firing when wand is not turned on	Sealer is being circulated	Check suck-back and return valves
	Sealer is not getting to the pump	Check your filter pot for clogs

\*Continued on next page.

Problem	Possible Cause	Solution
Pump is pressurized and not firing, and nothing is coming out of your spray wand.	Make sure the problem is a clog and not the pump	Shut off valve #2 and open valve #1, if it pumps, the pump is ok, proceed to checking for clogs.
	Clog in lines	Check live swivel, hose and tip. String hose out and see if it is under pressure. If not, check the swivel. If it is, check for a clog where the pressure ends.
Pump is not firing	No air pressure	Check air supply to your pump, and check your pump for leaks. Either the air is not getting to your pump, or it is leaking out.
Pump has an air leak	Use/temperature change	To locate the leaks, get your pump under pressure and spray with soapy water. If you get air bubbles, you have a leak. Release the fluid and air pressure from the pump, beat on the bands with a rubber mallet where the pump is leaking, then retighten the nuts and bolts on the band.
		If your pump is leaking from the white box, tighten the bolts. If it is still leaking, check the gaskets in the box.

Diagram 1A - Pilot Unloader Valve



Pilot unloader valve is shown here in the upright position. Put valve in the upright position to start the compressor, then down after the engine has warmed up, so that the compressor can build air pressure.

Diagram 1B - Adjusting Hydraulic Control Valve



Step 1: Turn Honda motor off. Remove O-Ring Plug Using a 1/8" Allen Wrench

Step 2: Turn the 5/32" set screw (using 5/32 Allen Wrench) 1/8 turn away from you (clockwise). See if the system will now agitate.

Step 3: If system will still not agitate, repeat Step 2, adjusting the 5/32" set screw another 1/8 turn at a time until system begins to agitate.

Step 4: Once system will agitate, replace O-Ring plug and make sure hydraulic fluid is not leaking.

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# **Cleaning the Unit**

#### -Option 1 (Recommended Option):

Fill tank halfway to completely full of water. Let system agitate at full speed for 30 minutes to one hour, periodically changing from forward to reverse. During that time, open valves 4, 1, and A to circulate water through pump. You can also put the spray wand into the top of the tank and open valves 4, 2, 6, and A. Empty tank and repeat this process if needed. We recommend Option 1 be followed by Option 3.

Note: Sand can be added to the tank during this process for abrasion to help clean the tank.

#### -Option 2:

Run water through pump using an auxiliary water source by opening valves 5 and 3, or 5 and 1. You can also run water through system by running water into filter pot and opening valve 3 or 1.

#### -Option 3:

Open valves 4 and 5, then use a pressure washer on inside of tank to clean off sealer.

-Depending on several variables, it will eventually be necessary to get inside the tank to remove excess sealer that has built up. Removing residual sealer is best done when temperatures are below freezing (or as cold as possible in warmer climates). Be careful when removing sealer with tools, as it is possible to ding the tank.

# Winterizing the Unit

- -After tank and pump have been thoroughly cleaned, remove lid and plug (found in bottom of filter pot) from filter pot, and open valves 4, 5, 6, and 3.
- -Dry fire pump until water no longer comes out of valve 3.
- -Shut off valve 3, open valve 2, and dry fire pump until water no longer comes out of the spray wand.
- -Repeat this process 1 2 more times. Shut off valves 2, S, and 1.
- -Open valve 3, set regulator at 100 lbs., and wait for compressor's idle to slow (allowing air to build up to 125 lbs.).
- -Dry fire pump by opening valve A and running windshield wiper fluid into suction side of filter pot until blue water comes out of valve 3.
- -Shut off valve 3, open valves 2 and 6, wait 1 2 minutes, then open all valves and dry fire system to remove windshield washer fluid.
- -This will leave windshield washer fluid sitting in any low spots, preventing freezing.
- -Turn all valves to ¾ way open, so that they are not completely open nor completely closed. Do this also to the pump and compressor after you are certain there is no air left in them. Leave all valves in the ¾ position until you are ready to begin sealing again.
- -Note: We use windshield wiper fluid because it is effective, inexpensive, and will not harm the pump.
- -If your unit has the optional water tank, be sure to also winterize your water tank and 1/4" pump.

