



A DIVISION OF GETZ FIRE EQUIPMENT

**Getz Equipment Innovators
Part No.: 4G0010
CO2 Transfer Pump**

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CO2 Transfer Pump (4G0010)**

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**Getz Equipment Innovators
CO2 Transfer Pump (4G0010)**

Power Source:

Air Compressor – must have a pressure regulator and moisture trap
Compressed Air – must have a pressure regulator and moisture trap
Nitrogen – must have a pressure regulator

Air Requirements:

130 psi at 13 cubic feet per minute
Maximum air pressure to CO2 pump – 150 psi
Safety relief set at 150 psi – “automatic resetting type”

Usable Media in the CO2 Pump

Liquid CO2 – Siphon tube in supply valve
High Pressure CO2 liquid cylinder

Warning: Operator must wear safety glasses when operating.

**Please order replacement parts from:
Getz Equipment Innovators
2320 Lakecrest Drive, Pekin, IL 61554
Phone (888) 747-GETZ (4389)
Fax (309) 309-495-0625
www.getzequipment.com**

Parts List

Item	Part No.	Description
1	1G0103	BUSHING BRASS REDUCING 1/2 X 1/4
2	1G0116	CONNECTOR PLASTIC 3/8 TUBE X 1/4 MPT
3	1G0049	TUBING POLY 3/8 WHITE
4	1G0066	VALVE PRESSURE RELIEF 150 PSI CO2
5	1G0102	TEE BRASS STREET 1/2
6	1G0084	VALVE BALL 1/2" BRASS
7	1G0217	1/2" NPT BRASS CLOSE NIPPLE
8	2G0063	PUMP CO2 LIQUID
9	1G0219	1/2X1/4 FORGED REDUCER 3000 PSI
10	1G51256	COUPLING 1/4 HOSE X 1/4 MALE PARKER
11	1G0035	HOSE 1/4 2750 PSI PARKER
12	1G0061	VALVE 3 WAY CO2 FILLING
13	1G0164	STEM ONLY CO2
14	3G59068	STEM NUT & GRIPWHEEL NEW STYLE
15	1G0218	1X1/2 FORGED REDUCER 3000 PSI
16	1G51253	COUPLING 1/2 HOSE X 1/2 MALE PARKER
17	1G51562	HOSE SYNFLEX 1/2 2000 PSI
18	1G0578	COUPLING 1/2 HOSE X 1/2 FEMALE PARKER
19	1G0172	ADAPTER CO2 1/2 FEMALE X 1/2 MALE
20	1G0173	ADAPTER CO2 1/8 FEMALE X 1/2 MALE
21	1G0171	ADAPTER CO2 3/8 FEMALE X 1/2 MALE
22	1G0170	ADAPTER CO2 1/4 FEMALE X 1/2 MALE

3G59762 – REPLACEMENT SUPPLY LINE

INCLUDES:

- (6) 1G51562 - HOSE SYNFLEX 1/2 2000PSI
- (2) 1G51253 - COUPLING 1/2 MALE SYNFLEX
- (1) 1G0578 - COUPLING 1/2 F/F 5000 PSI

3G56230 – 6FT HOSE ASSEMBLY

INCLUDES:

- (6) 1G0035 - HOSE 1/4 2750 PSI SYNFLEX
- (2) 1G51256 - COUPLING 1/4 MALE SYNFLEX

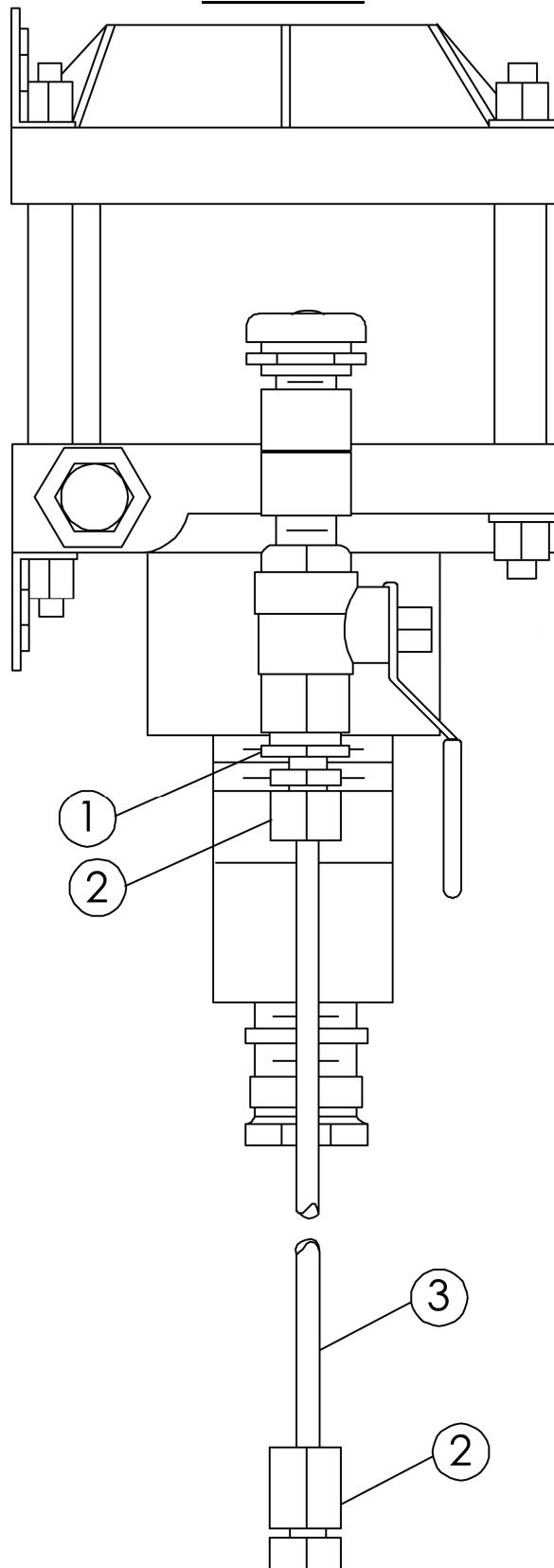
Assembly Instructions

1. Mount the CO2 pump to a wall or bench as close to the air supply line and liquid CO2 supply cylinder as possible.
2. Insert one end of the 3/8" clear air line (3) into the 3/8" tube connector (2) on the CO2 pump and tighten clearly.
3. Uncoil the 3/8" clear air line (3) and connect the 1/4" x 3/8" tube connector (2) already connected to the 3/8" clear air line (3) into a regulated air source and tighten securely. Air pressure regulator must be set to zero.
4. Close the 1/2" brass ball valve (6) on the CO2 pump so that the handle is facing sideways to the valve body.
5. Adjust the air supply regulator to 140 psi on the outlet pressure gauge. Check for air leaks.
6. Connect the hose fitting (16) on the 1/2" Parker line (17) into the female 1/2" swivel on the bottom of the CO2 pump and tighten securely.
7. Thread hose fitting (10) on the 1/4" Parker line (11) into the female pipe reducer bushing (9) on the side of the CO2 pump.
8. Place the gripwheel (14) up to the liquid CO2 cylinder valve and swivel the gripwheel (14) clockwise until securely tightened.
9. Turn the handle on the 1/4" brass 3-way valve (12) until the handle is facing sideways to the valve body. Open the CO2 liquid supply valve on the CO2 liquid supply cylinder and check for leaks.
10. While securely holding the 1/4" brass 3-way valve (12), turn the valve handle to point toward the 1/4" Parker line (11) and allow the air to bleed out of the pump and hoses until CO2 begins to flow out of the brass stem (13). Turn the valve handle back to point sideways to the valve body.
11. Remove the hose or horn from the CO2 extinguisher and thread on of the four CO2 fill adaptors (19-22) onto the CO2 extinguisher valve. Swivel the gripwheel (14) on valve clockwise onto the CO2 fill adaptor on the CO2 extinguisher valve. Tighten Securely.

