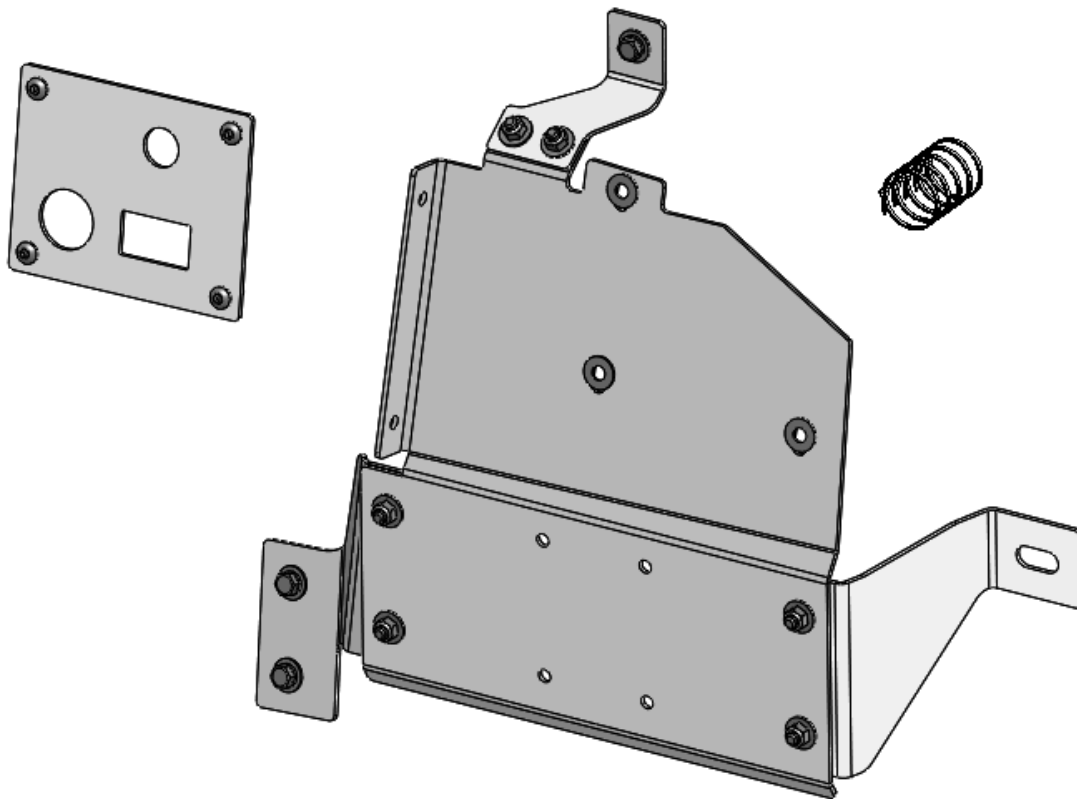




**L/CRUISER PRADO 150 SERIES
COMPRESSOR BRACKET
*INSTALLATION GUIDE***

3521080



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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.

Make sure your *Air Compressor Bracket* kit is the correct model for your application and that it contains all of the parts listed in section 1.3 below. Also, 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 trouble shooting 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 (CKMTA only) and ARB LINX PRV to the rear LHS of the vehicle.

NOTE : Not suitable for models with factory sub-woofer fitted.

1.3 Kit Contents

- 1 X 3752409 BRACKET COMPRESSOR MOUNT
- 1 X 6177397 F/KIT 3521080 BRKT
 - 22 X 4584327 WASHER FLAT M6x16x1.2
 - 9 X 6151402 BOLT HXHD M6x1.0x16
 - 10 X 6151223 NUT HEX NYLOC M6x1.0
 - 5 X 180302 CABLE TIE 4.8 X 180 MM BLACK
 - 3 X 4581287 WASHER SPRING M6x1.6x1.6
 - 4 X 6151459 SCREW BUTTON HEAD M6x16
 - 1 X 3789940 F/INST 3521080 BRKT (*THIS DOCUMENT*)
 - 1 X 3752408 BRACKET MOUNT FOOT
 - 1 X 3193803 PLATE SWITCH MOUNT
 - 1 X 3752407 BRACKET MOUNT FOOT
 - 1 X 3752406 BRACKET MOUNT FOOT



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; 10mm,14mm
- Combination ring/open ratchet wrenches; 10mm x2 (for compressor mount screws/nuts), 12mm (for Air line Elbows if installed), 14mm x2 (for hose connections)
- Ratchet & short extension
- Alan keys; 3mm (CKSA), 4mm (CKMA & CKMTA), for adjusting compressor body mount.
- Screwdrivers; No.2 Phillips & Small flat
- Torque Wrench 5 to 100Nm 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

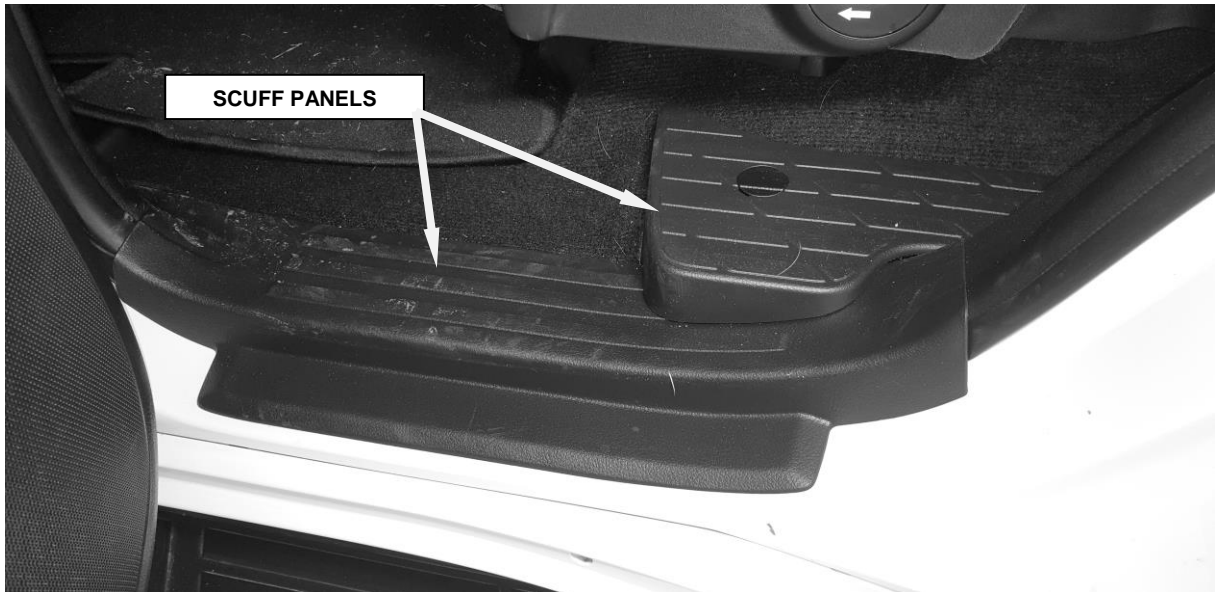
- Thread lubricant/sealant compound for pressure fittings (e.g., LOCTITE #567 Teflon paste or plumbing supply Teflon tape)
- A soap and water mixture to test for air leaks.
- Electrical tape.
- Teflon Tape
- Solder and/or automotive crimp fittings.
- Silicon sealant (to seal area around Air Locker lines 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 vehicle remove
- Remove seat belt fixing bolts and note position of bolt sizes and locations.

1 Introduction

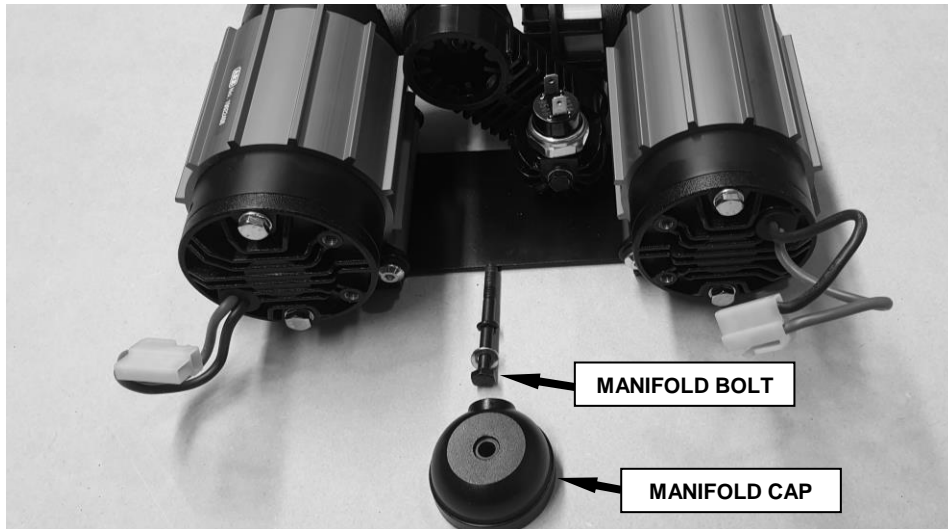
- Remove rear lower trim from RHS of vehicle



2 Configuring the 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
- Remove manifold bolt (10mm socket)



- Install 0740101 Adaptor JIC-4(M) to 1/4 NPT (M) to manifold cap and seal thread as shown (use 14mm spanner).

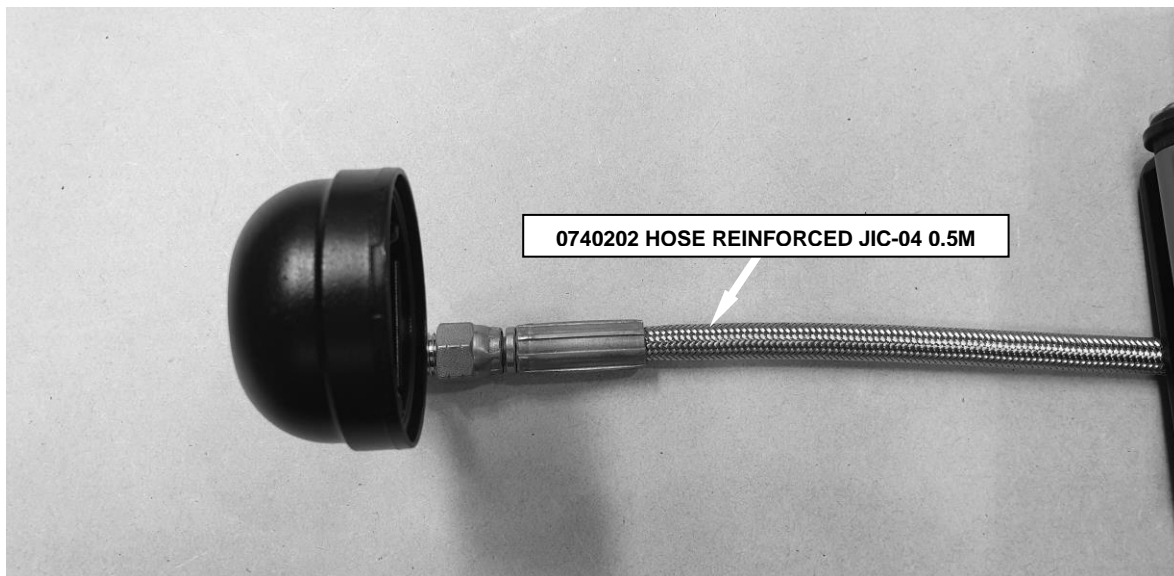


- Install 0740104 90 Deg Elbow JIC-4(F) to JIC-4(M)

