



CANX3-KIT INSTALL GUIDE

INCLUDES CALIFORNIA CARB VEHICLES
REV: B (12/2/2022)



© Kleinn Air Horns 2020, All rights reserved.

PO Box 91278 Tucson, AZ 85752

Phone: (520) 579-1531

Web: www.Kleinn.com



CANX3-KIT Install Guide

This digital PDF is interactive.

Please save ink and paper...



Open interactive manual using Adobe Reader[®]

on [PC, MAC, and all smart devices](#)



CANX3-KIT Install Guide

Table of Contents

- 1. LIST OF FIGURES5
- 2. How to Use this Manual6
 - 2.1. Interactive Manual using Adobe Reader6
 - 2.2. Illustration/Photo Details and Orientation.....6
- 3. Safety First6
- 4. Application Chart7
 - 4.1. 100% Direct Bolt-On Vehicle List7
 - 4.2. Excluded Vehicles7
 - 4.3. Aftermarket Product Compatibility7
- 5. Installation Overview.....8
 - 5.1. **QUICK INSTALL OUTLINE**.....8
 - 5.2. Kit Layout and Locations.....9
 - 5.3. Approximate Installation Time9
- 6. List of Tools and Supplies 10
 - 6.1. Standard Tool List (Required)..... 10
 - 6.2. Special Tool List (Recommended) 10
 - 6.3. Shop Consumables List (Recommended) 10
- 7. Parts List 11
 - 7.1. Before Starting, Review Parts List 11
 - 7.2. Pre-Packaged Electro-Mechanical Kit Items..... 11
 - 7.3. Air Fittings and Related Items 12
 - 7.4. Electrical Small Components and Related Items..... 13
 - 7.5. Bolt-On Mounting Brackets & Special Hardware 14
 - 7.6. Hardware, Fasteners and Soft Parts 15
- 8. On-Vehicle Mechanical Assembly Steps..... 17
 - 8.1. Plan Location of Quick Connect Air Coupler (1302) 17
 - 8.2. Remove Passenger Side Rear Fender 17
 - 8.3. Remove Driver Side Rear Fender..... 19
 - 8.4. Air Tank Brackets - Installation 19
 - 8.5. Air Tank Fittings - Bench Assembly..... 22
 - 8.6. Air Tank - Installation..... 23
 - 8.7. Bench Assemble Compressor with Bolts and X3-102..... 24



CANX3-KIT Install Guide

8.8.	Bench Assemble Compressor Bracket and Rubber Bushings	27
8.9.	Air Compressor Bracket - Installation.....	28
8.10.	Air Compressor - Installation	31
8.11.	Air Horn	33
8.12.	Install Remote Quick Connect Kit to Vehicle.....	39
9.	On-Vehicle Electrical Installation.....	40
9.1.	Relay and Fuse Diagram for System	40
9.2.	Illuminated Rocker Switch Electrical Hookup Guide	41
9.3.	Install Horn Button	42
9.4.	Disconnect Vehicle Battery(s).....	42
9.5.	Connect Wiring to Relay(s) and Fuse(s), then Attach to Vehicle.....	42
9.6.	Connect Air Horn Solenoid	43
9.7.	Pressure Switch	43
10.	Initial Testing of Kit.....	44
10.1.	Reconnect Vehicle Battery(s)	44
10.2.	Test Air Compressor	44
10.3.	Test Train Horns.....	44
10.4.	Test Quick Connect Coupler	44
10.5.	Re-install Rear Fenders.....	44
11.	General Operation of Kit	45
11.1.	Compressor Operation	45
12.	Routine Maintenance	45
13.	Warranty Information	45



CANX3-KIT Install Guide

1. LIST OF FIGURES

Figure 1 – Top View Showing Kit Layout (2018 X3 2 Door Shown)	9
Figure 2 – Passenger Rear Fender Removal (fasteners on top of fender)	17
Figure 3 – Passenger Rear Fender Removal (fasteners behind door and fender)	17
Figure 4 – Passenger Rear Fender Removal (below taillight).....	18
Figure 5 – Passenger Rear Fender Removal (fender resting on tire); Air Tank shown installed	18
Figure 6 – Air Tank Bracket Mounting Locations (side view)	19
Figure 7 – Air Tank Bracket Mounting Locations (top view)	19
Figure 8 – Front Air Tank Bracket Stops at Corner Gusset (shown with air tank).....	20
Figure 9 – Installing Front Air Tank Brackets, Exploded View	20
Figure 10 – Installing Rear Air Tank Bracket, Exploded View	21
Figure 11 – Installing Rear Air Tank Bracket, Proper Bolt Orientation (partial bracket shown)	21
Figure 12 – Air Tank Fittings Installed on Air Tank, Exploded View	22
Figure 13 – Air Tank Fittings Orientation (from above vehicle)	22
Figure 14 – Installing Air Tank onto Brackets, Exploded View	23
Figure 15 – Air Compressor Leader Hose Fitting Install	24
Figure 16 - Air Compressor with Bolts and X3-102 (Shown with Air Filter and no Leader Hose)	25
Figure 17- H13 Cut & Installed	26
Figure 18- Leader Hose Routing	26
Figure 19 - Air Compressor Bracket with Rubber Grommets Installed	27
Figure 20 – Air Compressor Bracket Mounting Locations (side view w/o fender – CARB Version shown)	28
Figure 21 – Air Compressor Bracket Mounting Locations (top view).....	28
Figure 22 – Installing Air Compressor Bracket, Exploded View.....	29
Figure 23 – Air Compressor Temporary Install (Shown installed on CARB Vehicle)	30
Figure 24 – Air Compressor Clearance Adjustment (Shown installed on CARB Vehicle)	30
Figure 25 – Air Compressor Bracket Final Install (Shown installed on CARB Vehicle)	31
Figure 26 – Installing Air Compressor onto Bracket; Exploded View (shown without Leader Hose)	32
Figure 27- Final Rounting of Leader Hose	32
Figure 28 – Air Filter with Remote Tubing Shown Attached	33
Figure 29- Air Horn Separation.....	33
Figure 30 – Carriage Bolts temporarily taped in place on Horn Bracket.....	34
Figure 31 – X3-302 with Rubber U-Trim installed, exploded view.....	34
Figure 32 – Sway Bar Bolts to remove and Brake Line Bolt (looking from above).....	35
Figure 33 – Air Horn Bracket Installed.....	36
Figure 34- Trumpet Support Bracket Installation.....	36
Figure 35 – Installing Air Horns onto Horn Bracket.....	37
Figure 36- Final Tightening of Air Horn Brackets and Air Horn	38
Figure 37 – Final installation of 102 Air Horn (X3 Turbo R shown)	38
Figure 38 – Example of Air Coupler Mounted to Bumper	39
Figure 39 – Suggested Ignition Relay Diagram for Air Horn System	40
Figure 40 – Wiring Guide for Illuminated Rocker Switch	41
Figure 41- Center Console for Rocker Switch Install	42
Figure 42 – Relay and Fuse (Example Location) Behind Passenger Seat (2019 X3 Turbo RC Shown).....	42



CANX3-KIT Install Guide

2. How to Use this Manual

2.1. Interactive Manual using Adobe Reader

It is recommended to open this digital PDF using Adobe Reader[®] to take advantage of following key features:

- **Hyperlinks** ([blue underlined text](#)) allow access to additional content via internet; click/tap to activate
- Includes [Installation Figures](#) and “[Figure xx](#)”
- **Table of Contents** page allows easily navigating this manual; click/tap any section line to go to it
- **Bookmarks** allow quickly navigating to any section; click/tap
- **Zoom IN** on pictures by pressing “CTRL and +” at same time on PC, or pinch in on smart devices
- **Zoom OUT** on pictures by pressing “CTRL and -” at same time on PC, or pinch out on smart devices

2.2. Illustration/Photo Details and Orientation

This manual may use digitally created illustrations, and/or actual photos of example vehicle. These graphics may not include exact items found on your vehicle (i.e., electrical wiring, fuel lines, body panels, etc.). Illustrations typically will be missing details and are for clarity to show critical mounting locations and orientation on vehicle.



Throughout manual yellow arrows with text reading “FRONT”, may be present over illustrations and pictures. These arrows specify direction toward front of vehicle and provide clarity to how illustration is viewed.

End of Section

3. Safety First

Read manual thoroughly before starting installation of this kit. Verify you have all parts listed and that you clearly understand this installation procedure. Contact Kleinn technical support for any questions.

Installation of this kit requires **moderate mechanical aptitude**; seek professional help if you’re not competent using hand tools in tight uncomfortable spaces, and around possibly rusted and sharp vehicle parts.

Before starting, obtain proper tools required to perform installation correctly, adequate lighting, eye protection, hearing protection for operating train horns, and hand protection to guard against sharp edges and metal burrs, which may be present on kit parts and vehicle parts.

Throughout this manual the following words may be used; be aware of their meaning and application.

CAUTION: means damage could occur to vehicle, or kit parts during, or after installation

WARNING: means injury could occur to you or others, including damage to vehicle, or kit parts

DANGER: means serious injury or death could occur to you or others during installation

End of Section



CANX3-KIT Install Guide

4. Application Chart

4.1. 100% Direct Bolt-On Vehicle List

CANX3-OBA is a 100% direct bolt-on aftermarket product for Can-Am vehicles listed in below chart; every effort has been made to verify correct fitment on these vehicles in their factory, non-modified conditions.

MODEL YR	MODEL	DRIVE	ENGINE	BODY	TRIM
2017-2021	MAVERICK X3	ALL	ALL	ALL	ALL

NOTE: All vehicles listed may require drilling holes for ground wires and installing switches, based on preference of installed switch locations and wire grounding points.

4.2. Excluded Vehicles

4.2.1. N/A

4.3. Aftermarket Product Compatibility

4.3.1. This kit has been designed to be compatible with following products from leading manufacturers:

- Aftermarket cages that discard OE rearmost bolt-on chassis tubes (i.e., Rack down tubes)
- Aftermarket front shock tower braces and bulkheads (i.e., S3 PowerSports), which bolt ONLY in front of shocks, or below frame (i.e., cannot attach above sway bar bolts)

4.3.2. **This kit has NOT been designed** to be compatible with any of the following products:

- Exhaust systems or high-performance intake systems, including super/turbo chargers
- Suspension systems (i.e., larger shocks/springs, control arms, sway bar upgrades, etc.)
- Winches
- Oversized tires
- Oversize rear fenders
- Many other systems/parts no listed

NOTE: Review this manual in full before unpacking items and verify correct space and mounting locations exist with your aftermarket product(s). *To install this kit alongside your other aftermarket product(s), modification to included parts, your vehicle, or aftermarket product(s) may be required.*

End of Section



CANX3-KIT Install Guide

5. Installation Overview

5.1. QUICK INSTALL OUTLINE

For person(s) with experience installing Kleinn bolt-on kits, CANX3-OBA can be quickly installed following below:

1. Layout and organize all parts on bench
2. Select location for Quick Connect Air Coupler
3. Remove driver and passenger rear fenders
4. Install air tank brackets
5. Bench Assembly – Air Tank, Fittings & Tubing
6. Install Air Tank
7. Bench Assembly – Air Compressor Bracket
8. Bench Assembly – Air Compressor and Leader Hose Bracket
9. Install Air Compressor Bracket
10. Install Air Compressor
11. Connect air tubing and wirings
12. Horn Disassembly
13. Bench Assembly – Air Horn brackets
14. Install air horn brackets
15. Install Air horns
16. Install Quick Connect Coupler and route air tubing
17. On-Vehicle electrical installation
18. Test system and adjust, as needed
19. Re-install both rear fenders

5.2. Kit Layout and Locations

CANX3-OBA consists of following sub-systems, located on vehicle, as follows:

ITEM	DESCRIPTION	MOUNTING LOCATION	APPROX. INSTALL TIME
1	6350RC Air Compressor	Rear Frame, Driver Side <i>(behind fender and below Rack)</i>	1-2 Hours
2	1 Gal. Air Tank	Rear Frame, Passenger Side <i>(behind fender and below Rack)</i>	1-2 Hours
3	102 Series Dual Horn with Air Solenoid	Front Sway bar Mounts, <i>(directly behind front shocks)</i>	2-4 Hours

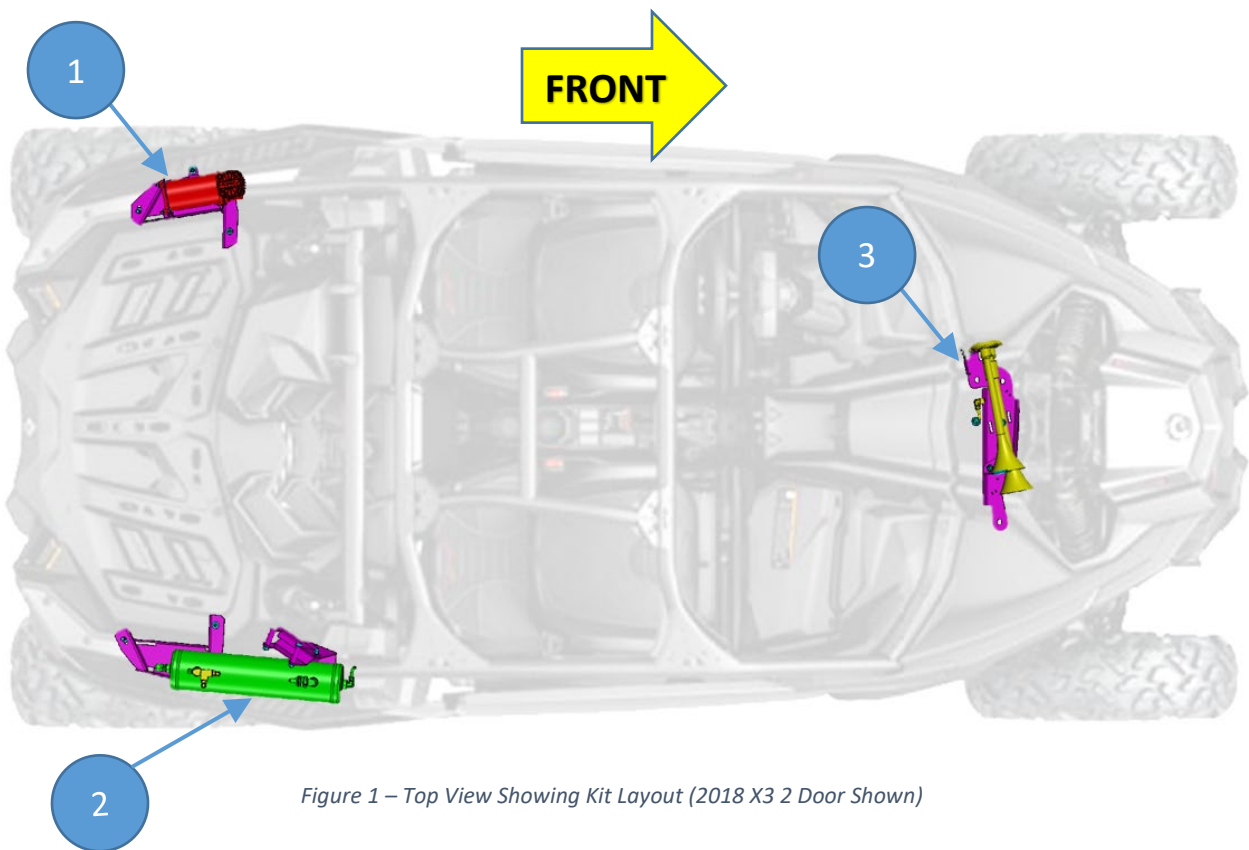


Figure 1 – Top View Showing Kit Layout (2018 X3 2 Door Shown)

5.3. Approximate Installation Time

CANX3-OBA is a multi-faceted product consisting of multiple mechanical, electrical, and pneumatic components.

