XP-870™ Operator's Manual

Last Updated: August 8, 2023

The XP-870 utilizes the rapid release of compressed air or CO2 to create a loud report and tuned shockwave effect.

COMPANY PROPRIETARY

XP-870 COMPONENTS

XP-870	
1. Pressure Gauge	3. Trigger Plug
2. Relief Valve	4. Fill Valve

KEYFOB RECEIVER OPERATION

KEYFOB RECEIVER	
1. Power Switch	3. Key Fob Transmitter
2. Power On LED	4. Connecting Plug

To remotely fire the XP-870 with the Key fob Receiver, plug the green cord of the Receiver into the black two pin plug of the XP-870. Turn the Key fob Receiver on and the Power On LED will illuminate. Fire the XP-870 by pressing the button on the Key fob remote. The Receiver does not have an Arming feature, it will fire immediately when it receives a signal from the Key fob Transmitter. Typical range for the Key fob is 30m to 50m in open air.

FILLING THE XP-870

Fill the XP-870 between 120 and 150 psi via the Fill Valve using any standard Schrader valve air attachment. The Pressure Gauge will indicate the air pressure in the main chamber. Note that the main chamber may take a few seconds to equalize depending on the fill rate. Fill time should take several seconds when using a pressurized source. Fill time from a compressor without a reservoir may take longer depending on the capacity of the compressor.

THE XP-870 IS NOW READY TO FIRE

FIRING THE XP-870

Connect a 12 Volt DC power source to the Trigger Plug (via Trigger Cable, Key Fob Receiver, or Long Range Receiver Box). When 12 Volts DC is applied, the XP-870 will fire by opening the solenoid valves producing a tuned Shock Wave and 116dB report. The valves are not polarity sensitive.

The XP-870 releases the compressed gas resulting in a loud report and shock wave from the opening. The shock wave can be quite forceful at close distances, Exercise Care When Used In Close Proximity to Exposed Skin or Tissue. Eye and Ear Protection are highly recommended.

The XP-870 can immediately be refilled and re-fired using the steps listed above.

PLEASE NOTE THE FOLLOWING:

If charged to over 150 psi, the Relief Valve will release and relieve the internal pressure to prevent over-pressurizing the XP-870.

Four 1/4-20 threaded bolt holes are provided on the top of the XP-870 for mounting an optional Effects Attachment. Up to 1lb of powder or 1 gallon of water may be placed within the Effects Attachment for additional visual signature.

The XP-870 will experience some recoil when fired. Be sure to securely restrain the XP-870 before firing.

The XP-870 can be connected to a continuous compressed gas supply and will automatically recharge once fired.

Several different triggering options and accessories are available from Explotrain.

If dirt or debris enters the opening, the Piston inside the XP-870 may not seal properly and the XP-870 cannot be charged. Keep the opening area of the XP-870 as free of dirt and debris as possible.

INSTRUCTIONS FOR USE WITH LIQUID EFFECTS OR WHEN SUBMERGED

The XP-870 can be used with the optional Effects Attachment to allow the use of larger volumes of powder or up to one gallon of water for improved visual effects.

1. Assemble the Effects Attachment to the top of the XP-870 using the four ¼" bolts and washers provided.
2. For powder effects, place the desired quantity of powder in a bag or on a piece of paper or card stock inside the Attachment.
3. When fired, the XP-870 will propel the powder into a large dust cloud for dramatic visual effects.
4. For liquid effects, place a sealed bag such a Ziploc containing up to one gallon of liquid into the Effects Attachment.
5. When fired, the XP-870 will rupture the bag and propel the liquid contents several feet into the air.

The XP-870 can also be used submerged. In open water, the most dramatic effects are usually achieved with the XP-870 placed less than a foot below the surface and pointed vertically.

XP-870 Disassembly

To disassemble the XP-870 in the event maintenance is needed:

1. Remove the Exhaust Cap (Figure 1) by rotating in a counterclockwise direction. To facilitate easier removal, it is recommended to fabricate a fixture similar to the one illustrated in Figure 2 so the XP-870 can be placed in a vise. Explotrain will provide a drawing of the fixture upon request.
2. Remove the wiring harness by removing the 13mm hex nut on each solenoid coil and pulling the coil off the shaft (Figure 3). Note: your XP-870 may have the stainless steel clips instead of hex nuts as shown in Figure 4. Set wiring harness aside.
3. With the fixture shown in Figure 2 attached, insert XP-870 upside down in vise and placing a 1" (or 26mm) wrench, on the valve elbow fitting (Figure 5) turn the main cylinder counterclockwise until the cylinder is loose from the lid. Completely unscrew the main cylinder and lift straight up. Inspect the inside (Figure 6) and remove any water or other foreign debris.
4. Remove the shaped piston by tilting slightly and lifting straight up (Figure 7).
5. Drain any liquid from the valves and dry the Exhaust Piston, Exhaust Cap, and inside the Body to remove any liquids or foreign debris.
6. Inspect rubber gasket to ensure it is clean and seated properly (Figure 8).
7. Apply a light coating of silicone spray to all interior components.
8. Apply a coating of anti-seize compound to the threads of the body and ensure the threads of the Exhaust Cap are dry and free of any dirt or debris. Ensure the O-ring(s) in the Exhaust cap are clean and seated in position.
9. Re-assemble in reverse order. WARNING: The aluminum threads are by nature subject to deformation if the threads are not properly aligned. Take care to ensure the two pieces are not cross threaded before tightening.
10. The rotation of the Body will become noticeably more difficult once it engages the O-ring seal in the perimeter of the Exhaust Cap, this is normal. When the Body is fully seated against the Exhaust Cap it will come to a full stop.
11. The XP-870 is now ready for storage or to resume normal operation.

