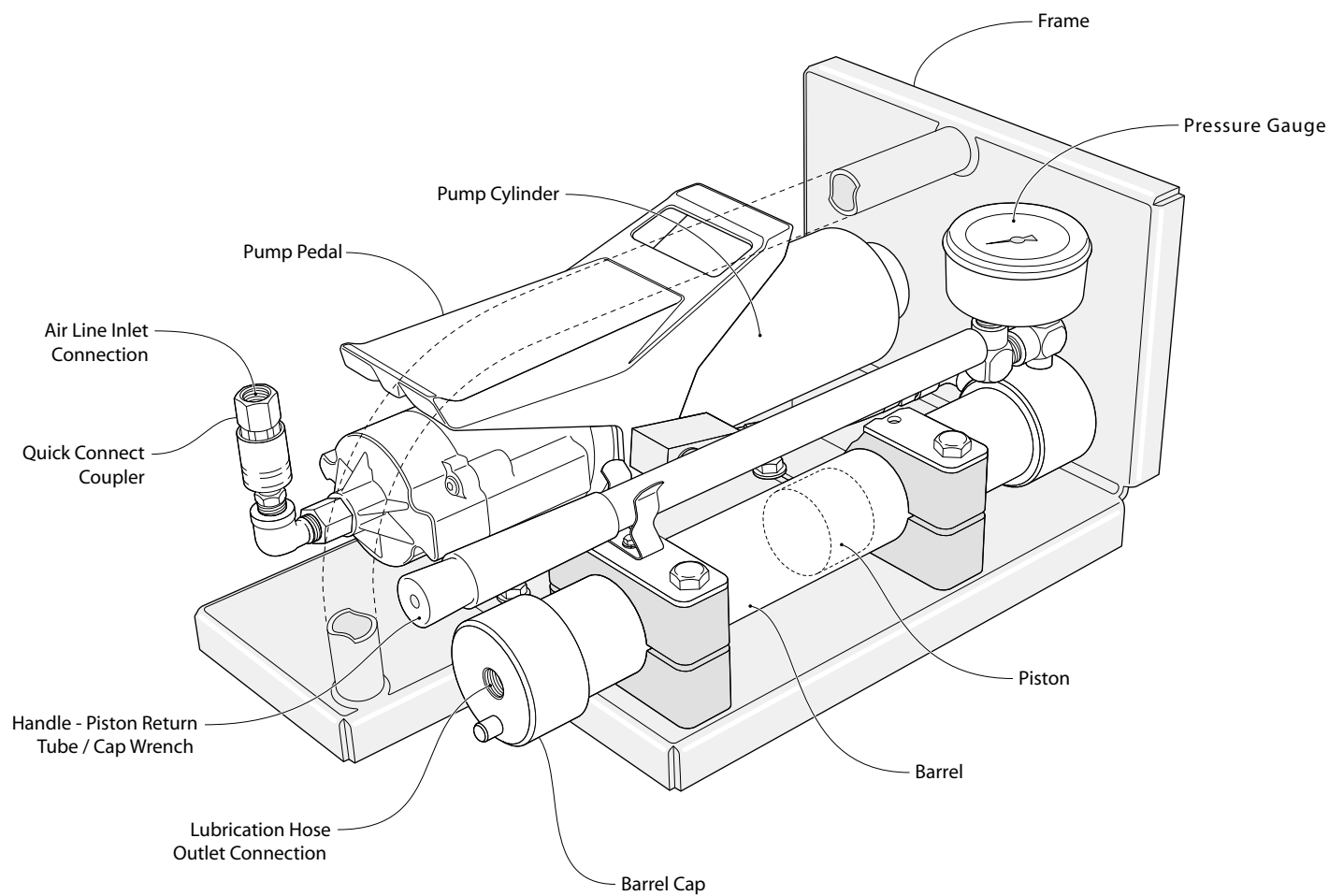
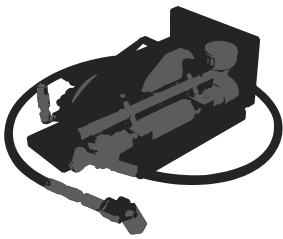


## Parts Diagram

**Safety First!**

Use only Genuine Dualco Parts.  
Contact Dualco for repair, or rebuilding  
procedures.