For a typical home mechanic, auto enthusiast, or technician installing a Kleinn Bolt-On kit for first time, a professional installation job with setup and testing of final product, is estimated to take:

- **4-8 Hours**

End of Section



CANX3-KIT Install Guide

6. List of Tools and Supplies

6.1. Standard Tool List (Required)

- 6.1.1. Basic mechanic's 3/8" drive socket sets with extensions
 - Inch Size Sockets (1/4" – 1" Hex)
 - Metric Size Sockets (6mm – 20mm Hex)
- 6.1.2. Basic mechanic's combination wrenches (box/open-end)
 - Inch Size Wrenches (1/4" – 1" Hex)
 - Metric Size Wrenches (6mm – 20mm Hex)
- 6.1.3. Basic mechanic's screwdriver set (Philips, Flat Head)
- 6.1.4. Torx driver, or socket set (T15-T30)
- 6.1.5. Diagonal Cutter/Wire Cutter Pliers
- 6.1.6. Wire Strippers
- 6.1.7. Wire Terminal Crimpers
- 6.1.8. Slip-Joint Pliers
- 6.1.9. Utility Knife, or Utility Razor blade
- 6.1.10. Magnetic retrieval tool

6.2. Special Tool List (Recommended)

- 6.2.1. 10-100 ft.-lb. torque wrench
- 6.2.2. 20-150 in.-lb. torque wrench
- 6.2.3. Multi-Meter for 12V DC electrical systems, or equivalent
- 6.2.4. 12V DC Test Light, or equivalent
- 6.2.5. Trim Panel Tool, for removing wiring and body clips, when needed

6.3. Shop Consumables List (Recommended)

- 6.3.1. Quality Electrical tape
- 6.3.2. Di-electric grease for electrical connections
- 6.3.3. Heat Shrink tubing for electrical connections
- 6.3.4. Blue Loctite (i.e., Loctite PN 242), or equivalent
- 6.3.5. Sand Paper, or Wire Brushes for installing ground wires
- 6.3.6. Extra plastic zip ties > 6" long
- 6.3.7. Extra NPT sealant (i.e., Kleinn Air Horn Juice, Teflon tape, etc.)
- 6.3.8. Touch-up paint for frame/chassis
- 6.3.9. Typical cleanup supplies

End of Section



CANX3-KIT Install Guide

7. Parts List

7.1. Before Starting, Review Parts List

Unpackage and organize Kit across a large work area and verify all parts are included, as listed below. Contact Kleinn support if any questions arise.

- 7.1.1. Review pre-packaged Kit items (i.e., K1, K2, etc.)
- 7.1.2. Review Air Fittings and Tubing (i.e., F1, F2, etc.)
- 7.1.3. Review Wiring and Accessories (i.e., E1, E2, etc.)
- 7.1.4. Review Bolt-On Mounting Brackets (i.e., M1, M2, etc.)
- 7.1.5. Review Hardware/Fasteners (i.e., H1, H2, etc.)
- 7.1.6. Familiarize yourself with how parts assemble

7.2. Pre-Packaged Electro-Mechanical Kit Items

NOTE: Items in this section come in their own packages and may include additional items inside package

ITEM	QTY	PART NUMBER	DESCRIPTION	PICTURE
K1	1	6350RC	6350RC Air Compressor Kit, with included hardware, and remote air supply line	
K2	1	6230RT	Air Tank, 1 Gal., 6-Port	
K3	1	102-1	102 Series Air Horn Kit, with included solenoid/valve	
K4	1	1302	Remote Quick Connect Coupler Relocation Kit	
K5	1	INF-1	Tire Inflation Kit	



CANX3-KIT Install Guide






7.3. Air Fittings and Related Items

ITEM	QTY	PART NUMBER	DESCRIPTION	PICTURE
F1	1	2151 (view location on Air Tank)	1/4" NPT PRESSURE SWITCH	
F2	1	51414NPTL (view location on Air Tank)	1/4" NPT X 1/4" NPT FEMALE, 90 DEG. ELBOW	
F3	1	52835 (view location on Air Tank)	1/4" NPT DRAIN VALVE	
F4	1	52175 (view location on Air Tank)	1/4" NPT, 175 PSI SAFETY VALVE	
F5	2	51414L (view location on Air Tank)	1/4" NPT X 1/4" TUBE FITTING, 90 DEG. ELBOW	
F6	1	51414F	1/4" NPT X 1/4" TUBING FEMALE, STRAIGHT <i>(USED ON COMPRESSOR LEADER HOSE END)</i>	
F7	20 ft	25014	1/4" AIR TUBING <i>(USE 6 FT FOR COMPRESSOR & 14 FT FOR AIR HORN)</i>	
F8	2	JUICE	THREAD SEALANT FOR NPT FITTINGS	



CANX3-KIT Install Guide

7.4. Electrical Small Components and Related Items

ITEM	QTY	PART NUMBER	DESCRIPTION	PICTURE
E1	1	N/A	FULL WIRE KIT, WITH ELECTRICAL CONNECTORS AND ZIPTIES	
E2	20 ft	N/A	1/8" WIRE LOOM, CORRUGATED AND SPLIT	
E3	15 ft	N/A	1/4" WIRE LOOM, CORRUGATED AND SPLIT	
E4	1 ft	N/A	1" WIRE LOOM CORRUGATED AND SPLIT	
E5	1	321-W	HORN ROCKER SWITCH, WITH BACKLIT HORN LOGO	



CANX3-KIT Install Guide

7.5. Bolt-On Mounting Brackets & Special Hardware

ITEM	QTY	PART NUMBER	DESCRIPTION	PICTURE
M1	1	X3-101	COMPRESSOR BRACKET	
M2	1	X3-102	LEADER HOSE SUPPORT BRACKET	
M3	1	X3-201	TANK BRACKET, REAR MOUNT	
M4	1	X3-202	TANK BRACKET, FRONT-INNER HALF	
M5	1	X3-203	TANK BRACKET, FRONT-OUTER HALF	
M6	2	X3-204	SPACER	
M7	1	X3-301	HORN BRACKET	
M8	1	X3-302	HORN STABILIZER BRACKET	



CANX3-KIT Install Guide

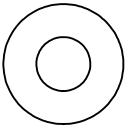
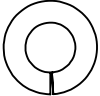
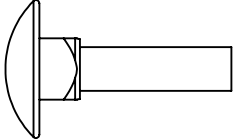
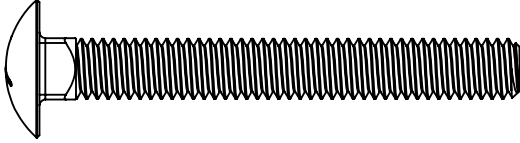
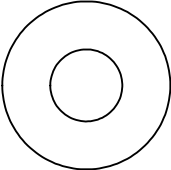
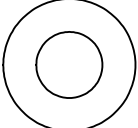
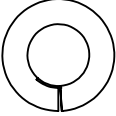
7.6. Hardware, Fasteners and Soft Parts

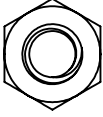
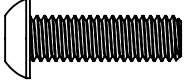
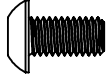
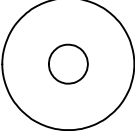
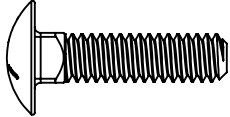

NOTE: A scale drawing is available at the end of this section & may be printed at 100% size to aid in identification of hardware.

ITEM	QTY.	SIZE	DESCRIPTION	PICTURE
H1	10	1/4" ID X 0.63" OD	FLAT WASHER, SAE, ZINC-PLATED	
H2	4	1/4"	LOCK WASHER, SPLIT, ZINC-PLATED	
H3	9	5/16"-18 X 1.00" LONG	SQUARE NECK BOLT, GRADE 2, ZINC-PLATED	
H4	2	5/16"-18 X 2.50" LONG	SQUARE NECK BOLT, GRADE 2, ZINC-PLATED	
H5	4	5/16" ID X 0.88" OD	FLAT WASHER, USS, ZINC-PLATED	
H6	7	5/16" ID X 0.69" OD	FLAT WASHER, SAE, ZINC-PLATED	
H7	11	5/16"	LOCK WASHER, SPLIT, ZINC-PLATED	
H8	11	5/16"-18	HEX NUT, GRADE 2, ZINC-PLATED	
H9	6	M6 X 1 X 20MM LONG	BUTTON HEAD TORX SCREW, BLACK-OXIDE	

H10	2	M6 X 1 X 18MM LONG	COUPLING NUT, CLASS 8, ZINC-PLATED	
H11	2	M6 X 1MM	NO-SLIP, CLIP-ON BARREL NUT	
H12	2	M5 X 0.8 X 10MM LONG	BUTTON HEAD CAP SCREW, BLACK-OXIDE	
H13	2	1 1/16" OD X 1/2" ID X 3/8" WIDTH	RUBBER GROMMET	
H14	8	#10 ID X .69" OD	FLAT WASHER, FENDER, ZINC-PLATED	
H15	2	1/4"-20 X 1"	SQUARE NECK BOLT, GRADE 2, ZINC-PLATED	
H16	2	1/4"-20	HEX NUT, GRADE 2, ZINC-PLATED	
H17	1	12"	RUBBER TRIM	

End of Section

ITEM #	QTY	SCALE IMAGE
H1	8	
H2	2	
H3	7	
H4	2	
H5	4	
H6	5	
H7	9	

ITEM #	QTY	SCALE IMAGE
H8	9	
H9	6	
H12	2	
H14	8	
H15	2	
H16	2	

NOTE:

SCALE IMAGES OF PREPACKAGED HARDWARE INCLUDED WITH COMPRESSOR ARE NOT ILLUSTRATED ON THIS SHEET.

SCALE IMAGES OF UNIQUE & EASILY IDENTIFIABLE HARDWARE ARE NOT INCLUDED ON THIS SHEET

THIS DOCUMENT IS DESIGNED TO BE VIEWED/PRINTED AND 100% OR 1:1 SCALE. IF PRINTING THIS PAGE, PRINT USING "ACTUAL SIZE" OR 100% SCALE.

REVISION	REVISION DATE
A	12/1/2022



PRODUCT	DWG NO.
CANX3-KIT	SCALE_H
SCALE: 1:1	SHEET SIZE A
	SHEET 1 OF 1

8. On-Vehicle Mechanical Assembly Steps

8.1. Plan Location of Quick Connect Air Coupler (1302)

- 8.1.1. Review how kit installs and decide on Quick Connect Coupler location. This facilitates later routing of the air tubing to the components.

NOTE: You may choose to directly fasten Quick Connect Coupler to the compressor or tank brackets. Be advised, **modification of brackets in any way, voids their warranty.**

8.2. Remove Passenger Side Rear Fender

- 8.2.1. Remove seven (7) T30 screws from top of fender and corner trim, as shown circled in below figure.
- 8.2.2. After removing screws, remove five (5) accompanying body clips on top of rear fender and two (2) on corner trim.

CAUTION: Use care removing body clips and corner trim; corner trim has a hidden clip on the backside. All items removed will be re-used later.



Figure 2 – Passenger Rear Fender Removal (fasteners on top of fender)

- 8.2.3. Remove three (3) additional T30 screws; two (2) located behind passenger door and one behind panel in wheel-well area as shown below. Un-clip wire loom from body panel for ease of moving fender.

