

GENERAL AIR RIDE KIT INSTALLATION INSTRUCTIONS

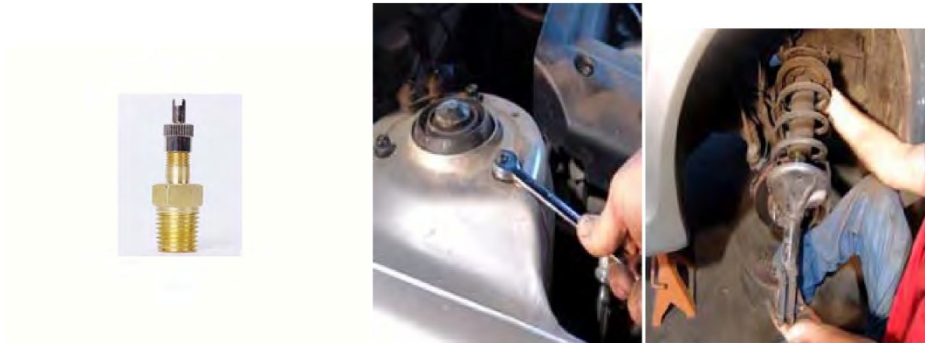
Airstruts and Cylinders Section I below

Airbags for most rears Section II

Airbags for Coiled Spring Frontends



We do not sell a universal kit. Our struts are built EXACTLY to Original Equipment Specifications. In most cases, you simply remove your factory strut and install the Airstrut. We include a Schrader manual fill valve so you can test the travel and ride height before you hook up your Plug & Play air Management System.



Remove Factory Strut. In most cases, you will reinstall the top bearing plates shown below.



Proceed to next page>>>>>>>

**BE SURE NOT TO HAVE ANY RUBBING AFTER AIR RIDE EQUIPMENT
HAS BEEN INSTALLED!**



On many of our struts, you might find an extra set of mounting holes on the bottom Clevis. For the lowest position, select the top holes.

After securing in place, install the supplied Schrader Manual fill valve, and air up to approximately 85lbs, with the wheel on, and on the ground. making sure that your strut does not contact any body parts during the travel. It is possible on rare cases, that the inner fender may have to be trimmed to allow full travel without contact.

Air Management

NOTE: If you are on a tight budget, you can leave the Schrader Valves installed, and use a small pump to adjust your height. There are many Air Management Options, but the only one you should consider is the Plug & Play, because ALL of the wiring and plumbing of the valves and switches is already done for you.



With Plug and Play all you have to do is run the supplied airlines from each of your struts or air bags to your air engine manifold once your fittings have been installed and your all set!

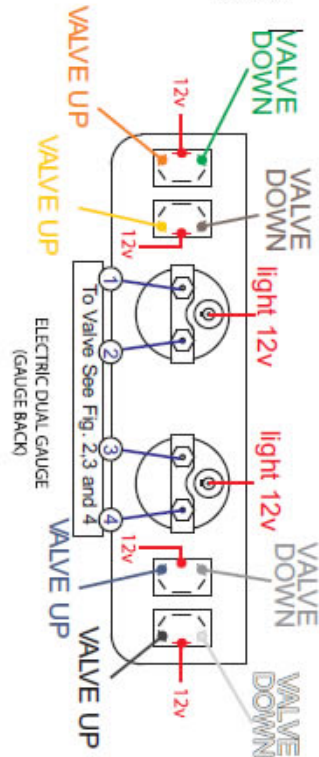
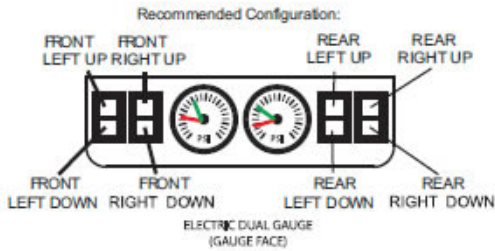


Install supplied Pressure shutoff Switch on the Airtank, and run the red wiring harness lead to the switch.