Read complete instructions  
before using this Gun.

### Part 1. Operation & Description

All models of the DUALCO Air Hydraulic Injection Gun are high-pressure tools that should be used with caution and according to these instructions.

**IMPORTANT** - This Gun is 10,000 psi rated. Do not exceed 10,000 psi.

The (numbers) shown herein refer to the Parts List on page 3 and in Brochure 363-898.

These Injection Guns transmit material by the use of compressed air as a power source against pressurized hydraulic fluid. One end of DUALCO Injection Gun is the Pump containing hydraulic fluid. The other end of the Gun is the Grease Barrel. The Barrel and the Pump are separated by the Gun Body, Hose, and other components. During operation, air pressure forces hydraulic fluid from the Pump through the Hose and Body into the space behind the Piston located in the Grease Barrel. The Piston pushes the material out through the Grease Barrel Cap. Numerous options are available for Grease Barrel Cap attachments to transmit material to the desired pump, valve, or other equipment.

- A.** To activate the Pump and extend the Pump Cylinder, depress the pedal on the marked end.
- B.** To hold the Pump cylinder in position, release the marked foot pedal to deactivate Pump.
- C.** To deactivate the Pump and retract the Pump cylinder, depress the marked foot pedal end.

**Note:** These instructions refer to Power Team Forms 101652 and 105001.

The Handle has a side hole near the threaded end, which will fit over the pin in the Grease Barrel Cap. Using the Handle in this manner makes it a convenient tool to loosen and tighten the Cap. The Handle is marked with approximate 1-ounce graduations for measuring material. The Handle can be used for pushing the Piston to bottom of Grease Barrel.

To ensure the DUALCO Air Hydraulic Injection Gun will perform and operate properly, use after use, keep the gun out of the weather, clean, and maintained.

### Part 2. Priming the Pump

#### Pictogram Definitions

Activating the Pump with the pedal end marked with a pictogram, the flow of Pump fluid is directed out of the reservoir.

Activating the Pump with the pedal end marked with a pictogram, the flow of Pump fluid is directed back to the reservoir.

**Under certain circumstances, it may be necessary to prime the Pump, following this procedure:**

- A.** Press the release end of the pedal while holding down the air intake valve with a flathead screwdriver. The air intake valve is located directly under the pedal in the area marked. The valve is depressed simultaneously with the area of the pedal during priming.
- B.** Allow the Pump to cycle approximately 15 seconds.
- C.** Remove the screwdriver, and press the end of the pedal once more.
- D.** If the Pump cylinder extends or pressure builds, the Pump has been successfully primed. If the Pump does not respond, repeat the procedure, jogging the air intake valve while holding the pedal in the active position.

### Part 3. Loading

Each new DUALCO Air Hydraulic Injection Gun is ready to use, following this procedure:

- A.** Make sure the Pump cylinder is retracted and the Pump is deactivated and all pressure is released.
- B.** Remove Grease Barrel Cap with Handle as previously described in I.
- C.** Using Handle, push Piston Assembly to bottom of Grease Barrel so it will be flush against Body.
- D.** For this Model, use an optional Wooden Dowel to push Piston Assembly to bottom of Grease Barrel.
- E.** Load the Barrel with material (Lubricant, Packing, Sealant, or Cleaner), in either bulk, prepackaged or stick.
- F.** Replace Grease Barrel Cap and tighten with Handle.
- G.** Replace Handle onto Body and the Gun is ready to operate. Be sure to have the appropriate material transmission apparatus or hose assembly firmly attached to the Grease Barrel Cap.

