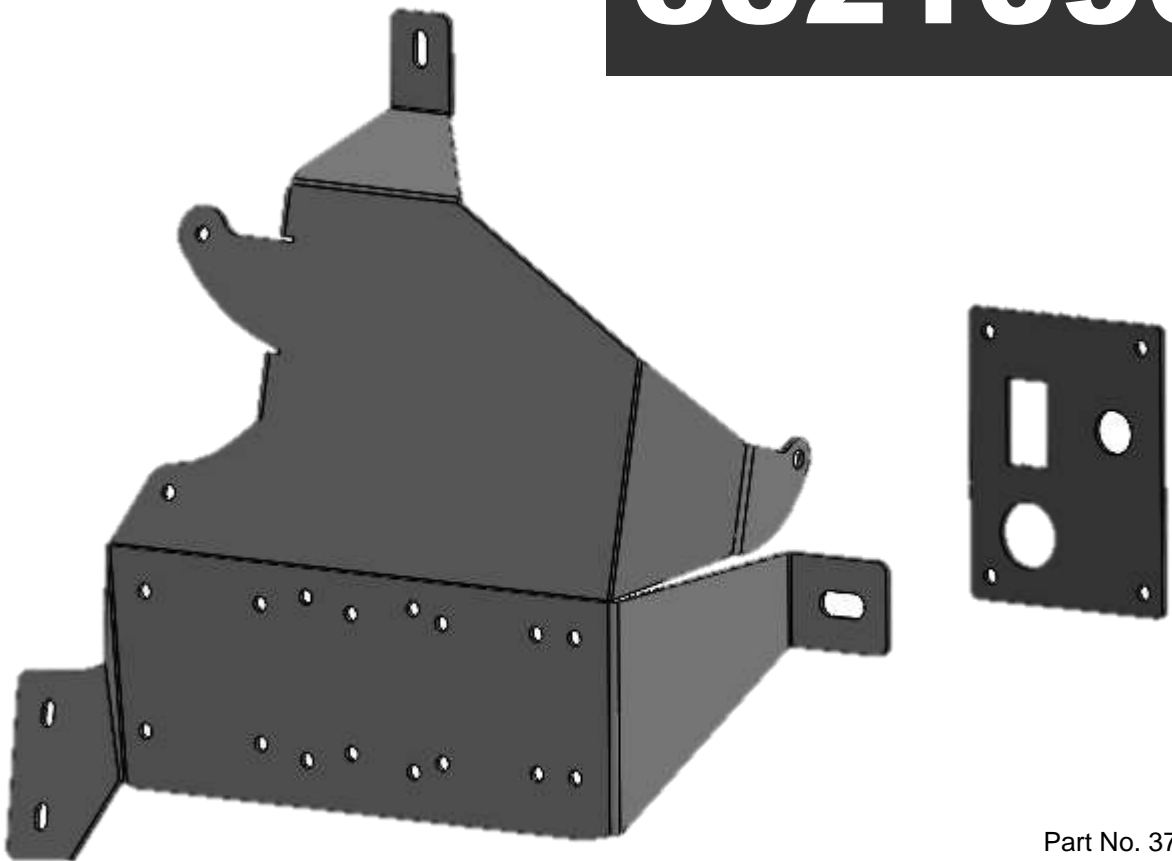




**L/CRUISER PRADO 150 SERIES
(7 SEAT) COMPRESSOR BRACKET**

INSTALLATION GUIDE

3521090



Part No. 37801364
Revision Date 1/9/23
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1 Introduction

1 Introduction

IMPORTANT:

To assure the highest level of planning and reliability goes into this installation, please read this guide in its entirety before attempting any modifications to the vehicle.

1.1 Pre-Installation Preparation

Although your *ARB Air Compressor Bracket* comes complete with all the step by step instructions you will need to install it, ARB recommends that you have your ARB Air Compressor installed by a trained professional. Many ARB distributors around the world have been fully instructed in Air Compressor installations by ARB, and have gained a wealth of experience and skill from years of performing similar installations.

Please ensure your Air Compressor Bracket Kit is the correct model for your application and that it contains all the parts listed in section 1.3 below. Be sure you have appropriately equipped yourself with all the necessary tools, parts, materials, and knowledge to complete this installation and minimize vehicle down time (see section 1.4 Tool-Kit Recommendations).

Please refer to your ARB Compressor and Air Locker Operating & Service Manuals for information on operating, servicing, driving technique, or troubleshooting your ARB Air Locker(s) if installed.

HINT: Place a ✓ mark inside each of the symbols as you complete each step. It is very important NOT to miss any of the steps!

1.2 Description

The Landcruiser Prado 150 series compressor bracket enables the installation of a CKSA, CKMA, or CKMTA with optional Air Locker Solenoids, 4L Air Tank, Quick Connect Coupling, Switch, Manifold Kit, and ARB LINX PRV to the rear LHS of the vehicle.

NOTE: Not suitable for Prado 150 5 seat variants and Prado 150 7 seat variants with factory sub-woofer fitted.

1.3 Kit Contents

- 1 x 3755930 BRACKET, MAIN PLATE
- 1 x 6178202 F/KIT 3521090 PRADO 150
 - 1 x 3193803 PLATE
 - 7 x 4584327 WASHER, FLAT M6 x 16 x 1.2
 - 3 x 6151402 BOLT, HEX M6 x 1.0 x 16
 - 4 x 6151223 NUT, NYLOC M6
 - 3 x 4581287 WASHER, SPRING M6 x 1.6 x 1.6
 - 4 x 6151459 SCREW, BUTTON HEAD
 - 1 x 37801364 FITTING INSTRUCTIONS
 - 5 x CABLE TIE
 - PINCH WELD
- 3 x 0740104 ELBOW, 90 DEG JIC-4 M-F
- 1 x 170633 ADAPTOR, ¼ NPSC TO JIC-4
- 1 x 0740111 PUSH COUPLING, JIC-4
- 2 x 0740202B AIR HOSE, 0.5 m JIC-4



1 Introduction

1.4 Tool-Kit Recommendations

Below is a list of tools and supplies recommended to complete this installation.