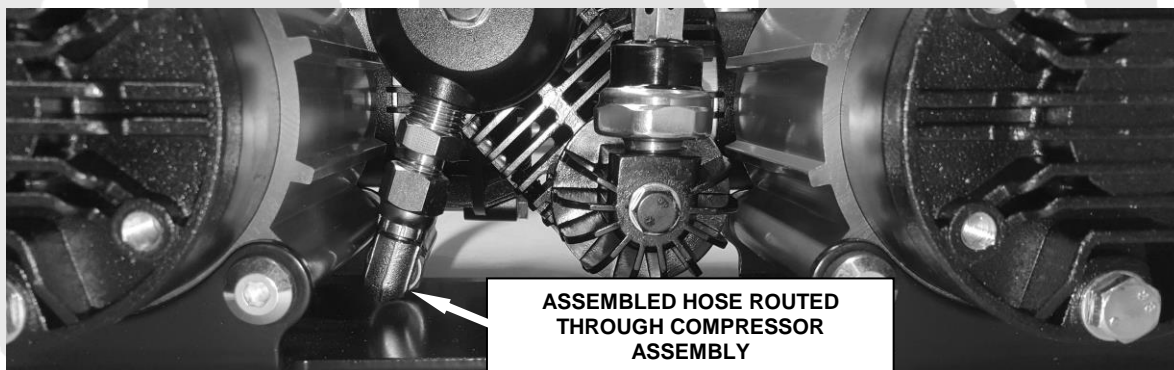


2 Configuring the CKMTA12/24 Compressor

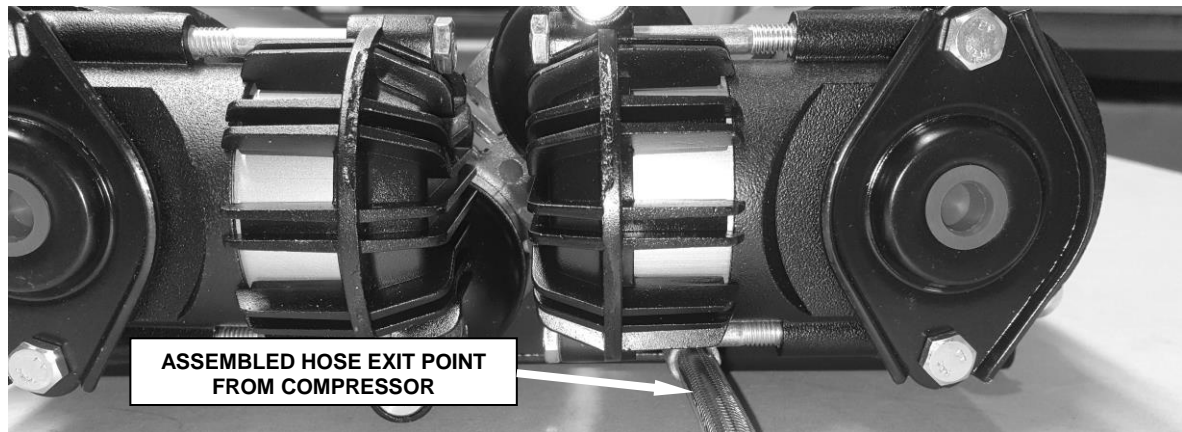
- Install 0740202 Hose Reinforced JIC-04 0.5M as shown. Tighten Elbow and hose fittings ensuring hose is 90deg to manifold cap as shown using 14mm spanner and 12mm spanner to retain elbow.



- Pass assembled hose and manifold cap through compressor assembly as shown. Reattach manifold cap to compressor and tighten manifold bolt (10mm socket) to approximately 9Nm (7 lbf.ft)



2 Configuring the CKMTA12/24 Compressor



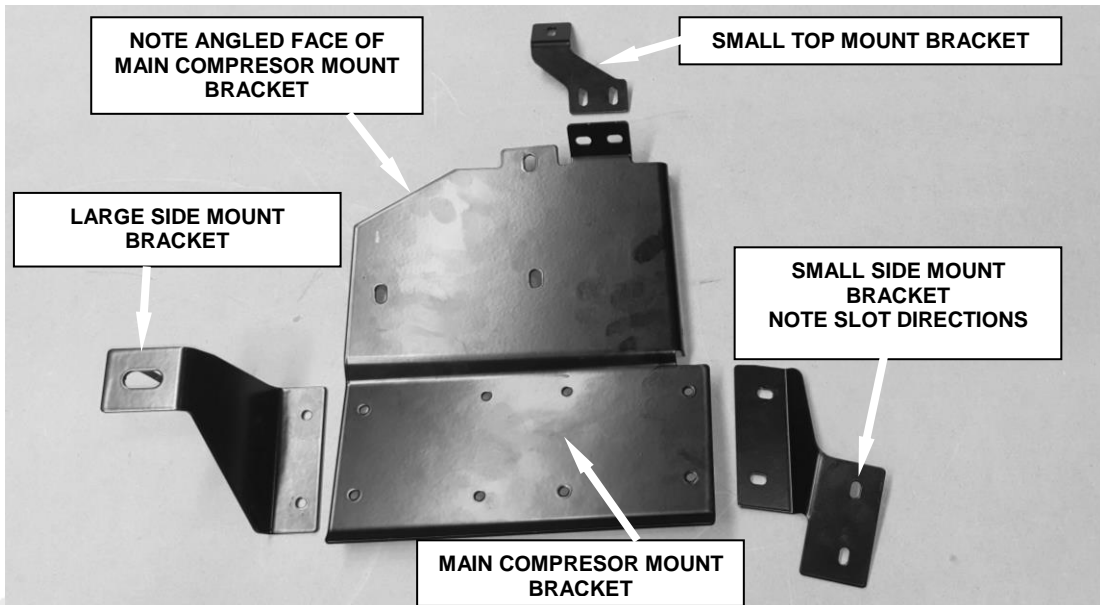
- Refit the cover reversing the operations used to remove.
- Re tighten the four cover bolts (10mm socket) to 6Nm [4.4 lbf.ft]



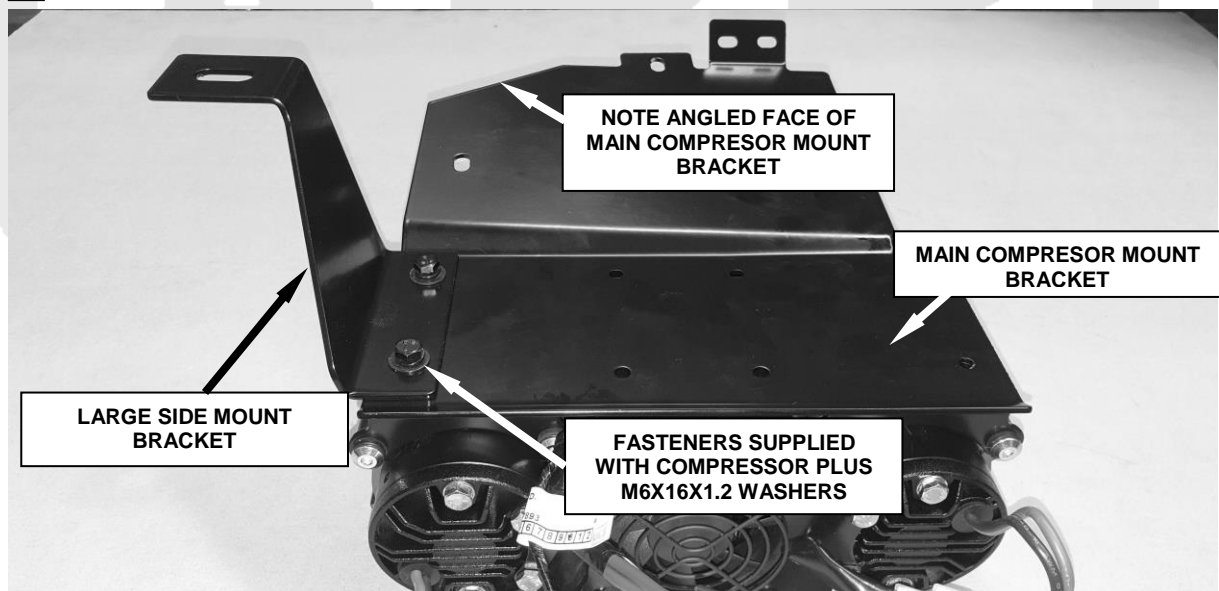
3 Assembly of the CKMTA 12/24 to Main Bracket

3.1 Assembly of CKMTA12/24 to Main Bracket

Image below shows the layout of the 4 brackets which make up the compressor bracket kit.



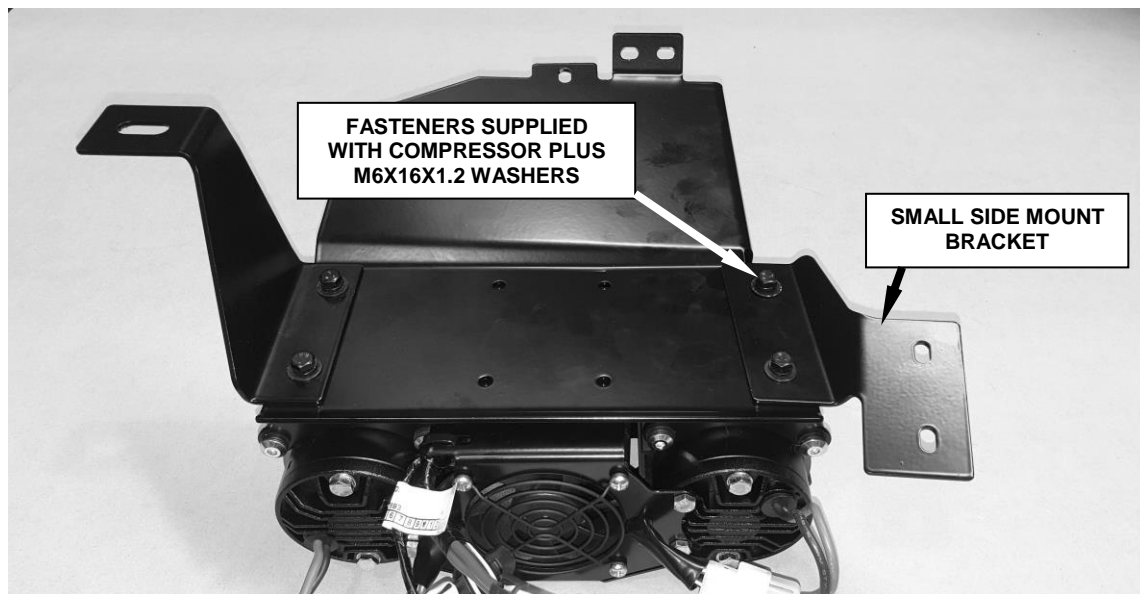
- Sit compressor on flat surface with mount face upwards.
- Place the main compressor mount bracket and large side mount bracket on compressor mount face as shown. Fasten using 2 of the fasteners that came with the CKMTA12/24 compressor plus 2 X Flat Washers (M6 X16X1.2) supplied with the compressor bracket kit.
- Torque fasteners to 9Nm [7 lbf.ft]



3 Assembly of the CKMTA 12/24 to Main Bracket

- Place the small side mount bracket on compressor mount face as shown. Fasten using 2 of the fasteners that came with the CKMTA12/24 compressor plus 2 X Flat Washers (M6 X16X1.2) supplied with the compressor bracket kit.