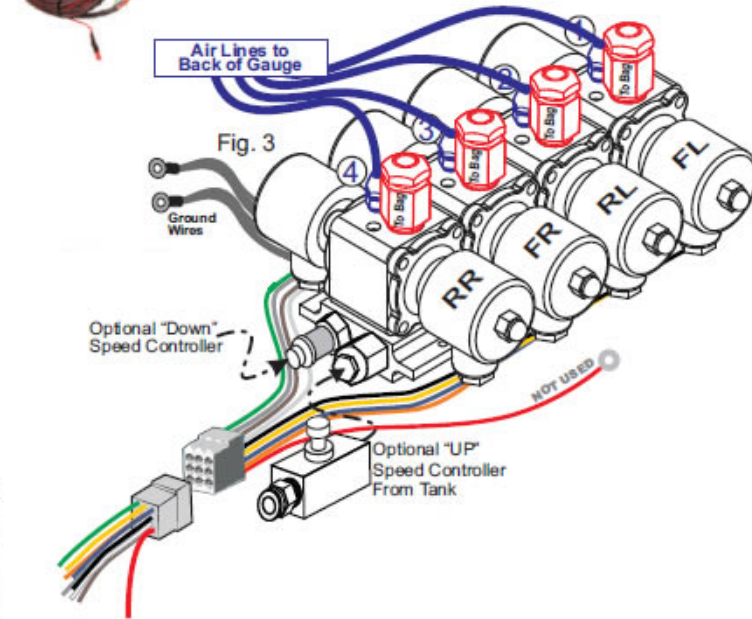
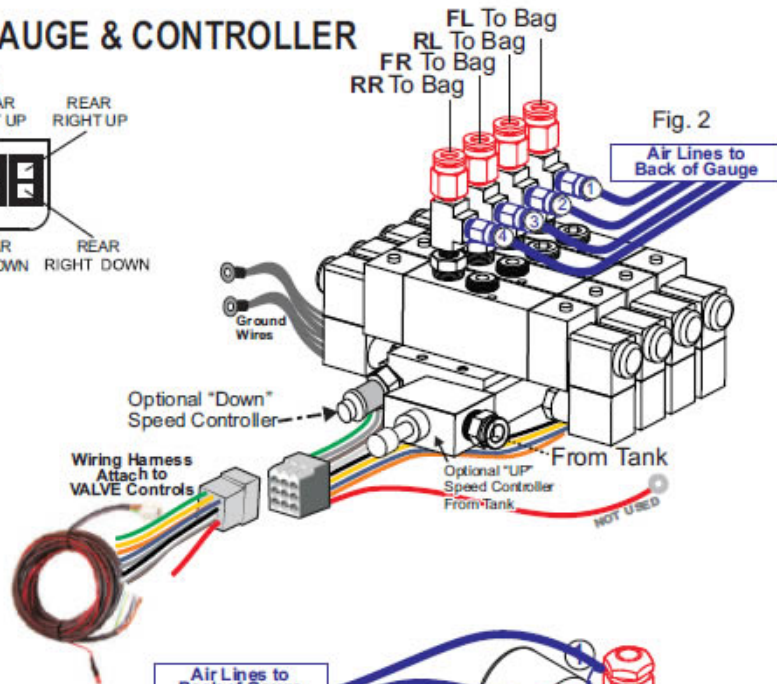


Install the Backflow Check Valve at the Airtank, using Liquid Thread Sealer making sure that the arrow points towards the tank.