1.4.1 Tools

- Standard automotive sizes of sockets including; 10 mm, 14 mm
- Combination ring/open ratchet wrenches; 10 mm x 2 (for compressor mount screws/nuts), 12 mm (for air line elbows if installed), 14 mm x 2 (for hose connections), 16 mm for air fittings
- Ratchet with short extension
- Allen keys; 3 mm (CKSA), 4 mm (CKMA & CKMTA), for adjusting compressor body mount.
- Screwdrivers; No.2 Phillips and small flat
- Torque wrench with 5 – 100 Nm range
- A razor knife to cut the carpet (if fitting Air Locker lines through the OE plug in the floor)
- A leak test gauge (i.e., ARB# ALTG01).
- A multimeter
- A soldering iron

1.4.2 Supplies

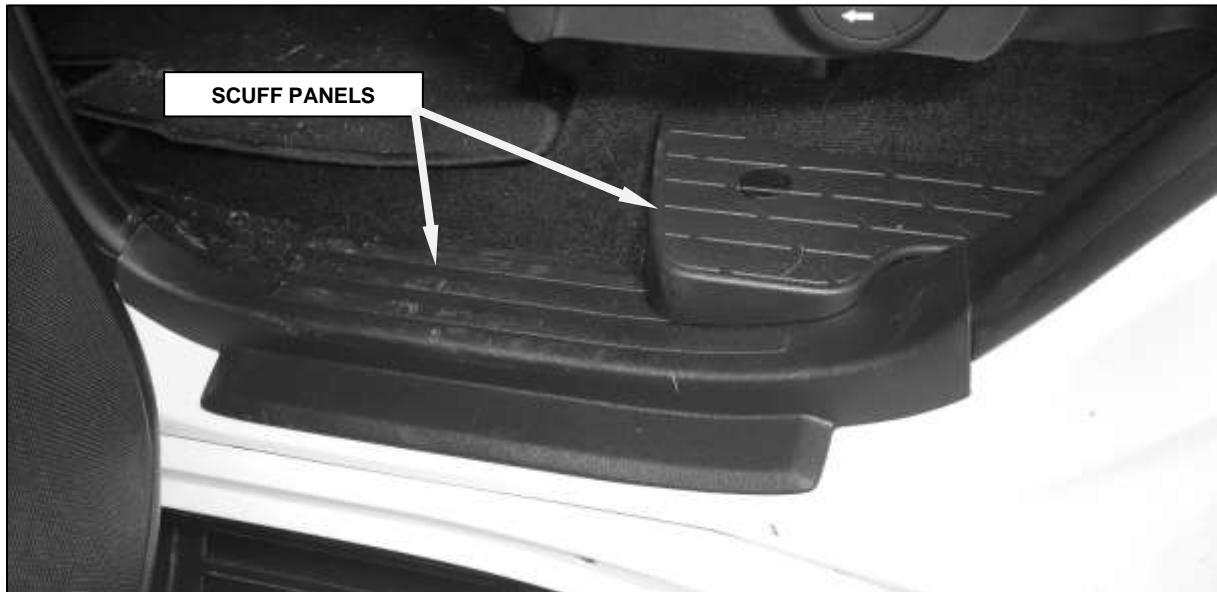
- Thread lubricant/sealant compound for NPT fittings (e.g., LOCTITE #567 Teflon paste or plumbing supply Teflon tape)
- A soapy water mixture to test for air leaks
- Electrical tape
- Teflon tape
- Solder and/or automotive crimp fittings
- Silicone sealant (to seal area around Air Locker lines if installed)

1 Introduction

1.5 Vehicle Preparation

A manufacturer's service manual and optional ARB Operation & Installation manuals should be used in conjunction with these instructions.

- Remove scuff panels from LHS rear door.

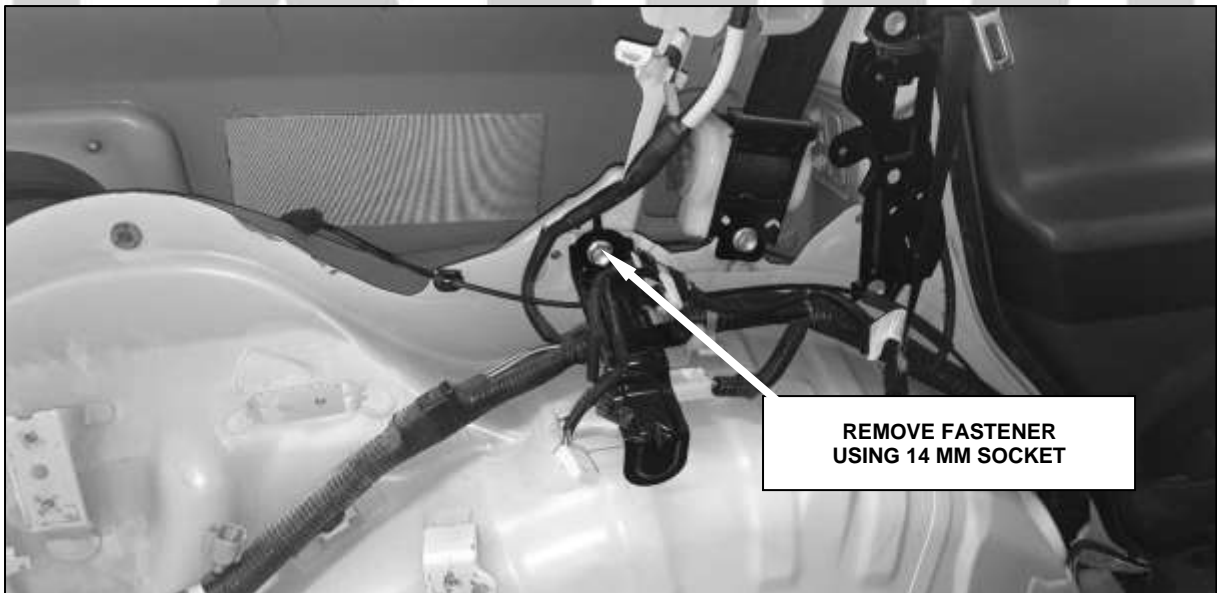


- If 3rd row seats are fitted to the vehicle, remove them.
- Remove seat belt fixing bolts and note positions, bolt sizes, and locations.
- Remove rear lower trim from RHS of vehicle.

1 Introduction



- Remove the bracket shown below using a 14 mm socket.



- Retain fastener and set the bracket aside.