If you have any questions, concerns, or would simply like to talk to us about using your XP-870 safely and effectively, please contact us at 850 862-5344 or information@explotrain.com

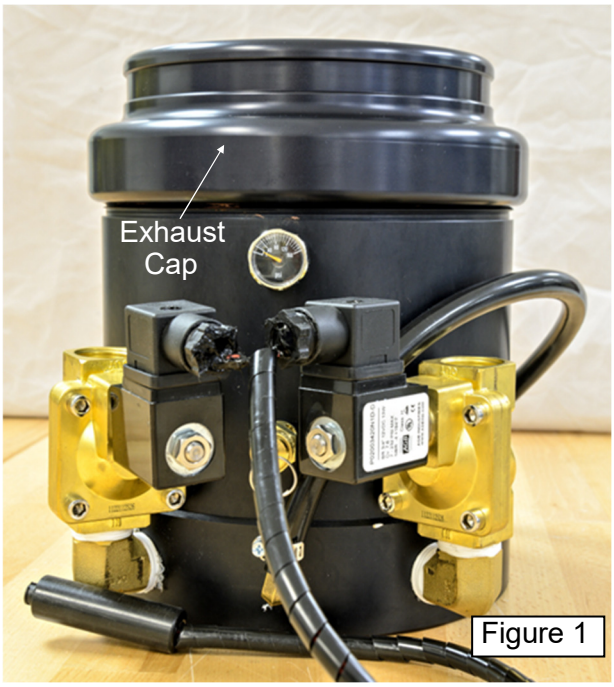


Figure 1

Figure 2

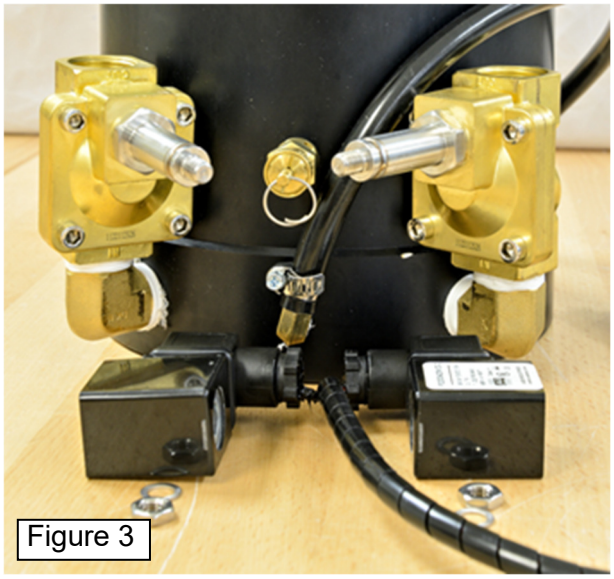


Figure 3

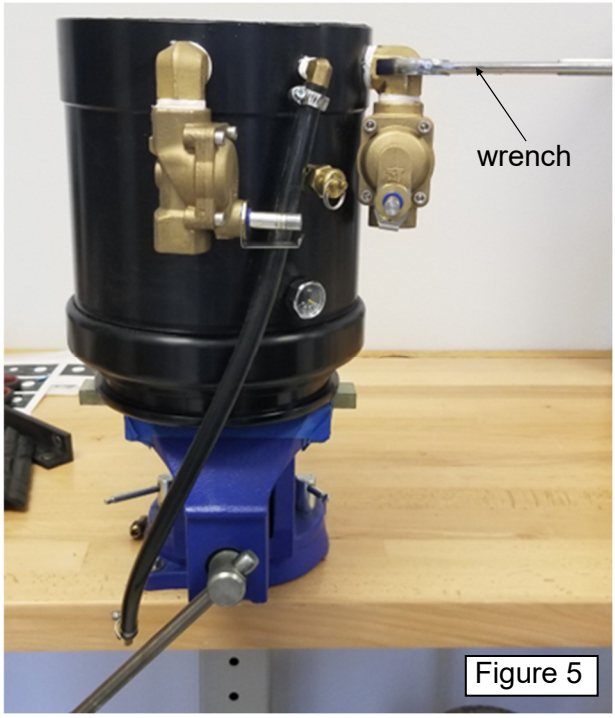


Figure 5

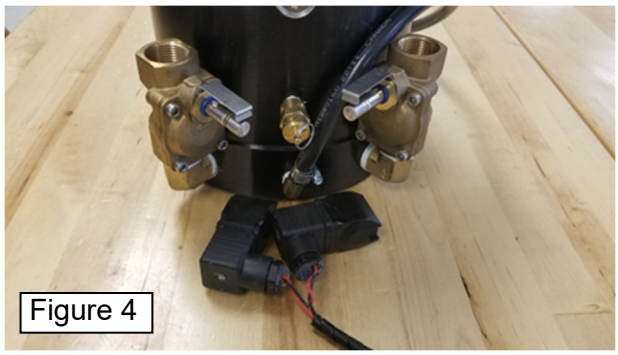


Figure 4

Figure 6

Figure 7

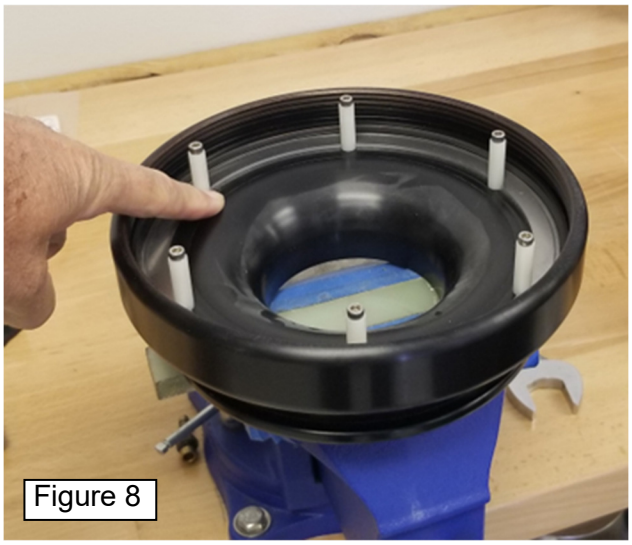


Figure 8

Programming a replacement XP-357 or XP-870 Key Fob to a Receiver:

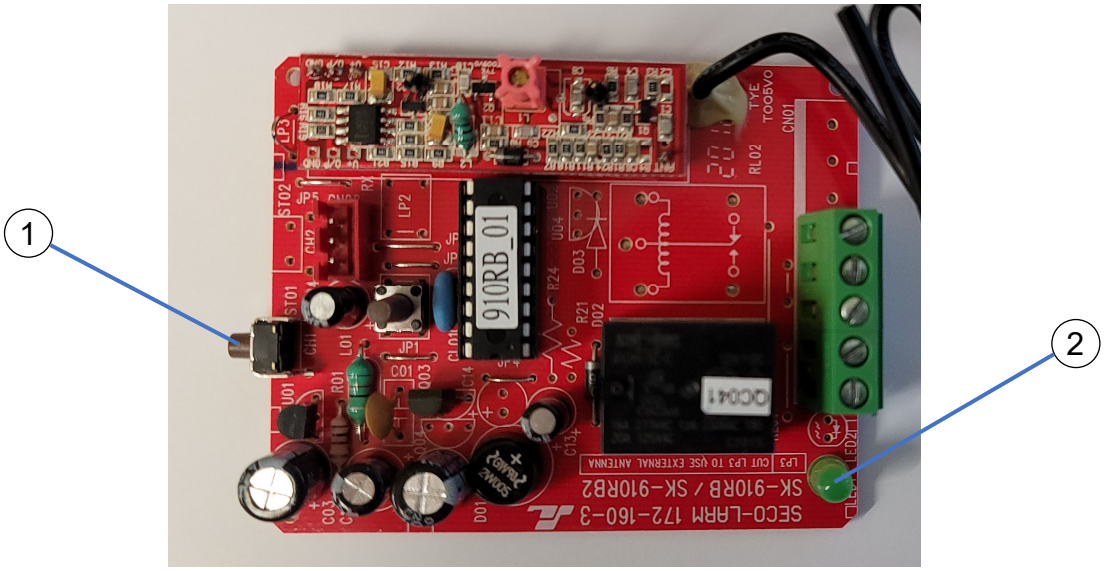
1. Press and hold the brown channel 1 mode switch for 3 seconds or more. The green channel 1 LED will start to flash indicating that it is in learning mode.
2. While the LED is flashing, press the button of the key fob transmitter to be learned one time. The green channel 1 LED will flash once to indicate the transmitter button has been successfully learned. After the button has been learned, the receiver will automatically exit learning mode.

NOTES:

- Each receiver channel can learn the codes of up to 15 different transmitters on a first-in, first-out basis.
- The green channel 1 LED will flash a maximum of 15 seconds. If no transmitter button is pressed during this time, the receiver will exit the code learning mode and the LED will turn off.
- If the code being learned has already been learned, the green channel 1 LED will turn steady ON and then start flashing again. The code will not be learned a second time.

To clear channel memory:

To clear all codes from memory, press and hold the brown channel mode switch for 3 seconds or more until the green channel 1 LED flashes. Release, then press the switch again for 3 seconds or more until the LED stops flashing. The LED will then flash twice to indicate that all codes associated with that channel have been erased.



1. Channel 1 mode switch	2. Channel 1 indicator LED