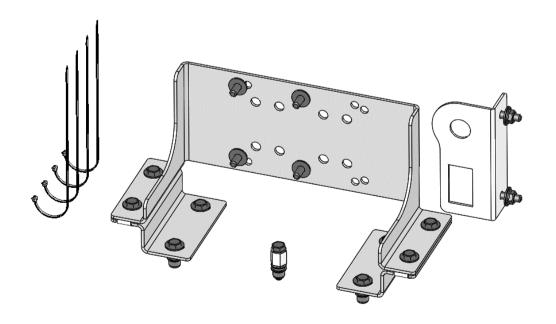


# FORD RANGER DUAL CAB SINGLE COMPRESSOR BRACKET (SUITS PX, PX2, PX3 & USA 190N MODELS)

# INSTALLATION GUIDE

3540320



No liability is assumed for damages resulting in the use of the information contained herein. ARB Air Locker Air Operated Locking Differentials, ARB Air Locker Air Activation System and Air Locker are trademarks of ARB Corporation Limited.

Other product names used herein are for identification purposes only and may be trademarks of their respective owners.

#### **ARB 4x4 ACCESSORIES**

**Corporate Head Office** 

42-44 Garden St Kilsyth, Victoria AUSTRALIA 3137 Tel: +61 (3) 9761 6622 Fax: +61 (3) 9761 6807

Australian enquiries North and South American enquiries Other international enquiries sales@arb.com.au sales@arbusa.com exports@arb.com.au

www.arb.com.au

# **Table of Contents**

1	Introduction	4
1.1	Pre-Installation Preparation	4
1.2	Description	4
1.3	Kit Contents	4
1.4	Tool-Kit Recommendations	
1.	.4.1 Tools	5
	.4.2 Supplies	
2 2.1	Vehicle Preparation Trim Removal	
2.2	Switch & Chuck Bracket Install	7
2.3	Bracket Kit Preparation	9
3 3.1	Bracket Kit Install Nutsert Install	<b>10</b>
3.2	Bracket Feet Install	
4	Compressor Install	13
4.1	Orientation of compressor for best fit	
4.2	Mounting compressor to bracket	
4.3	Plumbing up compressor for use with air chuck	
4.4	Connecting the Electrical System	
4.5	Post-Installation Check List	16



#### 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 3540320 Ford Ranger Dual Cab Compressor Bracket kit enables the installation of a CKSA or CKMA with optional Air Locker Solenoids, Quick Connect Coupling, Switch and ARB LINX PRV behind the rear seat of the vehicle.

#### 1.3 Kit Contents

- 1 x 3752899 BRACKET COMPRESSOR MOUNT
- 2 x 3752900 BRACKET COMPRESSOR MOUNT BASE
- ➤ 1 x 3752901 COMPRESSOR SWITCH MOUNT PLATE
- > 1 x 6177573 F/KIT BAG 3540320
  - 4x 180302 CABLE TIE
  - 16x 4584378 WASHER FLAT M6x16x1.2
  - 1x 5811042 NUT, MACHINED
  - 1x 6151046 WASHER FLAT 6MM
  - o 2x 6151173 NUT FLANGE M6
  - o 10x 6151213 BOLT HEX HEAD M6x1.0x20
  - 1x 6151228 BOLT HEX HEAD M6x1.0x30
  - o 4x 6151261 NUT U M6x1.0
  - o 6x 6151278 NUTSERT M6
  - o 4x 6151402 BOLT HEX HEAD M6x1.0x16



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; 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	
	Allen keys; 3mm (CKSA), 4mm (CKMA), for adjusting compressor body mount.	
	Screwdrivers; No.2 Phillips & Small flat	
	Torque Wrench 5 to 100Nm range	
	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.	
	Solder and/or automotive crimp fittings.	
	Silicone sealant (to seal area around Air Locker lines if installed)	



### 2.1 Trim Removal

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

NOTE: Sections 2.1 & 2.2 only required if fitting the switch & air chuck bracket to the B-pillar trim





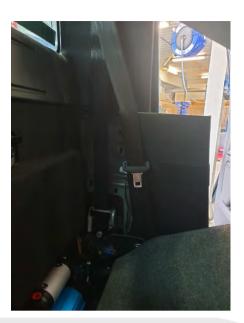
Remove scuff plate on LH rear door. It is held by plastic clips.