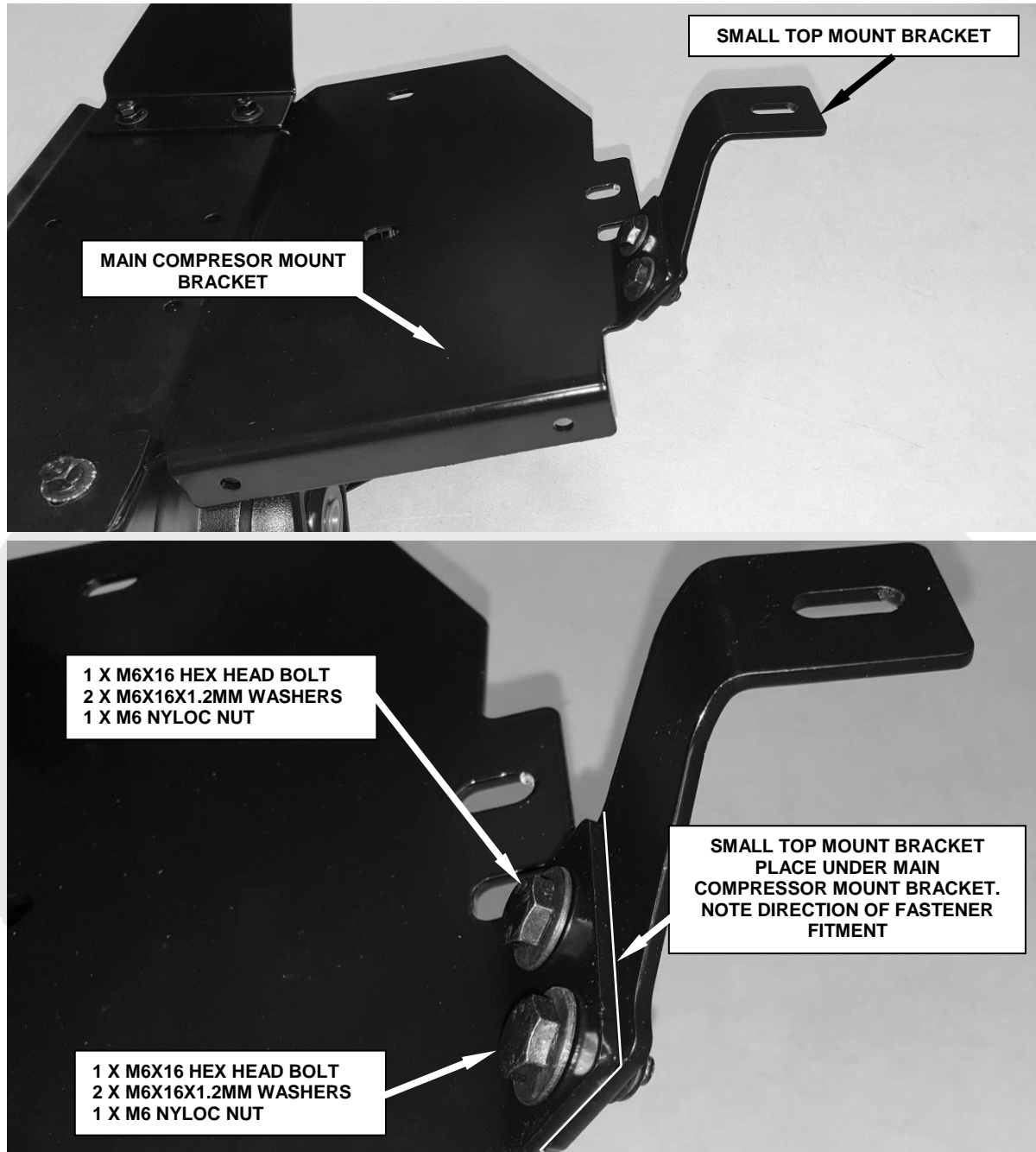
NOTE: Do not fully tighten these fasteners at this stage.



3 Assembly of the CKMTA 12/24 to Main Bracket

- Place the small top mount bracket on under compressor mount face as shown. Mount using 2 X M6X16 Hex Head bolts, 4 X M6X16X1.2mm washers and 2 M6 Nyloc Nuts.

NOTE: Do not fully tighten these fasteners at this stage.

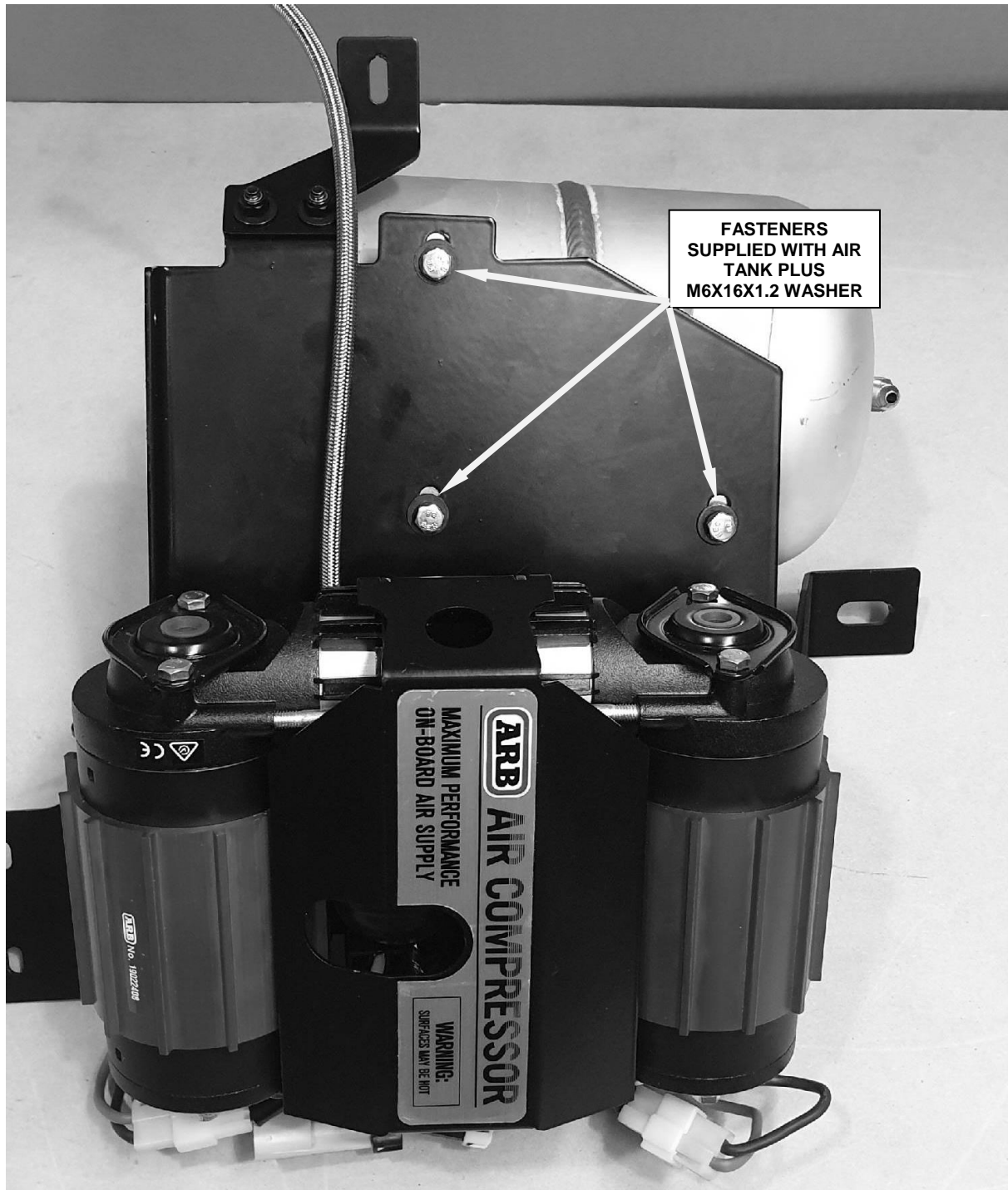


3 Assembly of the CKMTA 12/24 to Main Bracket

3.2 Assembly of 4 Litre Air Tank to Main Bracket

- Attach the Air Tank to the compressor/bracket assembly as shown using the fasteners supplied with the Air Tank Kit plus 3 X Flat Washers (M6 X16X1.2) supplied with the compressor bracket kit.

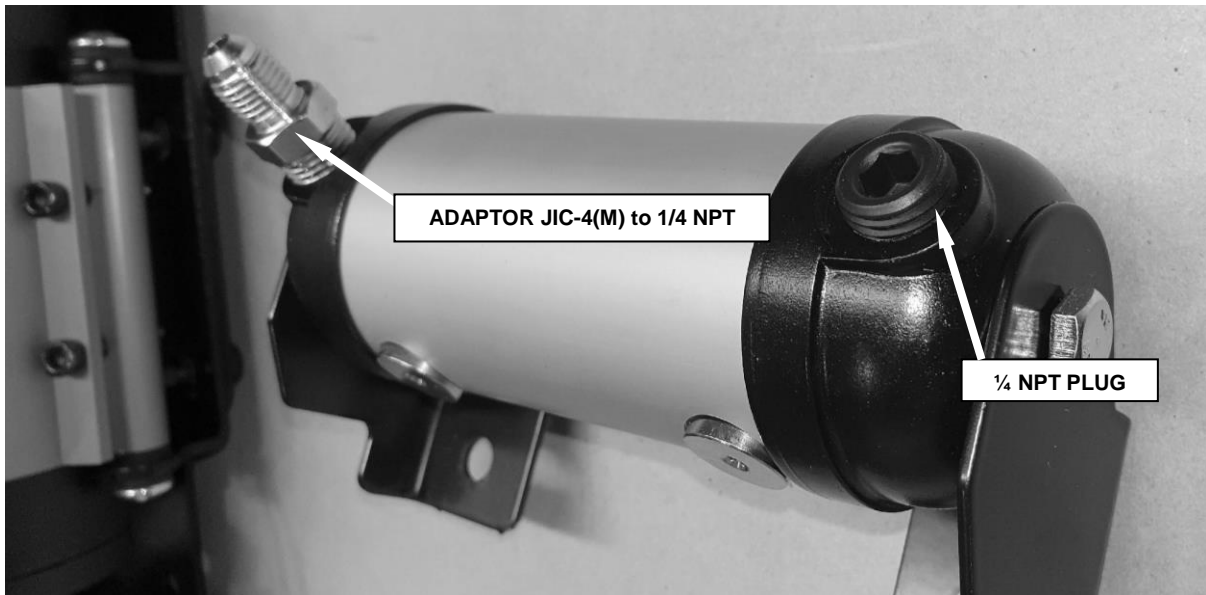
NOTE: Do not fully tighten these fasteners at this stage.