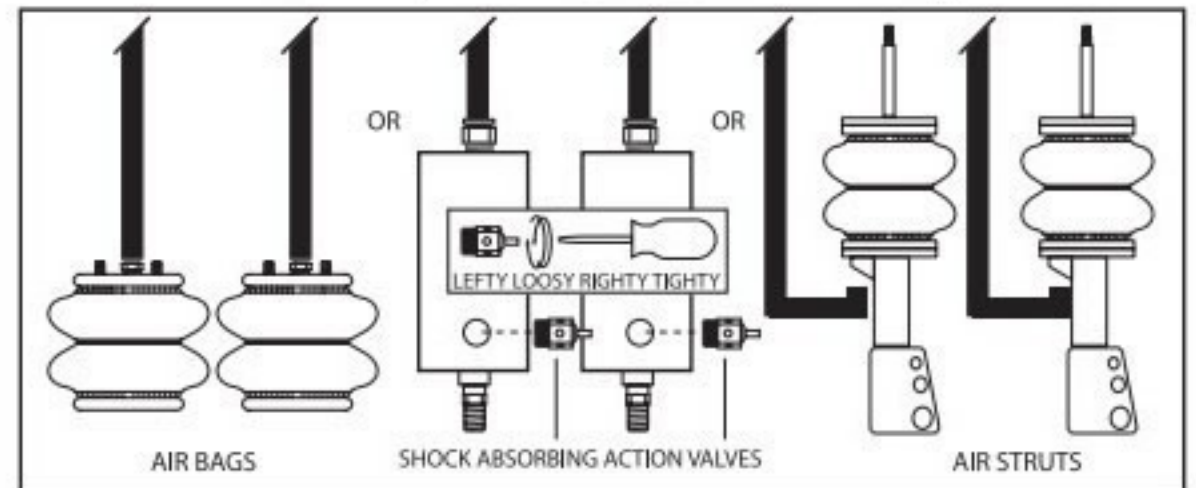
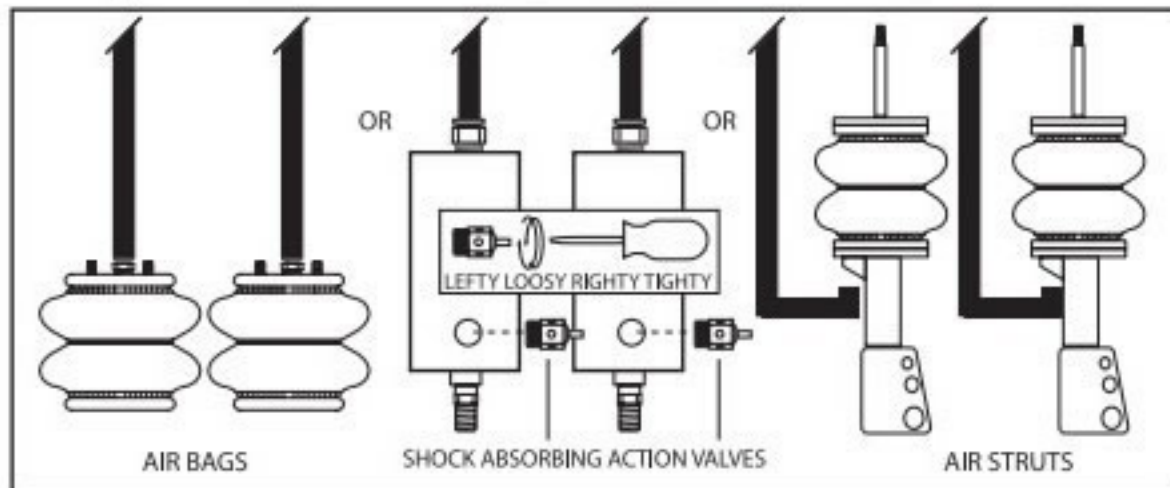
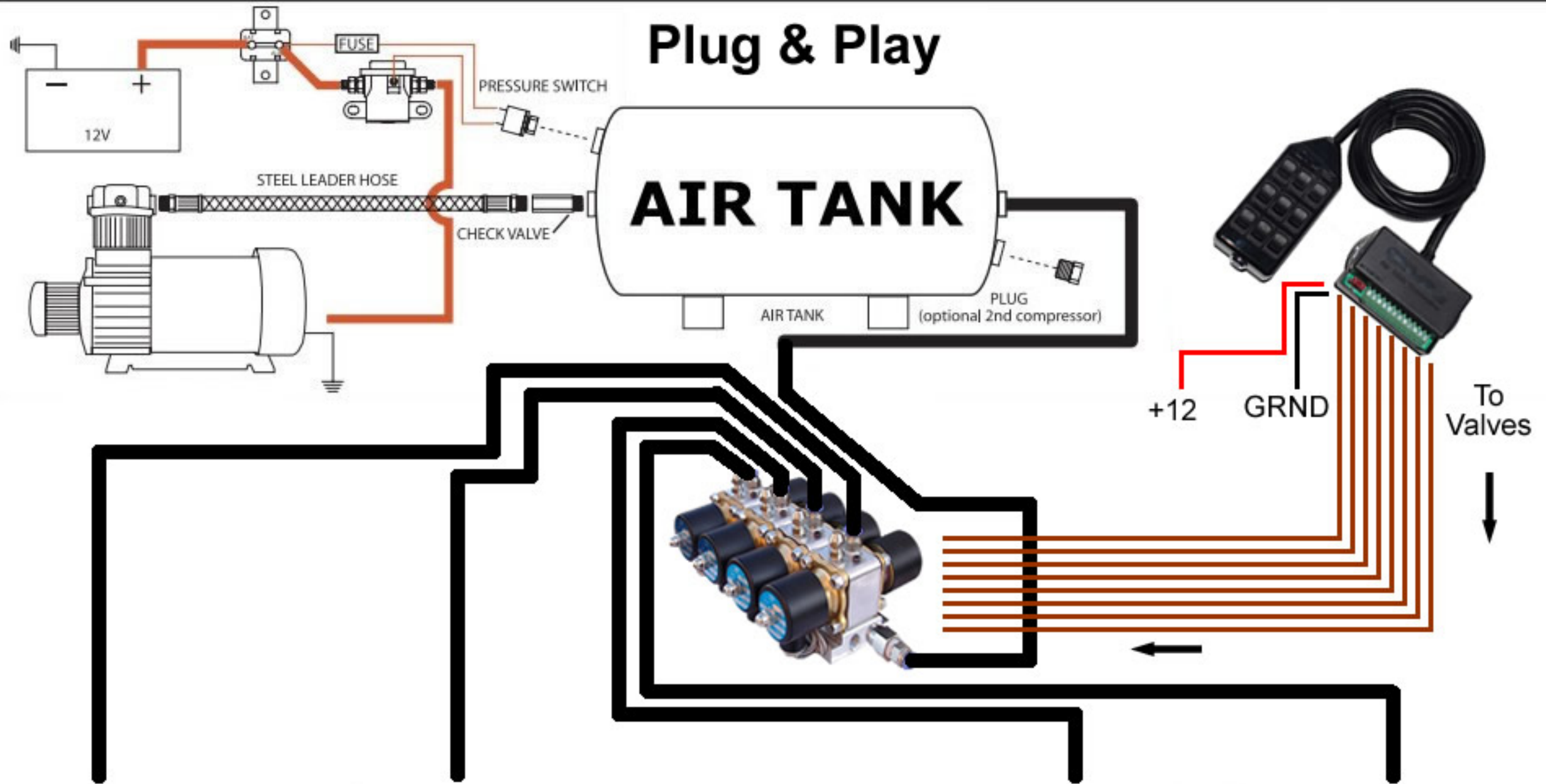
ELECTRIC DUAL GAUGE & CONTROLLER