2 Configuring a CKMTA12/24 Compressor

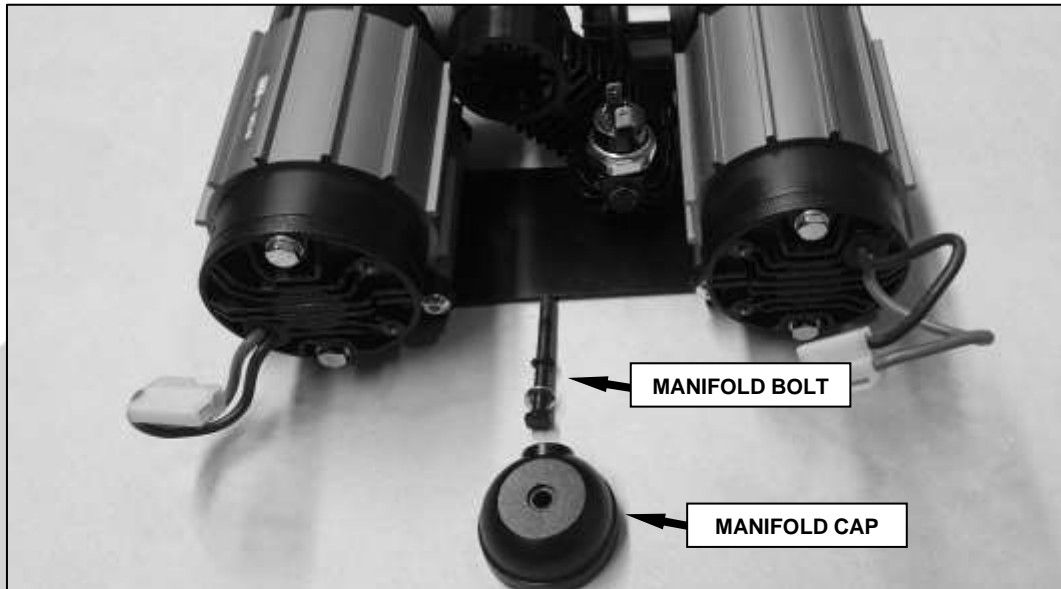
2 Configuring a CKMTA12/24 Compressor

2.1 Orientating the Compressor Outlet for Best Fit

- Refer to Section 2 of the installation guide (Part No 2102MTA12) supplied with the compressor for instructions on cover removal.

NOTE: Sealant is not required for JIC fittings.

- Remove the manifold bolt (10 mm socket).

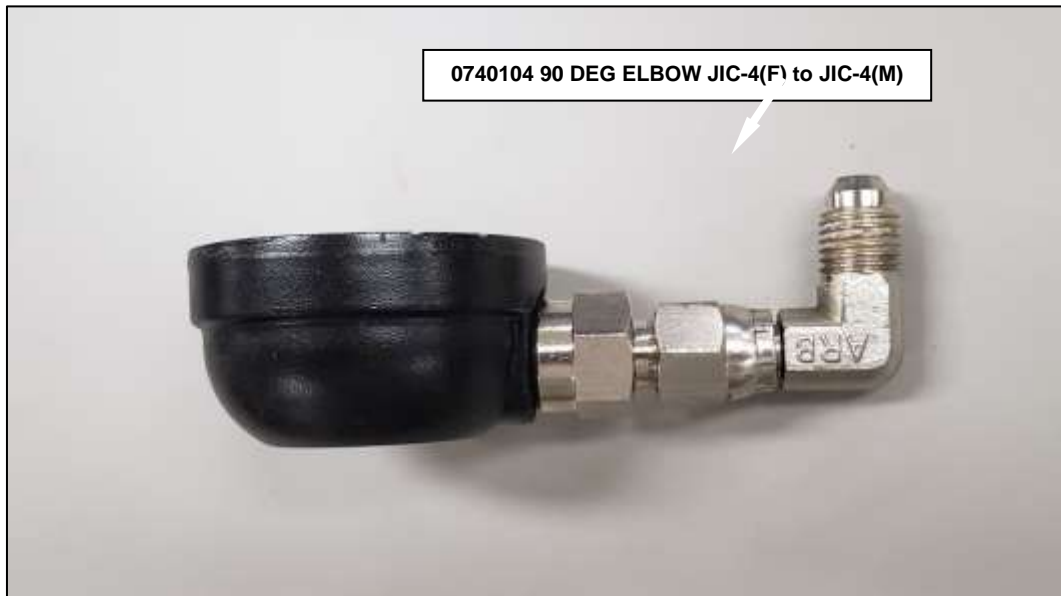


- Install the JIC adaptor (170633) to the manifold cap.



2 Configuring a CKMTA12/24 Compressor

- Install the 90 degree JIC elbow (0740104) to the manifold cap.

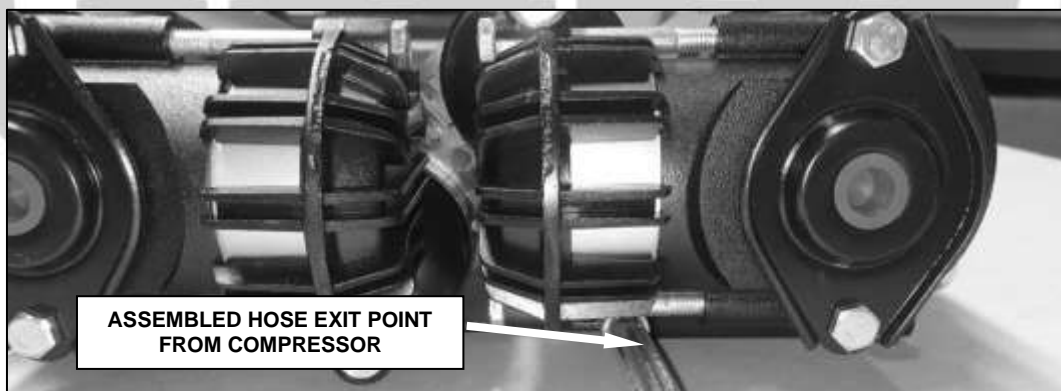
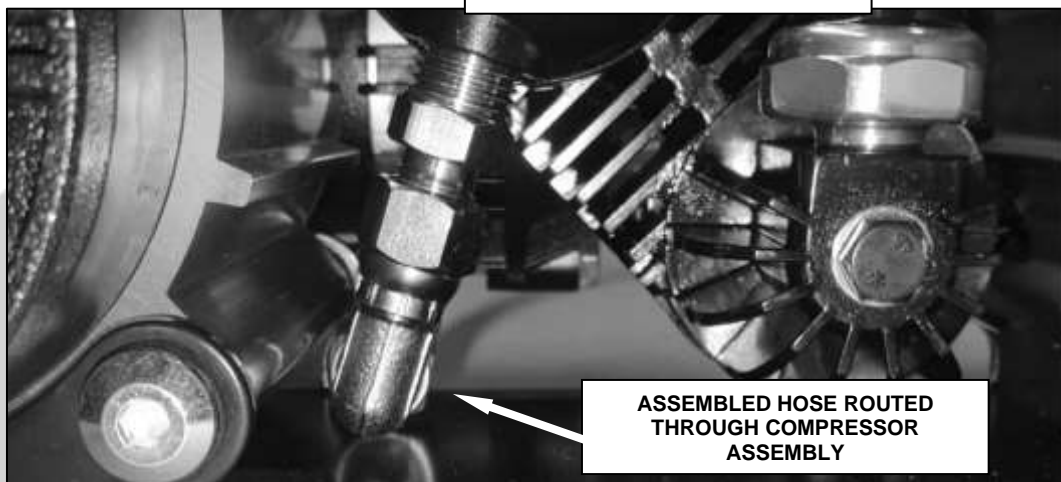


- Install the 0.5 m hose (0740202) as shown. Tighten the elbow and hose fittings ensuring that the hose remains at 90 degrees to the manifold cap as shown. Use a spanner to prevent the elbow from rotating.