Pull back door seal on LH rear door jamb.







Unclip the B-pillar LH side lower plastic trim and carefully remove trim from vehicle.

## 2.2 Switch & Chuck Bracket Install



Lay the trim down and position the bracket as shown. Mark the mount holes with a permanent marker.

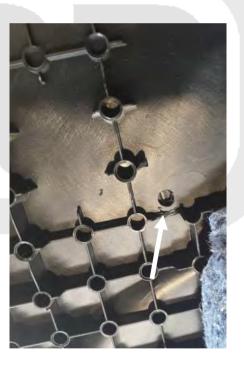






Drill out the mount holes to 7mm. Mount the bracket as shown using 2x M6x20 bolts, M6 flat washers & M6 flange nuts.





You may be required to cut a small section of plastic ribbing out to allow clearance for the washer and nut.







Reinstall the plastic trim. Bracket should be positioned as shown. Reinstall door jamb seal and scuff plate.

## 2.3 Bracket Kit Preparation



Fit the U-nuts to the 3752900 bracket mount feet as shown.



Loosely mount the feet to the compressor bracket using M6x20 bolts & M6 flat washers as shown. Please note the orientation of the feet.



## 3 Bracket Kit Install

#### 3.1 Nutsert Install

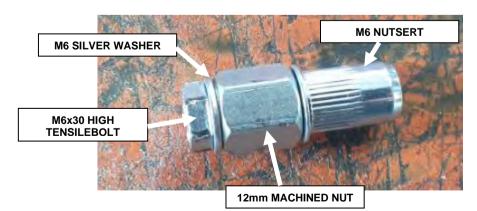


- Sit the bracket assembly in desired position and mark the centre of the slotted holes with a permanent marker. (PX3 shown).
- Drill out the floor with a 10mm drill bit. Drill through both the carpet and the steel floor.





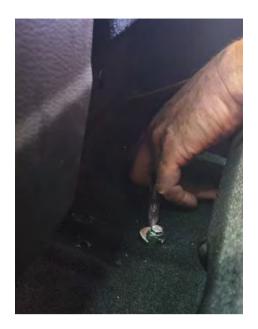
M6 Nutserts need to be fitted to the drilled holes. This can be done with a nutsert gun. Alternatively, the fitting kit comes with a small nutsert fitting device. Assemble the above components as shown. Use a small amount of lubricant between the bolt head and washer.





10

## 3 Bracket Kit Install





If using the supplied nutsert tool, hold the lower machined nut with a 12mm spanner. Tighten the M6 bolt with a 10mm socket & ratchet or using an impact driver as shown.

Tighten until you can feel a significant increase of resistance on the bolt. Remove the bolt from the nutsert and repeat for the other 3 nutserts.

**Note:** Ensure that the nutserts have gone through the carpet and not pinched the carpet. If need be, peel the carpet back to fit the nutserts.



Ensure nutserts have not pinched the carpet

☐ Vacuum up all debris caused by drilling operations.





Warning: Drilling operations can result in flying metal debris, safety glasses should be worn.



## 3 Bracket Kit Install

## 3.2 Bracket Feet Install



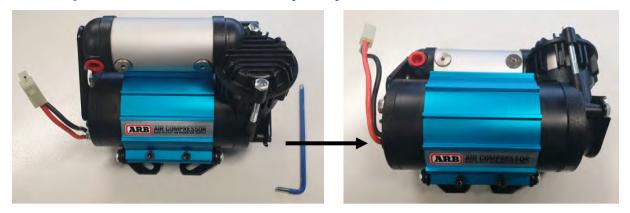


- The floor should now look like the above LH image. Remove the mounting feet from the bracket assembly used for marking hole positions. Install the mounting feet as shown in the RH image above, using M6x20 bolts & M6 washers.
- Torque fasteners to 9Nm [7 lbf.ft].

