

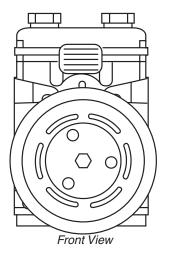
Engine Driven Compressor

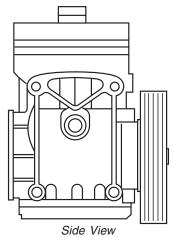
Base Kit

V-Belt Kit #27363/Serpentine Belt Kit #27361

www.airliftcompany.com

Please read these instructions completely before proceeding with installation





Do-It-Yourself Installation

Be sure to follow the enclosed instructions to hook up all of the filters, fittings, hose, and electrical connections.

IMPORTANT: The oil in the compressor **MUST** be drained and replaced with 12 oz. of 30W non-detergent oil before it is used.

Installation Components

Item	Description	Part Number	Qty.	Item	Description	Part Number	Qty.
Α	Compressor	24320	1	U	1/2" NPTM x 1/8" NPTF Bushing	21251	1
В	Clutch Key	10742	1	V	1/2" NPTF Coupling	21220	3
С	5/16" -18 x 1.75 Bolt	17256	2	W	1/2" Street Tee	21391	1
Ε	Clutch/Pulley Assembly (Serpentine Belt)	26615	1	Χ	1/4"-20 x .75" Bolt	17175	4
Ε	Clutch/Pulley Assembly (V-Belt)	26621	1	Υ	Self Tapper	17102	2
F	Coelescing Filter	21107	1	Z	10-32 x ³ / ₈ " Machine Screw	17352	2
G	Inlet Filter	10670	1	AA	1/4"-20 Kep Nut	18452	2
Н	Leader Hose	22024	1	AC	Red 16 Gauge Wire	24643	8'
I	Air Filter Bracket	10479	1	AD	ATC/ATO Fuse Tap In	24542	1
J	Brass Cross Bracket	26237	1	AE	Mini Fuse Adapter	24561	1
K	Compressor Fitting	21130	2	AF	Butt Connector	24645	2
L	Compressor Sleeve Insert	21125	2	AG	1/4" Female Terminal	24594	3
M	O-ring	21578	2	AH	AGC Fuse Tap In	24543	1
Ν	1/2" NPT Check Valve	21285	1	Al	3/16" Female Terminal	24524	1
0	1/4" NPT Relief Valve	24290	1	AJ	Thread Sealant	23586	2
Р	110-145 p.s.i. Pressure Switch	24551	1	AK	¹ / ₂ " Nylon Hose	20966	15'
Q	1/2" NPTM x 1/2" Tube Straight	21369	5	AL	Hose Cutter	10530	1
R	1/2" NPTM x 1/4" NPTF Bushing	21247	1	AM	Oil Dipstick	10159	1
S	1/2" Brass Cross	21221	1	AN	Pipe Nipple	21729	1
Т	Plug	21190	1				

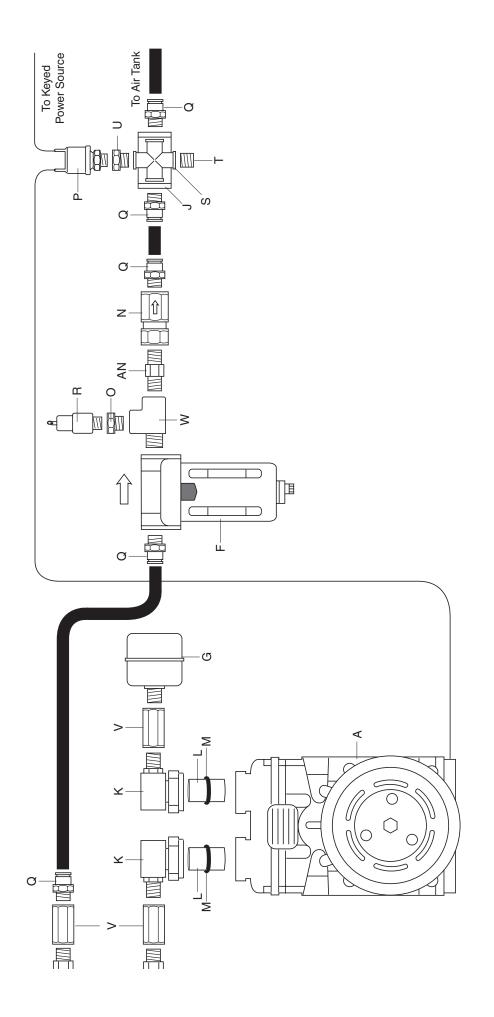


Figure 1

I. Attaching the Clutch

- 1. Lightly grease the supplied key (B).
- 2. Insert the key (B) into the slot in the tapered shaft on the side of the compressor.
- 3. Align the slot in the clutch with the installed key and slide the clutch onto the shaft of the compressor.

II. Installing the Filter

- Using the provided thread sealant, assemble the bushing (R) and relief valve (O) to the brass street tee (W). Install a ¹/₂" NPTM x 1/2" tube straight fitting (Q) to the tee (Figure 1).
- 2. With the arrow pointing in the direction of the flow, assemble the coelescing filter (F) to the brass tee assembly using the supplied sealant (Figure 1). Tighten securely.

IMPORTANT NOTE: DO NOT point the relief valve downward.

- 3. Securely attach a $\frac{1}{2}$ " NPTM x $\frac{1}{2}$ " tube straight nipple (AN) to the port on the coelescing filter (Figure 1).
- 4. Loosely attach the filter bracket (I) to the filter using the provided screws (Z).
- 5. Find a remote location on the frame or in the rear with enough clearance to install the filter assembly and use filter bracket as a template to mark mounting locations. Remove filter assembly and drill the mounting hole locations with a 1/4" bit.
- 6. Remove the filter from the bracket and install the bracket using the self tapping bolts (Y). Tighten securely (Figure 2).
- 7. Reattach the filter to the bracket and tighten screws securely (Figure 2).