Air Engine Wires	Position
Black	FL UP
White	FL DOWN
Grey	FR DOWN
Brown	RL DOWN
Green(WL) / Red (AE)	RR DOWN
Yellow	RL UP
Blue	FR UP
Orange(WL) / Purple (AE)	RR UP



REMOVE WIRING HARNESS FROM AIR ENGINE TO CONNECT TO SWITCH CONTROLLER OR ANY OTHER CONTROL SYSTEM YOU HAVE INCLUDED WITH YOUR AIR RIDE KIT...



Run Black Nylon Airhose from outlet port on the tank, to the Valve Port on the topside of the Plug & Play

Run airhose from the Compressor outlet to the CheckValve on tank.

Gauge & Switch Panel is completely prewired. Determine where you are going to place the control panel, then trim wire length if necessary, connect each COLOR CODED wire into the backside of the gauge. Plug the other end into the Molex Connector on the Plug & Play box. Each switch has 3-Positions, one for up/neutral/down. They control each Airbag independently. Each Gauge has 2 needles giving you control over the air pressure in all 4 bags independantly.

Then connect the red 8-Gauge wire to the Battery, and the other wire to a VERY GOOD clean ground on your frame or engine.

You can be sure that we include everything you need for your kit, right down to the Teflon tape for the bag and strut fittings.



Airbag & Bracket Install

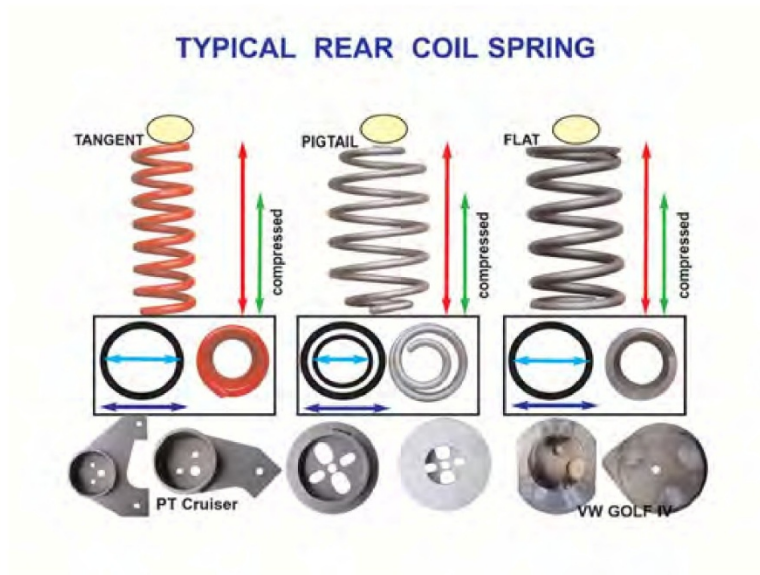
Most vehicles have Struts on the front, and Coilsprings on the rear.

If you have Coilsprings on the rear, take care to make sure the spring is “unloaded” (no weight on the spring)

Remove Spring, and any Bumpstops that might interfere with the mounting, or the bag travel.

Installing brackets require minor welding once you determine the exact placement of the brackets.

Tack-Weld in place, then install the bags, and air them up with the supplied Schrader “Test Valve”



Make sure the upper and lower brackets are in relative alignment, and make sure there is not body or metal contact when the bag travels up/down. Trim, move, or do whatever is necessary.