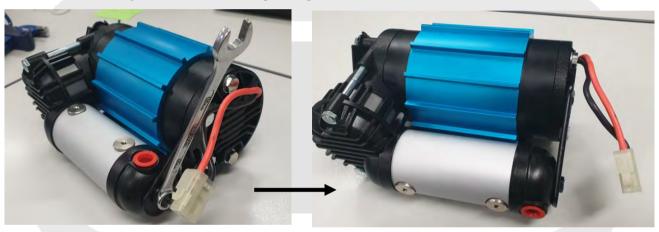


## 4.1.1 Orientation of compressor for best fit - CKMA

Loosen the two allen head screws and rotate the compressor 90° in the bracket as shown. Tighten the allen head screws to 8Nm [6 lbf.ft].

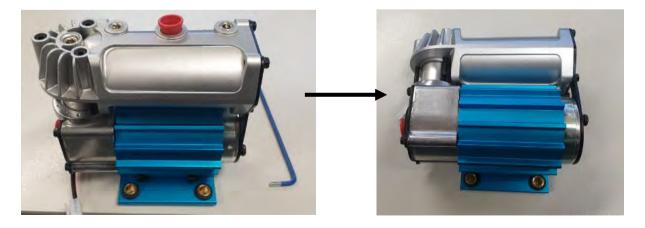


Loosen the bolt holding the manifold using a 10mm spanner. Rotate the manifold 90° as shown. Tighten the bolt to 9Nm [7 lbf.ft].



### 4.1.2 Orientation of compressor for best fit - CKSA

Loosen the two allen head screws and rotate the compressor 90° in the bracket as shown. Tighten the allen head screws to 8Nm [6 lbf.ft].





## 4.2 Mounting compressor to bracket

- Mount the compressor to the bracket using the M6x16 screws and washers supplied with the bracket fitting kit as shown. Manifold and manifold outlets should face upwards.
- Tighten the M6 screws to 9Nm [7 lbf.ft].





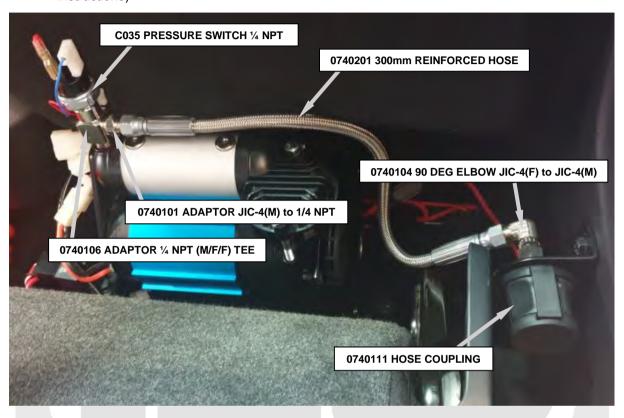
- Mount the compressor bracket (with compressor bolted to it) onto the bracket feet using 4x M6x20 screws and M6 flat washers
- Tighten the M6 screws to 9Nm [7 lbf.ft].





### 4.3 Plumbing up compressor for use with air chuck

- Below is an example of how to connect the compressor to the air chuck. Ensure that no part of the air hose or fittings are in contact with the interior panel behind, or that it touches the seat when closed.
- Use an appropriate thread sealant on required fittings (as listed in section 1.4.2 of the instructions)



#### 4.4 Connecting the Electrical System

- Refer to the installation guide that came with the compressor for detailed instructions for wiring of the compressor
- After completion of the wiring insert compressor switch into the switch mount bracket as
- At this stage of assembly test system for correct operation and check for any air leaks around connections



4.5 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:

