# FITTING INSTRUCTIONS

(INCLUDING SPECIFIC OPERATING PRESSURES)





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.

# **CR5168HP**



# 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 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:

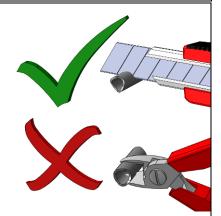
Push the freshly trimmed tubing into the fitting as far as possible.

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

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 SHARP BLADE **OR TUBE** CUTTER

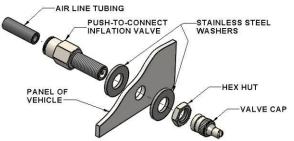
DO NOT USE PLIERS, SIDE **CUTTERS OR PIPE CUTTERS** 

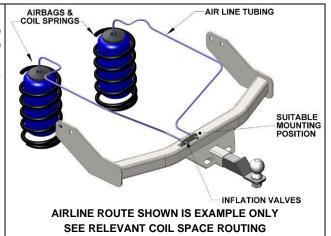


#### STEP 2 - POSITION YOUR INFLATION VALVES

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 airline 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.

DO NOT CONNECT OR SECURE THE AIR LINE AT THIS POINT

#### STEP 4 - ADD THE HIGH PRESSURE SLEEVES

IMPORTANT: Complete initial airbag and sleeve inflation at ride height. This will allow the airbag and sleeve to mate together in the correct suspension position.

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. Airbag Man recommend coil isolators be removed to help with airbag and sleeve installation.



### STEP 5 - PREPARE THE VEHICLE

To fit this kit, the coil springs need to be removed. Ensure this operation is carried out according to the vehicle manufacturer's instructions.

# STEP 6 - REMOVE THE BUMP STOP

The bump stops will need to be removed; this can be done by hand or by using multi grips.



# STEP 7 - CUT DOWN BUMP STOP POST

The bump stop post needs to be cut down to leave a 45mm post, see right.



# STEP 8 - DRILL BUMP STOP POST

Drill a pilot hole into the post, down 5mm from the top face, then open out to 10mm. This needs to be orientated on a diagonal, tyre side to the rear of the vehicle, see image on right.

**NOTE:** ensure all burrs and sharp edges are removed to prevent damage to the airline.

TYRE SIDE



#### STEP 9 - INSERT AIRBAG INTO COIL SPRING

Insert the airbag into coil spring with the air inlet at the top, through the widest opening, note that a blunt object may be useful in doing this as the airbag is a tight fit.

#### STEP 10 - 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.

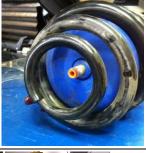
**USING RED PLUGS:** Flatten the airbag with the airline fitted and plug the other end of the airline tubing with the red plug. The airbag should now remain flattened whilst you perform fitment into the coil spring.



# STEP 11 - FIT REDUCER TO THE AIRBAG

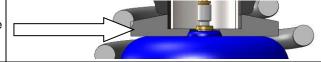
Insert the Plug In 3/16" PTC x 1/4" Reducer into the airbag fitting, see right.





# STEP 12 - POSTION THE PROTECTOR

Position the protector so that the larger step down will locate onto the previously cut down post. See image on right.



# STEP 13 - 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.

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.

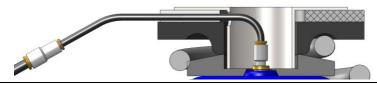
DEFLATE the airbag. If no leak, continue. If leak detected, remove the airline tubing, re-cut and re-test.

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

# STEP 14 - ROUTE AIRLINE THROUGH PRE-DRILLED POST

Feed the protector sleeve over the 3/16" tubing, use electrical tape to tape the end of the sleeve and allow it to pass through the previously drilled hole in the spring seat post. See image on right.

**NOTE:** The use of electrical tape can protect the airline not covered by the protector sleeve when feeding through the hole.

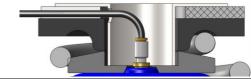


#### STEP 15 - INSERT UPPER COIL SPACER

Insert the upper coil spacer in between the upper spring seat and coil isolator, as shown on right.

Ensure the slot is orientated so that the airline will not get crushed between the upper spring seat and the spacer.





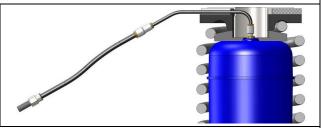
# STEP 16 - COIL SPRING RE FITMENT

Reattach all suspension components removed earlier. Ensure this operation is carried out according to the vehicle manufacturer's instructions.

#### STEP 17 - ROUTE AIRLINE TO THE INFLATION VALVES

Once the airline has been passed through the bump stop post and gap created from the upper coil spacer it can be connected to the 3/16" x  $\frac{1}{4}$ " reducer.

Secure the airline using the supplied "P" clips and zip ties. Ensure the airline is kept away from heat sources i.e., exhaust and any sharp edges.



# STEP 18 - INSTALL COMPLETION

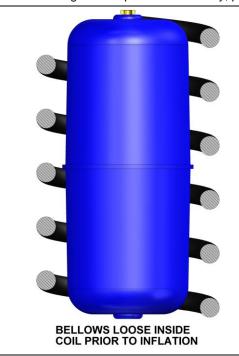
Bring the vehicle back down to its driving position following manufacturer's instructions.

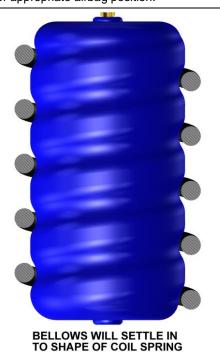
# **STEP 19 - SETTLING IN OF AIRBAGS**

The airbags in this kit are smaller in diameter than the inside of the vehicles coil springs, but they can stretch out to fill the coil space.

To stretch the airbags, inflate them up to 20 psi (1.4 bar) or higher, if required (but only to the maximum Specific Airbag Operating Pressure below). Leave airbags inflated for at least 2 weeks. The stretching out will allow the airbags to settle into position and provide the best performance in use.

**NOTE:** The below images are representational only, please follow above steps for appropriate airbag position.





# 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	HIGH PRESSURE KIT
<b>WITHOUT HP SLEEVES</b>	WITH HP SLEEVES
<u>MINIMUM</u>	<u>MINIMUM</u>
5 PSI (0.4 bar)	5 PSI (0.4 bar)
<u>MAXIMUM</u>	MAXIMUM
30 PSI (2.1 bar)	60 PSI (4.1 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



FREECALL 1800 247 224



⚠ 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.