2 Configuring a CKMTA12/24 Compressor

- Pass the assembled hose and manifold cap through the compressor assembly as shown. Reattach the manifold cap to the compressor and tighten the manifold bolt to approximately 9 Nm (7 lbf.ft).



- Refit the cover, reversing the operations used to remove it.
- Tighten the four cover bolts to 6 Nm (4.4 lbf.ft).

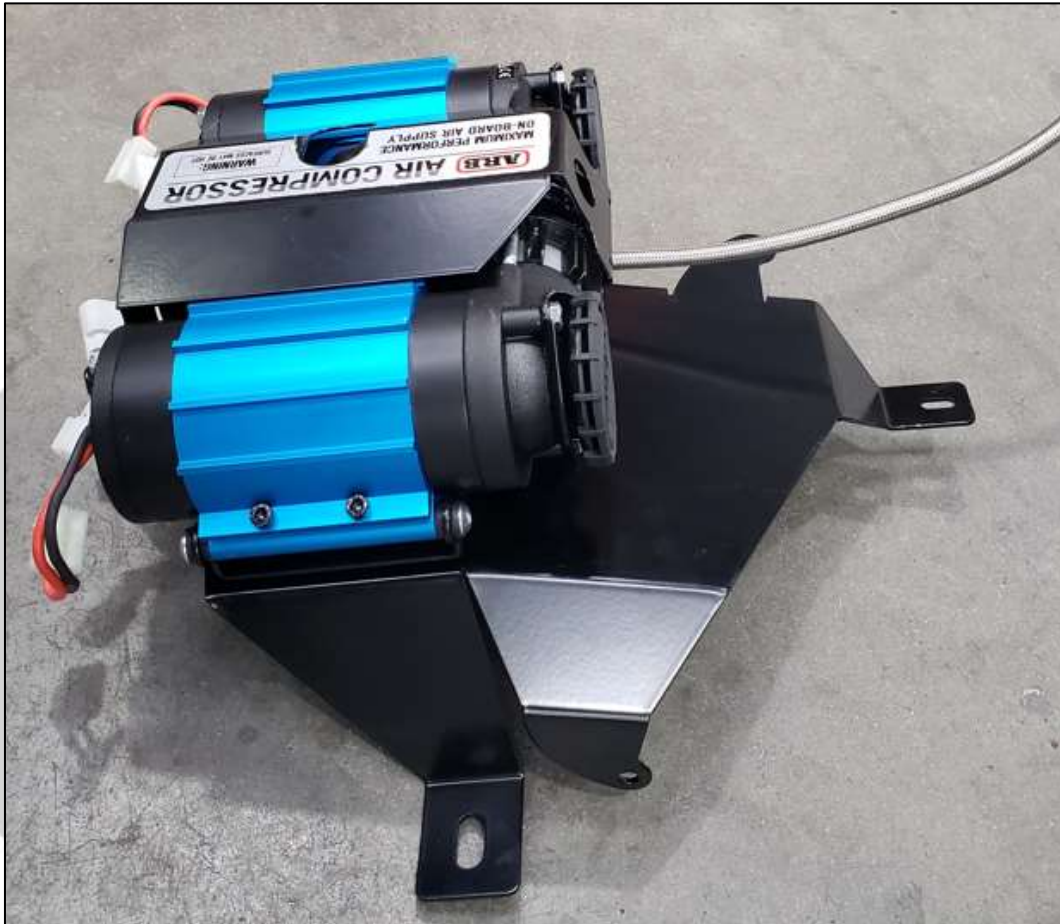
3 Installation of Main Compressor Bracket

3 Installation of Main Compressor Bracket

3.1 Attaching the Compressor to the Bracket

- Mount the compressor on the bracket as shown below. Use four sets of fasteners supplied with your compressor kit (bolt, spring washer, flat washer).

NOTE: The main curvature of the bracket should be AWAY from the compressor.



- Torque fasteners to 9 Nm [7 lbf.ft]

3 Installation of Main Compressor Bracket

3.2 Configuring the 4L Air Tank

- Attach two 90 degree JIC elbows to the tank's JIC adaptors as shown.



- Attach the free end of the 0.5 m hose to the fitting shown above.

3 Installation of Main Compressor Bracket

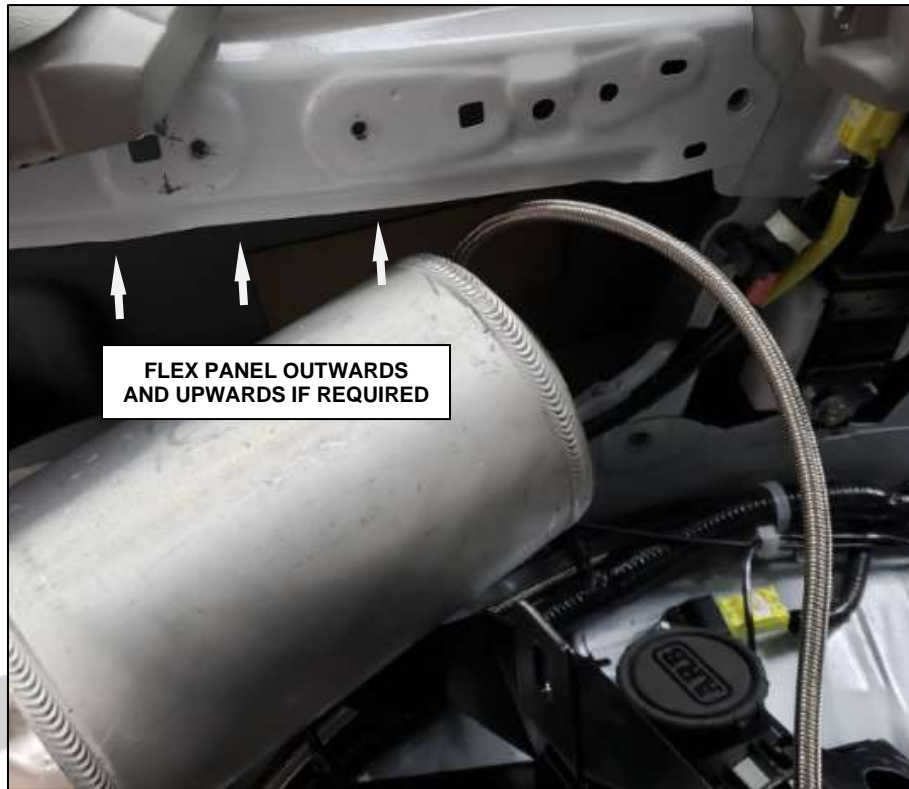
NOTE: The pinch weld included in the kit can be used to avoid the tank from rubbing on the body panels.



