

The air cannon is used to clean the filter bags and filter cartridges. The air cannon expels a high pressure burst of air internally into the bags or cartridges to propel debris from the filter media.

Air Cannon Solenoid (Fig. 1)

Part No.	Description
1191505	Solenoid valve — 12V
1140462	2" (51 mm) NPT Solenoid valve — 12V
1140462B	Repair kit for 1140462

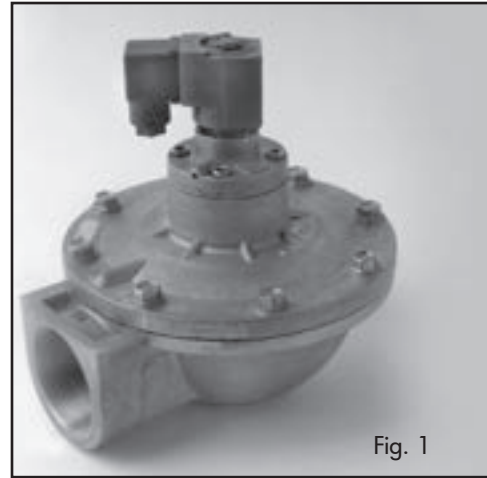


Fig. 1

Air Cannon Tank

Part No.	Description
1140459	Reservoir tank — 14 gallon (53 liters) capacity
1140007	Air tank relief valve — 150 psi (10 bar), 50 cfm
1250296	O'Ring, 223

Related Items

See Page L-4 for Air Cannon field modification.

Air Cannon Retrofit Kit (Classic)

Includes all required parts for air cannon upgrade.

Part No.	Description
1490710E	For a Guzzler Classic unit

Air Cannon Retrofit Kit (ACE)

Includes all required parts for air cannon upgrade.

Part No.	Description
1490710F	For a Guzzler ACE unit



Pressure Transducer

High/Low pressure switch for pulsation system.

Part No.	Description
1190017	Pressure transducer
1140443	Air Dryer
1651775A	Element Kit, Air Dryer Dessicant



Relay

Control timer for pulsation system.

Part No.	Description
1191109	8-pin time-delay relay for air cannon — 12V
1191157	8-pin time-delay relay for XCR timer — 12V
46344L	Relay - time delay on make, DIP SW



Skinner Valve

Air supply valve for pulsation system.

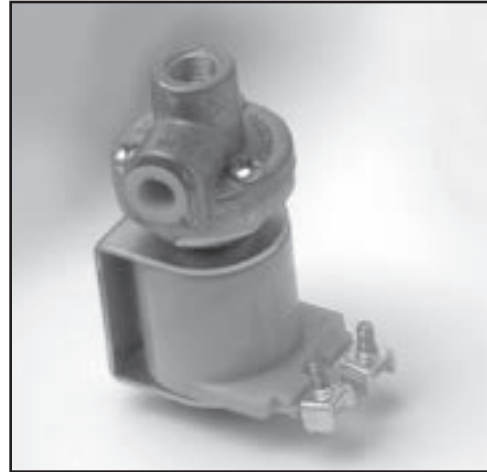
Part No.	Description
1140461	1/2" (12.7 mm) NPT solenoid valve — 12V



Solenoid Valve

Old style pulsation.

Part No.	Description
1190011	1/8" (3.2 mm) NPT solenoid valve — 12V



Diaphragm Valve

Old style pulsation.

Part No.	Description
1140020	1" (25 mm) valve



Field Modification of Air Cannon – Guzzler and ACE Models

Air Cannon Retrofit Parts List		
Part Number	Description	Quantity
10453K	Street elbow 2" (51 mm) 90 degree	1
10464R	Pipe nipple, 2" (51 mm) close	1
1140462	Valve, solenoid, 2" (51 mm) NPT	1
1280167	Double bolt clamp, 2" (51 mm)	2
16486C	Pipe coupling, 4" (102 mm)	1
20378	Reducer bushing, 4" x 2" (102 mm x 51 mm), hex	2
43783	Hose barb coupling, 2" (51 mm)	2
46809	Hose, hyd. 2" (51 mm) I.D. SAE100 R4	6 ft.

The field modification of the air cannon, both in the Guzzler and the ACE models, requires the removal of the internal parts of the air cannon. The only parts that are reused are the air cannon tank, the pop off valve, the drain cock and some of the fittings.

Essentially the ACE and the Guzzler air cannons are the same, the difference being in the way they are mounted on the unit and the plumbing to accommodate the two baghouses on the ACE as opposed to the single, large baghouse on the Guzzler.

For safety and ease of working, it is recommended that the air cannon be removed from the truck and placed on a workbench to complete this modification.

REMOVAL

1. Disconnect the 1/2" (12.7 mm) air supply hose to the air cannon at the solenoid.
2. Disconnect the electrical pigtail on the solenoid at the two-wire connector.
3. Disconnect the 1" (25.4 mm) exhaust hose at the solenoid (if so equipped).
4. Disconnect the 1/4" (6.4 mm) moisture drain line at the bottom of the air cannon tank (if so equipped).
5. Remove the 3" (76.2 mm) discharge hose at the air cannon end (Guzzler only).
6. Remove the two 2" (51 mm) discharge hoses at the air cannon end (ACE only).
7. Support the air cannon with a suitable sling and crane and remove the (4) nuts and bolts securing the air cannon to the debris body (Guzzler) or the baghouse (ACE).
8. Lift the air cannon from the truck and place it on a workbench.

Field Modification of Air Cannon – Guzzler and ACE Models (continued)

DISMANTLING

1. Unscrew the 5/8" x 1-3/4" (16 mm x 44.5 mm) cap screws holding the flange to the air cannon tank and remove the flange and gasket. Discard the gasket.
2. Partially pull out the piston and carrier now exposed as far as it will go and undo the 3/4" (19 mm) hose attached to the back of the carrier. Pull out the piston and carrier assembly completely.
3. Remove the air cannon solenoid as a whole along with the fittings.
4. Unscrew the bushings at the air inlet of the tank and pull out the 3/4" (19mm) hose from the inside.

ASSEMBLY WITH NEW COMPONENTS

Note: Use Teflon® tape or paste on all pipe fitting male threads to form air tight connections.

1. Using a new gasket (1250018), reassemble the 4" (102 mm) flange removed in Step 1 above.
2. Tighten the 2" (51 mm) nipple (10464R) to the female threads on the 4" (102 mm) flange and install the air cannon solenoid (1140462).
3. Install the 2" (51 mm) street elbow (10453K) and the 2" (51 mm) barb hose coupling (43783) to the discharge port on the solenoid.
4. Push one end of the 2" (51 mm) hose (46809) on to the barb hose coupling (47383) and secure it to the barb hose coupling with a double bolt clamp (1280167).
5. Install bushings to bush the air inlet port to 1/2" (12.7 mm) and install the 1/2" (12.7 mm) 90 degree street elbow from the parts that were removed at the air inlet port of the tank (from where the old solenoid was removed).
6. Mount the air cannon on its brackets on the unit and tighten the securing clamps.
7. Attach the 1/2" (12.7 mm) air inlet hose to the elbow at the air cannon inlet port and reconnect the 1/4" (6.4 mm) moisture drain line.
8. If necessary cut the 2" (51 mm) hose to length and connect the loose end of the 2" (51 mm) hose (46809) to the fitting on the baghouse and secure it with a double bolt clamp (1280167).
9. Extend wiring to the new air cannon solenoid and complete all connections.
10. Test the air cannon operation. Correct any problems that may be found.