

Converting a Manual AirPrime to an Auto with Lift Gauge

Existing AirPrime

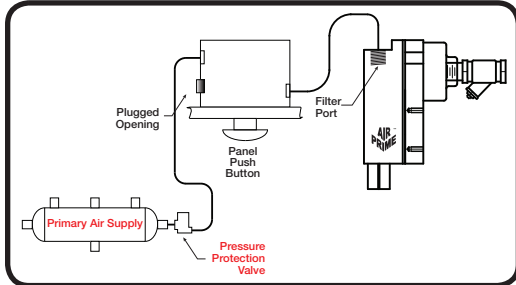


Figure 1



Conversion Kit #27.005.6



Figure 2



Figure 3

Plugged $\frac{1}{8}$ " NPT Connection to Lift Gauge. This is where the male swivel elbow will be attached and pointed towards the gauge. **Note:** This port must be present to utilize the lift gauge feature.

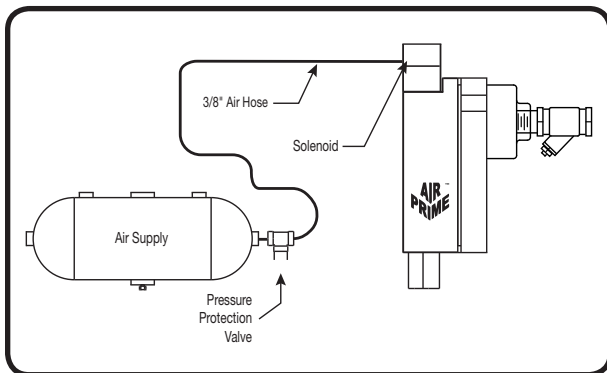


Figure 4

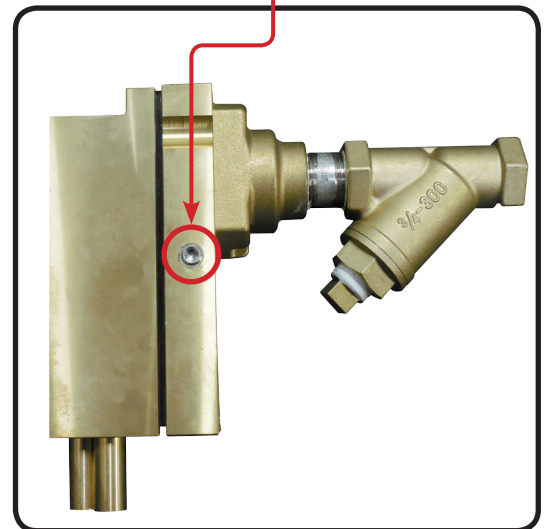


