

# Standard Duty Remote Air Command™

# INSTALLATION INSTRUCTIONS

Congratulations on your purchase of an 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 to identify the components and learn how to properly install your Air Command kit.

#### NOTE:

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

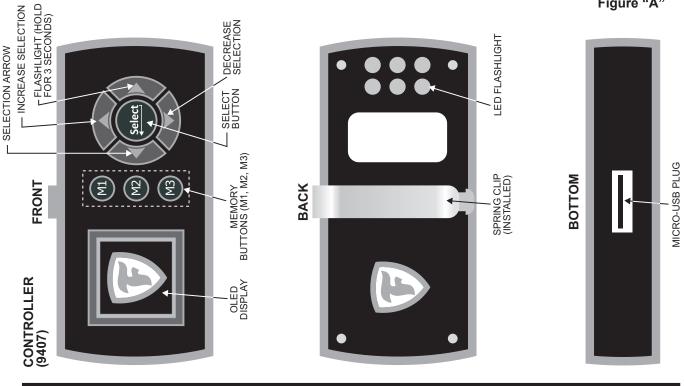
# **PARTS LIST**

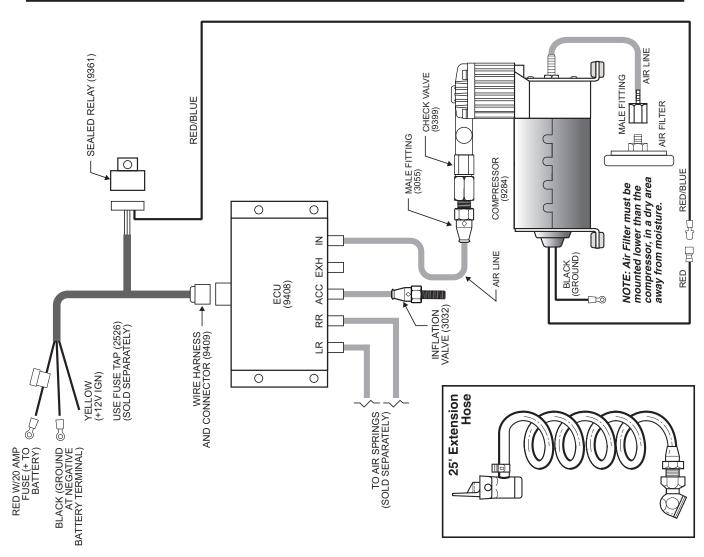
# HARDWARE PACK (A21-760-2540)

WIRELESS PAIRED UNIT WIRELESS CONTROLLER WIRELESS ECU AIR COMPRESSOR AUTOMOTIVE CHARGER ACCESSORY INFLATION HOSE	9406 9407 9408 9284 9427 9006	1 1 1 1 1	INFLATION VALVE MALE FITTING 3/16" FLAT WASHER 10/32" X 3/4" MACHINE SCREW 10/32" X 1" MACHINE SCREW 10/32" NYLOCK NUT	3032 3055	1 1 8 5 4 9
WIRE HARNESS	9409	1	VELCRO TABS		4
SEALED RELAY AIR LINE (18 FT.)	9361	1	NYLON TIE THERMAL SLEEVES		15 2

21-8423 11-12

Figure "A"





#### STEP 1—MOUNT THE COMPRESSOR

Disconnect the negative battery cable. Select a convenient location to mount the compressor. This location should provide ample airflow and be protected from airborne debris. The mounting surface should be rigid to support the compressor. The compressor is oil-less and can be mounted in any orientation necessary for installation. Make sure that the wire harness will reach from the compressor to the anticipated location of the ECU. Install the check valve and male air fitting into the threaded output on the compressor head, **see Figure "A"**. Tighten the fitting sufficiently to engage at least two threads with the pre-applied thread sealant. **DO NOT OVER TIGHTEN THE FITTING.** Mark the four compressor mounting holes using the compressor as a template and a center punch, then drill four 7/32" holes. Mount the compressor using the supplied 10-32 x 1" machine screws, 10-32 Nylock nuts and 3/16" washers. **See Figure "B"**. Attach the black wire from the compressor to a suitable ground source on the vehicle.