- Gently insert the tank into the space shown. This is easiest if the right side of the tank is inserted first towards the front of the vehicle. If this is proving difficult, the bottom edge of the body panel indicated below can be flexed outwards and upwards.



3 Installation of Main Compressor Bracket

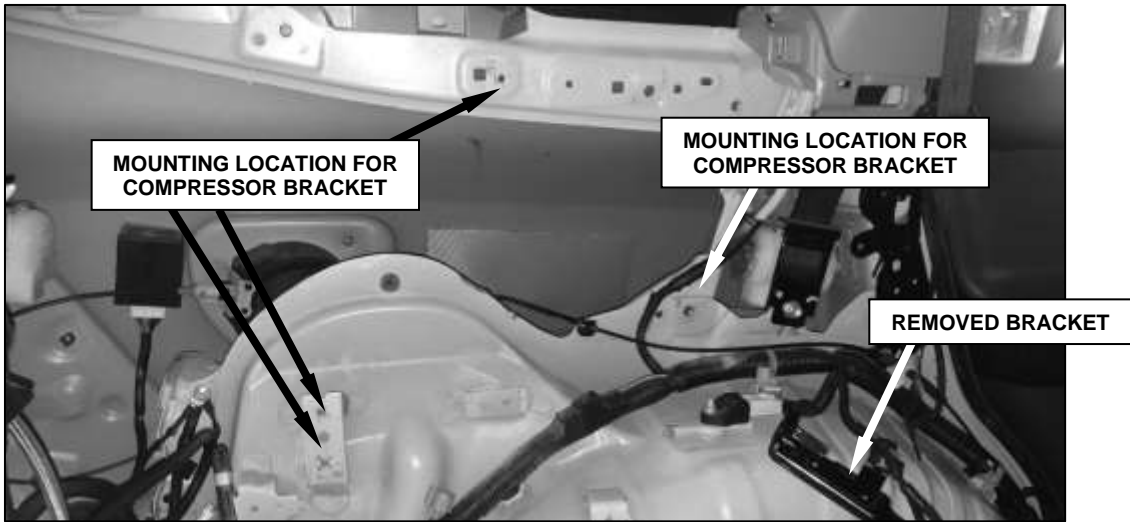


- With the tank in position, check that the hose is not kinked or pinched.

3 Installation of Main Compressor Bracket

3.3 Attaching the Main Bracket to the Vehicle

- The four attachment points for compressor bracket are highlighted below.



- Fit the bracket into position, and loosely retain it with the fasteners listed below.

NOTE: Do not tighten the fasteners at this stage.