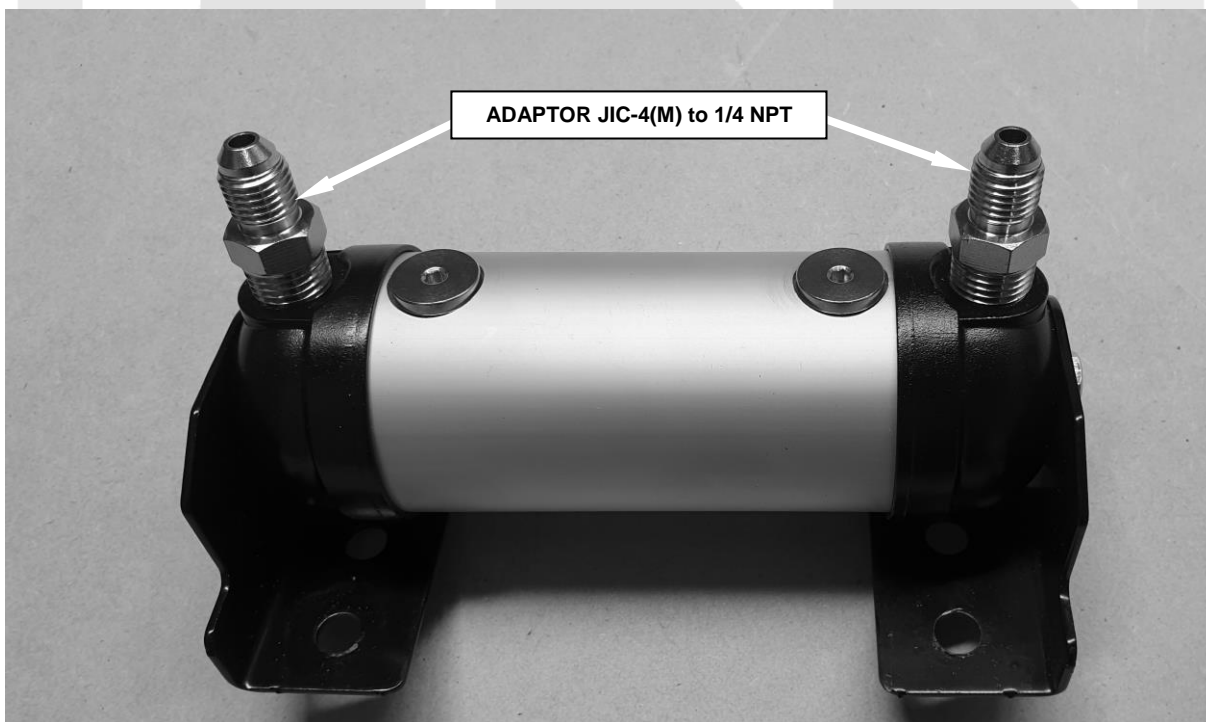
3 Assembly of the CKMTA 12/24 to Main Bracket

3.3 Configuration of the Air Locker Manifold kit

- Remove manifold from 171503 packaging
- Remove ¼ NPT plug and JIC-4 Adaptor from manifold

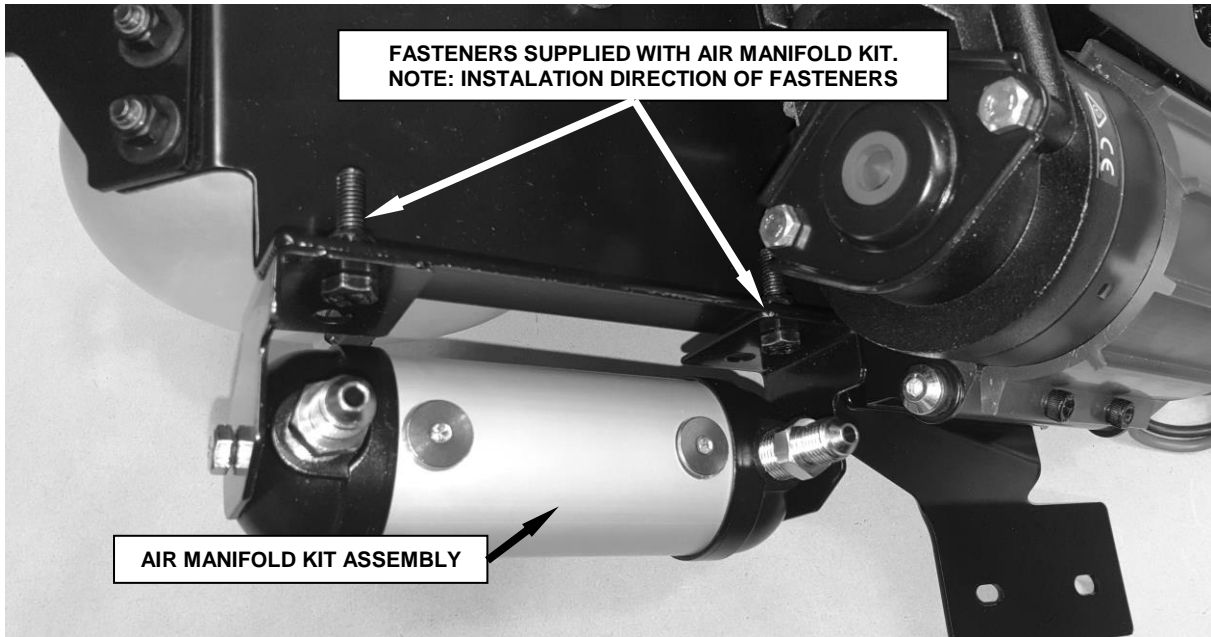


- Install 2 X ADAPTOR JIC-4(M) to 1/4 NPT adaptors to manifold and seal threads as shown. Use previously removed adaptor plus second adaptor found in Air Locker Manifold kit (use 14mm spanner)



3 Assembly of the CKMTA 12/24 to Main Bracket

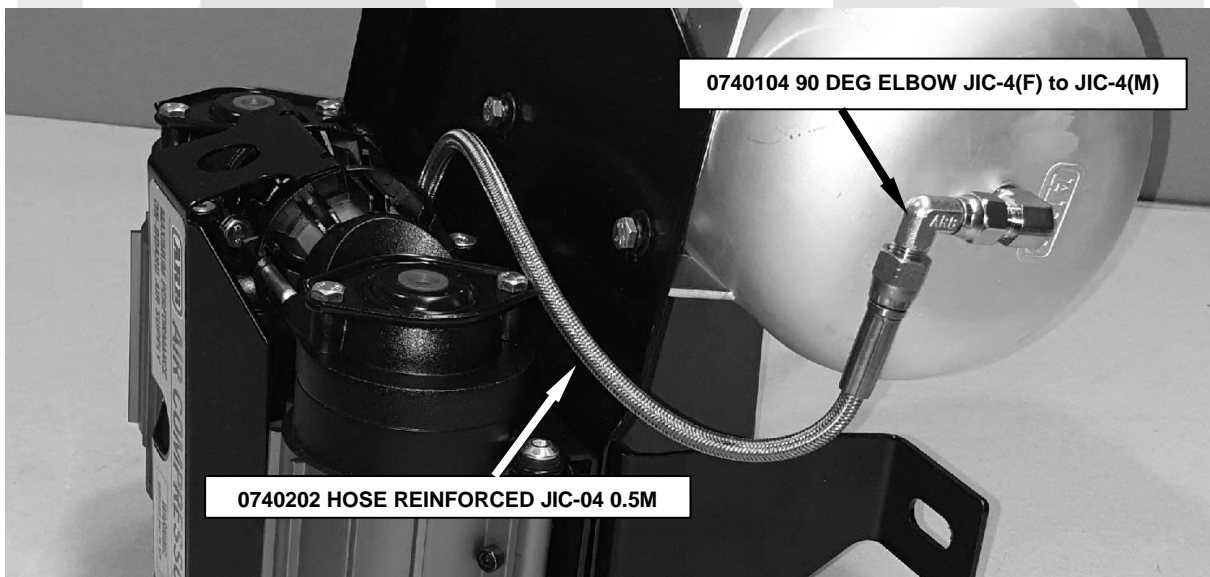
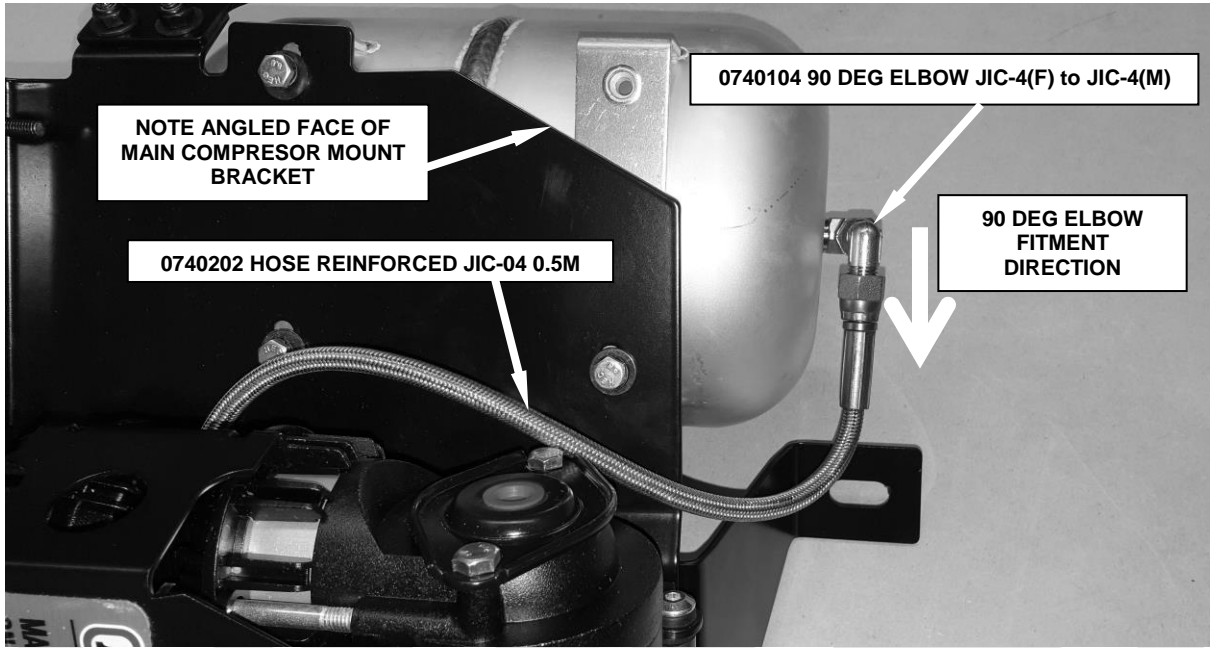
- Mount Air Locker manifold kit to compressor bracket as shown using fasteners supplied with Air Locker manifold kit.
- Torque fasteners to 9Nm [7 lbf.ft]