## STEP 2—MOUNT THE ECU

Select the ECU from your kit. Select a convenient location to mount the valve block near the compressor. Allow access to the 5 air fittings and the 4-pin connector for the wire harness. Mark the four mounting holes using the ECU as a template and a center punch, then drill four 7/32" holes. The ECU can be mounted using only two holes, one on either side. Mount the ECU using the supplied 10-32 x 3/4" machine screws, 10-32 Nylock nuts, and 3/16" washers.

# STEP 3—WIRE THE ECU AND COMPRESSOR

Plug the 4-pin connector from the wire harness into the back of the ECU. Ground the compressor (black wire with ring terminal to a suitable location on the chassis. Attach the red wire with the spade terminal to the red wire of the compressor. Attach the sealed relay to the wire harness and mount to the chassis. Route the wire harness into the engine compartment. Attach the yellow wire to a +12VDC ignition-activated source. Attach the black wire to the negative battery terminal. Attach the red wire with in-line fuse to the positive battery terminal. See Figure "A".

# STEP 4—MOUNT THE WIRELESS CONTROLLER

The wireless controller can be mounted to the sun visor using the supplied spring clip. Slide the clip onto the controller until the alignment

pins snap into the back of the controller. Alternatively, the controller can be mounted in the cabin using the four Velcro pads. Properly clean the mounting surfaces to remove dirt and oils. **NOTE: The gauge should not be left outside of the vehicle if not in operation. Keep the controller away from moisture. The display is glass and can be scratched if not cleaned properly. Lightly dampen a clean terry cloth with ammonia free cleaner. Gently clean the display to remove dirt and oils.** 

## STEP 5—ROUTE THE AIR LINE

Cut the air tubing as squarely as possible to avoid leaks. Avoid hot surfaces and sharp edges. Cut away about 1/4" from the end of the air tubing if trying to reinstall into an air fitting to avoid leaks.

INSTALL: Press the air tubing into the push-to-connect fitting until it bottoms out. Lightly pull back on the air tubing to ensure the fitting has properly secured the air tubing.

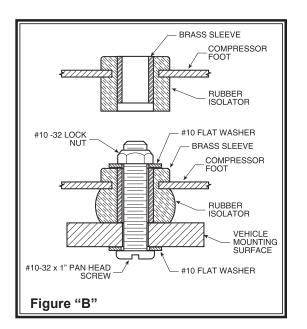
UNINSTALL: **MAKE SURE THERE IS NO AIR IN THE AIR TUBING BEFORE ATTEMPTING!** Press towards the fitting body on the collar (use a 1/4" open-end wrench if needed). Push the air tubing towards the fitting while pressing on the collar and then pull back on the tubing. The air tubing should come out fairly easily. If it does not, DO NOT force the air tubing. Doing so will damage the fitting and may cause leaks.

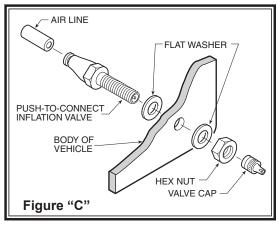
Cut a length of air tubing and insert between the compressor and the tank. Repeat between the tank and the inline valve and between the inline valve and the ECU port labeled **IN**. Cut the section of line between the tank and the inline valve and install the tee push-to-connect fitting. Route a line out to an easily accessible location and install an inflation valve (engine compartment, license plate mount, rear bumper). A 5/16" hole may need to be drilled to install the air inflation valve using two 5/16" flat washers.

Cut a section of air tubing that will reach from the ECU to the left side air spring. Insert the tubing into the fitting on the valve block labeled **LR**, and then insert the other end into the left rear air spring air fitting. Repeat on the right side air spring and connect to the ECU port labeled **RR**.

Select an air inflation valve and determine a convenient location for the air accessory port. This location can be anywhere on the chassis of the vehicle, as long as it is in a protected location so the valve will not be damaged, but maintains accessibility for the air chuck (engine compartment, license plate mount, rear bumper). A 5/16" hole may need to be drilled to install the air inflation valve using two 5/16" flat washers. Route the air line from the inflation valve to the ECU port labeled **ACC**.

There is a fitting on the ECU to accept additional tubing to route an exhaust line, labeled **EXH**. Increasing the air tubing length will reduce exhaust noise (Five feet MAX). However, this is an option and not necessary for proper operation.