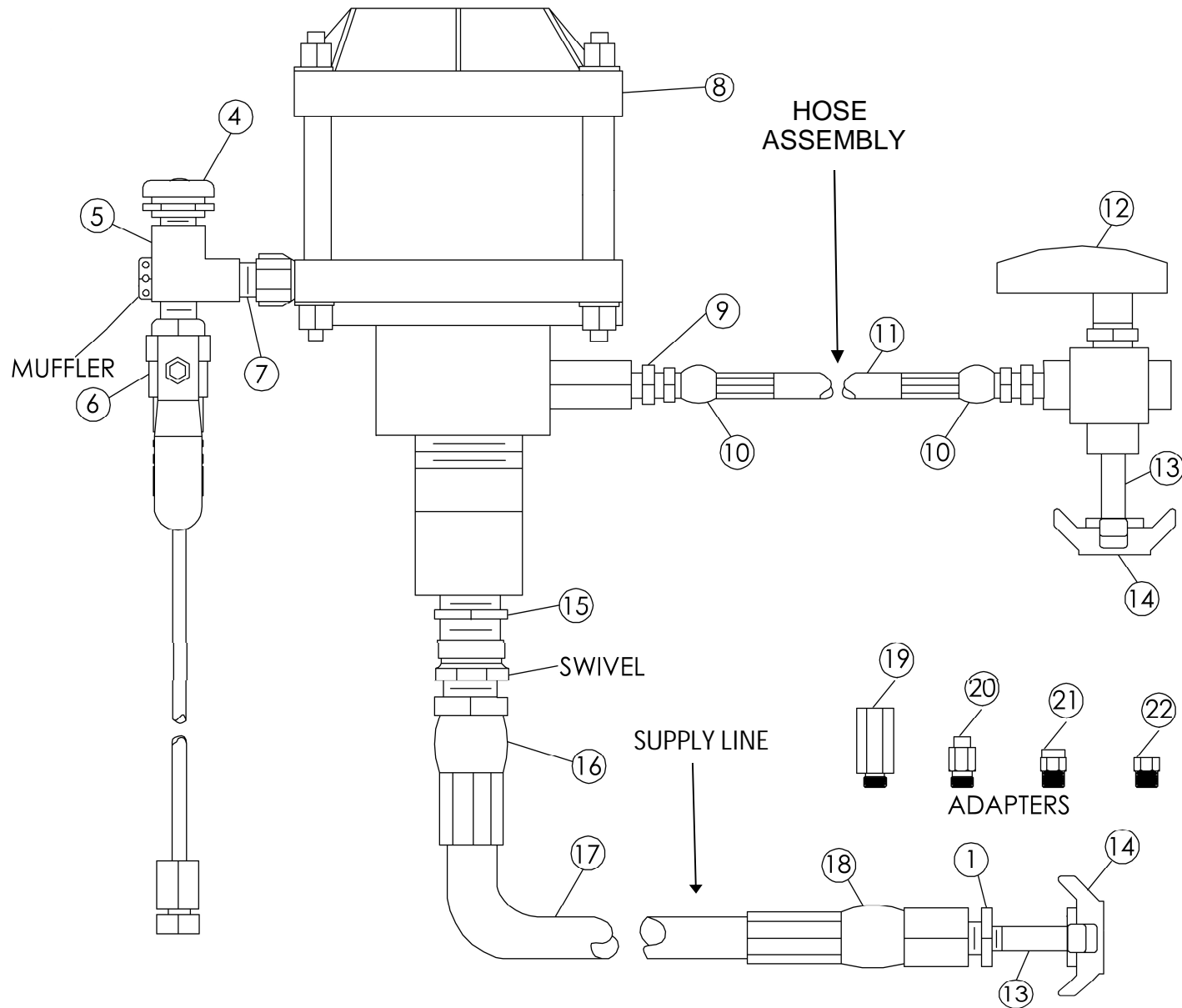
12. Place the CO2 extinguisher on a scale and clamp open the extinguisher valve.
13. Record the weight shown on the scale or adjust the scale weights to get the correct empty weight of the extinguisher. Look on the extinguisher to be filled to determine the amount of CO2 liquid the extinguisher will need. Add the empty weight of the extinguisher and the amount of CO2 liquid the extinguisher will need and adjust the scale to show the total amount of weight needed.
14. Turn the valve handle on valve (12) to point toward the 1/4" Parker line (11) and CO2 liquid will flow into the CO2 cylinder. When the scale stops increasing in weight or no CO2 liquid is heard flowing through the 1/4" Parker line (11), turn the valve handle in line with the 1/2" brass ball valve (6) to start the CO2 pump pumping.
15. When the total weight is achieved on the scale, turn the valve handle sideways to the valve body on the 1/2" brass ball valve (6).
16. Unlock the extinguisher valve and turn the valve handle on the 1/4" brass 3-way ball valve (12) to point toward the open port of the valve to release the CO2 pressure on the gripwheel (14).
17. Place the safety pin in the extinguisher valve handle and restrain the pin to the valve with a plastic seal.
18. Turn the valve handle on the 1/4" 3-way ball valve (12) sideways to the valve body and turn the grip wheel (14) counterclockwise to remove the gripwheel from the CO2 fill adaptor (19-22).
19. Remove the CO2 fill adaptor (19-22) from the CO2 extinguisher valve and replace the hose or horn assembly.