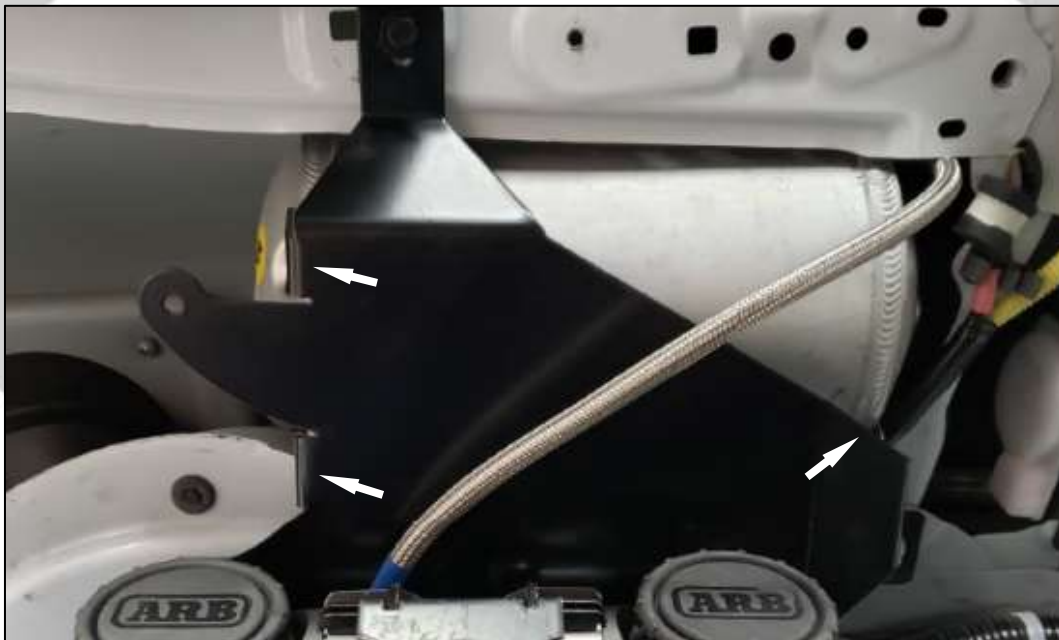


3 Installation of Main Compressor Bracket



3.4 Attaching the Air Tank to the Bracket

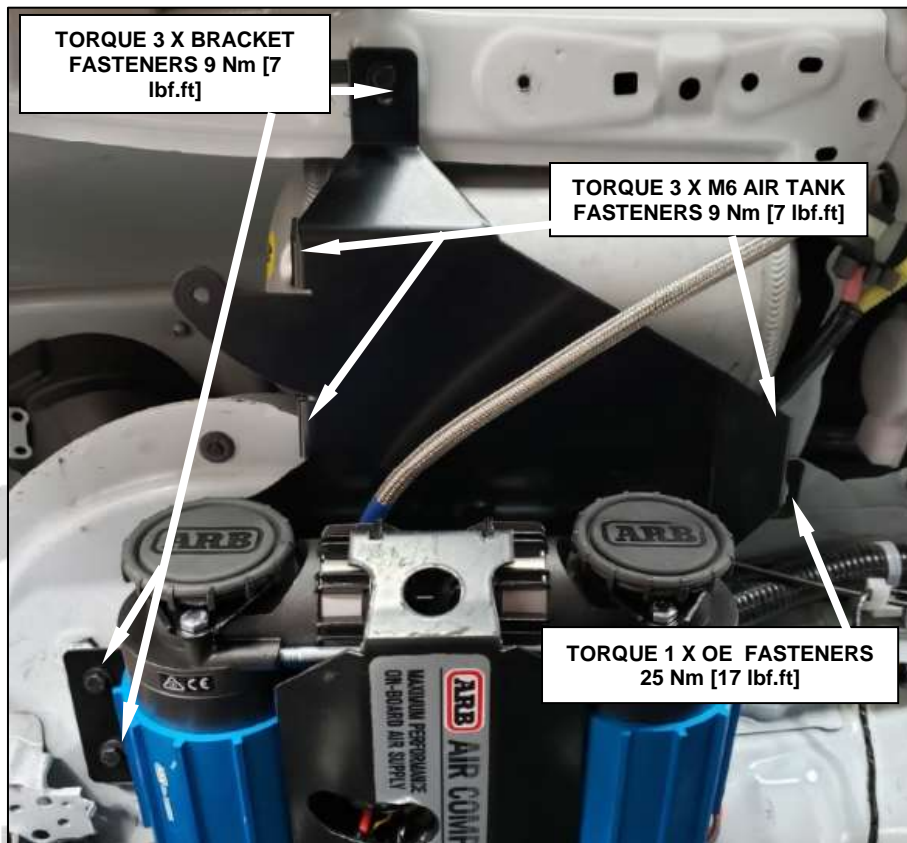
- Using the fasteners that came with your air tank kit, attach your tank to the bracket at the three points marked below.



3 Installation of Main Compressor Bracket

3.5 Torquing Fasteners

- Once the bracket and tank are in a satisfactory position, torque the M6 fasteners to 9Nm (7 lbf.ft) and torque the OE fastener to 25Nm (18 lbf.ft).



- Using a 4 mm allen key loosen the 4 x M4 socket head cap screws, allowing you to adjust the compressor position.
- Adjust compressor height so there is 2-3 mm clearance between compressor and body bracket.
- Once clearance is achieved, tighten the 4 x M4 socket head cap screws to 3 Nm [2.2 lbf.ft]



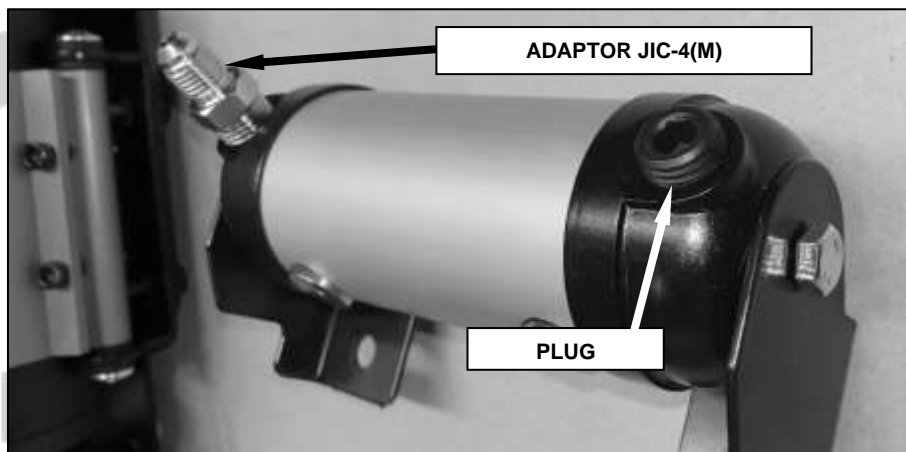
3 Installation of Main Compressor Bracket



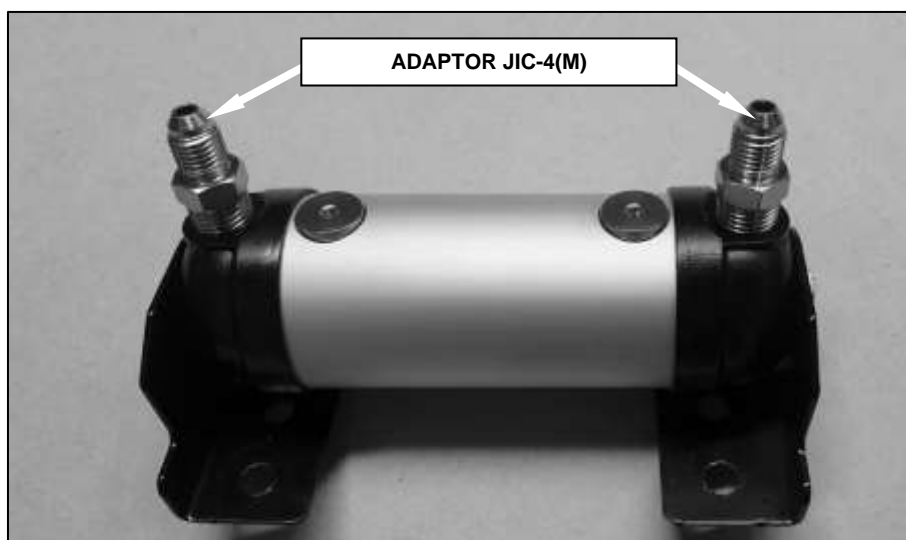
3.6 Configuration of the Air Locker Manifold Kit

NOTE: Newer versions of the manifold kit use parallel NPSC fittings instead of the tapered NPT fittings. The O-ring versions of the fittings do not require thread sealant. Thread sealant may cause the o-rings not to seal correctly.

- Remove plug and JIC-4 adaptor from manifold.



- Install two JIC adaptors to the manifold and seal threads as required. Use the previously removed adaptor plus the second adaptor found in Air Locker Manifold kit.



3 Installation of Main Compressor Bracket

- Attach the hose from the manifold kit to the tank outlet.



- Mount the manifold assembly to the compressor bracket as shown using the fasteners supplied with the manifold kit (bolt, nyloc nut). Take note of the manifold bracket direction in the picture below.