# **Maintenance Schedule**

#### Wilden Pump

Seal-Rite recommends that you regularly check your material pump for air leaks. Set your regulator at 100 psi, and then open valves 4 and 1. Pump should be circulating. Close valve 1. Soap and water your entire pump, including the white box. Any bubbles indicate an air leak. If you find air leaks, relieve the fluid and air pressure from the pump, fix the leaks and repeat until no more leaks exist. Seal-Rite also recommends that you annually grease your pilot spool by spraying one short squirt of white lithium grease in the air line that feeds the Wilden pump.

#### **Hydraulic Oil**

According to the hydraulics manufacturer, ISO 46 Grade Medium Hydraulic Oil is recommended. It is also known as AW 46 at such stores as Sam's, Napa Auto Parts, O'Reilly Automotive, etc. The AW stands for Anti-Wear. Maintain fluid level of ¾ full in hydraulic oil tank.

NOTE: Before leaving Seal-Rite, your unit was filled with 13 quarts of hydraulic oil.

#### **Hydraulic Oil Filter**

According to the hydraulics manufacturer, the hydraulic oil and filter should be changed once per year. (Hydraulic Oil Filter Part # 230-HIF)

#### Air Compressor

Jenny recommends non-detergent oil in your compressor (Synthetic Blue, part # 220-AUBO). The oil should be changed after the first 20 hours of use, then every 200 hours or annually. There are two air filters on the compressor (Compressor Air Filter Part # 220-AEFE). Check them weekly and change annually, if not sooner. Jenny also recommends monthly inspections of the safety relief valve, belt adjustment, bolt tightness and all air connections and joints for leaks.

#### **Honda Motor**

It is recommended that the first oil change in the Honda motor come at 20 hours, successive oil changes are recommended every 100 hours. The air filters should also be changed on the Honda motor at the same time as the unit's 100 hour service (Honda Air Filter Part # 220-AHAF).

#### **Additional Recommendations**

- -If Valve 3 is not used regularly, check it for sand deposits to prevent clogs.
- -Grease your agitation bearings annually, <u>one</u> pump of grease while the agitation is running. Do not over grease or damage to the bearing could result.
- -Lube your drive chain as needed.

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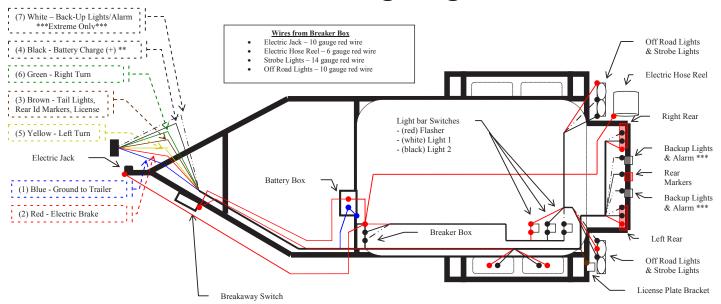
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# Tank Charts 850 Gallon Tank