If you are finished for an extended period of time, turn off the CO2 supply cylinder and air supply to the pump. Also, bleed the liquid CO2 out of the CO2 pump and lines.

SIDE VIEW



FRONT VIEW



Lubrication Instructions

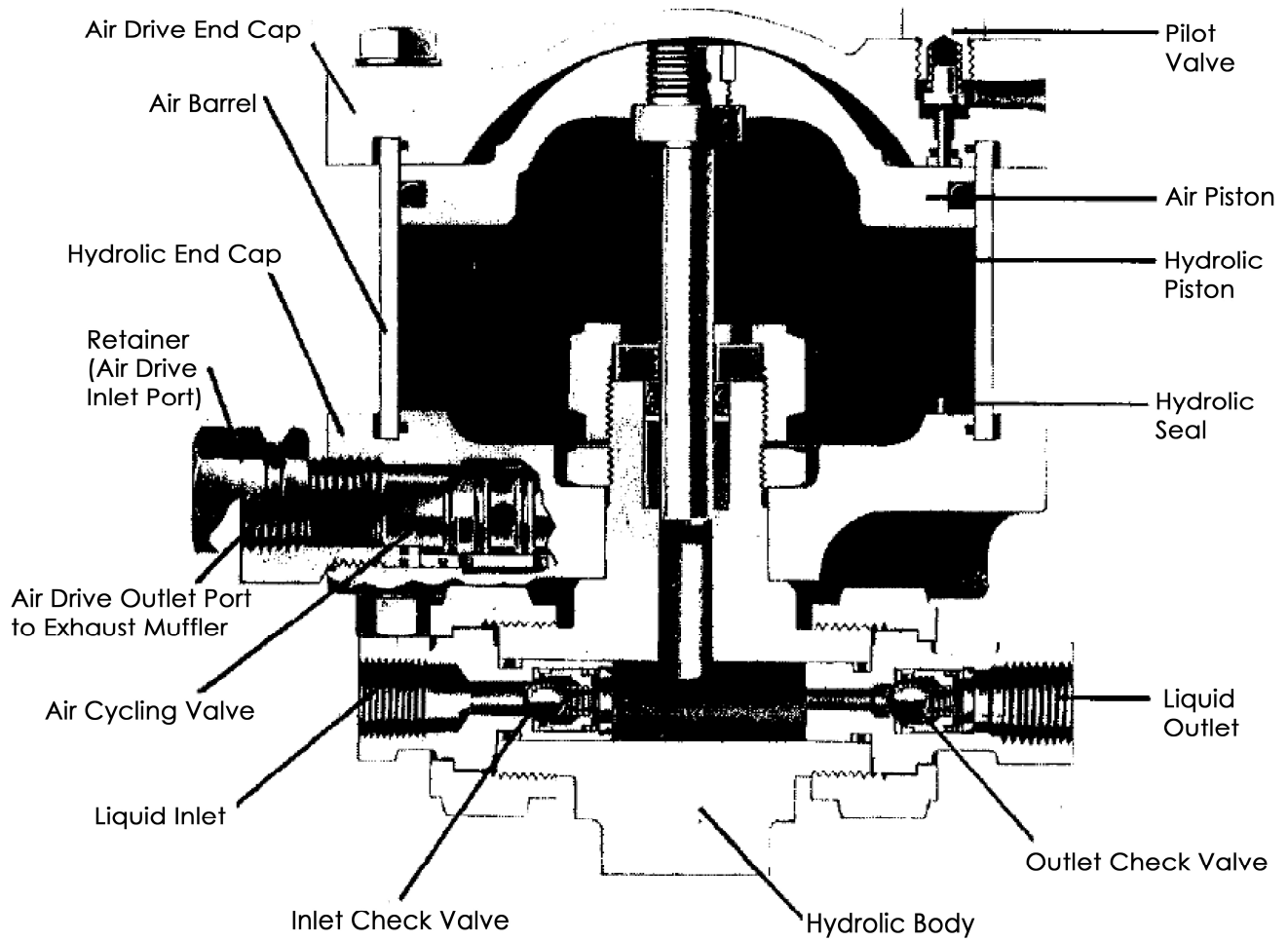
****Do Not Use Airline Oil Mist Lubricator or Standard O-Ring Lubrication****

This unit has been properly lubricated during assembly by the manufacturer. Re-lubricate the spool valve and outer sleeve every three months with Getz part #1G51515 - Air Seal Lubricant.