Using the black air tubing that came with the compressor, route the inlet air filter to a dry location. Warm one end of tubing in hot water and press it over the barb fitting on the compressor. Repeat on the barbed male fitting that accepts the air filter. **NOTE:** Water pulled through the compressor air filter will void the compressor warranty. **DO NOT SUBMERGE.** 

## STEP 6—USING THE WIRELESS CONTROLLER

With the Air Command kit and the air springs installed, you are ready to test the system. Re-attach the negative battery cable. Turn on the vehicle's ignition. Plug the automotive charger into the vehicle's power port/cigarette lighter and the mini-USB into the bottom of the wireless controller.

The gauge will display how much air pressure is in the system. Figure "B"

## **GENERAL OPERATION**

Once the system has been turned on (press the **SELECT** button), the **LEFT ARROW** button is used to cycle through the screen and make selections. The **UP/DOWN ARROW** buttons are used to change the pressure in the air springs. Pressing the **SELECT** button once will activate the system to move to the set pressure. Continuing to press the **LEFT ARROW** button will cycle through the corners:

## **LEFT ARROW Selection Sequence**

- 1 Left Rear (LR)
- 2 Right Rear (RR)
- 3 Rears (LR & RR)
- 4 Accessory port (ACC)
- 5 "Locked Screen." Enables menu functions
- 6 Returns to single selection (LR)

Once the pressure has been selected and the **SELECT** button pressed, the system will turn on the compressor or open the exhaust valve to achieve the pressure. The system WILL maintain the set pressure. The display will turn off after 20 seconds of inactivity. To restart the display, just press the **SELECT** button.

## **CONTROLLING AIR SPRINGS**

Use the arrow buttons to select the air spring. When the arrow on the display is aligned with the appropriate side, use the up/down arrow buttons to increase/decrease the pressure. Press **SELECT** to activate the system. The ECU will control the flow of air to achieve the set pressure. Once achieved, the ECU will continue to monitor the pressure and inflate/exhaust as necessary.

#### **CONTROLLING ACCESSORY PORT**

The accessory port works on a manual basis. Use the **LEFT ARROW** button to select **ACC**. Attach the included, coiled accessory air line to the inflation valve from the **ACC** port. Attach the other end of the coiled air line to the item that needs inflated (i.e. tires, inner tubes, air springs, etc.). Each time the up button is pressed, the compressor will kick on. Once released, it will shut off. The same works for the down button in order to exhaust. The pressure reading will remain active during this time, showing the accurate pressure as the accessory is being inflated/deflated.

#### **CONTROLLING MEMORY SETTINGS**

The controller is provided with three memory settings controlled by three memory buttons. To view the saved settings, press the memory button once. To activate the memory setting, press **SELECT**. The system will maintain this setting until a user defined change is made. To change the saved memory preset, use the arrow buttons to set the corners to the new pressure. Simply hold down the memory button you want to use for three seconds and the controller will store the new memory.

#### CONTROLLING FLASHLIGHT

The controller has a built-in, 6-LED flashlight. To turn on/off the flashlight, hold down the **RIGHT ARROW** button for three seconds. If the flashlight is on, the controller will not shutdown, reducing battery life.

#### **CONTROLLING THE MENU**

To reach the menu, hold the **SELECT** button for five seconds while in "**LOCKED SCREEN**." Use the arrow keys to navigate the screen. Once a changed selection has been made, press the **SELECT** button to save the changes.

Inflate the air springs to 70 psi or the max air spring pressure, which ever is less, and check the fittings for air leaks with a solution of soap and water. If a leak is detected at a tubing connection, check to make sure that the tube is cut as squarely as possible and that it is pushed completely into the fitting. The tubing can easily be removed from the fitting by first releasing the pressure from the air spring, then by pushing the collar towards the body of the fitting and holding, then pulling the tube out.

# STEP 7—CHECK THE SYSTEM

Inflate the air springs to 70 psi or the max air spring pressure, which ever is less, and check the fittings for air leaks with a solution of soap and water. If a leak is detected at a tubing connection, check to make sure that the tube is cut as squarely as possible and that it is pushed completely into the fitting. The tubing can easily be removed from the fitting by first releasing the pressure from the air spring, then by pushing the collar towards the body of the fitting and holding, then pulling the tube out.