**IMPORTANT** - Always make sure the Grease Barrel Cap is firmly attached to the Grease Barrel and be sure there is full thread engagement between these two parts before Gun operation.

• Optional Parts and Tools, including in-line Air Filter/Lubricator and Carrying Unit, may be available.

## Part 4. Maintenance

Any repair or servicing that requires disassembly of the DUALCO Injection Gun must be performed in a dirt-free environment by a qualified technician. Dispose of used parts and fluids properly.

### Item 1. Injection Fluid

The DUALCO Air Hydraulic Injection Gun comes filled with DUALCO Injection Fluid. Fluid should be added or replaced as necessary using only DUALCO Injection Fluid. Do not contaminate or use any other fluid. Check the fluid level in the Pump reservoir after every 10 hours of use. Drain and replenish the Pump reservoir with DUALCO Injection Fluid after every 300 hours of use. The fluid is available in several size containers up to 55-gallon drums.



**WARNING** - Read Material Safety Data Sheet and DUALCO Injection Fluid label before use.

**Item 2.** Refilling the DUALCO Air Hydraulic Injection Gun Pump with Injection Fluid and Purging the system of air

**A.** During the first moments of operation or after prolonged use, a significant amount of air may accumulate within the system. This entrapped air may cause the cylinder to respond slowly or behave in an unstable manner. To remove the air, run the system through several cycles (extending and retracting the cylinder) free of any load. The cylinder must be at lower level than the Pump to allow air to be released through the Pump reservoir.

**B.** Clean the entire area around the Pump filler plug before adding fluid to the Pump reservoir. Remove the Pump filler plug, and insert a clean funnel with filter. The cylinder must be fully retracted and the air supply disconnected when adding the fluid to the Pump reservoir.

### Item 3. Lubrication

If the Gun is operated on continuous cycles for extended periods, it is recommended that an automatic Air Filter/Lubricator be installed on the air inlet line as close to the Pump as possible. Set the Lubricator to feed approximately one drop of oil per minute into the system. Use SAE No. 10 oil.

### Item 4. Periodic Cleaning

**IMPORTANT** - The greatest single cause of failure in hydraulic pumps is dirt. Keep the Pump and attached equipment clean to prevent foreign matter from entering the system.

A routine should be established to keep the Pump as free from dirt as possible. All unused couplers must be sealed with thread protectors. All hose connections must be free of grit and grime. Any equipment hooked up to the Pump should also be kept clean. Use only DUALCO Injection Fluid in this Pump and change as recommended (every 300 hours).

### Item 5. Draining and Flushing the Pump Reservoir

**IMPORTANT** - Wipe the Pump exterior completely clean before attempting this procedure!

**A.** Remove the screws that fasten the Pump assembly to the reservoir. Remove the Pump assembly from the reservoir. Do not damage the gasket, filter, or safety valve.

**B.** Drain the reservoir of all fluid and refill half full with clean injection fluid. Rinse the filter clean.

**C.** Place the Pump assembly back onto the reservoir, and secure with two of the machine screws assembled in opposite corners of the housing.

**D.** Run the unit for several minutes. Use the same method described in the section titled "Priming the Pump."

**E.** Drain and clean the reservoir once more.

**F.** Refill the reservoir with DUALCO Injection Fluid and replace the Pump assembly (with gasket) on the reservoir and install the screws. Torque the screws to 25 to 30 inch pounds (2.8 to 3.4 N·m).



**IMPORTANT** - Drain and clean the other hydraulic system components (hoses, cylinders, etc.) before reconnecting them to the Pump. This will prevent contaminated fluid from entering the Pump again.



**IMPORTANT** - Warranty will be voided if the Pump Internal Relief Valve or other Gun components are altered, disassembled, or tampered with.

### Note:

Contact DUALCO for other operation, repair, or rebuilding procedures.