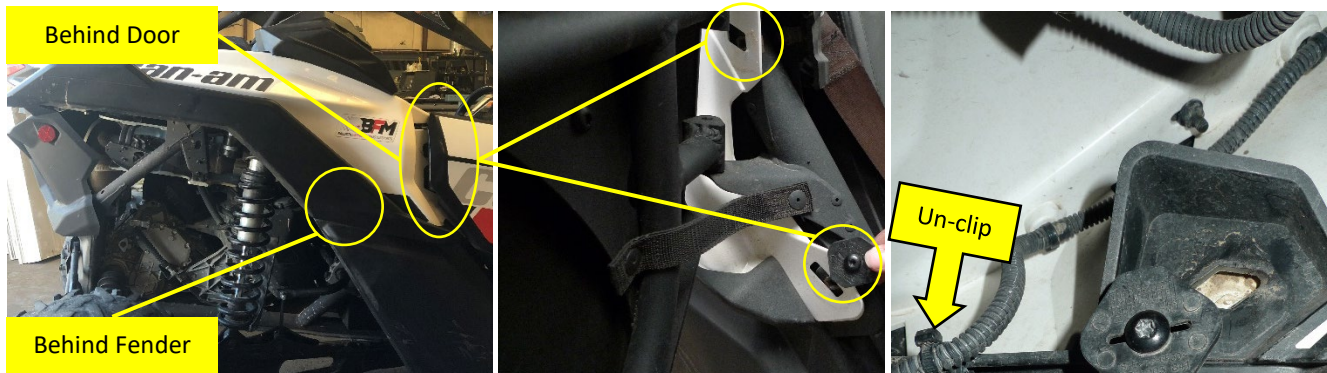


Figure 3 – Passenger Rear Fender Removal (fasteners behind door and fender)

8.2.4. Remove single T15 screw holding rear of fender near inside of brake light, as shown below.



Figure 4 – Passenger Rear Fender Removal (below taillight)

8.2.5. Pull fender outwards from body and rest on tire to reduce stress on brake light wiring, as shown below.

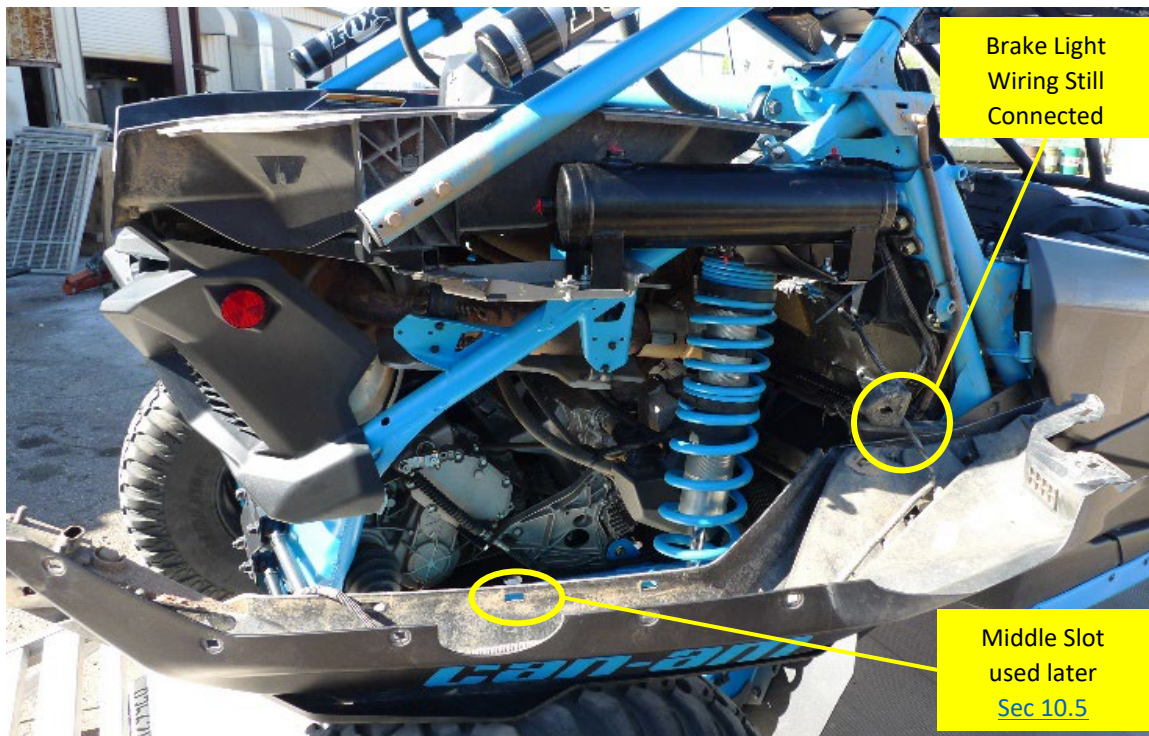


Figure 5 – Passenger Rear Fender Removal (fender resting on tire); Air Tank shown installed

8.3. Remove Driver Side Rear Fender

8.3.1. Repeat previous steps for Passenger Fender removal.

8.4. Air Tank Brackets - Installation

8.4.1. Gather Brackets X3-201, X3-202, X3-203 and X3-204 (2)

8.4.2. On passenger side of vehicle, remove two (2) bolts holding Rack; as shown below. Do not discard large bolt, as it will be re-used. Smaller bolt (i.e., front bolt) will be replaced.

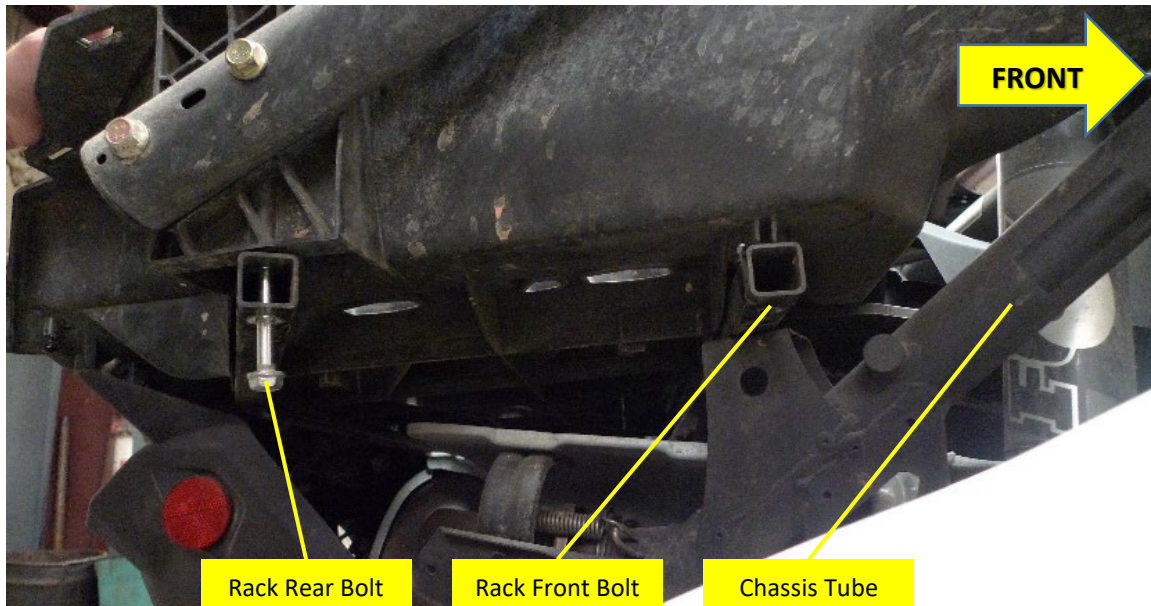


Figure 6 – Air Tank Bracket Mounting Locations (side view)

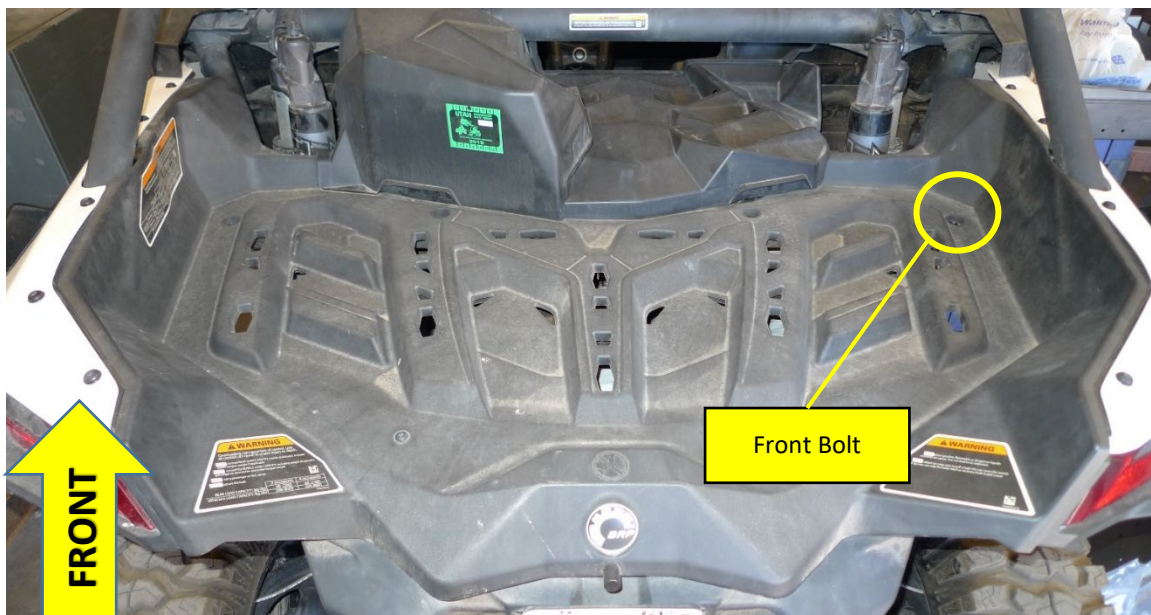


Figure 7 – Air Tank Bracket Mounting Locations (top view)

8.4.3. Install Air Tank Bracket (X3-202, 203 & 204) on chassis tube, using [hardware](#) #H3, H4, H6, H7 & H8, as shown below. Hand-tighten hardware only, so Bracket can still be rotated and moved along tube.

NOTE: Ensure forward edge of clamp is butted against weld bead on chassis, which increases clearance between back of X3-203 and springs. There should be a minimum ¼" clearance to coil spring.

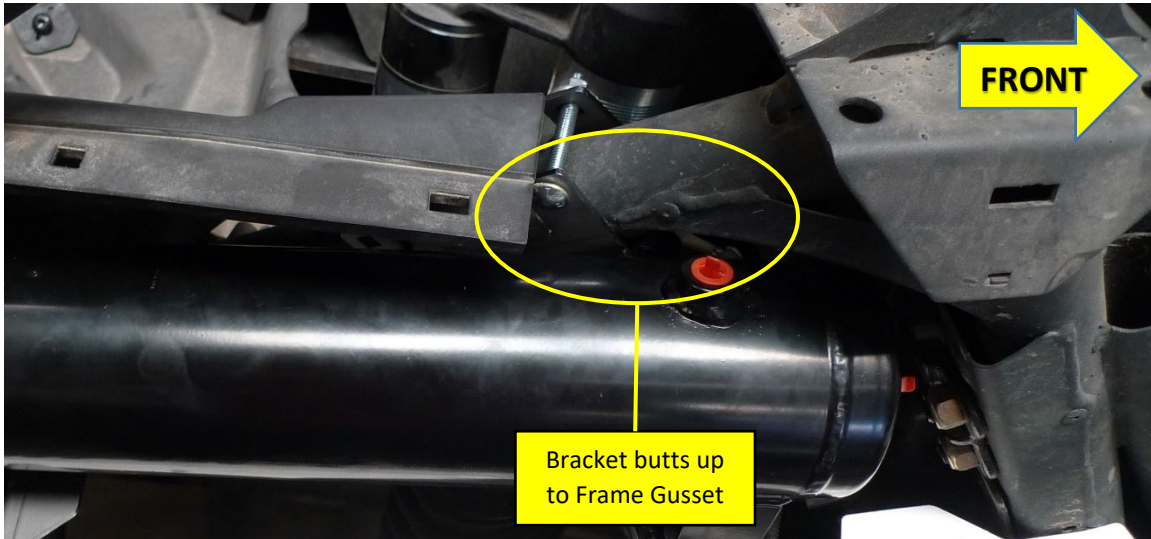


Figure 8 – Front Air Tank Bracket Stops at Corner Gusset (shown with air tank)

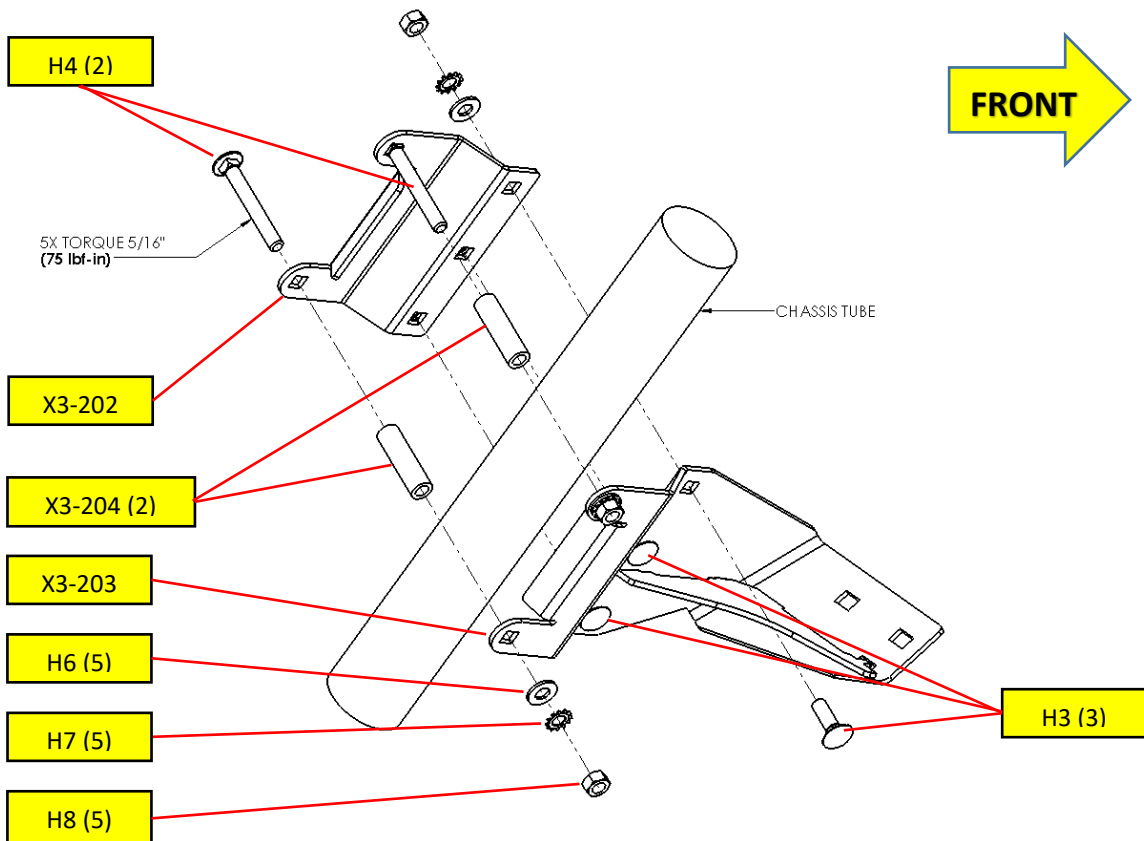


Figure 9 – Installing Front Air Tank Brackets, Exploded View

8.4.4. Install bracket X3-201 onto rack support tubes, using [hardware](#) #H9, H10, H11, H1 & H2, as shown below. Hand-tighten hardware only, so bracket can still be adjusted for the air tank, as needed.

