FITTING INSTRUCTIONS

(INCLUDING SPECIFIC OPERATING PRESSURES)

CR5145HP





This air suspension system is designed to assist the original vehicle manufacturer's suspension - it is not meant to carry the entire rated load. We do not recommend that the coil springs be altered from the OEM suspension specification; unless an applicable commercially available suspension kit is fitted.



The kit is designed to suit a standard vehicle configuration modifications to the vehicle outside the kit design parameters may adversely affect fitment and operation such as:

- Height changes outside any noted in the kit specification.
- Larger dampers (Shock Absorbers)
- Wheel and tyre changes
- Exhaust changes.



If your vehicle is fitted with a brake proportioning valve or stability control system it is important to ensure this is maintained and adjusted according to the vehicle manufacturer's instructions.



It is recommended that only a properly qualified person installs the product and carries out maintenance. If you are not qualified and attempt to carry out such work ensure that all safety equipment is used and safety standards are met.



Ensure that you have read the full Product Manual before attempting to fit the product.



Ensure the Product Manual is kept with the vehicle and that any vehicle owner and/or operator is fully advised on the system and its operation before attempting to drive or operate it.



SEE OTHER WARNINGS AND IMPORTANT INFORMATION IN THE PRODUCT MANUAL

LHS = LEFT SIDE OF THE VEHICLE WHEN FACING FORWARD

STEP 1 - AIR LINE TUBING & FITTINGS - GENERAL NOTES **CUTTING**

Only cut the airline tubing with a sharp blade making the cut as square as SHARP BLADE possible.

Always trim the tubing before re-inserting into the fitting.



If you use a sharp utility knife or razor blade great care must be taken in all cases not to cut yourself during this operation.

CONNECTING & REMOVING

To connect:

Push the freshly trimmed tubing into the fitting as far as possible.

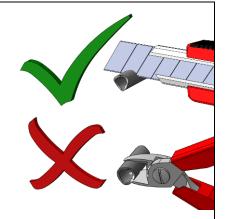
To remove:

First release the air pressure from the system. To withdraw the tubing, push and hold the collar on the fitting away from the tube and pull out the tubing.

Hint In confined spaces an open ended spanner can be used to evenly depress the collar and remove the airline tubing.

CUT TUBING SQUARE WITH OR TUBE CUTTER

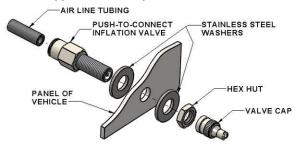
DO NOT USE PLIERS, SIDE **CUTTERS OR PIPE CUTTERS**

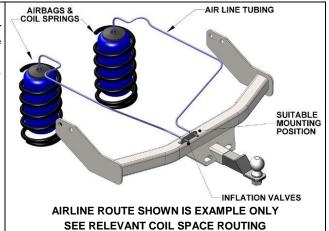


STEP 2 - POSITION YOUR INFLATION VALVES

Select a convenient location for the air inflation valves such as the bumper or the body of the vehicle. It must be protected from road damage and be accessible for air inflation equipment.

Drill a 5/16" hole and install the air inflation valve using two 5/16" stainless steel washers as supports where required.





STEP 3 - PREPARE THE AIR LINE TUBING

The air line is supplied with split protector tube pre-fitted to shield the air line during and after installation. Decide on a suitable route for the air line from the airbag to the inflation valve location to avoid direct heat from engine, exhaust pipe, and away from sharp edges.

Uncoil the air line tubing being careful not to fold or kink it and cut to length to suit the chosen route. Once routed, the protector tube is pulled back later to prepare the protected air line.

Insert the tube at one end and route as above securing in place with the nylon ties provided. Trim and insert the other end as required.



STEP 4 - ADD THE HIGH PRESSURE SLEEVES

Refer to the High Pressure Sleeve Fitting Instructions supplied with the High Pressure Sleeves.

Fit the elasticated tapered end of the High Pressure sleeve over the airbag and slide the High Pressure sleeve over the airbag as shown. The High Pressure sleeve is to be positioned with the tapered ends neatly over the upper and lower shoulders of the airbag as shown.

Note: Fitting airbags with high pressure sleeves will increase the material thickness to be inserted into the coil.



STEP 5 - PREPARE THE VEHICLE

In order to fit this kit the coil springs need to be removed. Ensure this operation is carried out according to the vehicle manufacturer's instructions. It is particularly important to follow the Jeep recommended procedure for vehicles fitted with rear load levelling suspension (SES) as the self leveling dampers require special attention to ensure that they can be re-fitted.

STEP 6 - RELEASE UPPER CONTROL ARM & LINK ARMS

Remove the fasteners from the upper link arms so that they are clear of the hub casting.







STEP 7 - REMOVE ABS WIRE CLIP

The clip holding the ABS wire onto the upper control arm will need to be removed to prevent it from straining under extension.

NOTE: Ensure all other lines and wires are checked for over extension.



STEP 8 - REMOVE THE COIL SPRINGS

Coil spring removal is made easier once the upper control arm and link arms have been removed.

NOTE: The use of coil spring compressors will make this process a lot easier, as shown.



STEP 9 - DRILL THE UPPER SPRING SEAT (outer skin)

STRAIGHT DRILLING OPERATION

Mark the center of the upper spring seat.

Drill straight into the upper spring seat with a pilot drill, being aware there are secondary skins above this outer layer that are not to be drilled yet.

