

## DUAL ELECTRIC AIR COMMAND II

### INSTALLATION INSTRUCTIONS

Congratulations on your purchase of a new Dual Electric Air Command Kit. This kit was designed to provide inflation control of your air helper springs. This kit will be an asset to your vehicle, meeting nearly all of your air supply needs.

Please take a few minutes to read through the instructions, identify the components, and learn how to properly install your Dual Electric Air Command Kit.

#### NOTE:

*The Dual Electric Air Command Kit can be used with all air helper spring products. If you are installing an air suspension system, do not install the air line tubing to the air springs as stated in the suspension system instruction manual. If you are adding the Dual Electric Air Command kit to an existing air suspension system, you will need to deflate the air springs and remove the air line tubing.*

### NOTE ON CONNECTING THE AIR LINE TUBING

Cut the air line tubing as squarely as possible. To connect the air line tubing to the fittings, push the tubing into the fitting as far as possible. If for any reason the tubing must be removed, release the air pressure from the air helper spring. Push the collar toward the body of the fitting and pull out the tubing. To reassemble, make sure the tubing is cut squarely and push the tubing back into the fitting.

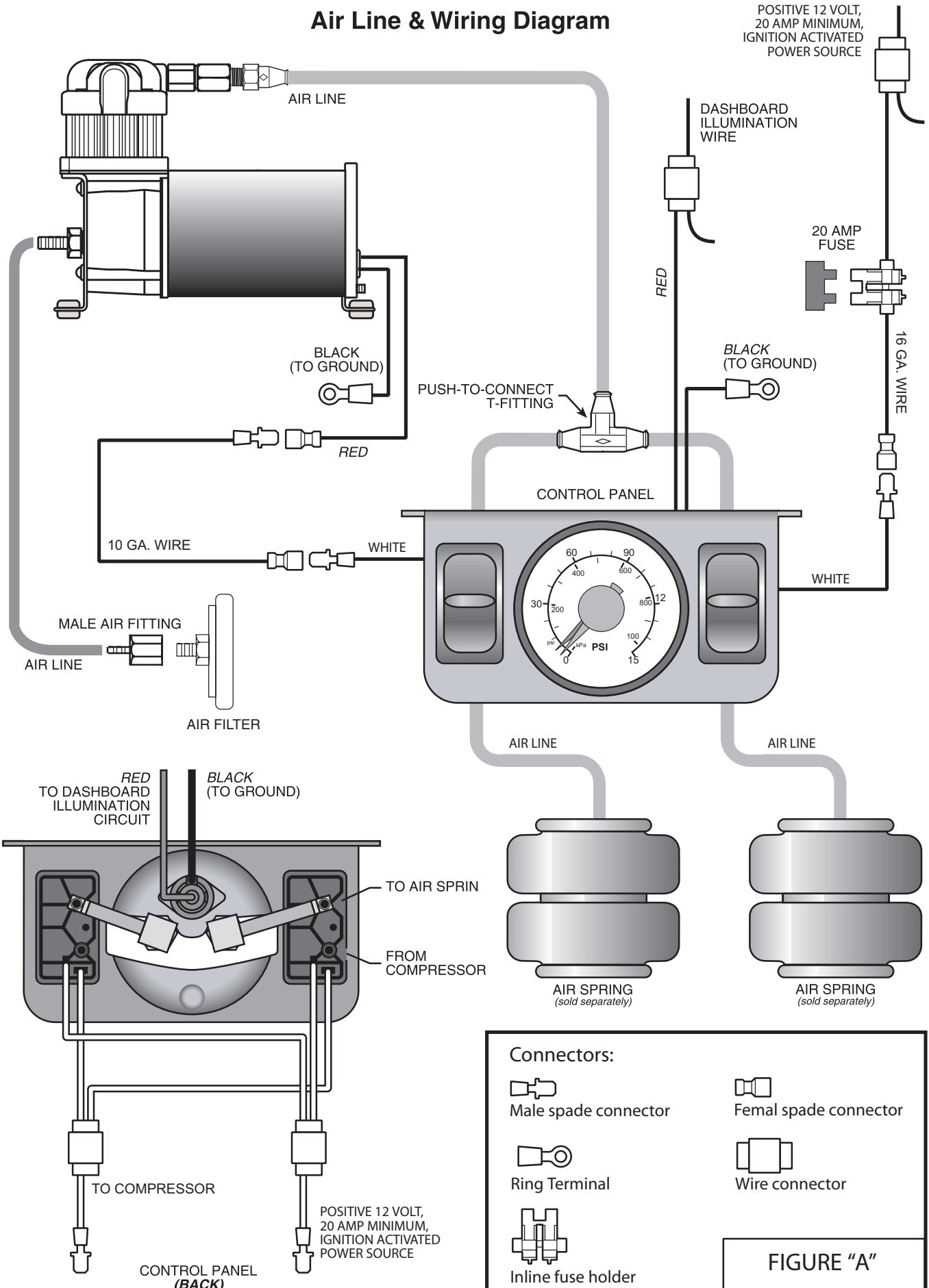
#### TOOLS REQUIRED:

- POWER DRILL
- 3/16" DRILL BIT
- 1/8" DRILL BIT
- CENTER PUNCH
- PHILLIPS SCREW DRIVER
- ELECTRICAL PLIERS
- PLIERS
- (2) 7/16" WRENCHES
- UTILITY KNIFE






### PARTS LIST

DUAL AIR CONTROL PANEL	2188	1	NYLONTIE	15
COMPRESSOR	9285	1	15 FT. 10 GAUGE WIRE	1
1/8 NPT STRAIGHT FITTING	3055	1	FEMALE SPADE CONNECTOR	1
1/4"x1/4"x1/4" TEE FITTING	3025	3	MALE SPADE CONNECTOR	2
10 -32 x 1" MACHINE SCREW		5	RING TERMINAL	2
10 -32 LOCK NUT		5	WIRE CONNECTOR	1
#10 FLAT WASHER		7	IN-LINE FUSE HOLDER	1
100 FT. AIR LINE TUBING		1	20 AMP BLADE FUSE	1

# Air Line & Wiring Diagram



**Connectors:**

	
Male spade connector	Femal spade connector
	
Ring Terminal	Wire connector
	
Inline fuse holder	

**FIGURE "A"**

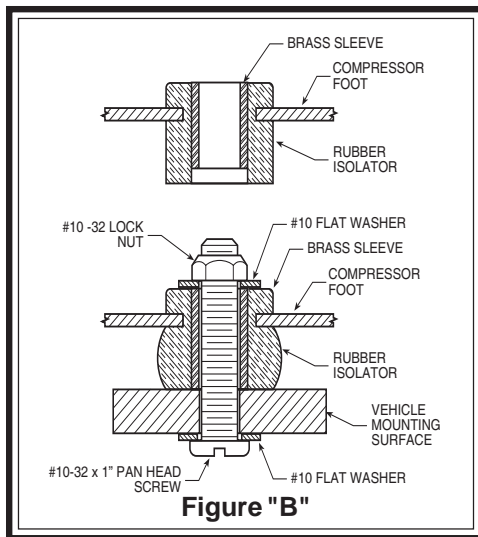


Figure "B"

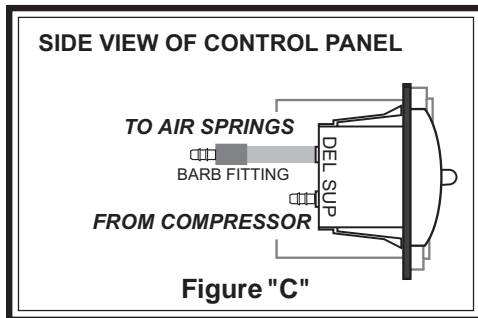


Figure "C"

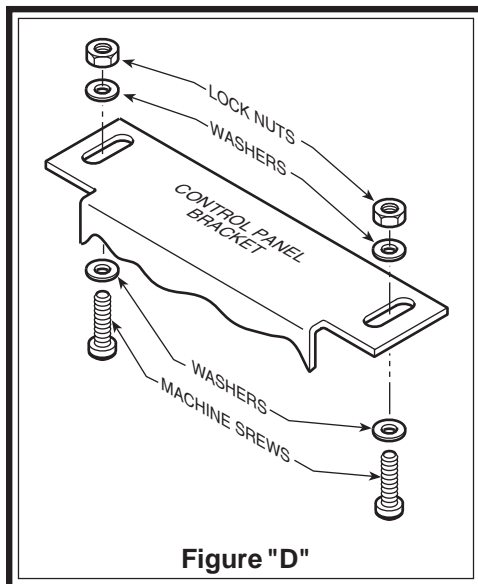


Figure "D"