3 Assembly of the CKMTA 12/24 to Main Bracket

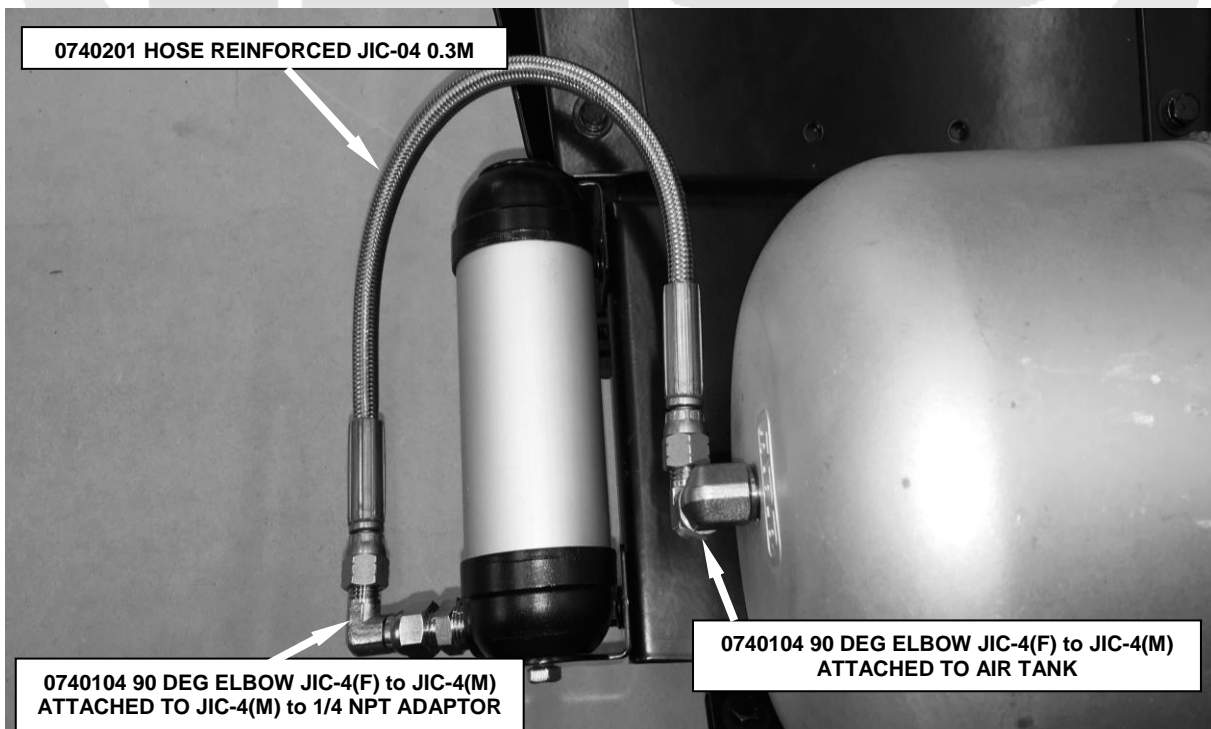
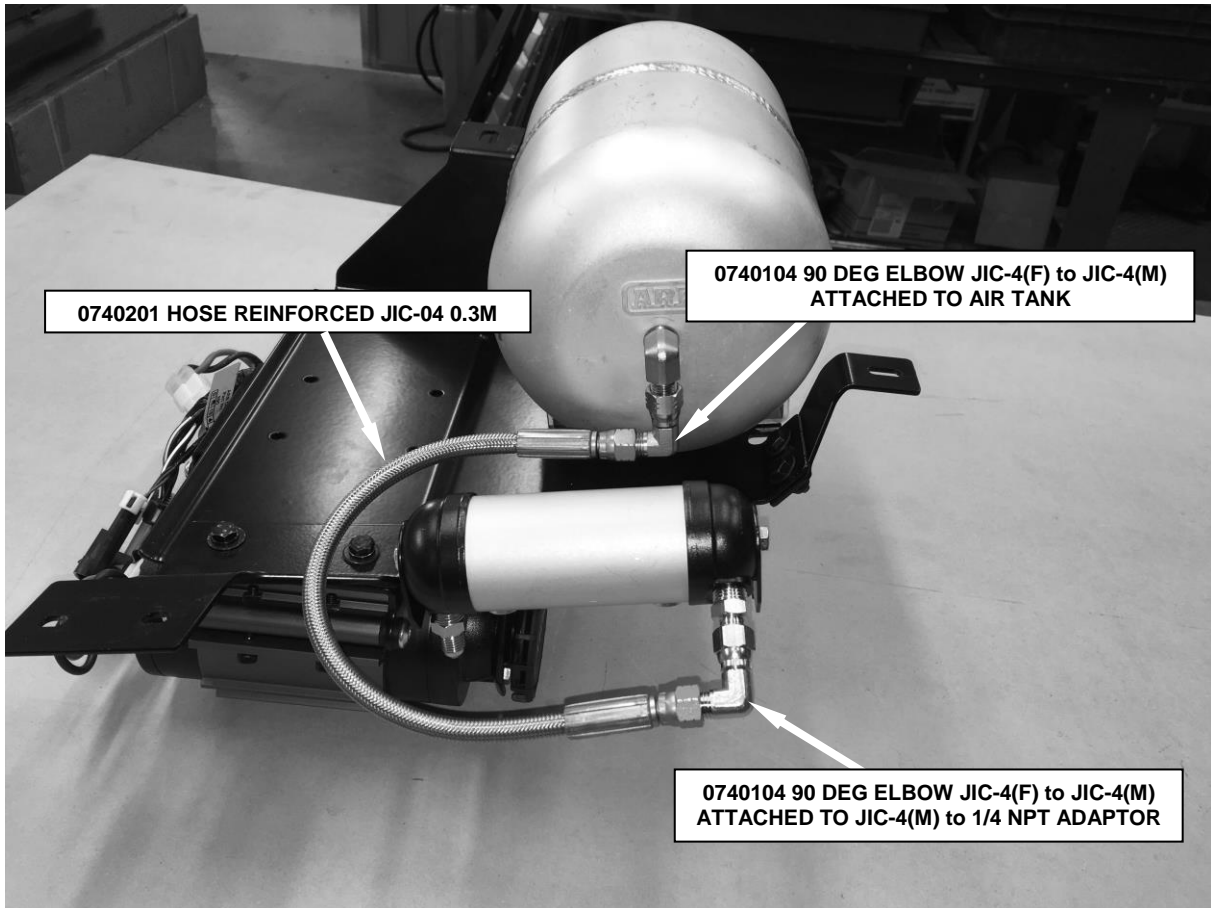
3.4 Connecting Hoses

- Using a 0740104 90 DEG ELBOW JIC-4(F) to JIC-4(M) attach the supply air hose to the air tank as shown.
- Ensure the 90 deg elbow is parallel with end face of tank and connection is as shown below. This allows for clearance with vehicle trim when it is reinstalled.
- Tighten fittings using 14mm spanner and 12mm spanner to retain elbow



3 Assembly of the CKMTA 12/24 to Main Bracket

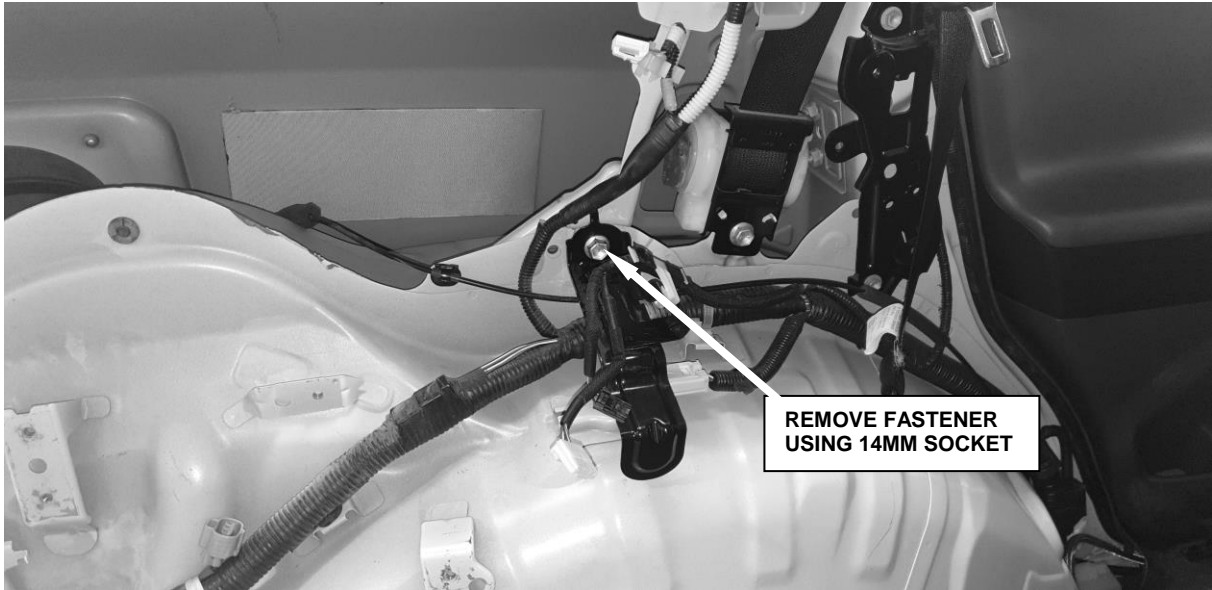
- Connect a 0740104 90 DEG ELBOW JIC-4(F) to JIC-4(M) to each end of the 0740201 reinforced JIC-04 0.3M hose.
 - Attach one end of the 0740104 90 DEG ELBOW JIC-4(F) to JIC-4(M) to the air tank and attach the other end to the JIC-4(M) to 1/4 NPT adaptor on the manifold as shown
- NOTE: Do not fully tighten these fasteners at this stage.



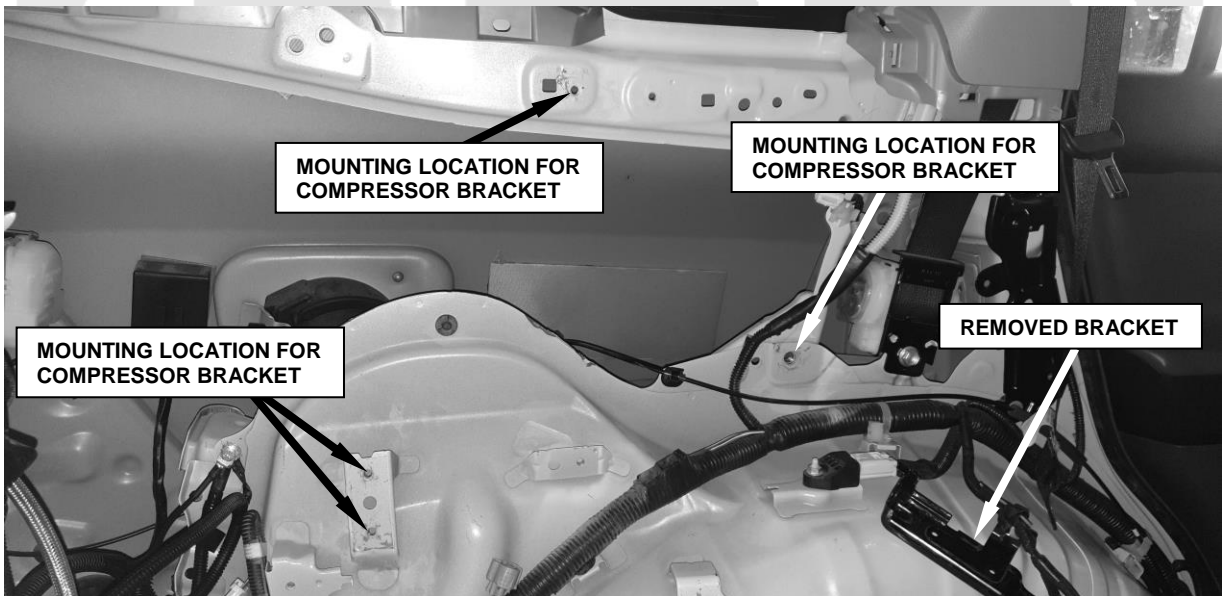
4 Installation of the Compressor Bracket Assembly

4.1 Installation of Compressor Bracket Assembly

- Remove bracket as shown below using 14mm socket.

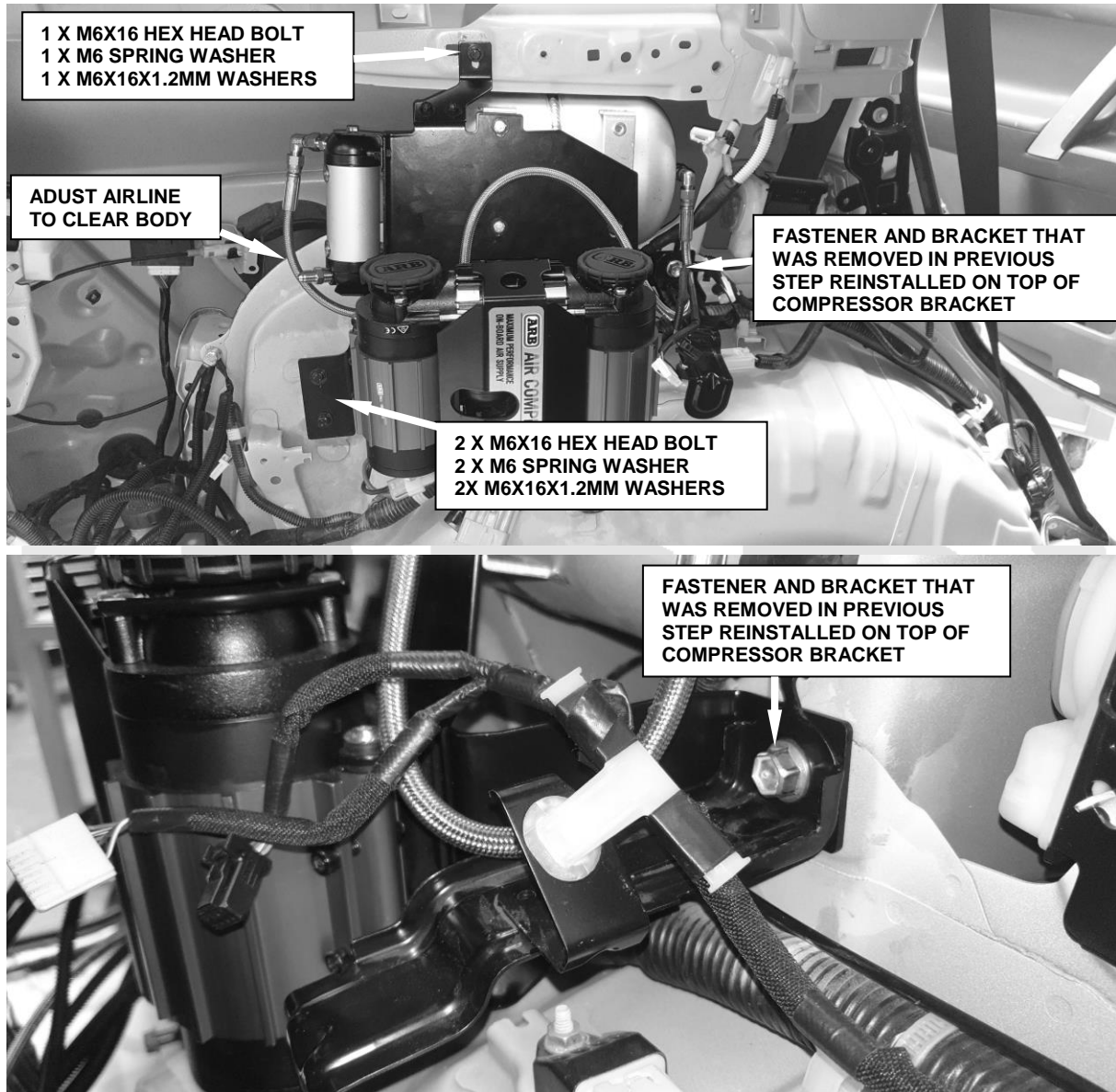


- Retain fastener and set bracket aside. Image below shows the 4 attachment points for compressor bracket



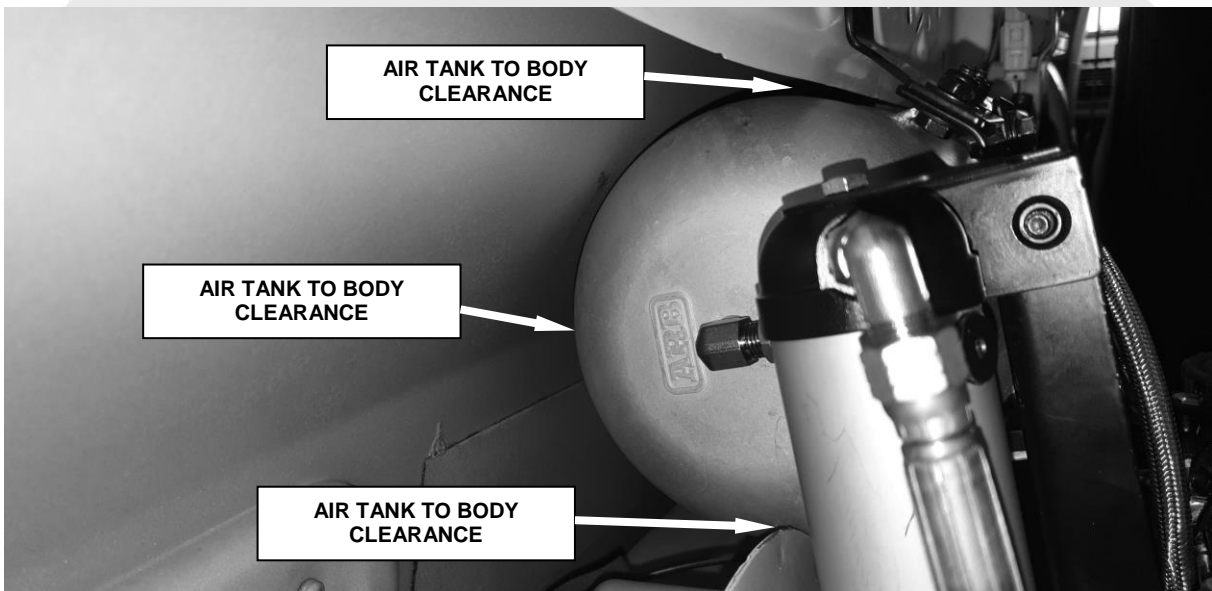
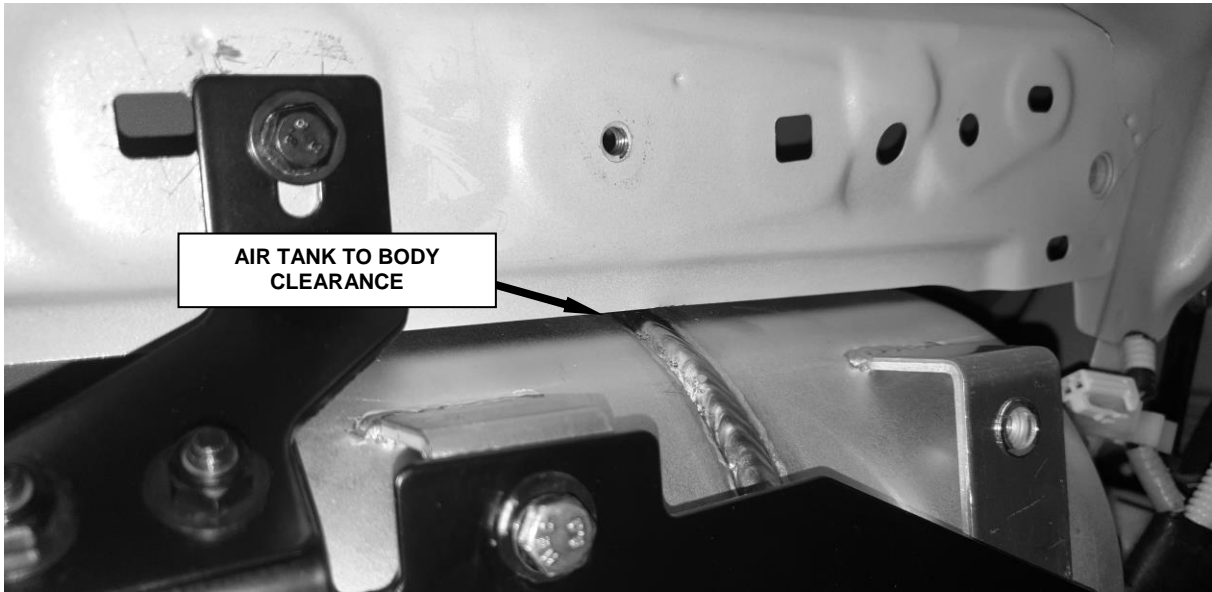
4 Installation of the Compressor Bracket Assembly