NOTE: first re-install large rear OE bolt to hold Bracket in place, then use a magnetic tool to hold Coupling Nut and Washer together and insert them into Support Tube.

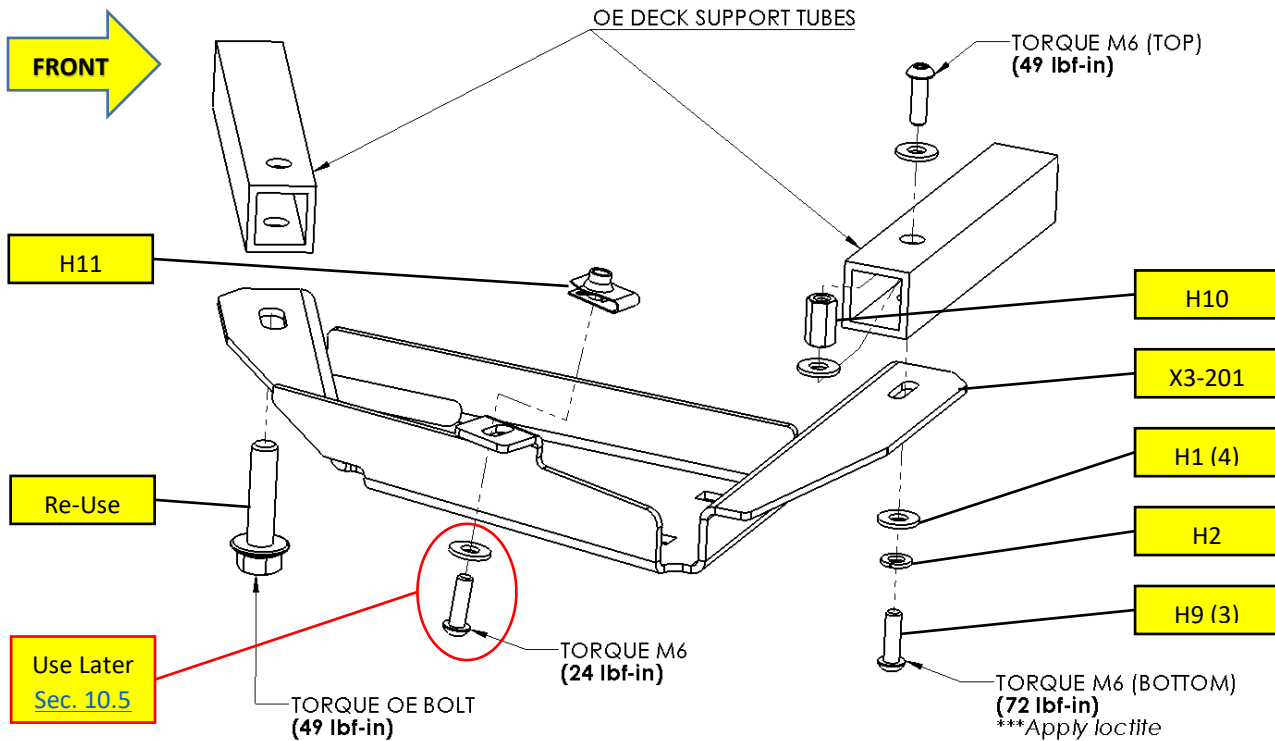


Figure 10 – Installing Rear Air Tank Bracket, Exploded View

8.4.5. Ensure Coupling Nut and Washer are correctly installed inside Tube, as shown below.

NOTE: To hold Coupling Nut while tightening screw, use a 10mm open end wrench

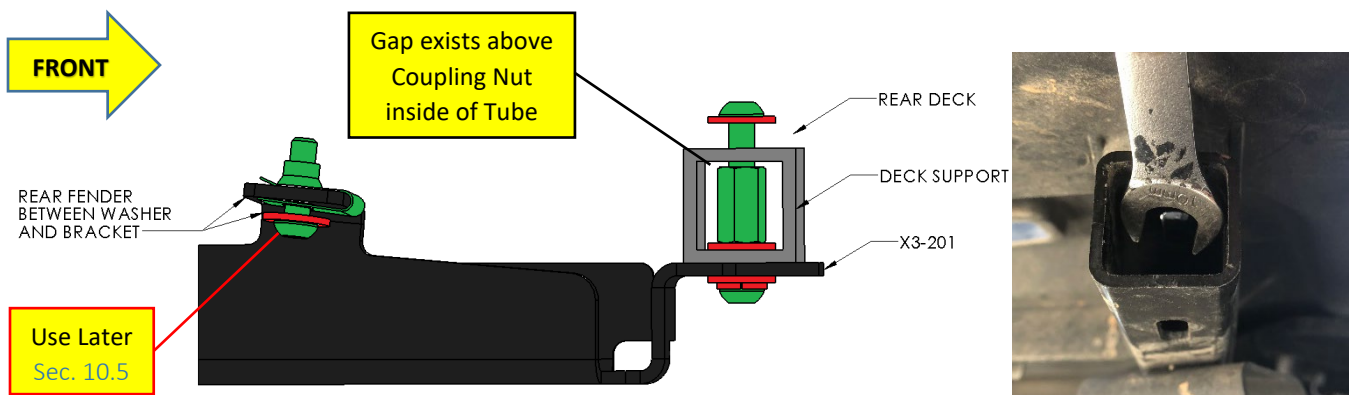


Figure 11 – Installing Rear Air Tank Bracket, Proper Bolt Orientation (partial bracket shown)

8.5. Air Tank Fittings - Bench Assembly

- 8.5.1. Gather all necessary Air Fittings and Air Tank; ensure all threads on fittings and inside ports are clean.
- 8.5.2. Apply two drops of [Juice](#) to each male pipe thread.
- 8.5.3. Hand-tighten each fitting, then further tighten 1/4-1/2 turn using proper sized box-end wrench; adjust as necessary to match fitting orientation shown in figure below.
- 8.5.4. Attach Air Fittings to Air Tank, per below illustration. The fittings from the 1302 kit & the F5 noted below may be oriented different from illustration based on the location chosen for mounting the gauge or quick connect.

[Click Here to View Fittings List](#)

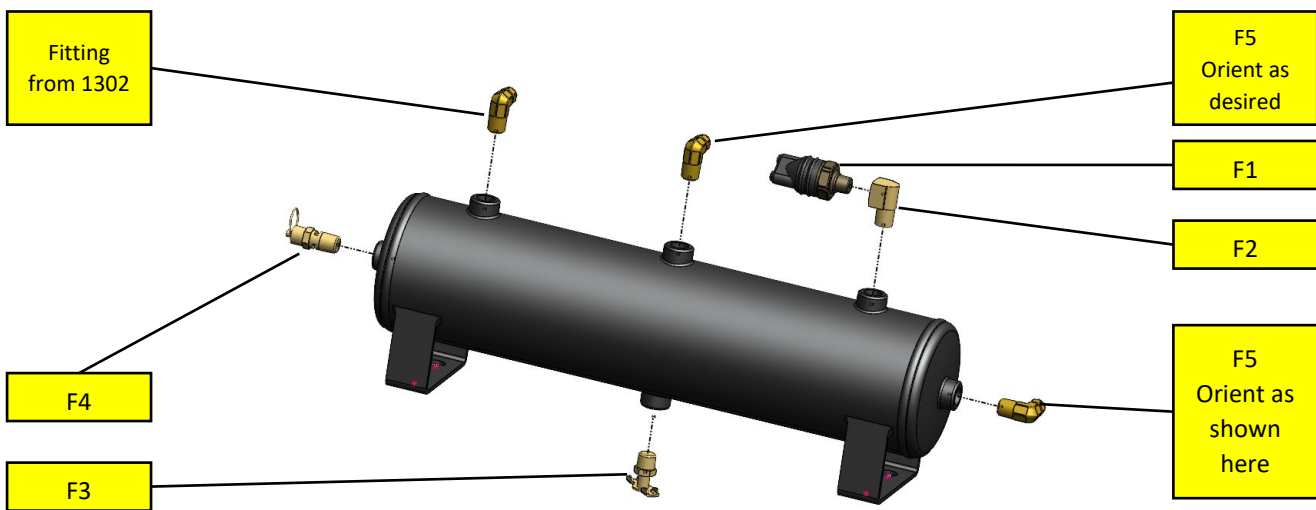


Figure 12 – Air Tank Fittings Installed on Air Tank, Exploded View

- 8.5.5. Connect 6 FT. of supplied 1/4" Air Tubing to front Air Fitting, as shown below. Connections to all Kit components are also listed.

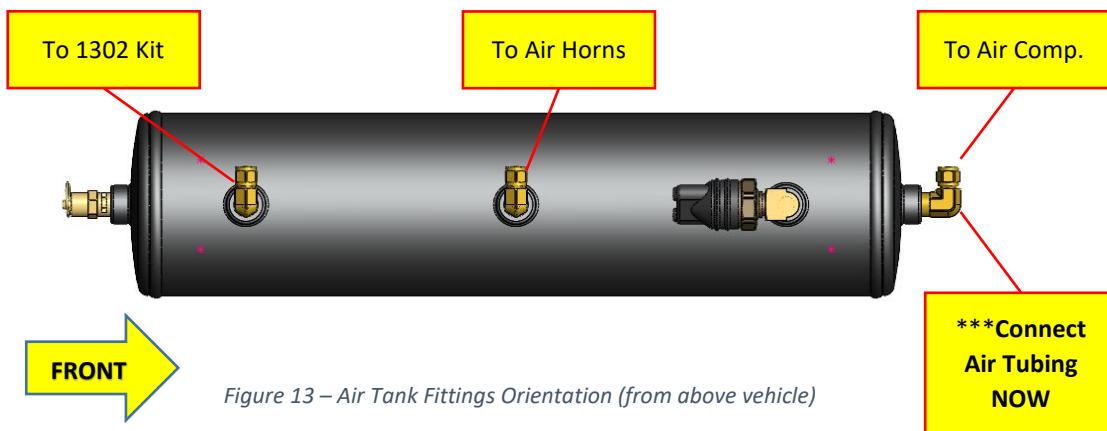


Figure 13 – Air Tank Fittings Orientation (from above vehicle)

8.6. Air Tank - Installation

- 8.6.1. Before starting, ensure 6 FT. of supplied ¼" Air Tubing is connected to Air Tank front port, to allow easily routing across rear firewall/chassis and connecting to Air Compressor.
- 8.6.2. Place the air tank onto brackets to determine if the front bracket needs adjustment (i.e., made level); make any adjustments necessary & remove the air tank. **Final torque front bracket**, per figure 10 above.
- 8.6.3. Install the air tank onto the brackets, using [hardware](#) #H3, H5, H7 & H8, as shown below.

NOTE: Position the air tank and brackets, as necessary, to maintain a minimum ¼" clearance between suspension spring and bracket. It is ok if the air tank contacts the inner fender, or back of brackets.

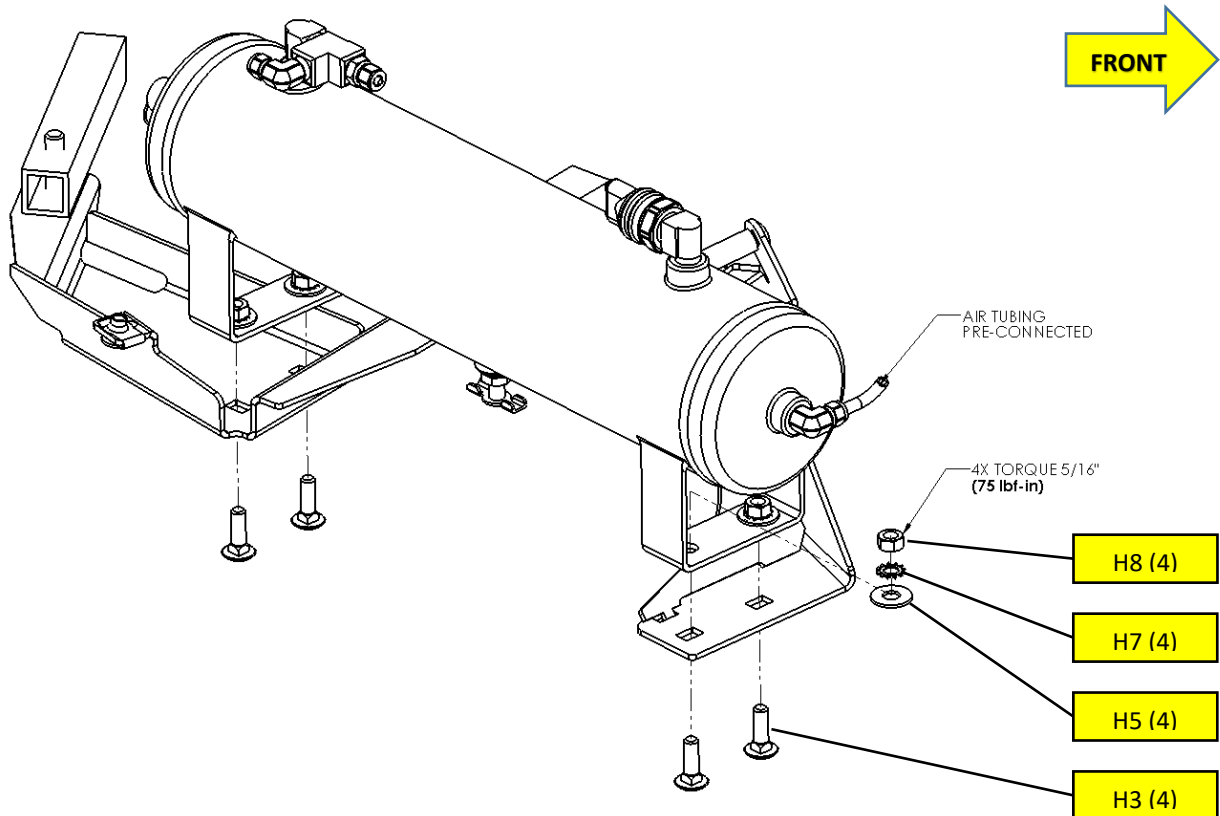
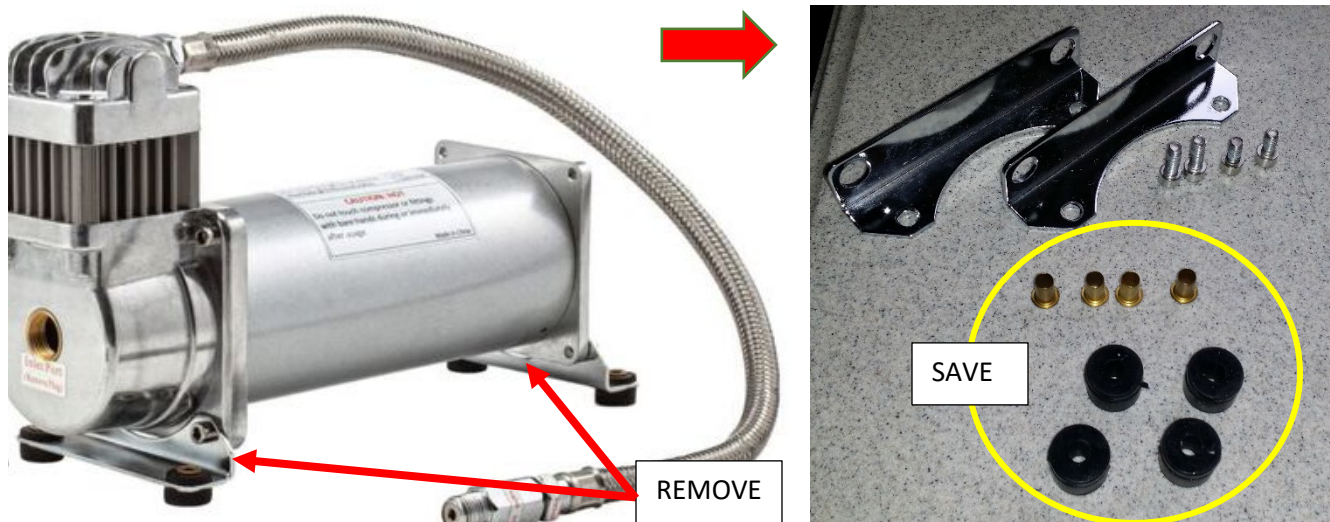


Figure 14 – Installing Air Tank onto Brackets, Exploded View

- 8.6.4. Once the air tank is properly positioned, **final torque all air tank bolts and then the rear bracket bolts**, per the figure above.
- 8.6.5. The remaining air tank installation will be completed during electrical wiring and Quick Connect routing.

8.7. Bench Assemble Compressor with Bolts and X3-102

- 8.7.1. Remove Compressor from packaging.
- 8.7.2. Remove Brass Sleeves and Rubber Bushings from the compressor feet & set aside. Do not tear bushings.
- 8.7.3. Remove the chrome feet from Compressor and discard (REF. the below image).



- 8.7.4. Apply [Juice](#) to end of leader hose and attach Air Fitting (F6) to the check valve. REF. the below figure. Do NOT overtighten the fitting, which could damage the check valve. See instructions included in compressor box.

CAUTION: It is not recommended to attempt to remove Leader Hose from Compressor and create a single run of 1/4" Air Tubing. Leader Hose removal may permanently damage threads in Compressor.

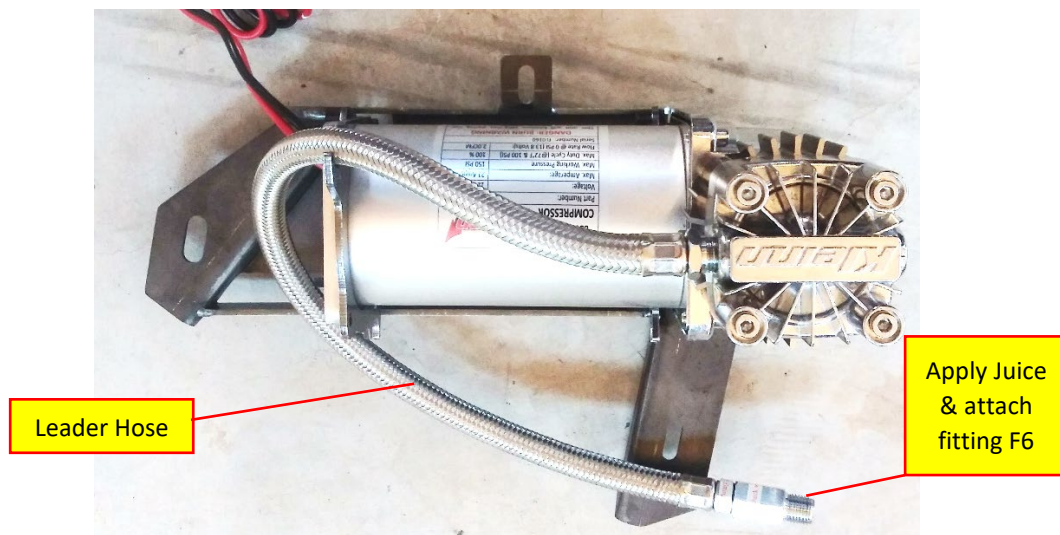


Figure 15 – Air Compressor Leader Hose Fitting Install

- 8.7.5. Attach the Leader Hose Support Bracket (X3-102) onto the back of the compressor using Hardware [H12](#), as shown below.
- 8.7.6. Open hardware bag (included in Compressor Box) and install bolts, lock washers, and flat washers to Compressor, as shown below; Hex bolts are threaded from front to back. It is recommended to apply Medium-Strength thread locker before installation.
- 8.7.7. Torque to 20 in-lbs.

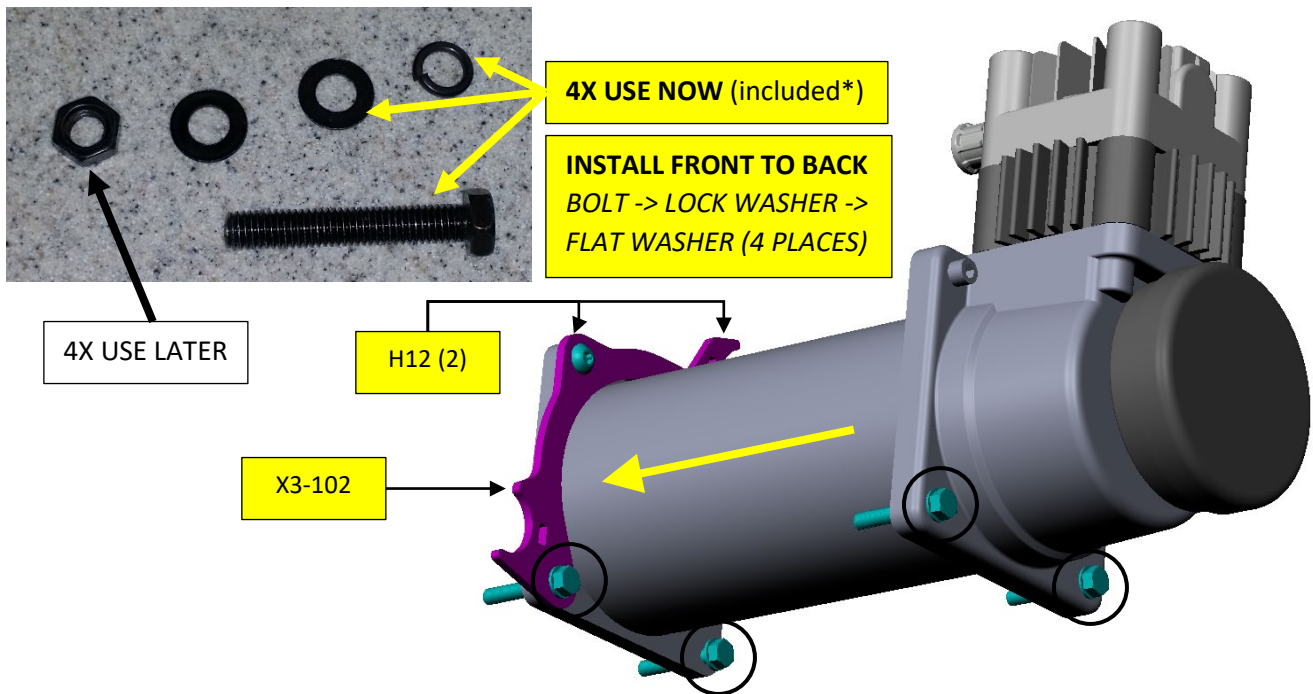


Figure 16 - Air Compressor with Bolts and X3-102 (Shown with Air Filter and no Leader Hose)

- 8.7.8. Cut one (1) [hardware](#) H13 (rubber grommet) in half and place each half onto the two (2) circular grooves on support bracket X3-102 as shown below.



Figure 17- H13 Cut & Installed

- 8.7.9. Route the leader hose around the support bracket (X3-102) indents and secure using zip ties. Reference the below figure.



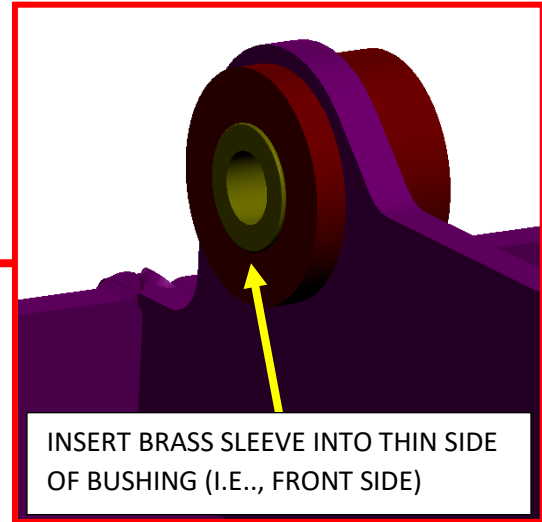
Figure 18- Leader Hose Routing

8.8. Bench Assemble Compressor Bracket and Rubber Bushings

8.8.1. Insert Rubber Bushings and Brass sleeves into the Compressor Bracket (X3-101), as shown below.



RUBBER BUSHINGS & BRASS SLEEVES FROM COMPRESSOR FEET



INSERT BRASS SLEEVE INTO THIN SIDE OF BUSHING (I.E., FRONT SIDE)

INSTALL THIN SIDE OF BUSHING THROUGH HOLE; THICK SIDE TOWARD VEHICLE REAR

*use of lubrication may facilitate the installation of the bushings.

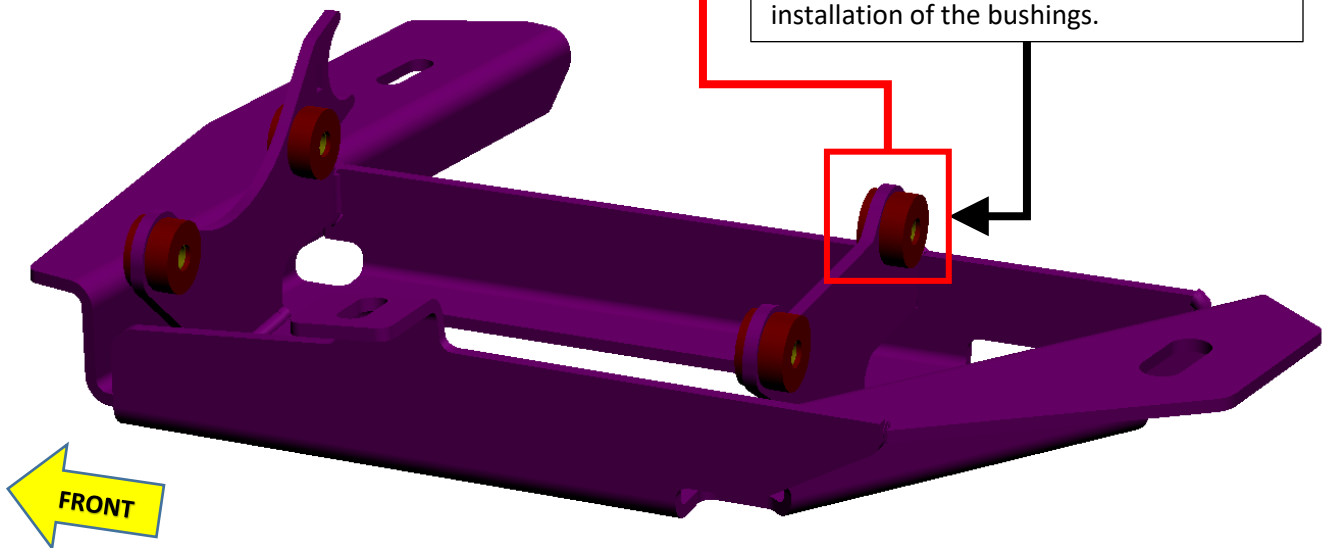


Figure 19 - Air Compressor Bracket with Rubber Grommets Installed

8.9. Air Compressor Bracket - Installation

- 8.9.1. Gather the X3-101 assembled bracket.
- 8.9.2. On Driver side of vehicle, remove front bolt holding Rack; as shown below. M6 bolt and nut (i.e., front bolt) will be replaced.
- 8.9.3. Remove rear bolt holding Rack; same as [Figure 6](#). Do not discard this bolt; it will be re-used.

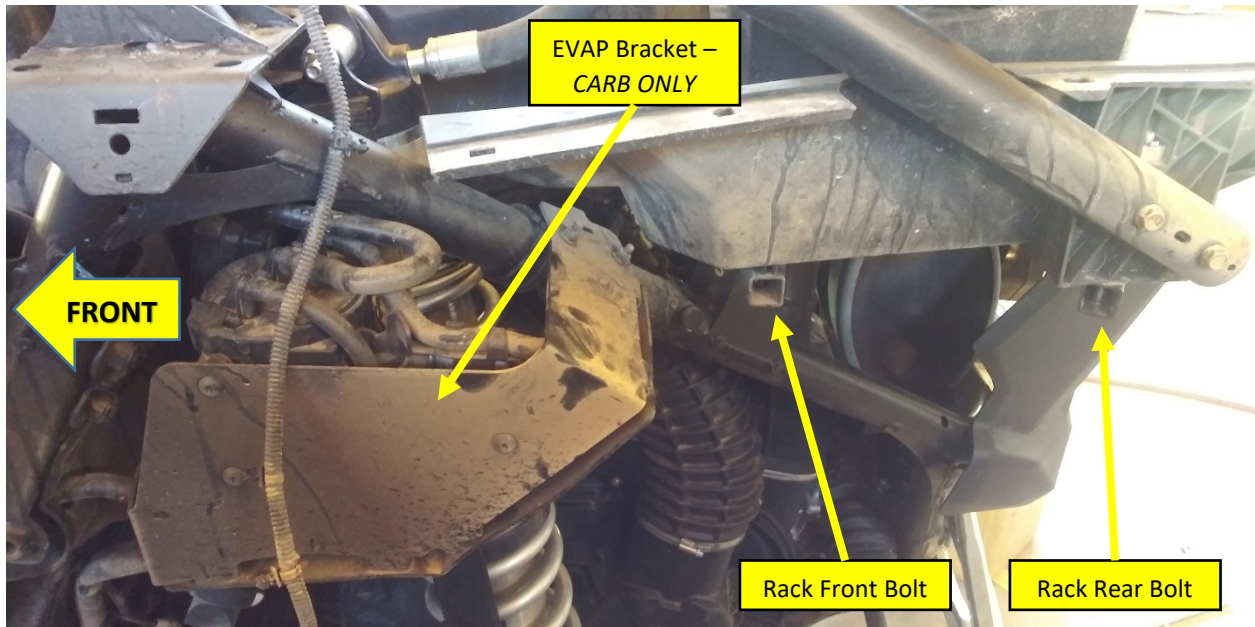


Figure 20 – Air Compressor Bracket Mounting Locations (side view w/o fender – CARB Version shown)

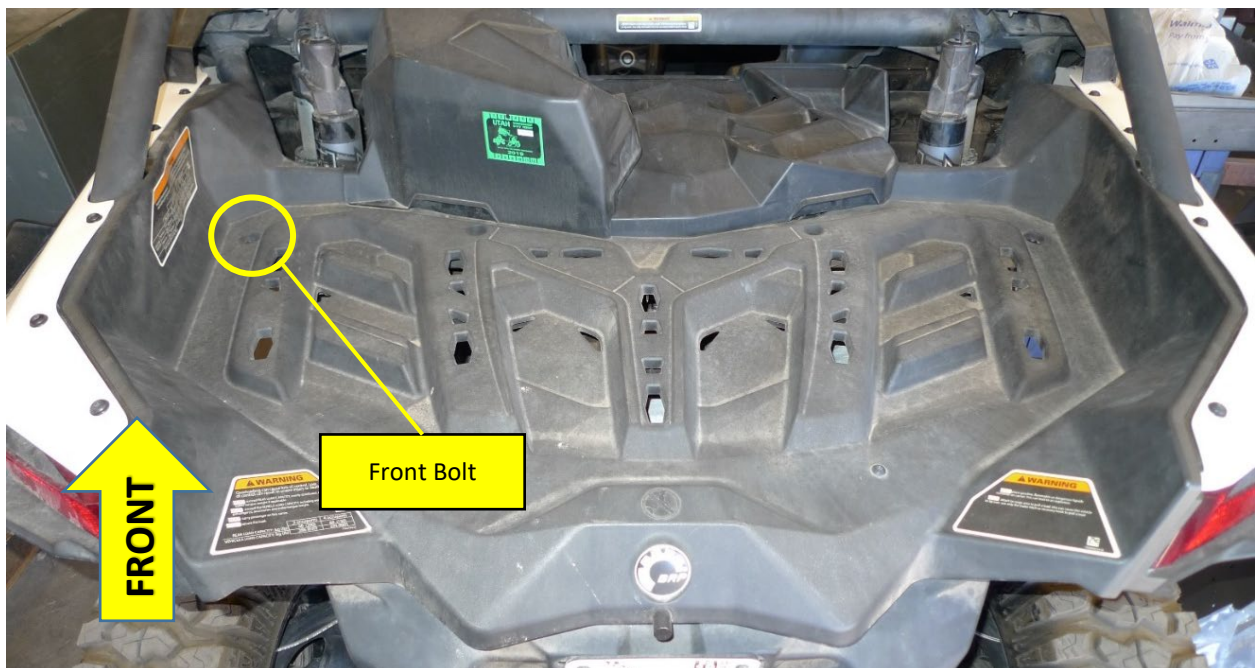


Figure 21 – Air Compressor Bracket Mounting Locations (top view)

8.9.4. Using [hardware](#) #H9, H10, H11, H1 & H2, attach Air Compressor Bracket below Rack Support Tubes in same fashion, as performed during Air Tank installation ([Figure 10](#)). Leave fasteners slightly loose, to enable Bracket to be re-positioned, as needed.

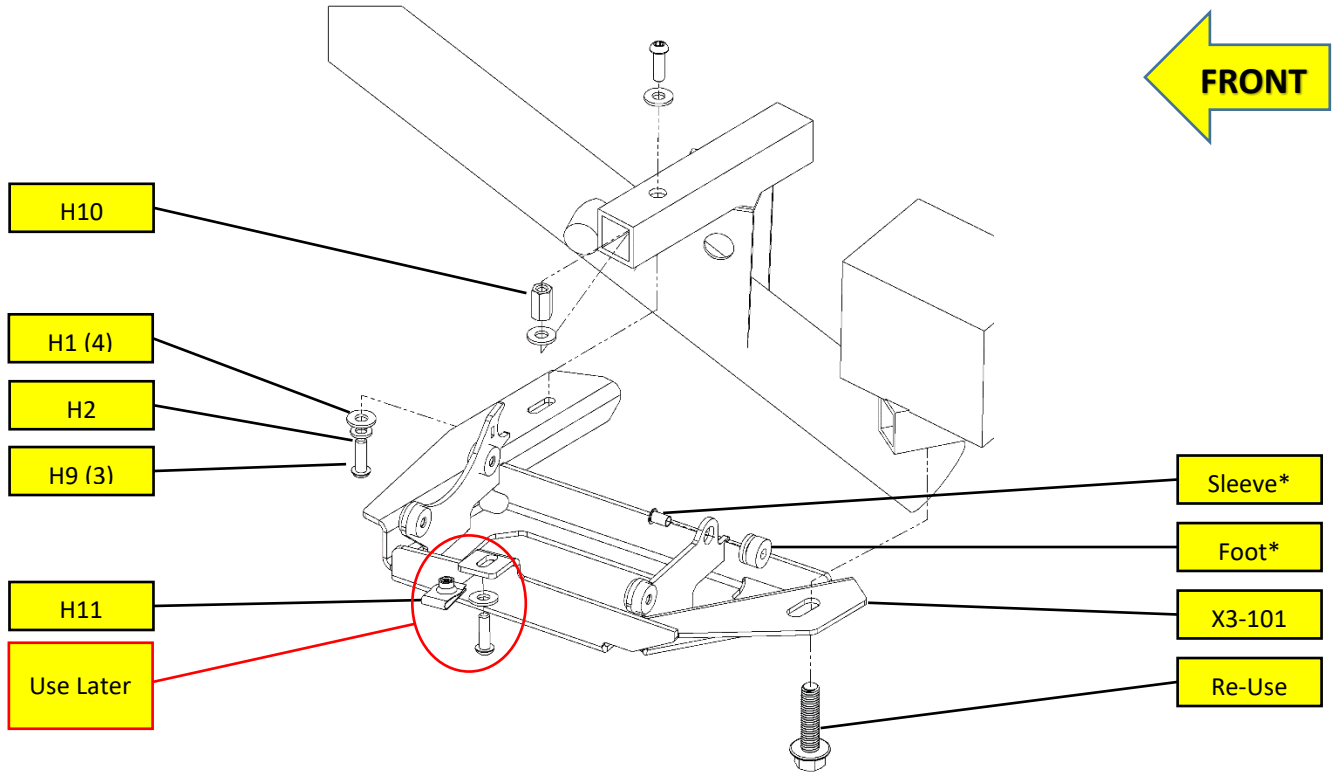


Figure 22 – Installing Air Compressor Bracket, Exploded View

8.9.5. Temporarily install the air compressor onto the bracket by inserting the bolts (included in compressor box) through the brass sleeves (i.e., front to back). Ensure the compressor is pushed rearward; use a nut if necessary to hold in place.

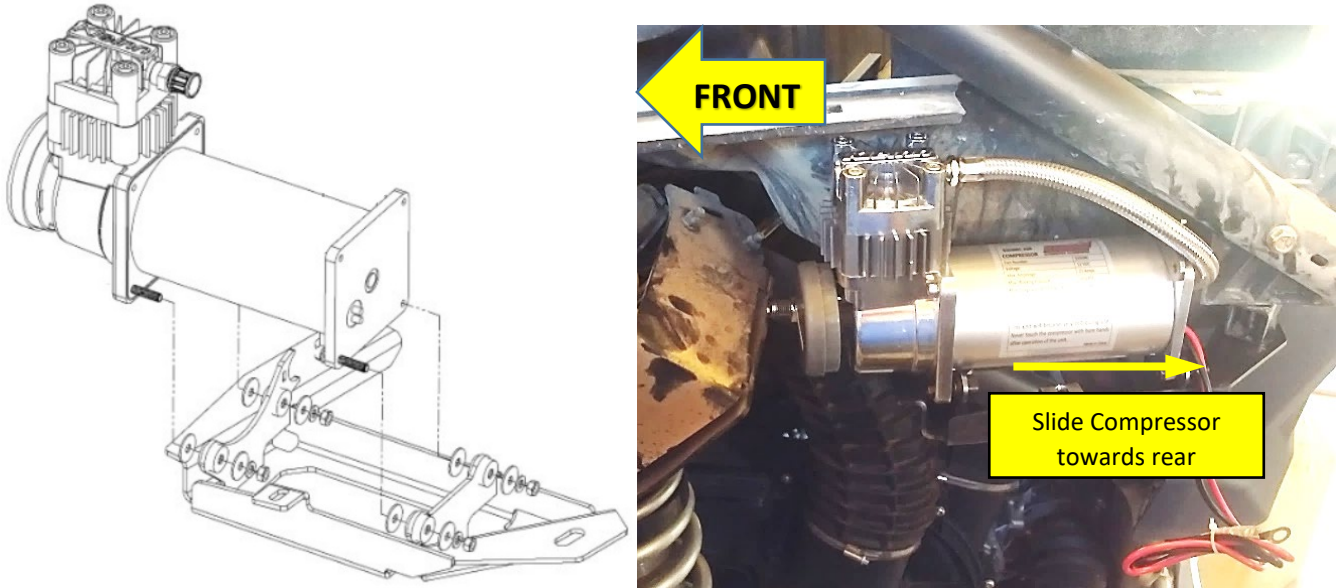


Figure 23 – Air Compressor Temporary Install (Shown installed on CARB Vehicle)

8.9.6. With the compressor in place, **adjust the bracket** side-to-side, as required to maintain at least 1/8" clearance between compressor head and rack, as shown below. Once position is obtained, **final torque rear rack bolt to 49 lbs-in.**