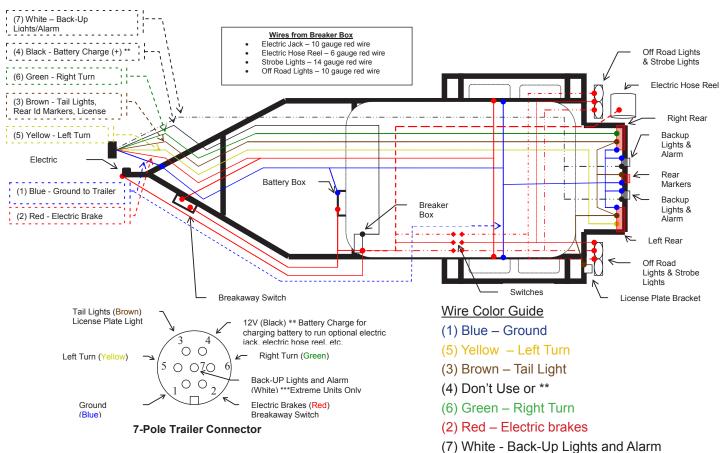
	Gallons of		Gallons of		Gallons of		Gallons of
Inches	Sealer	Inches	Sealer	Inches	Sealer	Inches	Sealer
of Void	Remaining						
1	878.07	16	692.62	31	421.94	46	156.28
2	872.26	17	675.92	32	403.26	47	140.66
3	864.80	18	658.92	33	384.63	48	125.48
4	856.05	19	641.65	34	366.06	49	110.75
5	846.20	20	624.13	35	347.57	50	96.54
6	835.41	21	606.39	36	329.18	51	82.89
7	823.79	22	588.46	37	310.93	52	69.85
8	811.42	23	570.35	38	292.82	53	57.49
9	798.38	24	552.09	39	274.89	54	45.87
10	784.73	25	533.71	40	257.15	55	35.08
11	770.52	26	515.22	41	239.63	56	25.23
12	755.80	27	496.65	42	222.36	57	16.47
13	740.61	28	478.01	43	205.36	58	9.01
14	725.00	29	459.34	44	188.66	59	3.20
15	708.99	30	440.64	45	172.29		

Tank Diameter: 60.0" Tank Length: 72.0" Total Capacity: 881.3 Gallons Note: Measurement of the void is to be done from where the tank starts, not the top of the manway.

# **Trailer Wiring Diagram**



# **Trailer Wiring Connections Diagram**



Note: The above wiring diagrams are not intended as a diagram for the wiring on the tow vehicle. It is strictly for the wiring of the Seal-Rite trailer. Tow vehicle wires should be located by function only, as color coding is not standard among all manufacturers.

<sup>\*\*</sup>Battery Charge for charging battery to run optional electric jack, electric hose reel, etc.

## **Spray Tip Recommendations**

Tip Size	Gallons Per Minutes If	Regulator is Set At	Job Size
80/20	Approx. 1.4	Approx. 40#	Small Driveway
80/30	Approx. 3	Approx. 40#	Small Driveway
80/40	Approx. 4	Approx. 40#	Medium Driveway
80/50	Approx. 5.5	Approx. 50#	Small Lot
80/70	Approx. 9.5	Approx. 70#	Large Lot
80/100	Approx. 15.8	Approx. 100#	Extra Large Lot

**Please Note**: The above regulator settings are only estimates. Pressure should always be kept as low as possible while maintaining a desired spray pattern. Pressure may vary depending on the consistency of the mix or if the spray tip is worn or worn out. Depending on sand load usage, tips may become worn out after around 700 gallons of sealer. Worn tips have a tendency to stream on each side of the fan or produce an uneven spray pattern. In the case of a worn tip, you may find it necessary to increase the regulator setting to get a desired spray pattern. In other instances, replacing the worn tip may be the best option.

**To Determine the Ideal Pressure Setting**: When spraying your material, turn the regulator down until it disrupts your spray stream. Turn the pressure slightly back up to correct the stream. This is your ideal pressure. Pressures can vary greatly with different material mixes. For example, even a heavier sand load or new additive in the same material can warrant a different pressure than one would normally use.