- Position the compressor bracket assembly as shown below
- Fix compressor bracket assembly in place using the fasteners listed below.
- Do not fully tighten fasteners at this stage
- Adjust airline position so there is clearance to body and tighten fittings using 14mm spanner and 12mm spanner to retain elbow

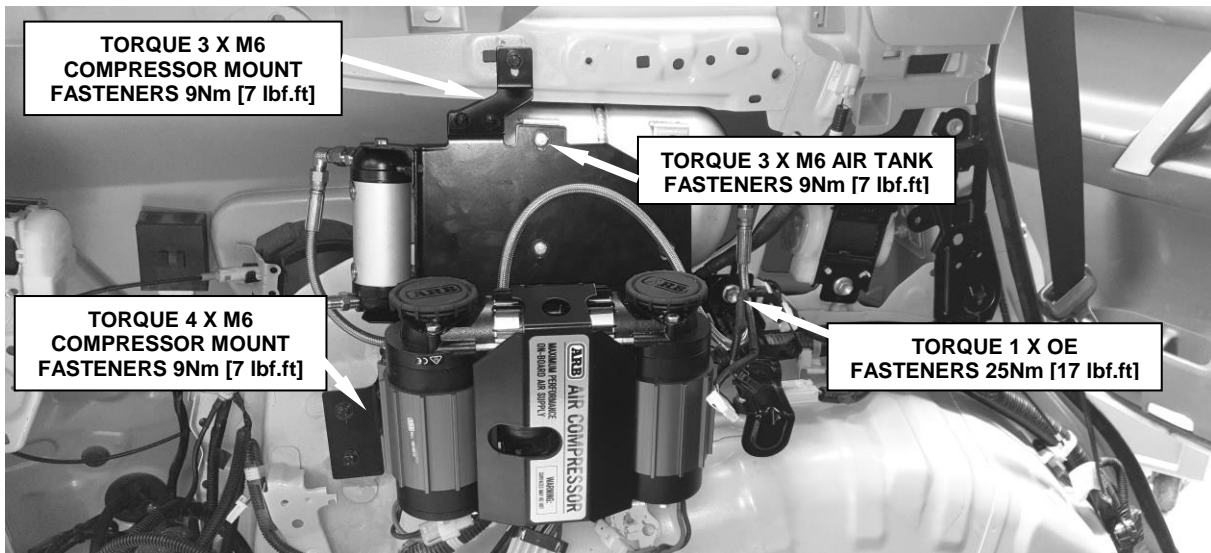


4 Installation of the Compressor Bracket Assembly

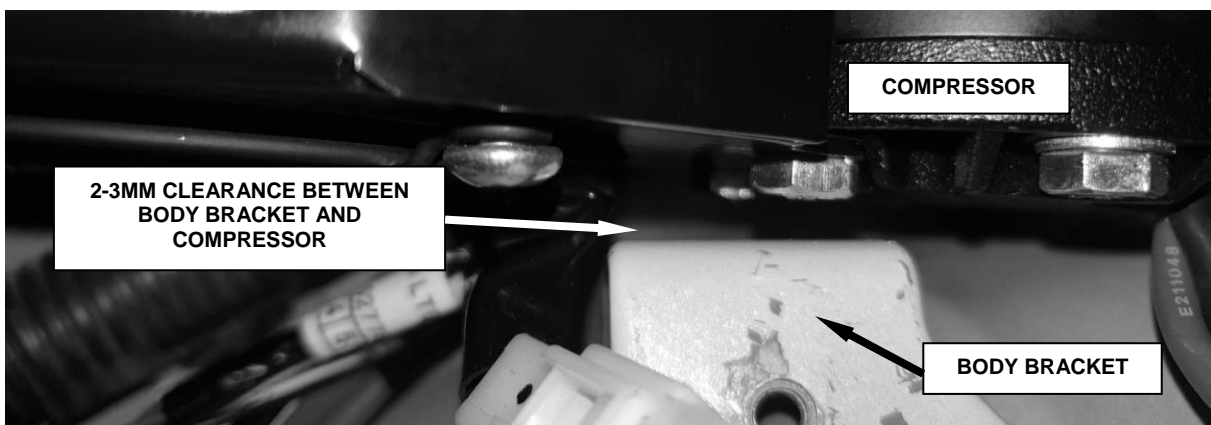
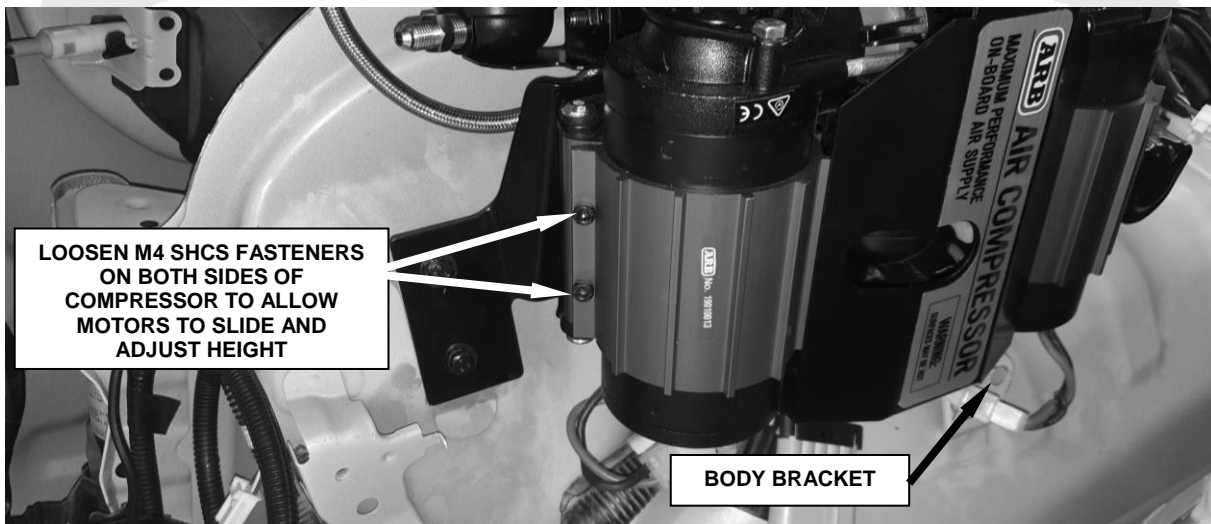
- Adjust air tank position to ensure there is clearance to vehicle panels
- When clearance is achieved around air tank torque M6 fasteners to 9Nm [7 lbf.ft] and torque OE fastener to 25Nm [18 lbf.ft]



4 Installation of the Compressor Bracket Assembly



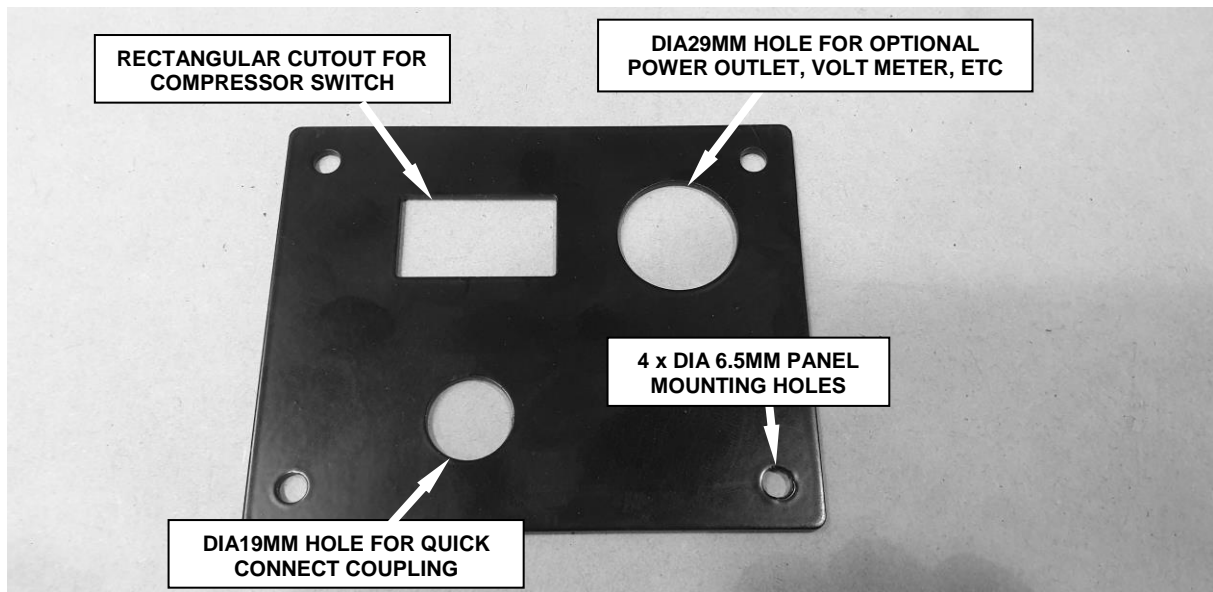
- Using a 4mm allen key loosen the 4 X M4 SHCS (This allows to compressor assembly to slide in housing)
- Adjust compressor height so there is 2-3mm clearance between compressor and body bracket.
- Once clearance is achieved tighten the 4XM4 SHCS to 3Nm [2.2 lbf.ft]