Open the pilot hole out to approximately 19mm

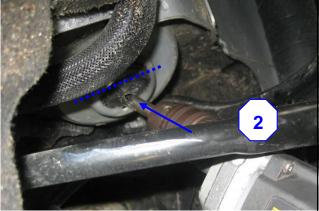


STEP 10 - DRILL THE UPPER SPRING SEAT (inner skins)

ANGLED DRILLING OPERATION

The second and third internal skins are to be drilled at an angle with a 10mm bit. The 10mm bit is to pass through the first 19mm hole, but the 10mm hole is to be started positioned inboard of center with the drill angled as shown to allow this operation.

NOTE: The angled drilling operation positions the air line routing holes to allow the air line to be routed towards the central body cross member. If the routing pathway is drilled central or outboard, the air line will not merge to the central body cross member correctly.



STEP 11 - OPEN UP THE INTERNAL HOLES FURTHER

Then open the 10mm internal skin holes out to 13mm.

NOTE: remove any sharp edges or burrs.



STEP 12 - ROUTE THE AIRLINE TUBING INTO THE COIL SPACE

Route the airline tubing through the top of the coil spring seat holes inboard towards the central body cross member and out the pressed oval holes in the cross member section.

The tubing will be routed to the back of the car in the general direction as shown ensure there is enough extra to protrude through the coil space for airbag connection and test.

NOTE: If you would prefer the inflation valves inside the boot there are 3 grommets to the rear of the spare wheel well that you can pass the airlines up through.









STEP 13 - INSERT AIRBAG INTO COIL SPRING

Prepare the Coil-Rite airbag into the coil spring by removing the upper spring isolator and inserting the airbag.

STEP 14 - RED PLUGS

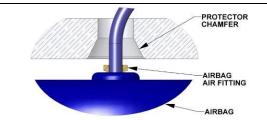
Use of the red plugs supplied is optional. They will enable a general reduction in airbag size which may be required to ease an airbag into a coil spring which is out of the vehicle, and they will fully flatten an airbag for easy insertion into an in-situ extended coil spring through the winding.

USING RED PLUGS: Flatten the airbag with the airline fitted and plug the other end of the airline tubing with the red plug. The airbag should now remain flattened whilst you perform fitment into the coil spring.

with the airline fitted and plug the led plug. The airbag should now int into the coil spring.

STEP 15 - POSITIONING THE PROTECTOR

Position the air fitting protector on the air fitting end of the airbag, with the counter hole facing the air fitting, as shown. Now re seats the coil isolator.



STEP 16 - CONNECT AIRLINE TUBING AND TEST CONNECTIONS

CONNECT the airline tubing by inserting one end into the airbag air fitting, the other end into the installed inflation valve.

Hint Flat nose pliers may be used to lightly grip the airline tubing to ensure it is fully inserted into the airbag fitting.

INFLATE the airbag to the maximum allowed pressure (See Specific Operating Pressure Advice attached) and check for leaks at the connections using soapy water spray. We recommend a soapy water spray solution of 25% soap to 75% water.

DEFLATE the airbag. If no leak, continue. If leak detected, remove the airline tubing, re-cut and re-test.

CHECK airbag is not in contact with any sharp edges or is too close to exhaust heat in all load and height conditions.

STEP 17 - COIL SPRING RE FITMENT

Feed the airline tubing through the upper spring seat as the coil spring is positioned back into place; ensure this is done as per the manufacturer's recommendations.



STEP 18 - HIGH PRESSURE SLEEVE POSITIONING

Once the airbag and high pressure sleeves are in the coil spring it is recommended that you visually inspect to ensure correct positioning. You can work the high pressure sleeve around the airbag so that it is as even as possible prior to inflating the airbag.

STEP 19 - INSTALL COMPLETION

Reattach the link arms and brake calipers removed earlier in the installation, then return the vehicle to its driving position. Ensure this operation is carried out according to the vehicle manufacturer's instructions.

STEP 20 - TO FINISH

Ensure the **WARNING** label is fixed in a prominent position in sight of the vehicle operator.

Ensure the Product Information Wallet is given to the vehicle owner/operator.

Ensure the vehicle owner/operator fully understands how to use the product.

All fixings should be checked for tightness after the first laden run and thereafter as per the original manufacturer's recommendations.

SPECIFIC AIRBAG OPERATING PRESSURES

See operating instructions section for proper use and apply the specific pressures below:

STANDARD KIT <u>WITHOUT</u> HP SLEEVES	HIGH PRESSURE KIT <u>WITH</u> HP SLEEVES
<u>MINIMUM</u>	MINIMUM
5 PSI (0.4 bar)	5 PSI (0.4 bar)
MAXIMUM	MAXIMUM
30 PSI (2 bar)	60 PSI (4 bar)

Adjust and maintain pressure up to the stated maximum to level the vehicle for the load imposed and always maintain the minimum airbag pressure.

Failure to do so may result in product or vehicle damage not covered under warranty.

IF MORE PRESSURE IS REQUIRED TO LEVEL THE VEHICLE CALL AIRBAG MAN ON 1800 247 224 FOR FURTHER TECHNICAL ADVICE





Incorrect use of this air suspension product can result in damage to the airbag, associated parts and/or the vehicle, which is not covered under warranty.

Ensure the airbags are maintained at the stated ride height at all times and the maximum pressure is never exceeded.