We design the brackets so ride height is 3” below factory level. This is the “SweetSpot” to get a smooth ride. If you raise or lower the vehicle more than 3”, the ride quality will change. The correct way is put a metal spacer to raise the ride height, or shorten the bracket (if possible) to go to the lowest possible position. Depending on how hands on you are, you can install this kit yourself with no problems.

Rear Shocks and Shock Relocaters should be considered if you have to move your shock absorbers. In any event, Shorter Shocks should be installed at your option. Install Instructions are on the attached .pdf file below.



Installing Airbags on Front Coiled Suspension



Go to attachment below:

FRONT SHOCK RELOCATION KIT OPTIONAL UPGRADE PART

******* (NOT INCLUDED IN KIT) *******

SPINDLES, COILSPRINGS, SHOCK RELOCATER KIT, AND AIRARM INSTRUCTIONS



1. Using floor jack, jack up truck till wheels are off the ground and support with jack stands.
2. Remove wheels.
3. Unbolt upper shock bolt and 2 lower shock bolts and remove shock.
4. A coil spring compressor should be used to keep the coil compressed. If not using spring compressor is not being used then extreme caution should be used when dislocating the lower ball joint in the next step as the coil will unload with great force once the lower ball joint is broken loose.
5. Using ball joint separator dislocate lower ball joint from spindle. Make sure upper control arm and spindle are supported by wedging something between upper arm and frame.
6. With lower arm unbolted from the spindle remove bolts from lower control arm mounts at the frame and remove the lower control arm.
7. Bolt aftermarket lower control arm in place with the straighter side with the bigger bolt hole to towards the front of the vehicle.
8. Bolt lower ball joint to lower position of spindle.
9. Support lower control arm with floor jack.
10. Using ball joint separator again dislocate upper ball joint from spindle. Make sure once again that the spindle is supported to prevent brake line from being stretched.



11. If you are only installing SPINDLES, or COILSPRINGS, then remove the factory spindle and Coil and re- install Spindles and coils at this time.
12. Unbolt upper control arm cross shaft from upper control arm gusset leaving cross shaft installed in upper control arm as it will not be reused because our aftermarket upper arms for the s10 come with new cross shafts.
13. Install aftermarket upper control arms with ball offset towards the front of the truck by bolting cross shaft to upper control arm gusset.
14. Bolt upper ball joint to upper position of spindle.
15. Install bags and upper brackets before reinstalling wheels.
16. With front end assembled and all nuts and bolts tightened lower vehicle down and make sure air suspension is working properly.
17. Be sure to get truck aligned at the ride height that it will be driven at the most.



Driver side with control arms and spindles removed.
Shown with SPRING POCKET ELIMINATORS & SHOCK
RELOCATOR.



Passenger side with control arms installed and spindle turned to the right.
Passenger side with control arms installed and spindle turned to the left.
If you are installing Optional Spring Pocket Eliminators,



You will need to hold the Eliminator barrel up to the frame and trace where you intend to cut. Do not worry about strength because when you weld the 3/16" Thick Gauge Barrel in place, your frame will be several times stronger than factory. The easy way to do this is with a Plasma Cutter. A die grinder will do the job if you are patient.

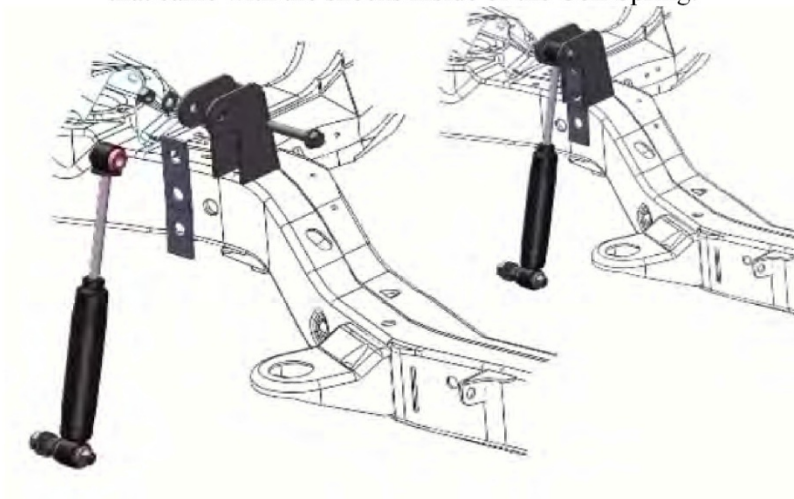
Then slide the Barrel up into the cavity and "Tack-Weld" in place when you have determined the best possible placement. SpringPocket Eliminators will allow you to use a #3800 8.50" wide bag on a fullsize truck and allow you to lift it with under 120psi, but the best part is the smooth ride. With twice the air volume, it takes less to lift and it has room to breathe. A little more work, but do it right the first time.