Figure 5

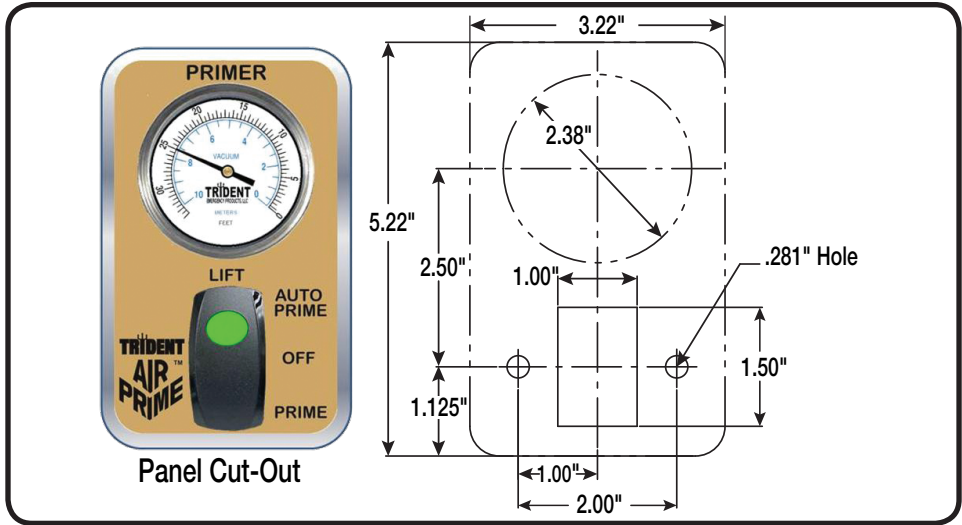


Figure 6

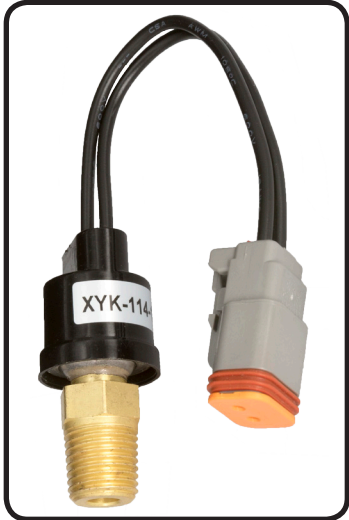


Figure 7



Figure 8

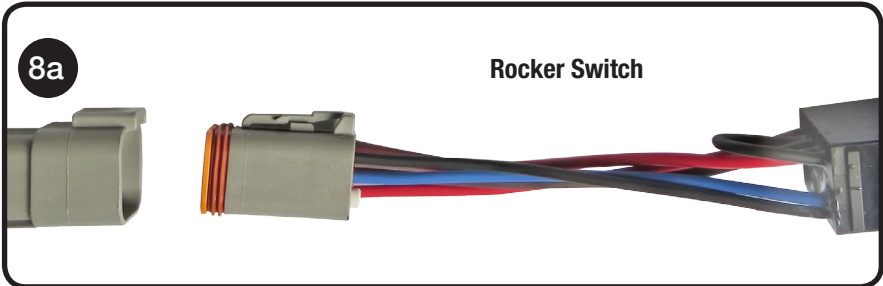


Figure 8 Detail

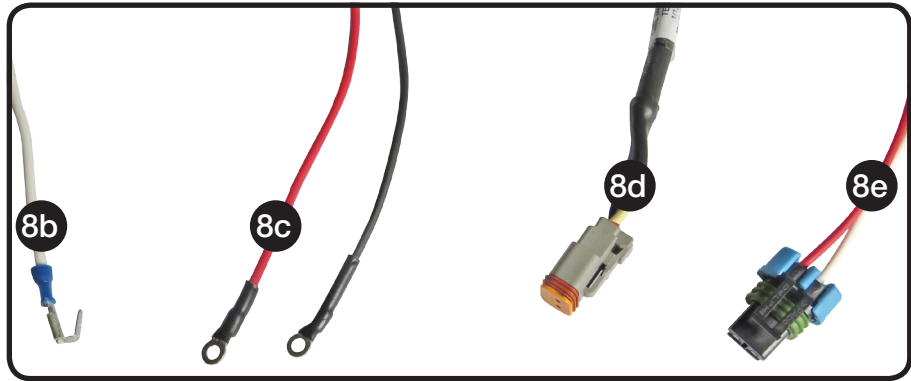


Figure 8 Detail

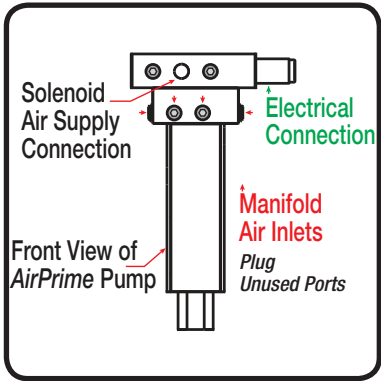
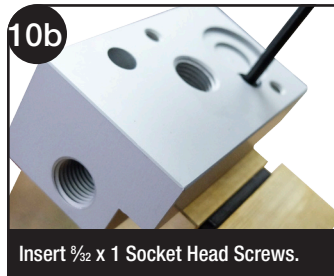
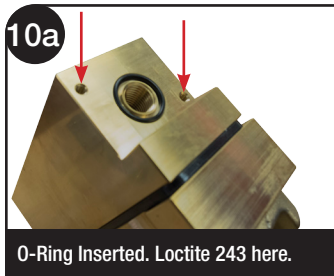


Figure 9



Installation Instructions

Before proceeding verify the following:

- There is ample space on the panel for the new control and gauge assembly. Refer to **Figure #6** for space requirements.
 - Ensure that the 1/8" NPT connection exists on the existing primer body to provide a connection to the gauge. Refer to **Figure #5**.
1. Locate the existing Manual *AirPrime* unit within pump enclosure. It can be found by tracing the existing air line from the primer push-button control on the pump panel to the top of the *AirPrime* unit (See **Figure #1**). Verify that the unit is already mounted ABOVE the highest priming point in the suction piping, if not move it higher.
 2. Remove the existing airline and tubing connection fitting located on the top of the *AirPrime* unit.
 3. Attach the new solenoid and manifold assembly (See **Figure #2**) to the top of the *AirPrime* unit using the screws provided. A blue thread-locker should be used on screws. Be sure to include the o-ring seal provided between the manifold and *AirPrime* unit body. **Note:** This unit is shipped assembled and must be taken apart prior to installation onto your primer. Reassemble using all of the contained parts in the same order as it was disassembled. Follow **Steps 10a through 10h** above for assembly. Ensure that the three (3) ports in the solenoid are in the same orientation and placed above the two (2) manifold ports as shown in **Figure #9** and **10h**.
 4. Relocate the 3/8" OD air hose connected to the PPV valve protected air tank from the existing panel push-button to the primer solenoid (See **Figure #4**).
 5. Replace the existing push-button with the new rocker switch and gauge control provided onto the pump panel (See **Figure #2**). The existing hole on the panel will have to be modified to accept the new control as shown in **Figure #3**. Refer to **Figure #6** for the new dimensions.
 6. Install the pump pressure switch provided in a 1/4" NPT "Discharge Pressure" opening on the top of the fire pump. The switch must be installed in a vertical orientation and in a position that allows for proper draining of the switch (See **Figure #7**).
 7. Install the Automatic *AirPrime* wiring harness as follows: (See Page 2 for **Figure #8**).
 - 8a Gray 5-prong plug to rocker switch control in pump panel bezel, and connect 6" pigtail to wiring harness (gray plug).
 - 8b White wire to "OK TO PUMP" light circuit, (Positive + Side) or to fire pump shift control circuit (PTO or split shaft) (1 1/2 feet long) [1.5 m].
 - 8c Red (+) and black (-) wires to power supply (1 foot long) (Wiring and 1 amp fuse provided by installer).
 - 8d Plug-in to *AirPrime* solenoid connection (5 feet of cable) [1.8 m].
 - 8e Plug in to fire pump discharge pressure switch (5 feet of cable) [1.8 m] (See **Figures #5** and **#6**).



AirPrime Conversion Kit

Lift Gauge Compatibility Check

Adding a Lift Gauge to an Existing AirPrime Unit

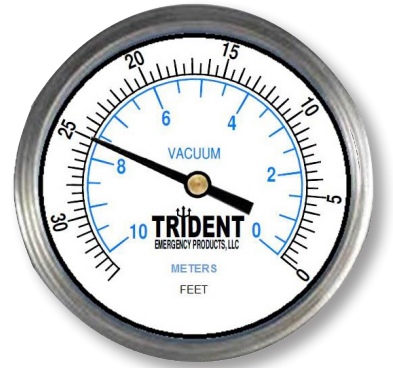
Applies to the following kits:

Kit #	Description
27.005.4	Manual AirPrime Gauge Conversion Kit
27.005.5	Automatic AirPrime Gauge Conversion Kit
27.005.6	Manual to Auto with Gauge Conversion Kit

Is it possible to upgrade your AirPrime system to include a Lift Gauge?

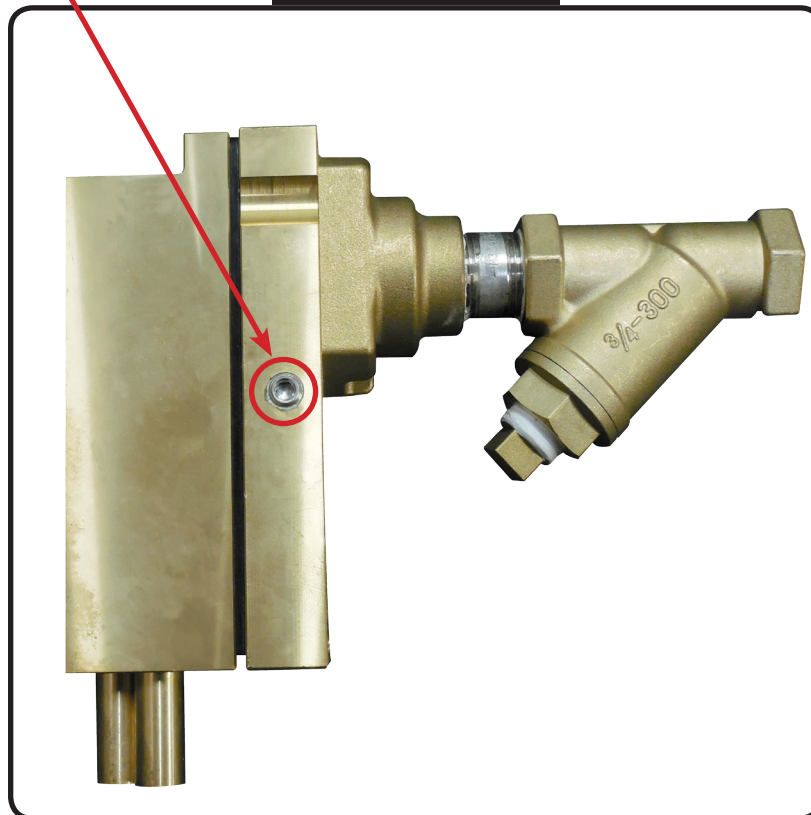
Yes... Provided that your primer is equipped with the port pictured below.

Locate your AirPrime unit within your pump enclosure and visually inspect for the 1/8" NPT port sealed with a pipe plug.



1/8" NPT Connection
to Lift Gauge.

Existing AirPrime



The
GOLD
Standard
for Pump
Priming