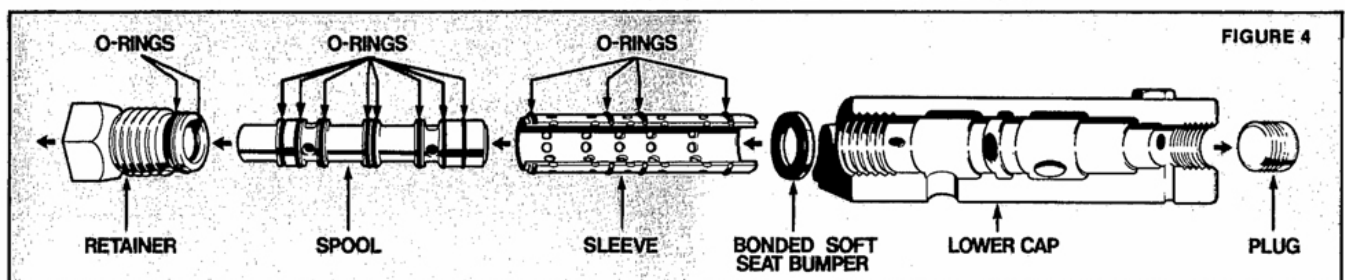
Lubricating Instructions:

1. See page (10), pump schematic, to aid lubrication of the air drive.
2. Turn off the incoming air supply and bleed air pressure off the CO2 pump.
3. Turn off the incoming CO2 liquid supply to the pump and bleed CO2 liquid out of the CO2 pump.
4. Unscrew the retainer bushing counterclockwise from the lower end cap assembly.
5. Unscrew the pip plug counterclockwise.
6. Insert a 1/4" wooden dowel rod into the hole where the pip plug was removed and push the inner spool out of the lower end cap, noting the way the spool comes out.
7. Reinsert the 1/4" wooden dowel rod into the hole where the pipe plug was removed and push the outer sleeve out of the lower end cap, noting the way the sleeve comes out.
8. If the spacer was not removed with the outer sleeve, place the 1/4" wooden dowel into the hole where the pipe plug was removed and push the spacer out of the lower end cap. Lightly lubricate the rubber part of the spacer with part #1G51515 – Air Seal Lubricant.
9. Apply a light coat of Air Seal Lubricant to the o-rings on the inner spool and outer sleeve o-rings.
10. Reinsert the spacer back into the lower end cap with the metal portion of the spacer toward the pipe plug hole.
11. Reinsert the outer sleeve and inner spool back into the lower end cap and seat firmly into place.
12. Place pipe sealant on the pipe plug and screw clockwise back into the lower end cap securely.
13. Place a light coat of Air Seal Lubrication on the inner and outer o-ring on the retainer bushing and screw the retainer bushing back into the lower end cap. Snug up gently.
14. Turn on the incoming air supply and CO2 liquid supply to the CO2 pump.

If the air drive section is disassembled, apply a very thin coat of Air Seal Lubrication to all the o-ring surfaces in the air drive section before reassembling.



EXPLODED VIEW OF AIR CYCLING VALVE MECHANISM



Trouble Shooting

1. Pump cycles but it will not add weight to the cylinder being filled.
 - A. No siphon tube on the CO2 supply valve in the CO2 liquid cylinder.
 - B. CO2 liquid cylinder is empty.
 - C. CO2 pump is vapor locked and will require CO2 liquid to be purged through valve (12).
2. Pump stalls out before the total weight is in the cylinder being filled.
 - A. Increase the incoming air pressure to the CO2 pump up to 150 psi maximum.
 - B. Inner spool valve and outer sleeve need to be lubricated. See page 10
 - C. Air drive section needs to be disassembled and lubricated. See page 10
3. White mist or ice forms on the CO2 pump muffler.
 - A. Liquid seals in the CO2 pump need to be replaced. reference page (10).
 - B. CO2 vapor is being used to power the CO2 pump.
 - C. Incoming air supply temperature is above 140 degrees Fahrenheit.
4. Pump will not cycle or cycles slowly at proper incoming air pressure and the spool valve and outer sleeve have been lubed.
 - A. O-rings need to be replaced on the spool valve and outer sleeve. reference page (10).
 - B. Incoming air supply regulator is dirty or has foreign material blocking the inlet port screen.
 - C. Liquid CO2 cylinder supply valve is not open or is not open all the way.
5. Pump stalls and blows air continuously out of the CO2 pump muffler.
 - A. O-ring seals need to be replaced in the air drive section. reference page (10).
 - B. O-rings need to be lubricated on the inner spool valve, outer sleeve, and air drive section.Reference page (10)