### STEP 1 - SELECT A MOUNTING LOCATION FOR THE CONTROL PANEL

Select a mounting location on the dashboard of your vehicle. This should be a protected location so that the control panel will not be damaged. To mount the gauge panel underneath the dashboard, use the control panel as a template and center-mark each mounting hole on the dashboard. Drill a 1/8" hole on each of the center-marks. **Do not attach the gauge panel to the dashboard at this time.**

### STEP 2 - PREPARE THE COMPRESSOR

Install the 1/8" push-to-connect straight fitting into the head of the air compressor. Install the rubber isolators into the compressor feet *see Figure "B"*.

### STEP 3 - PREPARE THE CONTROL PANEL

Cut two pieces of air line tubing 3-1/2" in length, making the cut as square as possible. Before attaching the air line tubing to the barbed fitting on the gauge panel, soak the end of the tube (1") in hot water for a few minutes to soften the tubing. Install each length of tubing on to the barbed fittings on the back of the switches marked *SUP* (supply). Do not use pliers to work the tubing on to the barbed fitting, as the tubing may be damaged. Insert the remaining ends of the tubing into a push-to-connect T-fitting *see Figure "A"*.

### STEP 4 - MOUNT THE COMPRESSOR

Begin by removing the negative battery cable. Select a convenient location to mount the compressor. This location should provide ample air flow and be protected from airborne debris and moisture. The mounting surface should be rigid to support the compressor, such as under the hood on a fender well or in a vented storage compartment. The compressor can be mounted in any orientation.

Using the compressor as a template, mark and drill four 3/16" holes. Any burrs in the holes should be removed to prevent damage to the rubber isolators. Mount the compressor using the 10-32 x 1" machine screws, 10-32 lock nuts, and 3/16" washers supplied with the kit *see Figure "B"*. Maximum vibration isolation can be achieved by properly mounting the compressor. The machine screw and nut should be tightened only enough to bottom-out the brass insert *see Figure "B"*. **DO NOT OVER-TIGHTEN.** Over-tightening will crush the brass insert and the insulator, thereby reducing vibration isolation.

Attach the ring connector on the black compressor wire to a grounded component of the vehicle chassis.

### STEP 5 - ROUTE THE AIR LINE TUBING

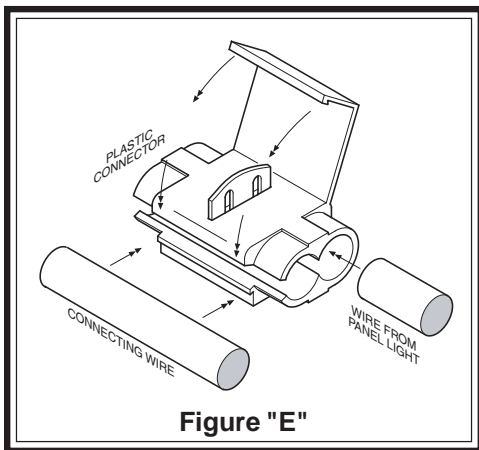
Before installing the air line tubing, ensure that there is no pressure in the air springs. To release the air pressure from the air springs, remove the valve core from the manual inflation valves or release the pressure by using a tire gauge to depress the valve stem.

#### A) COMPRESSOR TO CONTROL PANEL

Cut a piece of air line tubing that will reach from the control panel to the compressor. Cut the air line tubing as squarely as possible and insert the tubing into the push-to-connect straight fitting on the compressor. Insert the other end into the T-fitting on the control panel as far as possible *see Figures "A" & "C"*. **Do not fold or kink the tubing.** It may be necessary to drill a hole in the firewall to route the tubing. Ensure that the tubing is protected from sharp edges when passing through the firewall. A rubber grommet may be installed in the hole drilled in the firewall to protect the tubing from chafing.