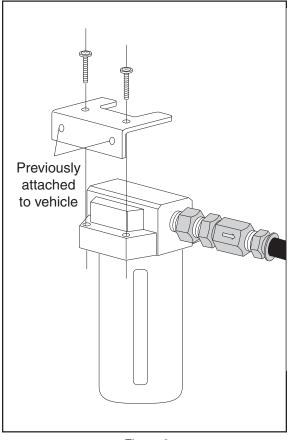


Figure 2

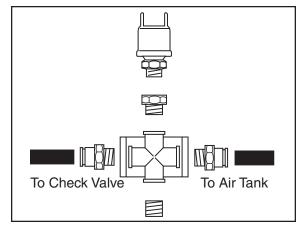


Figure 3

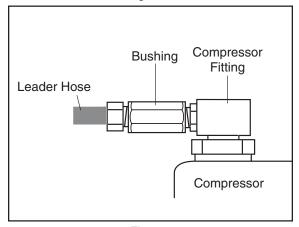


Figure 4

III. Installing the Hose Assembly

- 1. Install the brass cross bracket (S). Using the bracket (J) as a template, mark and drill the two 1/4" mounting holes and attach using two bolts (X) and two nuts (AA).
- 2. Attach the bushing (U) and pressure switch (P) to one leg of the brass cross (S) and plug (T) to the other leg directly across from the pressure switch (Figure 1).

IMPORTANT NOTE: DO NOT point the pressure switch down.

- 3. Attach the brass cross to the bracket using a $\frac{1}{2}$ NPTM x $\frac{1}{2}$ tube straight fitting (Q) on each side (Figure 1).
- 4. Install a 1/2" NPTM x 1/2" tube straight fitting (Q) to one end of the check valve (N) (Figure 1). Tighten securely. The check valve will be installed to the filter assembly. NOTE: The arrow points in the direction of the flow and the fitting goes onto the discharge end of the check valve.
- 5. Use the provided hose cutter (AL) to cut a length of ½" hose long enough to run from the cross assembly to the air fitting on the filter assembly. Do not attach at this time.
- 6. Being sure that the arrow on the check valve points in the direction of the flow, attach one end of the hose into the push-to-connect fitting on the check valve. Route the other end to the fitting on the cross assembly (Figure 1).
- 7. The open leg on the cross routes into a ½" hose going to the existing air tank (Figure 1).
- 8. Using the thread sealant provided, assemble two of the brass couplings (V) to both ends of the steel leader hose (H). Tighten securely (Figures 1 and 4).
- If included with your comopressor, remove the inlet and exhaust cap bolts on the top of the compressor.
- Slide the O-rings (M) around the two sleeve inserts (L). Set the inserts into the port holes on top of the compressor.
- 11. Set the compressor fittings (K) over the inserts and loosely attach using the supplied replacement bolts (C).
- 12. Attach a coupling (V) and filter (G) to the supply side (the suction port) using the provided sealant. Position the filter and tighten the compressor fitting bolt securely.
- 13. Firmly attach the steel leader hose to the remaining compressor fitting using the provided sealant (Figure 1).
- 14. Attach a 1/2" NPTM x 1/2" tube (Q) fitting to the opposite end of the leader hose.
- 15. Tighten the bolts on both compressor fittings securely.
- 16. Attach a length of hose (AK) from one end of the leader hose to the fitting on the relief valve assembly on the filter (Figure 1).



Figure 5

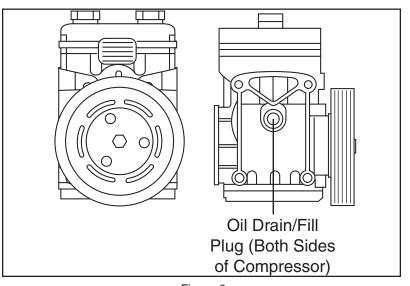


Figure 6

Technical Support 1-800-248-0892

IV. Before Operating

This compressor uses oil. Use the supplied dipstick (AM) to check that the oil level is at 12 oz.

NOTE: The filter will catch any passed oil.

V. Checking the Oil

Use a dipstick (AM) to check the oil depth. The depth must be between 1³/₄" and 2". If the oil level is not checked and/ or properly maintained, the warranty will be void.

VI. Draining the Filter

In order to maintain proper function of the compressor system, the filter must be drained frequently.

- 1. Make sure the air is flowing through the system.
- 2. Place a rag under the filter to catch any drainage.
- 3. Press the orange button on the bottom of the filter.

VII. Wiring the Electrical System

- 1. The hot lead to the compressor is the black wire on the clutch. Cut off the fitting on the end of the black wire and using butt connector (AF), splice a length of the red wire (AC) to the black wire. Run red wire to spade terminal on the pressure switch. Attach a blue spade connector (AG) to the red wire and attach to one of the terminals on the pressure switch.
- 2. Splice the 20 amp fuse in the fuse box using the adapters provided into a hot keyed power source and run it to the other terminal on the pressure switch.

Note: Be sure to use the hot side of the circuit in the fuse box.

- 3. After all hardware has been secured and oil level is within range, the system is now ready to operate. See Figure 5 for a finished installation.
- 4. We recommend purchasing a spare belt to carry in the vehicle in case of a belt failure.
- 5. Check all fittings and air line connections for leaks with a solution of ½ dish soap to ½ water in a spray bottle.



Thank you for purchasing Air Lift Products

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