If you are not UPGRADING to the Eliminators, you will install the standard Barrels at this point.



Shock Absorber Relocater kits are mandatory whenever installing an airkit that came with the shocks inside of the Coil Spring.

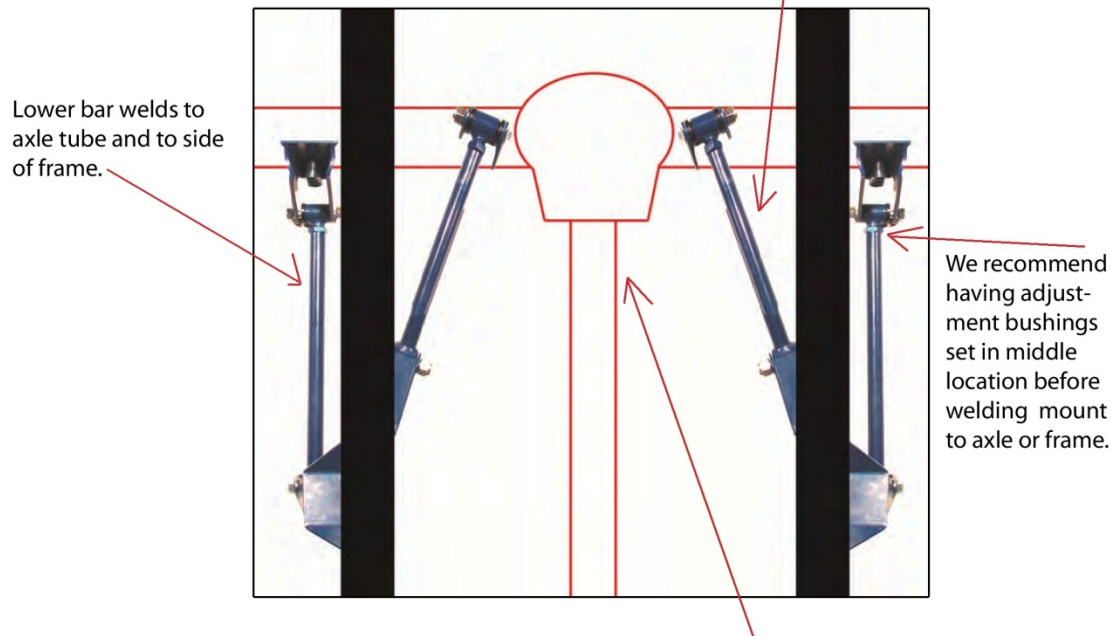


You must specify when ordering if you wish to have the Stem/Loop Version shown below, otherwise we will automatically ship the Loop/Loop Version shown on previous page.



Universal Weld-On Triangulated 4 link instructions

Third and Fourth link upper bars must be welded on top of axle tube and go outward towards frame rail. (In most cases gas tank must be relocated).



IMPORTANT: Measure drive line angle before leaf spring removal. Or check with manufacturer for specific recommendations.

Caution: We recommend tack welding link bars in place and moving vehicle up and down to ensure nothing binds before permanently welding 4 link in place.

Typical Weld-On 4-Link Installation Instructions

(Click on picture of part to purchase.)

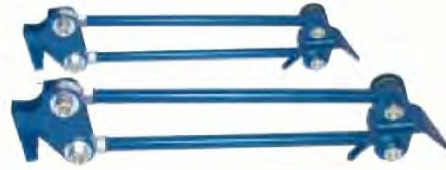
1. FIGURE 1-1 SHOW YOU A COMPLETELY ASSEMBLED 4 LINK ASSEMBLY. IT IS SHOWN WITH RECOMMENDED AIR BAGS, YOU MAY USE AIR SHOCKS OR COIL OVER SHOCKS. BUT THIS HARDWARE IS NOT INCLUDED AND MUST BE PURCHASED SEPARATELY.

2. MAKE SURE THAT THE VEHICLE IS ON LEVEL GROUND AND THE FRAME IS PLACED ON JACK STANDS. NEVER WORK ON A VEHICLE THAT IS SITTING ON JACKS.