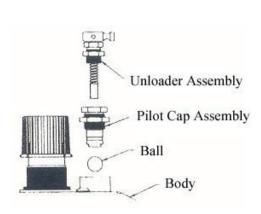
# Pilot Valve Installation and Adjusting Instructions

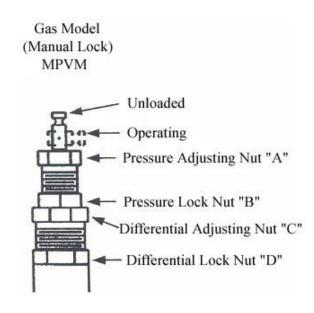
#### Pilot Valve Installation

- -Place ball into pilot hole in body. Hand tighten pilot cap assembly into pilot hole body then back out ¼ turn and tighten differential lock nut "D".
- -Turn unloader assembly into pilot cap assembly (approximately four turns for 125 PSI cut-out pressure) and tighten pressure lock nut "B".
- -Check operation of pilot valve and adjust (if required) as detailed in "Pilot Valve Adjusting Instructions" below.

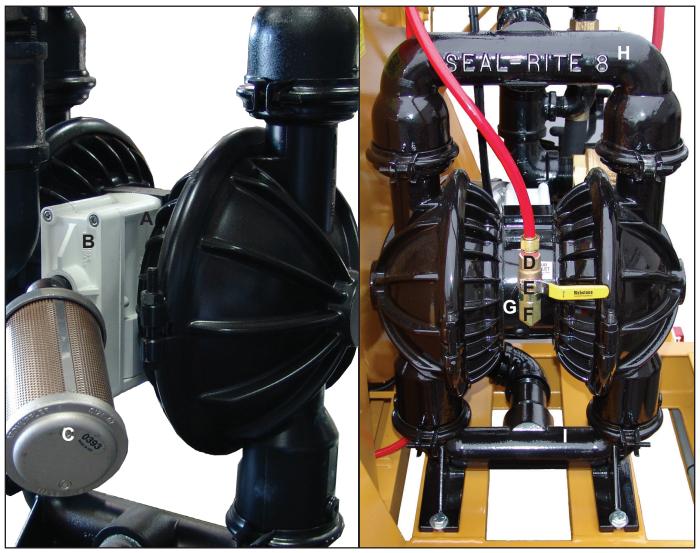
#### **Pilot Valve Adjusting Instructions**

- -Operation: Pilot valves are used on gas engine or electric motor driven compressors, where the compressor is to maintain a constant pressure range while running continuously. The pilot valve may be used to operate a discharge line unloader or an unloading device in the compressor head. Unloading occurs when the receiver reaches a preset cut-out pressure. The pilot valve opens, actuating the unloading device and allows the compressor to run in an unloaded mode. When the receiver pressure drops to the preset cut-in pressure, the pilot valve closes allowing the unloading device to close and the compressor once again pumps into the receiver.
- -Pressure Adjustment: Loosen pressure lock nut "B" and adjust pressure adjusting nut "A" to desired cut out pressure. Turn pressure adjusting nut "A" clockwise to increase pressure and counter clockwise to decrease pressure. After setting pressure tighten pressure lock nut "B".
- -Differential Adjustment: Loosen differential lock nut "D" and adjust differential nut "C" to desired differential. Turn differential nut "C" counter clockwise to decrease differential and clockwise to increase differential. If pilot valve "chatters" increase differential.
- -Manual Lock Lever (gas model): Allows you to manually unload the compressor (for starting or warm-up) with air pressure in the tank. To unload, flip lever to in-line position. Be sure to return lever to "Operating" position after starting engine or the pump will not operate at preset pressures.





# **Wilden Pump Parts**



A- Air Valve Assembly: 210-PWPAV Air Valve Gasket: 210-AVG

B- Muffler Plate: 210-PMP

Muffler Plate Gasket: 210-PGMP

C- Muffler: 003-PWPM

D- Push-In Fitting: 220-A5PITF E- Ball Valve: 210-PBV5MF F- 90° Elbow: 230-5502-8-8

G- Bushing: 210-PBR

H- Discharge Manifold: 210-DMP8

I- Inlet Manifold: 210-IMP8

2" P8 Pump: 210-P2WP8 Rebuild Kit: 004-P2WP8RK P8 ProFlo Shaft: 210-PP8SHAFT Pilot Sleeve Assembly: 210-P8PS