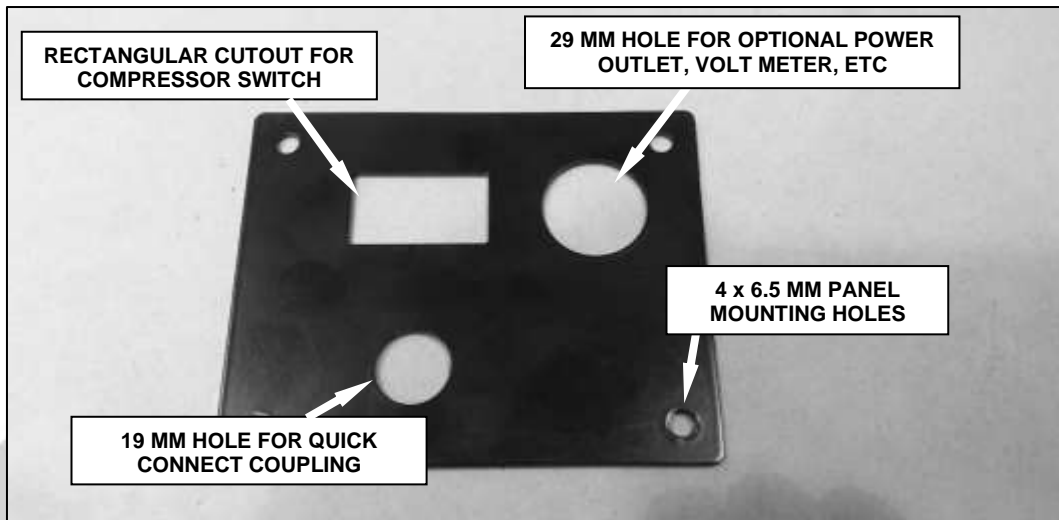
- Torque the fasteners to 9 Nm [7 lbf.ft]

4 Installation of Switch Panel to Interior Trim

4 Installation of Switch Panel to Interior Trim

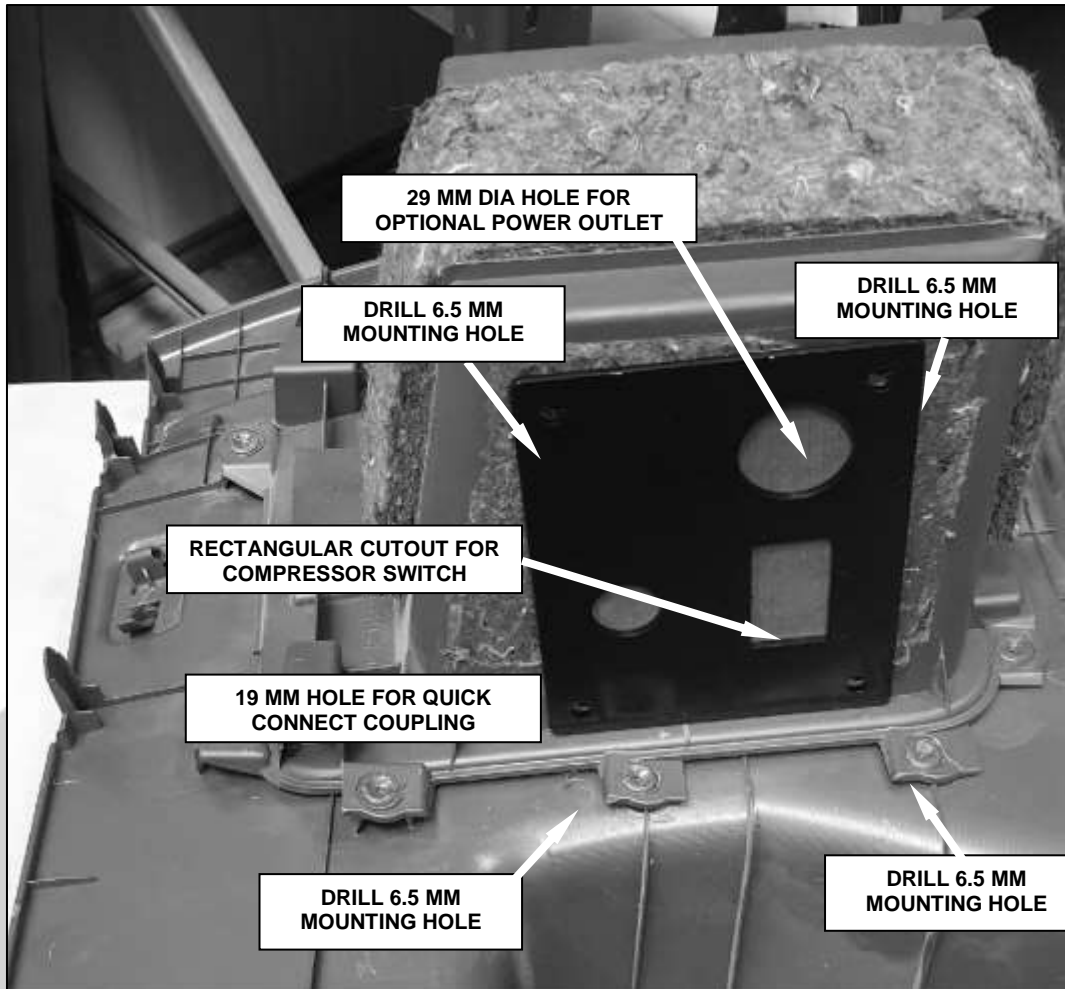
4.1 Installation of the Switch Panel to Interior Trim

The image below shows the layout for the panel switch plate. The switch plate is mounted inside the storage pocket found on the trim panel removed earlier in the installation process.



- Remove sound insulation material from the outside face of pocket as shown below.
- Position the switch panel in the center of the face as shown.
- Drill the four mounting holes using a 6.5 mm drill.
- Mark and cut out the holes required for the panel combination being used.
- Deburr the holes that have been cut in the panel.

4 Installation of Switch Panel to Interior Trim



- Mount the fittings to the switch plate.

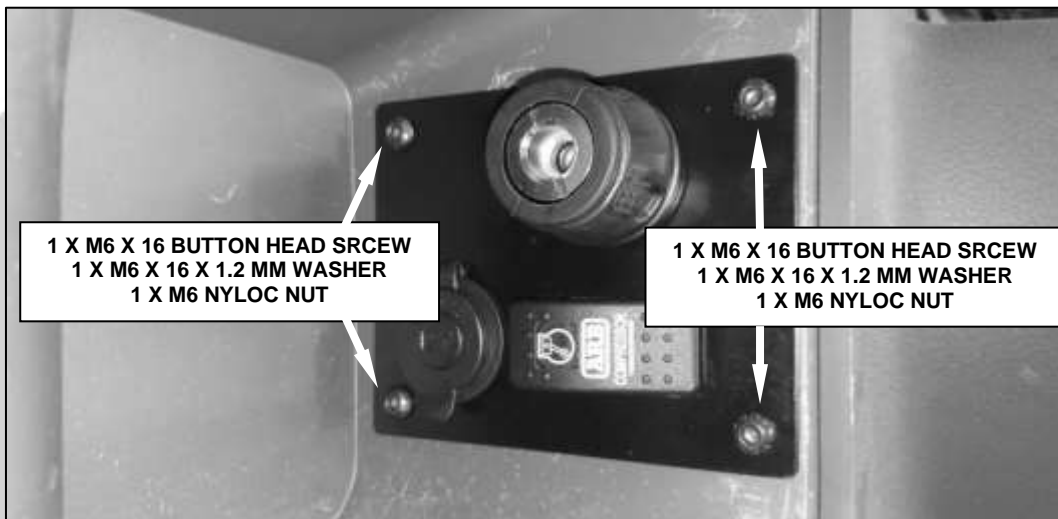


- Insert the assembled switch plate to the inside of the pocket as shown.
- Tighten the air fitting using a 14 mm spanner.

