

# OutLaw-C Owners Manual

Thank you for purchasing your Outlaw-C Pump System. You are now the proud owner of the world's smallest Gas Powered Air Diaphragm Pump System, offering unprecedented performance and flexibility. Please read this manual to familiarize yourself with its operation and precautions.

## **Mounting.**

Your Outlaw-C must be securely mounted to the vehicle using appropriate hardware. As each vehicle and each circumstance is different, there are no standard mounting guidelines. Losing your Outlaw-C on the highway and having it bounce down the road at 65 MPH whereupon it is duly punted off into a ditch by a Big Rig...or similar occurrences due to improper mounting will violate your warranty.

## **SHIPPING DAMAGE.**

**Carefully inspect your box upon arrival and note any damage. If your Outlaw-C is damaged in shipping, you MUST save all box and packaging. Failure to do so will result in a denial of shipping damage claim and no refund or replacement can be issued. YOU MUST SAVE THE BOX AND PACKING!**

## **Assembly.**

Please save your box and packing materials in case any service is required. Your Outlaw-C is partially pre-assembled, but you will need to install your pump, spray lines and your air connector. Your Outlaw-C is supplied with 1/2" Female NPT threaded inputs and outputs. First, you will want to mount your pump to the plate and frame using the included hardware. Your pump **MUST** be mounted so that the air and fluid connections are on the bottom or your airline will not reach the air connector. If you would like to remote mount your pump off of the Compressor, you will need a longer airline to reach the Pump. 1/4" Flexzilla is the standard supplied air hose with our systems. We recommend you occasionally check the mounting hardware for tightness. Note that the pumps may seem loosely attached to the frame, have only one screw and they move around. *This is normal. It is the factory design and intended to allow the pumps, which vibrate, to move in the mount without causing frame damage.*

## **Flow Direction.**

Your pump in and outputs can be switched to face either left or right. To detach the manifolds, look for the small black clips next to each connection point on the pump. Slide the clips open and the manifold will release. This must be done on each pump as there are two inputs and two outputs. Note, there are seals and in order for the manifolds to properly seat the manifold must be firmly seated. Once seated, slide the black clips closed on each pump until they click.

Next, attach your fluid lines to your pump. With the pump mounted on the frame, the inner most manifold is the input, the outermost manifold closest to you is the output. We recommend using a **minimum** 3/4" **suction** hose for your fluid input from your tank.

This line is under suction and must be rigid enough to withstand suction without collapse. A hard pipe suction line can be utilized but a small section of flex line into the pump **must** be used to avoid pump connector damage from pump movement which is normal during operation. Broken connections on the pump are NOT covered under warranty so please make sure you provide proper strain relief to the input and output hoses. We recommend the use of a teflon containing thread sealant to prevent leaks. Your suction hose or pipe must be no longer than 10 ft. If you plan to pump slightly thicker than water viscosity fluids such as deck stains, they must have a non restrictive inline filter. Hoses, nozzles valves and connectors must be chemically compatible with the material being sprayed.

### **Air Line.**

Your Outlaw-C comes equipped with a standard 1/4" air line. Please insert the air hose onto the barbed fitting on the pump and use the included clamp to secure in place. Check the clamp occasionally for tightness.

### **Auxiliary Air Connector.**

Your compressor has been outfitted with a secondary auxiliary quick connect air connector. This is designed as the port to run our Outlaw-Mini pump. However, it can also be used to drive air tools, pump up tires or to run an air based fluid transfer pump.

### **Hose Sizing.**

Your pump is capable of moving a significant amount of fluid, but can only do so if the pump head pressure is kept below a certain level. Therefore, a minimum 1/2" or (preferred) 5/8" spray hose should be used. Larger will not hurt! Strain relief **MUST** be provided if the hose is attached directly to the pump to avoid damage from pulling on the manifolds.

### **Compressor Prep.**

Your Honda Engine compressor requires both engine oil and compressor oil...both included. Please reference the manuals included for the proper quantity of oil. Running without oil will void the warranty. We recommend regular oil changes with the proper grade of oil. It is highly recommended you add Gasoline to the fuel tank or starting may be extremely difficult. Please do not refuel the unit while running. Catching your Outlaw-C on Fire will violate the warranty.

### **Caution**

The Muffler is hot during operation. Burning yourself on your Outlaw-C is not recommended unless you are into that sort of thing.

### **Lift Capability**

Your Outlaw-C is capable of pumping fluids up as high as 2 stories assuming a 1/2" spray hose. Higher than that will require larger hose. Your Outlaw-C is not rated to lift fluid higher than 3 stories with 3/4" spray hose.

### **Daily Operation.**

To begin pumping, start your compressor following the instructions in your Honda Engine Owner's manual. Do not forget to put the compressor starting valve into the start position (see Compressor owner's manual). The valve can be pushed down once started. Let pressure in the tank build. Note there are TWO pressure gauges. The first down lower mounted on the tank indicates the internal tank pressure. The second nearest your air valve and aux air output is the regulator pressure. This is the Gauge you will want to look at. Once the compressor has reached full tank pressure it will idle down. Grab the black pressure regulator knob and pull UP gently. You will feel it click. Turn the knob clockwise to increase the pressure and counterclockwise to lower the pressure. We recommend a running pressure to your pump of 80 PSI. Higher pressure can be used but will put excessive wear on the air end of the pump. **DO NOT EXCEED 100 PSI.** Once set, push the knob back down to lock the valve. Your compressor engine will increase RPMs to recharge once air pressure reaches a set point as air is used. If you are spraying a large quantity of liquid, it is **NOT** unusual for the compressor to run continuously. Monitor the heat of your compressor and check the compressor oil regularly.

