# FITTING INSTRUCTIONS

(INCLUDING SPECIFIC OPERATING PRESSURES)

# CR5002HP





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 original 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.



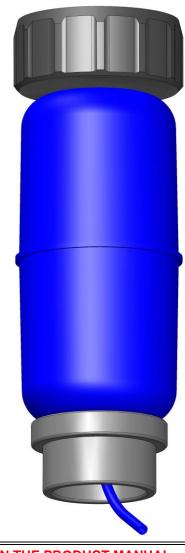
It is recommended that only a properly qualified person installs the product and carries out maintenance. If you are not qualified and attempt to carry out such work, ensure that all safety equipment is used, and safety standards are met.



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 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.

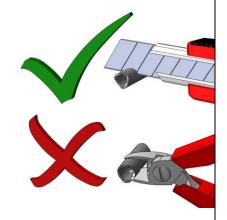
#### To remove:

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 **SHARP BLADE OR TUBE** CUTTER

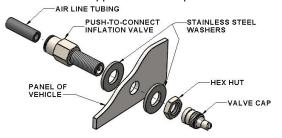
DO NOT USE PLIERS, SIDE **CUTTERS OR PIPE CUTTERS** 

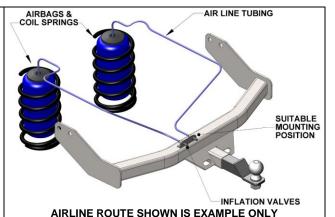


## STEP 2 - POSITION YOUR INFLATION VALVES

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.





SEE INSTRUCTIONS FOR SPECIFIC ROUTE

#### 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.

## 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.



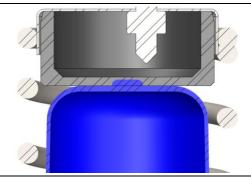
#### STEP 5 - PREPARE THE VEHICLE

To fit this kit, the coil springs can either be extended or removed. Ensure this operation is carried out according to the vehicle manufacturers instructions.

## STEP 6 - FIT UPPER SUPPORT

Select one *CC1100 Upper protector* from your kit and insert inside the coil spring, then position inside the upper spring seat.

The protector will need to be firmly pressed in to place as there is a rubber flange that may cause it to fall out during fitting. Once in use the protector will be fully seated.



## **STEP 7 - FIT LOWER SUPPORT**

Select one CC1108 from your kit, insert inside the coil spring then position the smaller diameter section inside the lower spring seat.

The airline tubing will pass through this lower protector. See image in STEP 7 for further positioning detail.



## STEP 8 - ROUTE THE TUBING AND CONNECT TO THE AIRBAG

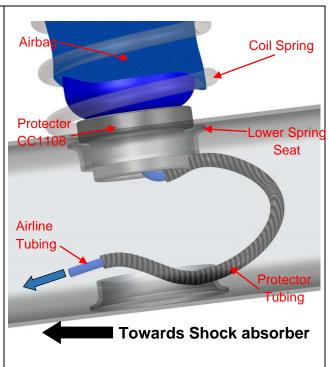
From the underside, feed the airline tubing up inside the lower control arm from the wheel end, then through the lower protector and into the coil space.

Feed enough tube up to enable bringing it through the coil windings and connect to the airbag prior to installing the airbag.

With the airline cut squarely with a sharp knife or tube cutter, insert, and connect it into the airbag, pushing in until fully seated.

NOTE: The airline will insert approximately 15mm into the airbag connector to be fully seated.





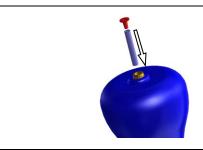
## STEP 9 - CHECK AIRBAG CONNECTION FOR LEAKS

Prior to installation of the airbag, it is advised to check the airline connection for leaks. Connect the air valves to the opposite end of the airline and inflate the airbag to maximum 15 psi (1 bar). Using a soap and water mixture, spray the connection and check for leaks.

#### STEP 10 - RED PLUGS

Use of the red plugs supplied is this kit is optional. They will enable a general reduction in airbag size which may be required to ease an airbag into a coil spring, they will fully flatten an airbag for easy insertion into an in-situ extended coil spring through the coil 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 - INSERT AIRBAG INTO COIL SPRING

Feed the flattened airbag into the coil space through the highest clear opening, with the air fitting to the bottom.

# STEP 12 - 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 13 - ROUTE AIRLINE**

With the airbag in position, route the airline under and fix to the lower shock mount.

Then follow up to the brake caliper, clamping it to the union and then clamp the airline to the brake line, keeping the same length as the brake line, then clamp to the brake line bracket on the chassis.

Continue the airline to the inflation valves, clamping as required.

IMPORTANT: Inspect that airline is clear of all obstructions and cannot be damaged through full articulation of the suspension.

# STEP 14 - CONNECT AIRLINE TUBING AND TEST CONNECTIONS

**CONNECT** the airline tubing through to the inflation valves.

**INFLATE** the airbag to the maximum allowed pressure (see Specific Airbag Operating Pressures) 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** airbag. If no leaks, continue. If leak found, 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 15 - PREPARE HEAT SHIELD**

Select the heat shield from the kit and bend the legs as shown, bending by hand is OK. Offer up the head shield to the position where the exhaust pipe passes closest to the airbag, and, if necessary, bend the shield to the exhaust shape.

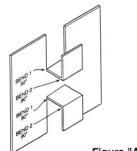
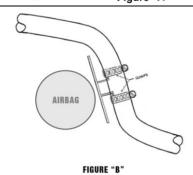


Figure "A"

## STEP 16 - START HEAT SHIELD CLAMPS

Select the two worm drive clamps from the kit, and undo them completely, then slip over the pipe and re-start. Position the clamps so that you can do them up to hold the shield, as shown,

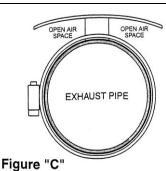


#### STEP 17 - FIT HEAT SHIELD

Fit the heat shield to the pipe using the clamps and position the shield to provide an air space between it and the pipe, whilst protecting the airbag. If two heat shields are being fitted, overlap them as much as possible.

Exhaust modifications from standard or incorrect fitment can cause eventual heat damage issues.

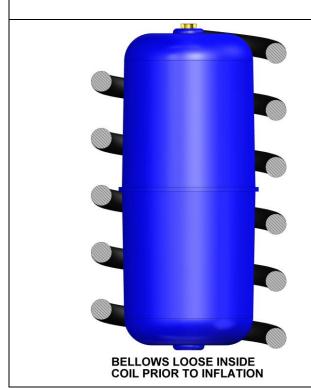
Should you have the exhaust system modified this may result in increased heat exposure to the airbags, which may reduce the life span. Please contact Airbag Man before any exhaust modifications are carried out.



#### STEP 18 - 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.



**BELLOWS WILL SETTLE IN** TO SHAPE OF COIL SPRING

## **STEP 19 - COMPLETION**

Return the vehicle to 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

The product is only intended to act as a helper to the original standard OEM suspension. 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
MINIMUM	MINIMUM
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 height.

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.