Inner Piston: 003-PIP Outer Piston: 210-OP2

Center Block Gasket: 210-PGCB

\*\*\*Even when installing a new pump, you need to re-torque the pump to Wilden manual specifications. Periodically check for air leaks and correct torque during times of temperature change.\*\*\* **Air Compressor Parts** 



A- Oil Sight Gauge: 220-OSG Plug: 210-W5PP

B- Air Pressure Gauge: 220-AEAPG

C- Honda GX390 (13HP) Motor

D- Pilot Unloader Valve: 220-AEPV

E- Honda Air Filter: 220-AHAF

F- Honda Motor Gas Cap: 220-AHGC

G- Honda Motor key: 220-AHMK

H- Filter Housing: 220-AFH

I- Filter Element (4pk): 220-AEFE

J- Battery Box: 002-SRBATB

K- Air Hose: 220-A5

L- 160psi Liquid Filled Gauge: 220-160LFGF

M- Air Filter Regulator: 220-ARF

N- 1/2" 90° Push-In Tubing Fittings: 220-A5PITF90

P- Drain Assembly: 220-AE25BDA Q- Ball Valve Drain: 220-AE25DC

R- Honda Motor Base Control: 003-HMBC16581

S- Control Box: 003-31610QAE2

T- Switch & Harness (wiring): 220-A3SWK U- Head Unloader Tube: 220-610-1121

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W- To Replace Compressor Tubing: 004-ACTK

X- Check Valve - 003-141-1105

Y- Honda Idler Control 220-AICA (connected to Pilot

**Unloader Valve**)

Z-50' Coupled Air Hose: 220-AHR

AA- 8 3/4" Aftercooler Hose: 220-360-1398 BB- 24 1/2" Aftercooler Hose: 220-360-1173

Ultimate Blue Synthetic Air Compressor Oil: 220-AUBO

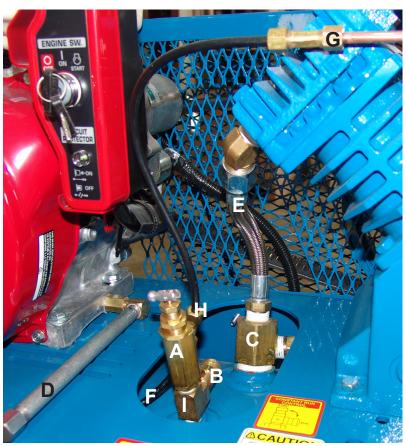
Air Pump: 220-ACPUMP

Air Pump Rebuild Kit: 220-610-1297

Head Gaskets: 220-610-1044



# **Air Compressor Close Up and Back**



A- Pilot Unloader Valve: 220-AEPV B- Pop Off Valve: 003-141-1011 C- Check Valve: 003-141-1105

D-Oil Drain for Honda Motor

E- 8 3/4" Aftercooler Hose: 220-360-1398

F- To Idler Control Assembly

G- Head Unloader Tube: 220-610-1121 H- Tee for A/C Tubing: 220-121-1039

I- Brass T: 220-121-1189



J- 3" Pulley: 220-AP3
K-Banded Belt: 400-20307219
L. Spider Coupling: 003-HLC

L- Spider Coupling: 002-HLC M- Hydraulic Pump: 230-HHP

N- 10 1/2" Flywheel

## **Prop 65**

MARNING: This product can expose you to the following chemicals known to the state of California to cause cancer:

Cumene, sulfuric acid, nickel, mineral oil, sulfur, acrylonitrile, carbon black, tetrafluoroethylene, titanium dioxide, naphthalene, cobalt octoate, ethylbenzene, hexanoic acid, talc, styrene, silica

MARNING: This product can expose you to the following chemicals known to the state of California to cause birth defects or other reproductive harm:

Ethylene glycol, n-hexane, toluene, methanol

MARNING: This product can expose you to the following chemicals known to the state of California to cause cancer or birth defects or other reproductive harm:

Lead, arsenic, chromium, benzene

For More Information: www.P65Warnings.ca.gov