### **Tank Drains.**

It is normal for air compressor tanks to fill with moisture. This moisture must be removed regularly. To do so, open the valves on each of the tanks to drain the air and moisture from the tanks. This should be done after each job. Letting your tanks fill full of water will violate the warranty. Do not forget to close the tank drain valves or pumping will become extremely difficult as all air will escape the valves.

**Caution:** Noise from the Engine Running and Air coming from the tank exhaust valves can be extremely loud. Proper hearing protection is recommended to help prevent you from say "What?" in future years.

### **Air Line Moisture and Icing**

**All** Air Tools may require proper Air Line moisture management to avoid icing and tool/ pump freezing. A good water separator is recommended if you are experiencing pump staling due to icing, especially when spraying large quantities of materials over an extended period of time. **SHOULD YOU EXPERIENCE ICING, REMOVE THE MUFFLERS FROM THE PUMPS.** They can be removed by sliding the small tabs away from the muffler and pulling outwards. This will not effect the operation of the pump. This should provide relief until a water separator can be installed. We use and recommend the Tsunami Brand water separators.

## **Storage and Maintenance.**

After completing your job, flush and drain the Outlaw-C pumps for storage and drain the air tanks. Although your pump is chemical \*resistant\* and capable of spraying a very wide range of PH level chemicals, it is accepted good practice to clean out pumps after use. Your pump and spray lines should be cleaned after each use and drained. If temperatures are to be below freezing, the pump and hoses must be fully drained and the unit should be winterized. It is not a bad idea to de-mount the entire unit and store it in a heated space to prevent freeze damage. Your Compressor and Engine require regular oil changes to keep them clean and operating correctly. Please follow the recommended service intervals as outlined in the Engine and Compressor manuals.

### **Cautions:**

**Do not mix acid and alkaline chemicals in your Outlaw-C Pump or spray lines. Your system must be thoroughly flushed with water prior to switching over spray materials. Your Outlaw-C pump cannot be used as a fuel transfer pump. It should not be used to pump chemicals above 150 degrees F.**

**CAUTION: SPRAY HOSE FLUID WILL BE UNDER PRESSURE. PLEASE RELIEVE THE SPRAY HOSE PRESSURE BEFORE DISCONNECTING ANY SPRAY LINE TO AVOID INJURY OR MATERIAL DAMAGE. PRECAUTIONS SHOULD BE TAKEN IF DRIPS FROM CAUSTIC OR ACID COULD DRIP FROM THE DISCONNECTED HOSE AND PUMP WHILE DISCONNECTING LINES. A FLUSH IS RECOMMENDED PRIOR TO HOSE DISCONNECTION.**

### **Viscosity.**

Your Outlaw-C pump is capable of spraying a wide range of materials but it is not intended nor designed to spray thick or viscous material or powders. If it pours like water or only slightly thicker, it can be sprayed. Do not yell at your pump, it will make it mad. Do not yell at the pump designer, it will make him mad.

**When spraying chemicals, please observe and follow all appropriate Personal Protection Safety guidelines and regulations including eye, skin and respiratory protection.**

### **Pump Service.**

Your Pump is fully serviceable and will eventually require maintenance. Commercial use clients should consider keeping a spare pump or a set of diaphragms and air valves on hand in case something is pulled through your pump or a diaphragm bursts. Changing the diaphragms is easy. It takes only a few minutes to change the diaphragms and valves out. Note, your pump has reverse flow valves installed on one pump. The orientation of the valves as installed must be followed in order for the pumps to operate

correctly. Please see Youtube for a very thorough and easy to understand video from Flojet on diaphragm and valve replacement. Your pump can easily be swapped in about 5 minutes on site. Spare pumps and rebuild kits are available and may be purchased from us. Any scrapes or gouges in the finish that occur should be sprayed with a good quality paint. For Technical Questions: Please contact us at 360-410-9902

THE PUMP MAN  
[WWW.CLEANINGPUMPS.COM](http://WWW.CLEANINGPUMPS.COM)

**Disclaimer:**

Enderle Property Service LLC, DBA The Pump Man, Kevin Enderle et. Al assumes no liability for any injuries, damage or monetary losses arising from the improper use or mis-use of the Outlaw-C Pump System or any chemical or material sprayed through said pump.

One Year Limited Warranty.

Your Outlaw-C will remain free from defects in workmanship for a period of 1 Year from date of purchase. Manufacturer's Warranty applies on Engine and Compressor. Warranty excludes normal wear and tear on diaphragms, check valves and seals from use. Warranty shall not cover claims due to chemically or viscosity incompatible materials run through the pump. Please inquire if you are unsure whether the material you wish to use is chemically compatible. Warranty shall not cover diaphragm or valve damage from ingestion of debris or damage from drops, hits or abuse.