#### B) CONTROL PANEL TO AIR SPRINGS

Cut two lengths of air line tubing. Each length must reach from the control panel to each air spring. Before attaching the air line tubing to the barbed fitting on the gauge panel, soak the end of the tube (1") in hot water for a few minutes to soften the tubing. Slide the tubing as far as possible onto the barbed fitting marked *DEL* (delivery) on the back of the paddle switch *see Figures "A" & "C"*. Install the opposite end of the tubing into the push-to-connect air fitting on each air spring. **Route the air line so that the left paddle switch inflates the left air spring and the right paddle switch inflates the right air spring.** Make sure that the tubing is protected from sharp edges when passing through the firewall. A rubber grommet may be installed in the hole drilled in the firewall to protect the tubing from chafing.



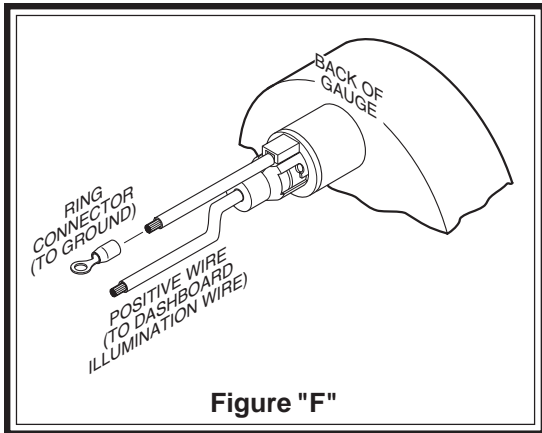
**Figure "E"**

### **STEP 6 - ATTACH THE CONTROL PANEL**

Place the control panel on the dashboard where the mounting holes were drilled in *Step 1*. Use the provided screws to attach the control panel to the dashboard *see Figure "D"*.

### **STEP 7 - ROUTE THE ELECTRICAL WIRE**

Install the relay within three feet of the compressor. Nylon ties can be used to secure any excess wire and the relay neatly into place. Route the white wire labeled "Switch Panel" to the control panel. Connect the white wire to one of the white wires on the back of the switch. The remaining white wire will be grounded to the vehicle. Next, connect the orange wire labeled "Comp +" to the red (positive) wire on the compressor. Connect the red, fused wire labeled "Bat +" from the relay to the battery or another 12V (positive) source capable of supporting 20 amps. *See Figure "A"*.



**Figure "F"**

### **STEP 8 - WIRE THE CONTROL PANEL FOR ILLUMINATION**

There are two wires (one red and one black) attached to the gauge on the back of the control panel. Connect the red wire to a fused dashboard illumination wire. Connect the black wire to a suitable ground source *see Figure "F"*.

Attach the end of the positive wire to a dashboard illumination wire using a wire connector. Slip the wire connector over the existing dashboard illumination wire and insert the un-stripped gauge panel wire into the wire connector. Close the wire connector over the wires with pliers *see Figure "E"*. Attach the black wire to a ground source by crimping a ring connector on to the wire and securing it to a suitable ground source on the vehicle. *Note:* Should additional wire be necessary to reach the dashboard illumination wire and ground source, use 10 gage multi-strand wire.

### **STEP 9 - CHECK THE SYSTEM**

With the Dual Electric Air Command Kit and your air helper springs installed, you are ready to test the system. Reattach the negative battery cable. Turn on the vehicle's ignition. Push the paddle switch up to inflate the air springs. The gauge will display how much air pressure is in each air spring. Inflate the air helper springs to 70 psi or maximum kit pressure, which ever is less, and check the fittings for air leaks with an applied solution of soap and water. If a leak is detected at a tubing connection, check to make sure that the tube is cut as square as possible and that it is pushed completely into the fitting. The tubing can easily be removed from the fitting. First, release the pressure from the air spring. Push the collar towards the body of the fitting and pull out the tube.

### **SYSTEM OPERATION**

The Dual Electric Air Command Kit allows the air springs to be inflated from the inside of the vehicle. Push the paddle switch up to inflate the air springs and push the paddle switch down to deflate the air springs. Each air spring can be controlled individually with the corresponding paddle switch.