5 Installation of Switch Panel to Interior Trim

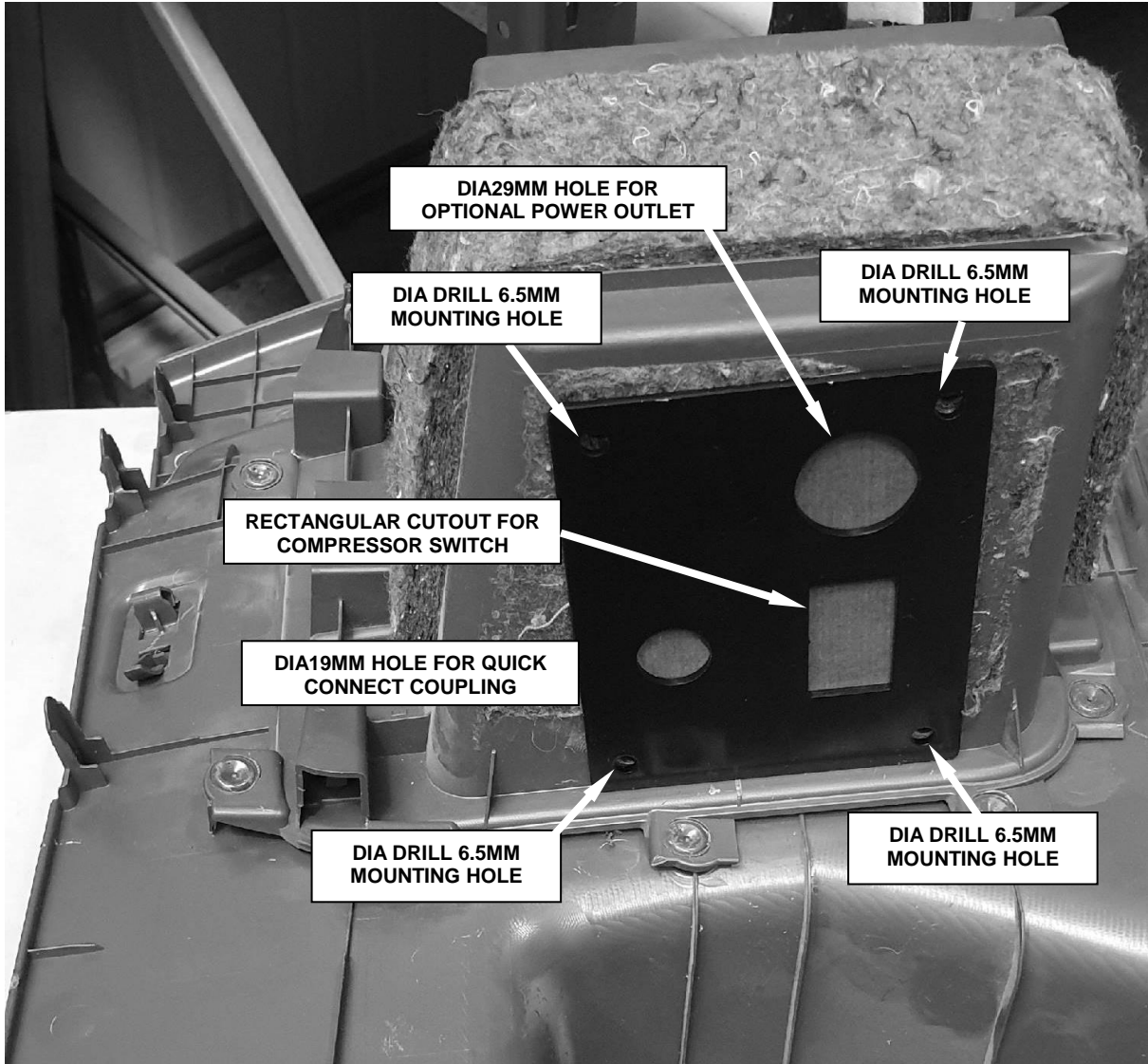
5.1 Installation of Switch Panel to Interior Trim

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



5 Installation of Switch Panel to Interior Trim

- Remove sound insulation material off the outside face of pocket as shown below.
- Position switch panel in the center of the face as shown.
- Drill the 4 mounting holes using a Dia 6.5 mm drill.
- Mark out and cut holes required for panel combination being used
- Deburr holes in plastic after cutting



5 Installation of Switch Panel to Interior Trim

- Mount fittings to switch plate

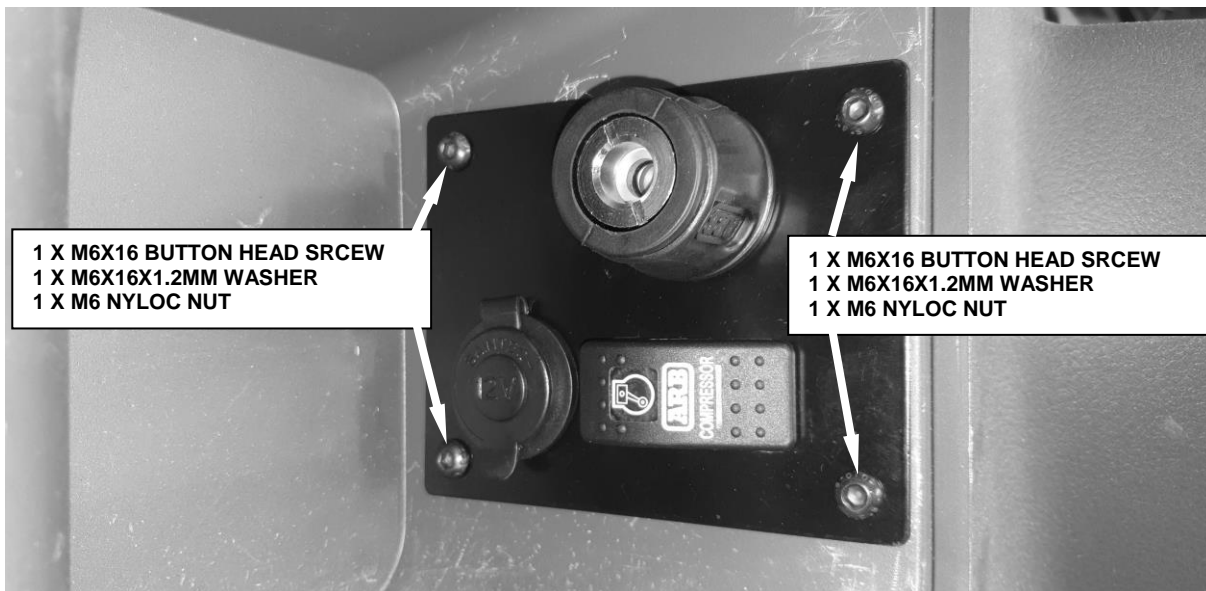


- Insert assembled switch plate to the inside of the pocket as shown.
- Tighten fitting using 14mm spanner.

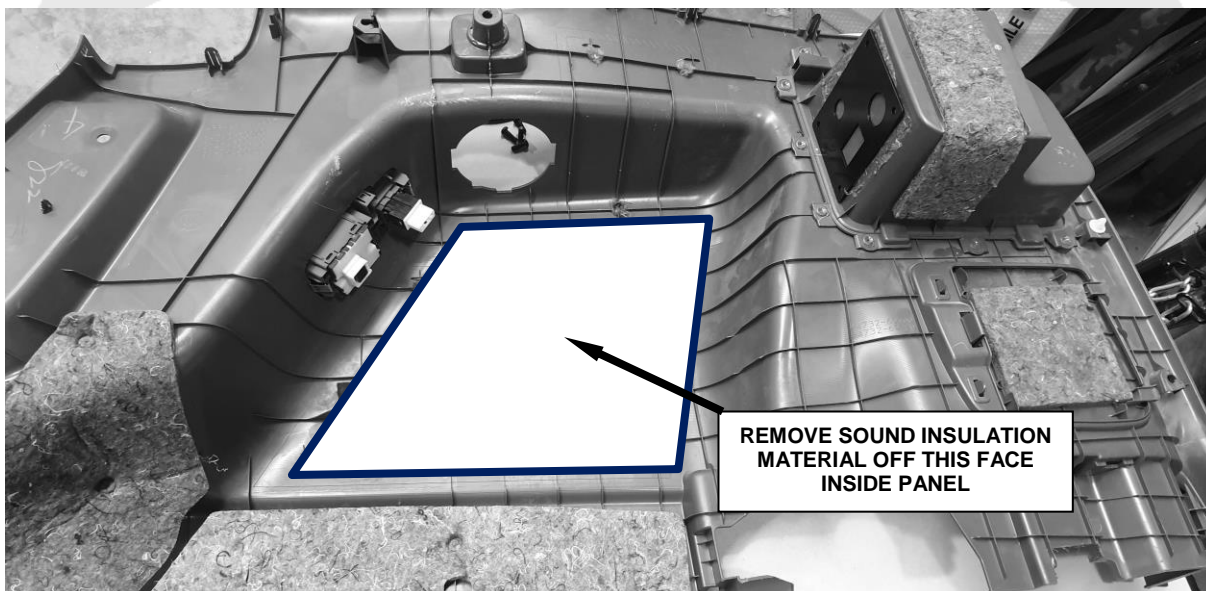


5 Installation of Switch Panel to Interior Trim

- Secure switch plate to trim panel using 4X M6X16 Button Head Screws, 4X M6X16X1.2 washer and M6 Nyloc Nut.



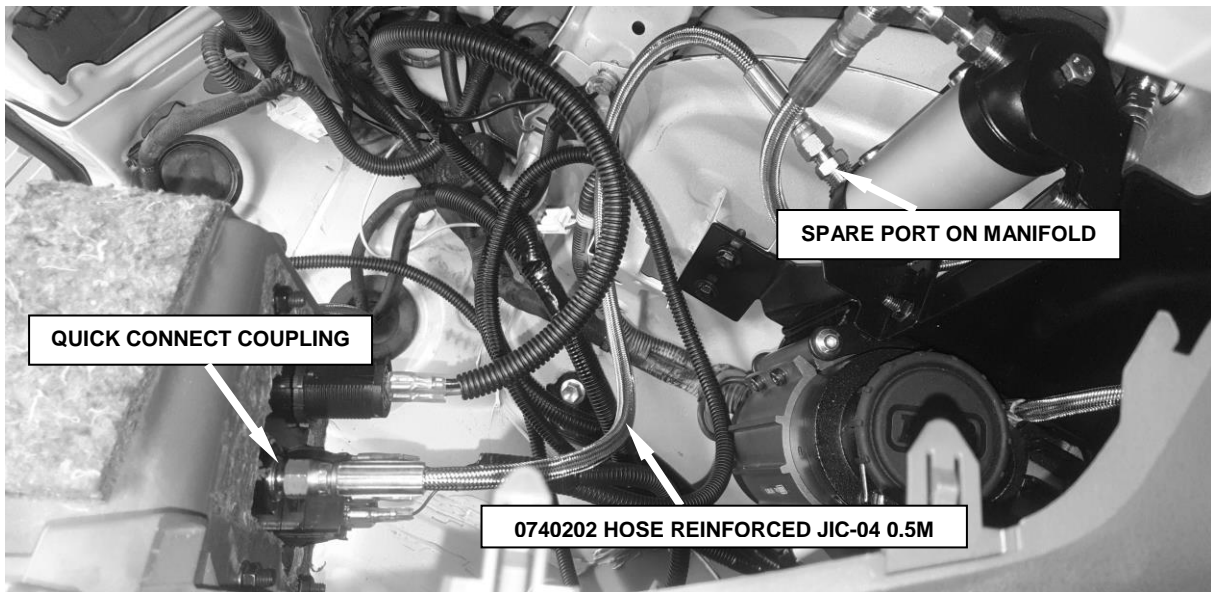
- Remove sound insulation material off the highlighted area of the rear panel.



6 Completing Installation

6.1 Connecting Hoses

- Connect a (0740202 hose reinforced JIC-04 0.5M) 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 trim panel and tighten fittings using 14mm spanner.



6.2 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

6.3 Secure wiring

- Using cable ties supplied secure OE wiring that was removed in step 1.5 as indicated below.
- Secure compressor to ensure that wiring cannot be damaged when jack is removed

Note: Lower section of compressor bracket has slots cut into it to allow for wiring cable to be attached.

6.4 Panel Fitment

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

6 Completing Installation

6.5 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 just to ensure that you haven't missed any of the vital steps.

- The air system has been leak tested.
- The air filter position will not be exposed to moisture, dust or dirt.
- 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 No: _____

POINT OF SALE (NAME/LOCATION): _____

DATE OF PURCHASE: _____

INSTALLATION PERFORMED BY: _____

DATE OF INSTALLATION: _____

VEHICLE MAKE: _____

VEHICLE MODEL: _____

VEHICLE YEAR OF MANUFACTURE: _____