3. ONCE THE VEHICLE IS SECURE REMOVE YOUR REAR TIRE, STOCK SHOCKS, UNBOLT YOUR LEAF SPRINGS, HANGERS AND REMOVE.

4. SEE FIGURE 1-2 THIS FIGURE SHOWS YOUR AIR BAG ASSEMBLY TO YOUR LOWER AND UPPER BAG MOUNTS. NOTE: YOUR LOWER BAG MOUNT WELDS TO THE BOTTOM OF YOUR AXLE OR IT MAY BE FLIPPED OVER AND WELDED TO THE TOP OF YOUR AXLE DEPENDING ON YOUR HEIGHT NEEDS. YOUR UPPER BAG MOUNT MUST BE CUT FROM EACH END TO FIT YOUR FRAME. ONCE THIS IS DONE ALIGN YOUR UPPER BAG MOUNT WITH YOUR LOWER BAG MOUNT AND WELD IN PLACE. BE SURE THAT YOUR AIR BAG IS REMOVED AND THAT YOUR AXLE IS CENTERED BEFORE WELDING ANYTHING.

5. SEE FIGURE 1-3 THIS FIGURE SHOWS YOUR 4 LINKS BAR INSTALLATION TO YOUR FRONT AND AXLE MOUNTS. FRONT BRACKETS CAN BE PLACED INSIDE OR ON THE OUTSIDE OF YOUR FRAME. DEPENDING ON YOUR OWN CLEARANCE ISSUES. THEY MUST BE WELDED FLUSH WITH THE BOTTOM OF YOUR FRAME RAIL. SEE FIGURE 1-1 AND 1-3, THESE BOTH SHOW THEM INSTALLED ON THE SIDE OF YOUR FRAME RAIL.

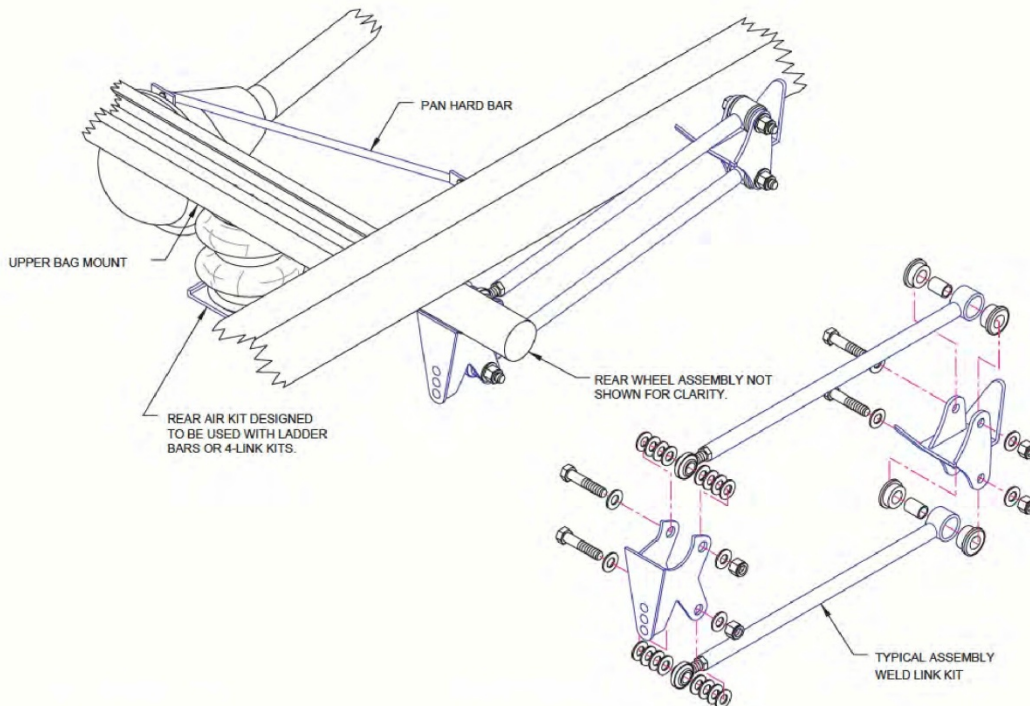


6. AXLE BRACKETS ARE TO BE PLACED PARALLEL AND EQUAL DISTANCES FROM THE AXLE ENDS. BE SURE THAT YOUR AXLE IS CENTERED AND THAT YOUR 4 LINK BARS ARE PARALLEL BEFORE WELDING INTO PLACE.