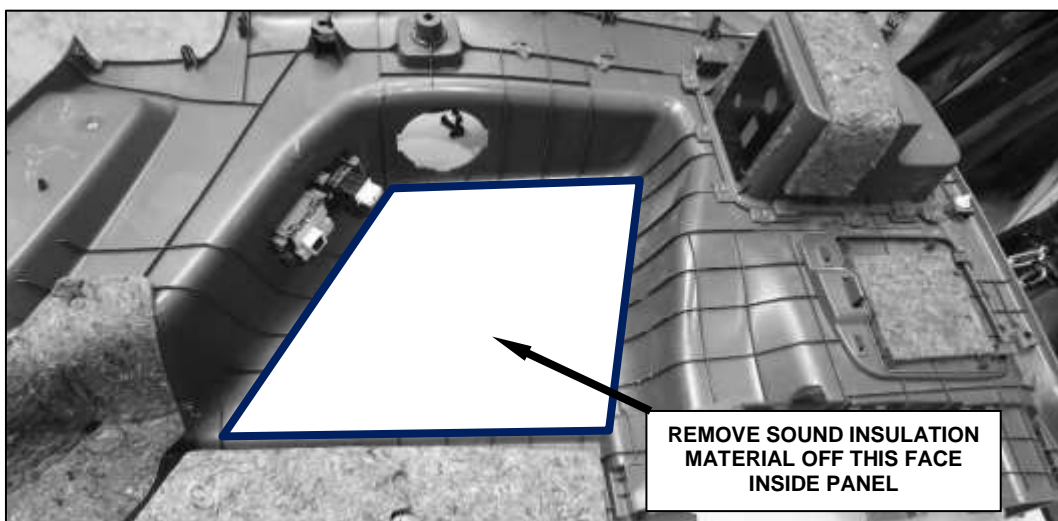
4 Installation of Switch Panel to Interior Trim



- Secure the switch plate to the trim panel using 4 x M6 x 16 button head screws, 4 x M6 x 16 x 1.2 washers, and M6 Nyloc nuts.



- Remove sound insulation material from the highlighted area of the rear panel.

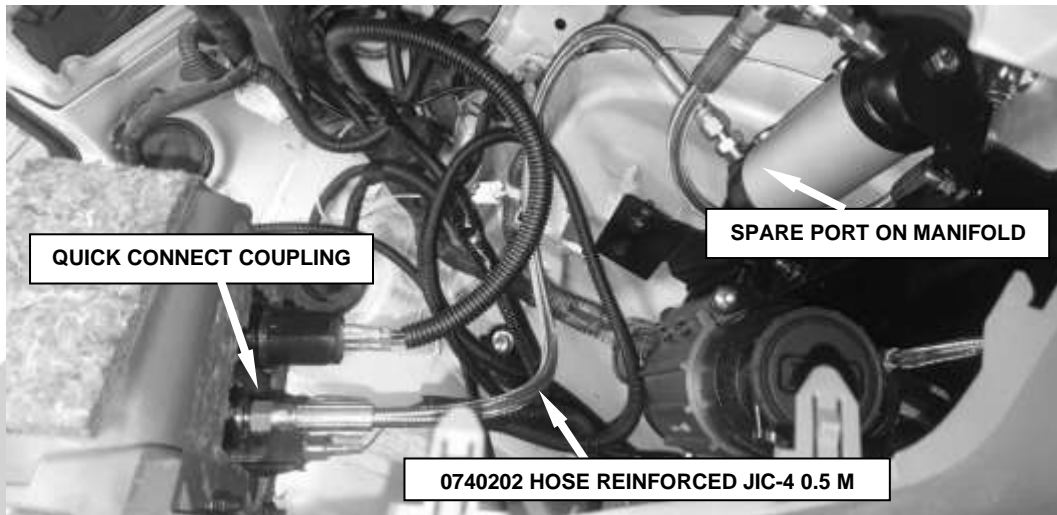


5 Completing the Installation

5 Completing the Installation

5.1 Connecting Hoses

- Connect a hose (0740202 hose reinforced JIC-4 0.5 M) from the free port on the manifold to the quick connect coupling as shown.
- Route the hose as shown below to allow easy fitment of the trim panel and tighten the fittings using a 14 mm spanner.



5.2 Connecting the Electrical System

- Refer to the installation guide that came with the compressor for detailed instructions for wiring of the compressor
- At this stage of assembly test system for correct operation and check for any air leaks around connections

5.3 Secure Wiring

- Using the cable ties supplied, secure any OE wiring that was removed in step 1.5.
- Secure the compressor to ensure that wiring cannot be damaged when the jack is removed from the storage compartment.

5.4 Panel Fitment

- Refit all interior panels/trims to vehicle.
- Refit all seat belt fittings.
- Check that all seatbelts operate correctly.
- Refit the rear seats if removed.
- Check the rear seats operate correctly.

5 Completing the Installation

5.5 Post-Installation Check List

Now that the compressor installation has been completed, ARB recommends that you take the time to complete the following check list to ensure that you have not missed any vital steps.

- Air system leak test completed.
- The air filter position is not exposed to moisture, dust, dirt, or water ingress.
- All air lines and wiring have been securely cable tied to resist snagging.
- Switch(es) have been securely mounted within operator reach, yet well away from danger of accidental engagement.
- Switch(es) function properly and illuminate to indicate activation.

For warranty and service purposes, please fill in the following fields and supply a copy to the customer (if applicable).

ARB PRODUCT MODEL NUMBER: _____
SERIAL NUMBER: _____
POINT OF SALE (NAME/LOCATION): _____
DATE OF PURCHASE: _____
INSTALLATION PERFORMED BY: _____
DATE OF INSTALLATION: _____
VEHICLE MAKE: _____
VEHICLE MODEL: _____
VEHICLE YEAR OF MANUFACTURE: _____