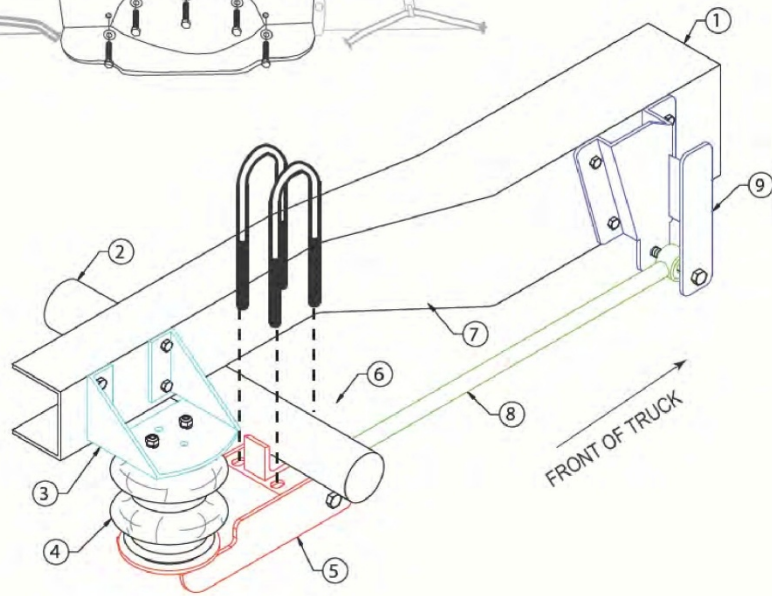
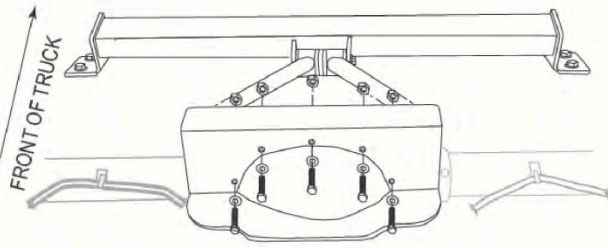
7. INSTALL BOTH YOUR UPPER AND LOWER 4 LINK BARS. THE LINKS ARE ADJUSTABLE, INSTALL THE ADJUSTABLE END TOWARDS THE REAR OF THE TRUCK. YOUR 5/8 WASHERS ARE USED AS SHIMS ON THE ADJUSTABLE ENDS. SEE FIGURE 1-3 FOR ASSEMBLY.

8. BOLT TOGETHER AND SET TRUCK AT DRIVE HEIGHT. NOW YOU SHOULD BE READY TO WELD YOUR NEW PANHARD BAR FROM THE SIDE OF THE OF THE FRAME TO YOUR DIFFERENTIAL. THE BAR SHOULD RUN PARALLEL TO YOUR AXLE AND INSTALLED SO IT DOES NOT COME IN CONTACT WITH ANYTHING. THE PURPOSE OF THIS BAR IS TO PROVIDE LATERAL SUPPORT TO YOUR VEHICLE. MEANING KEEPING THE AXLE FROM SHIFTING FROM SIDE TO SIDE. BE SURE THAT YOUR AXLE IS CENTERED BEFORE WELDING YOUR BAR. FIGURE 1-4 SHOWS YOUR PAN HARD BAR WELDED IN PLACE.

9. IF USING AIR BAGS BE SURE THAT THEY ARE REMOVED BEFORE WELDING ANYTHING AND THAT THEY HAVE THE APPROPRIATE CLEARANCES. AIR BAGS MUST NOT COME IN CONTACT WITH ANYTHING!!!! (YOU AS THE CONSUMER ARE RESPONSIBLE FOR YOUR AIR BAGS, WE DO NOT WARRANTY BAGS.)



TRIANGULATED BOLT-ON 4-LINK



GENERAL PACKAGE CONTENTS (PLUG AND PLAY):

1 – 5 GALLON SS TANK

1 – LARGE DC7500 COMPRESSOR

1 – COMPRESSOR KIT WITH LEADER HOSE, PRESSURE SWITCH, RELAY

1 – 3/8 INCH MAIN AIRLINE SPOOL (APROX: 60FT)

1 – 3/8 INCH MAIN AIR FITTING KIT

1 – ¼ INCH GAUGE AIRLINE SPOOL

1 – ¼ INCH GAUGE AIR FITTING KIT

2 – DUAL NEEDLE GAUGES

1 – AIR ENGINE MANAFOLD (3/8 INCH)

1 – CIRCUITE BREAKER

1 – 9 ROCKER SWITCH CONTROLER

4 – AIR BAGS / BRACKETS / STRUTS (APPLICATION SPECIFIC)

NOTE: SOME KITS MAY INCLUDE OTHER HARDWARE NOT SPECIFIED ABOVE DEPENDENT ON THE APPLICATION AND CHASSIS SECIFICATIONS.

PLEASE GIVE US A CALL IF YOU HAVE ANY QUESTIONS ABOUT YOUR VEHICLES SPECIFIC AIR RIDE SYSTEM..



***IF YOU HAVE ANY ADDITIONAL QUESTIONS OR
NEED FURTHER HELP PLEASE GIVE ONE OF OUR
FRIENDLY TECHNICIANS A CALL AT:***

1-800-823-0320

WE ARE ALWAYS HERE TO HELP!

INQUIRY@X2INDUSTRIES.COM

We thank you for your business!