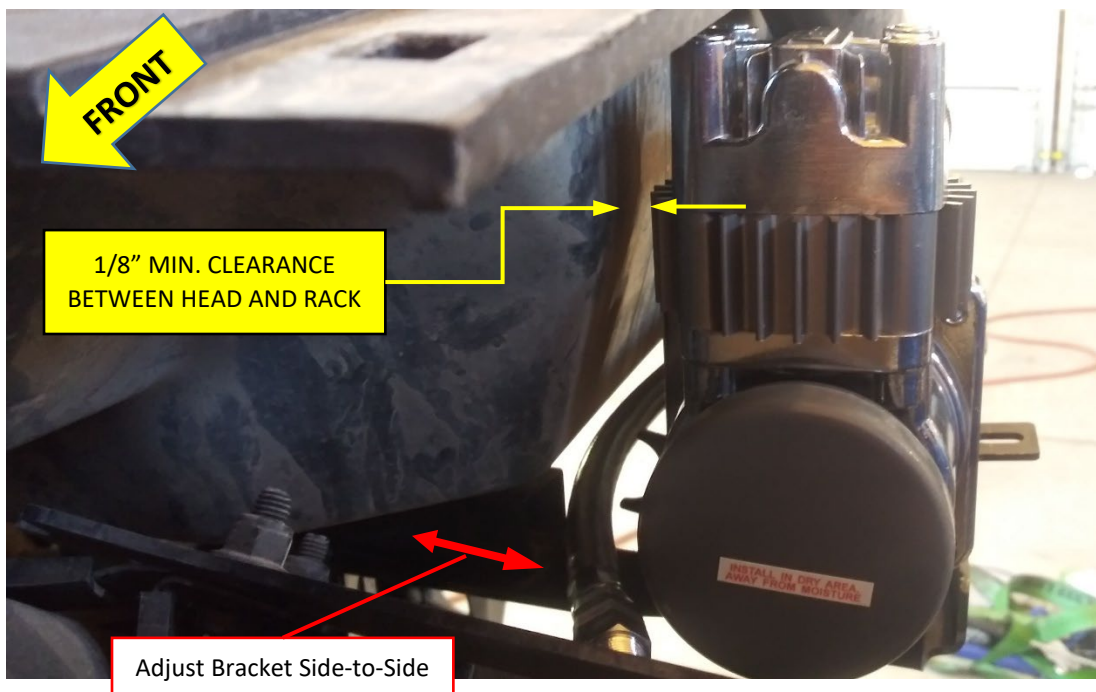


Figure 24 – Air Compressor Clearance Adjustment (Shown installed on CARB Vehicle)

- 8.9.7. Remove the air compressor from its mounting bracket and set aside. This is necessary to gain proper access to Hex Coupling nut (i.e., [H10](#)) inside Rack Support Tube.
- 8.9.8. With the bracket properly positioned, **final torque front rack bolts to 72 lbs-in and 49 lbs-in**, as shown in [Figure 10](#) and [Figure 11](#).



Figure 25 – Air Compressor Bracket Final Install (Shown installed on CARB Vehicle)

8.10. Air Compressor - Installation

- 8.10.1. Route 1/4" Air Tubing, which is connected to front of Air Tank from bench assembly step ([Figure 13](#)) across back of firewall, or above chassis, as desired. There should be at least 12 inches of excess tubing sticking out of Driver's side to manipulate and connect to Air Compressor. Once route is selected, secure Air Tubing in place.

WARNING: Route plastic tubing away from heat sources; tubing should never exceed 150 deg F while in use, as tubing can rupture under pressure and may cause harm, or injury.

8.10.2. Install Air Compressor on Bracket using hardware included* inside Compressor packaging and place Fender Washer ([H14](#)) on both sides of Rubber Feet, as shown below. Final torque all bolts.

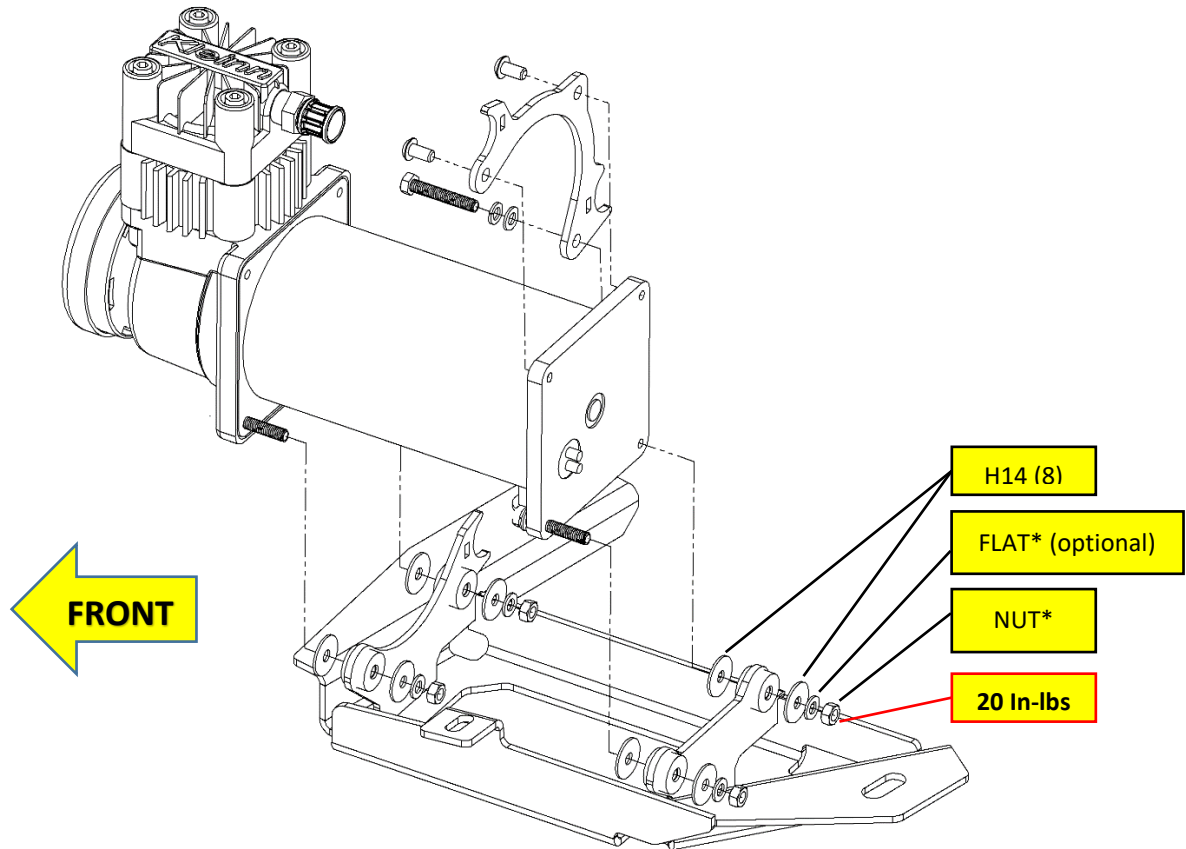


Figure 26 – Installing Air Compressor onto Bracket; Exploded View (shown without Leader Hose)

8.10.3. Cut the second [hardware](#) H13 (rubber grommet) in half and place one half onto the circular groove of the compressor mounting bracket. Finalize leader hose routing and zip tie in place as shown below.

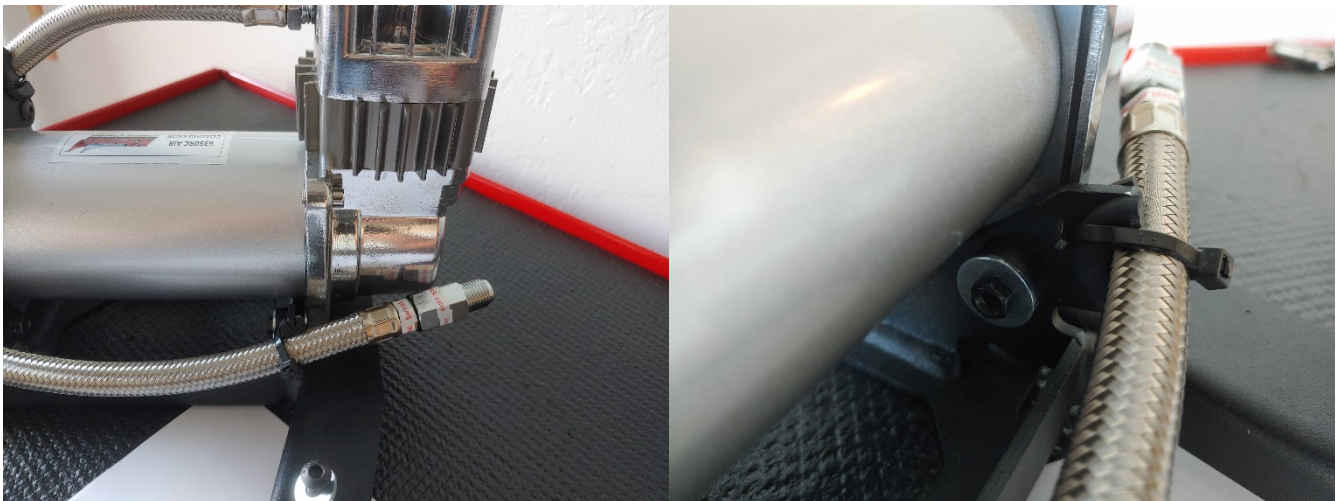


Figure 27- Final Routing of Leader Hose

- 8.10.4. Connect previously routed 1/4" Air Tubing to Leader Hose end, and secure all Air Tubing using supplied zip ties
- 8.10.5. Install air filter onto the end of the compressor, per directions in compressor package.

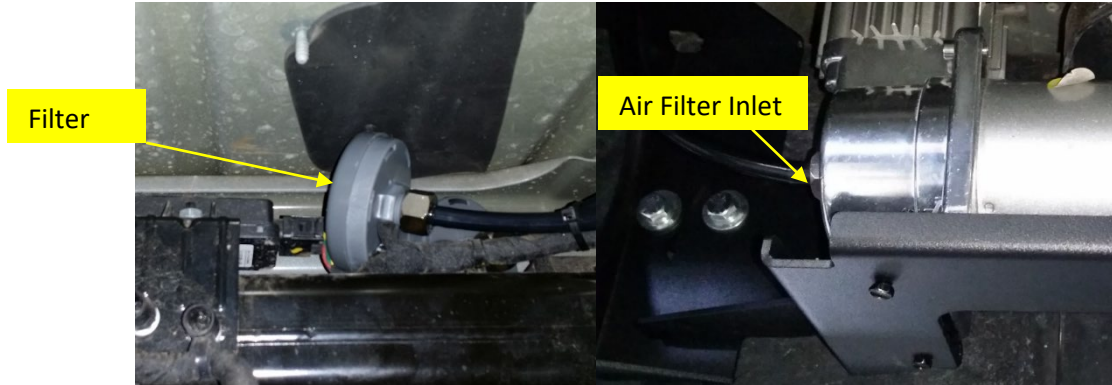


Figure 28 – Air Filter with Remote Tubing Shown Attached

8.11. Air Horn

- 8.11.1. Disassemble the trumpets (#1 & #2 below) from the air horn driver (#3 below), by grasping the trumpet throats turning counter-clockwise; it may be necessary to clamp the air horn driver. The horn should be separated into three components when finished.

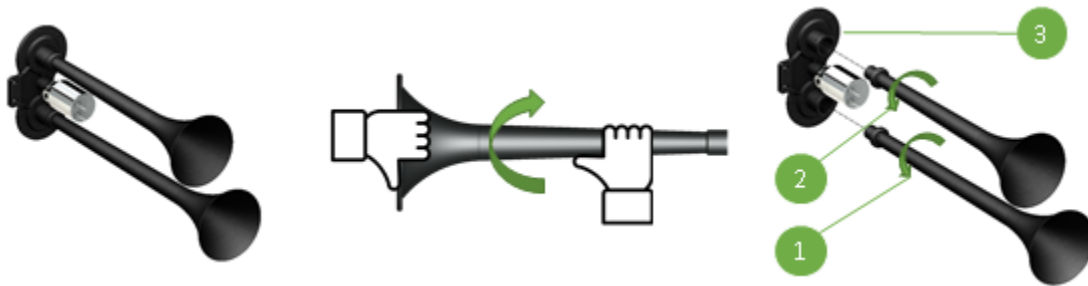


Figure 29- Air Horn Separation

8.11.2. Gather X3-301 Horn Bracket, [hardware](#) H3 (2), and a long piece of masking tape, or similar and temporarily tape carriage bolts to bottom of Bracket, as shown below; threads should be sticking up.

NOTE: This step is necessary, as space constraints near Sway Bar make it difficult to insert bolts with Bracket in place. **Apply tape long enough so that it can be easily removed after installation.**

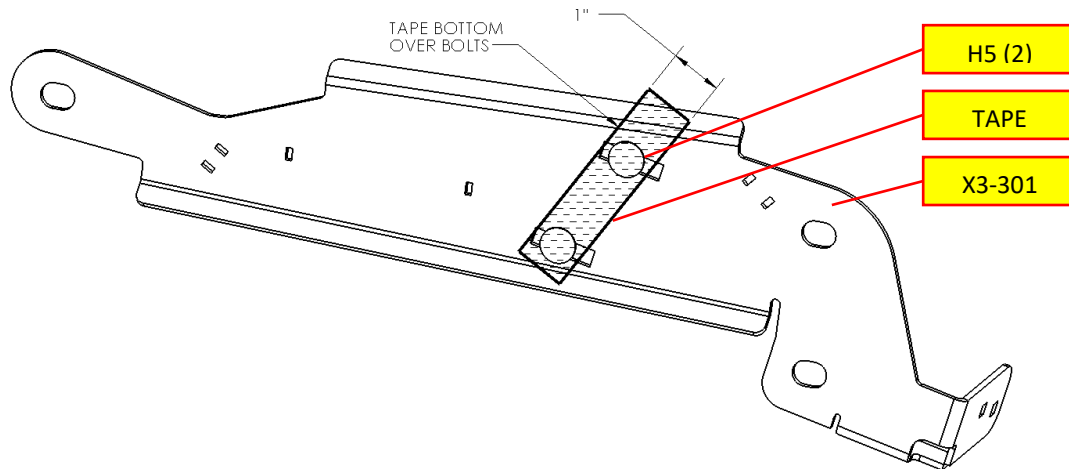


Figure 30 – Carriage Bolts temporarily taped in place on Horn Bracket

8.11.3. Gather X3-302 and Rubber Trim ([hardware](#) H17), cut trim and install into holes, as shown below.

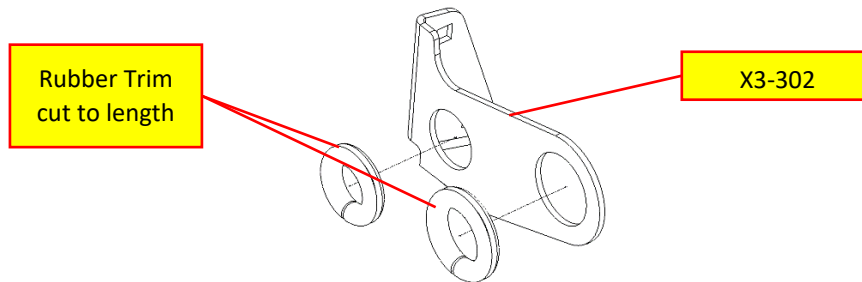


Figure 31 – X3-302 with Rubber U-Trim installed, exploded view

8.11.4. Remove three (3) M12 OE bolts that hold the front sway bar and remove the small T30 bolt holding the brake line against the firewall, as shown below. Fasteners, as they will be re-used.

NOTE: Removal of both front wheels will facilitate installation; however, if front suspension is fully extended (i.e., vehicle supported in center with no weight on suspension), the coil springs will be closer to horn trumpets, which increases difficulty installing the air horn.

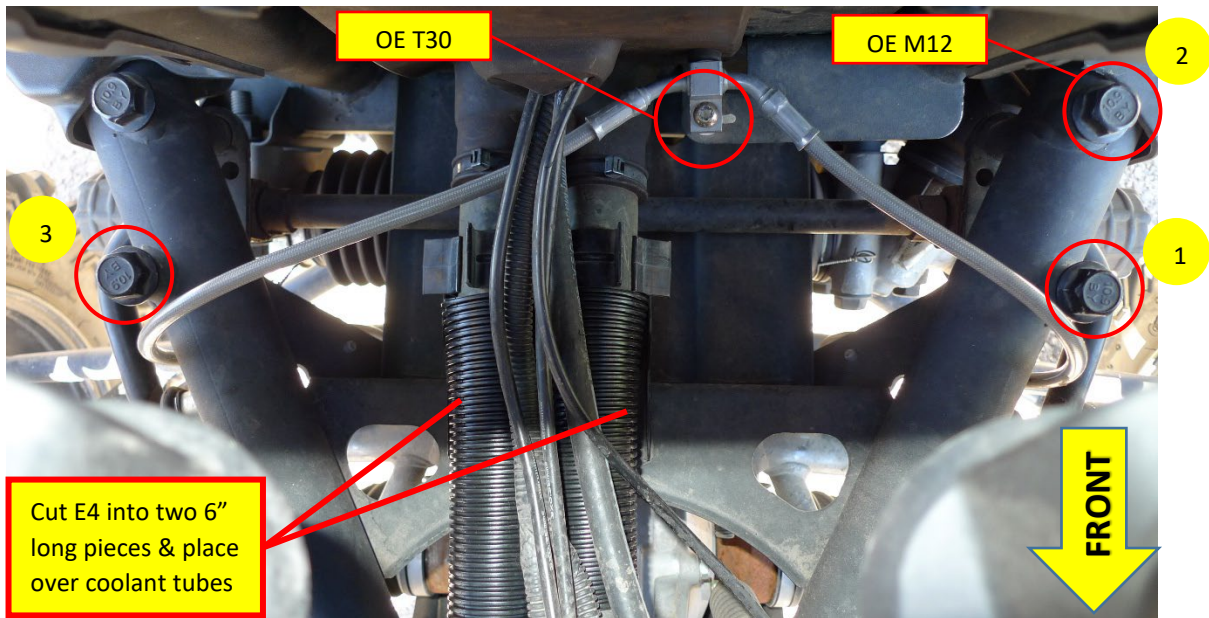


Figure 32 – Sway Bar Bolts to remove and Brake Line Bolt (looking from above)

8.11.5. Cut supplied split wire loom (E4) into two 6" long pieces and fit over coolant tubes, as shown above.

- 8.11.6. Install X3-301 by pulling upwards on the brake lines and sliding the bracket between the brake lines & the coolant tubes, as shown below.
- 8.11.7. Reposition the loom to provide protection from the bracket contacting the coolant lines.
- 8.11.8. Fasten the bracket by reinstalling the previously removed M12 hardware. DO NOT fully tighten hardware.
- 8.11.9. Use the supplied zip-ties to **LOOSELY** secure brake lines, coolant tubing, and wiring using the small rectangular slots. **Re-install and torque the T30 Bolt.**

NOTE: On vehicles equipped with “Smart-Lok”[®] locking front differential, disconnect vacuum/vent line to differential, if necessary and route above Bracket, then re-connect to front differential.

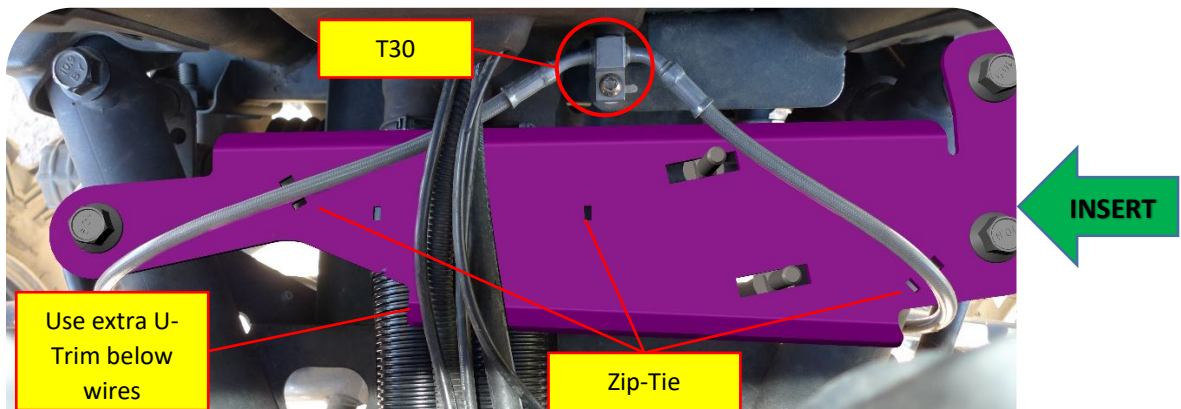


Figure 33 – Air Horn Bracket Installed

- 8.11.10. Install X3-302 Trumpet Support Clamp in the orientation shown below using hardware H6, H7 & H8. **Do not fully tighten this hardware.** The tape can now be removed from the bracket.

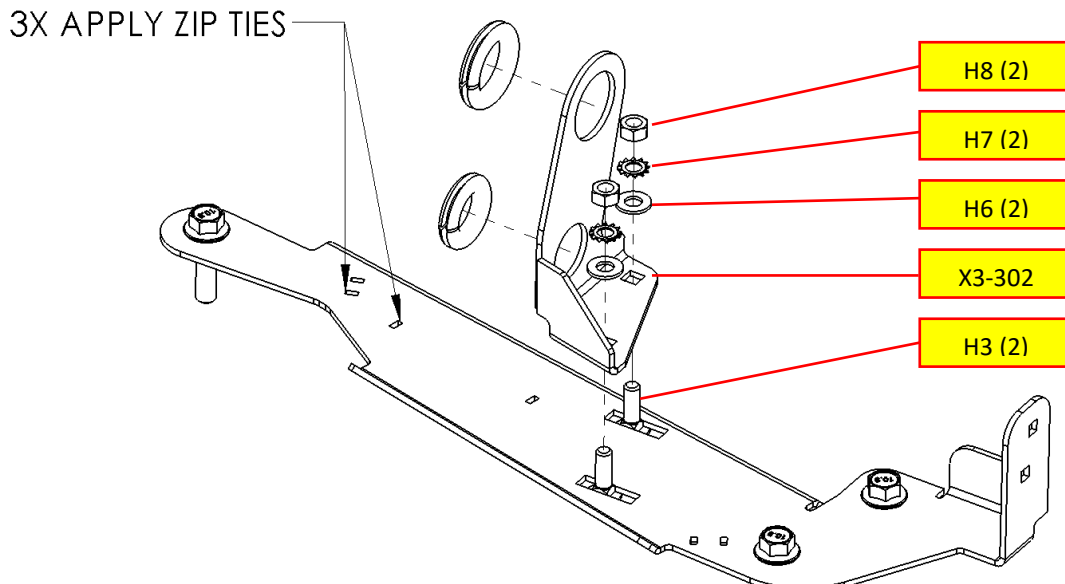


Figure 34- Trumpet Support Bracket Installation

- 8.11.11. On bench, connect remaining amount of supplied 1/4" Air Tubing to Air Fitting on Air Horn Solenoid.
- 8.11.12. Slide detached trumpets into the support bracket, then install the air horn driver onto the main bracket using [hardware](#) H15, H1, H2 & H16. Loosely fasten the hardware & reattach the trumpets to the horn driver.

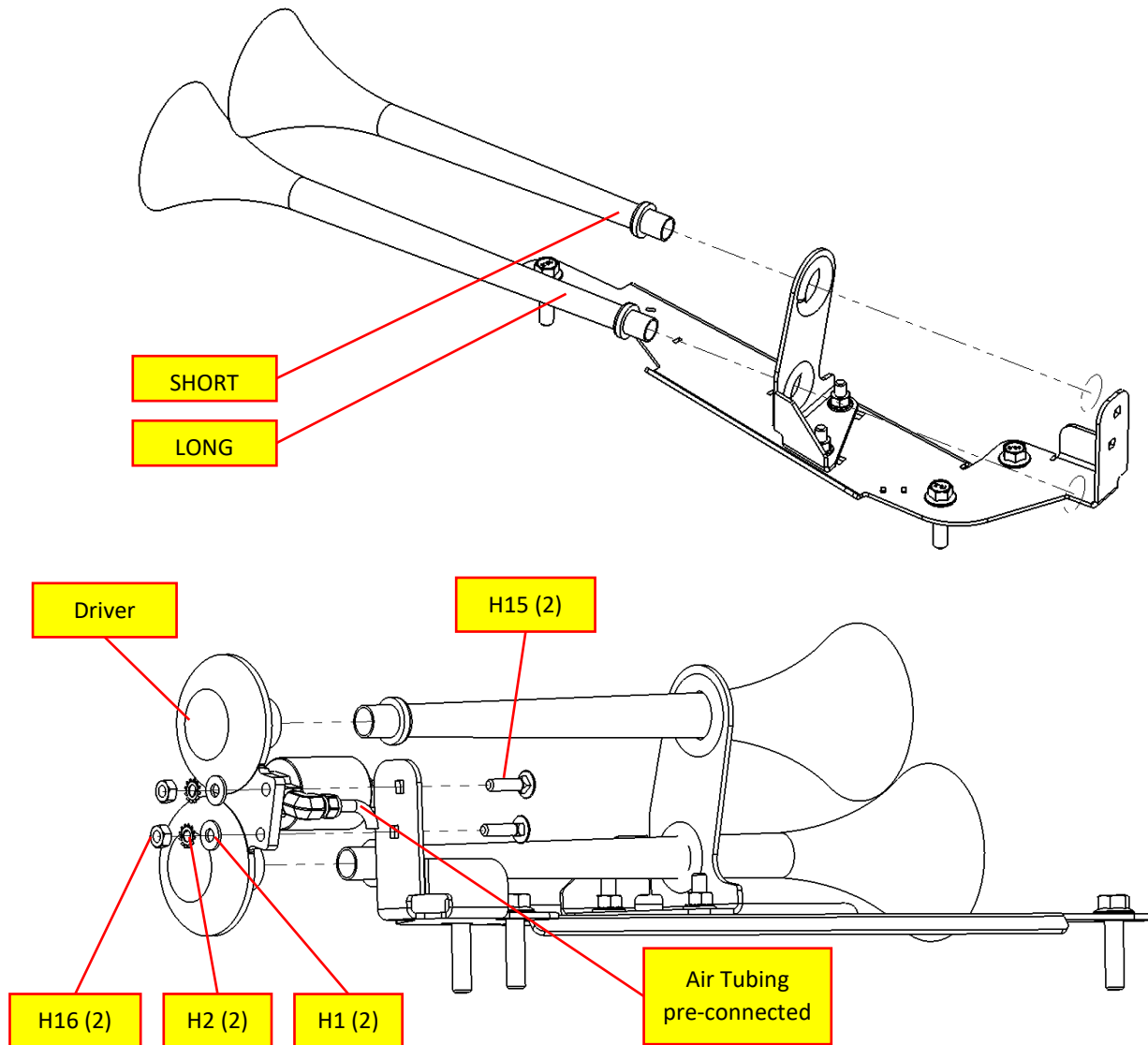


Figure 35 – Installing Air Horns onto Horn Bracket

8.11.13. Route the air tubing across the bracket, as desired.

NOTE: Position the X3-301 bracket, as necessary to ensure maximum clearance around springs.

8.11.14. **Final torque all fasteners** as shown per order below & fully secure the brake and coolant lines via previously installed zip ties.

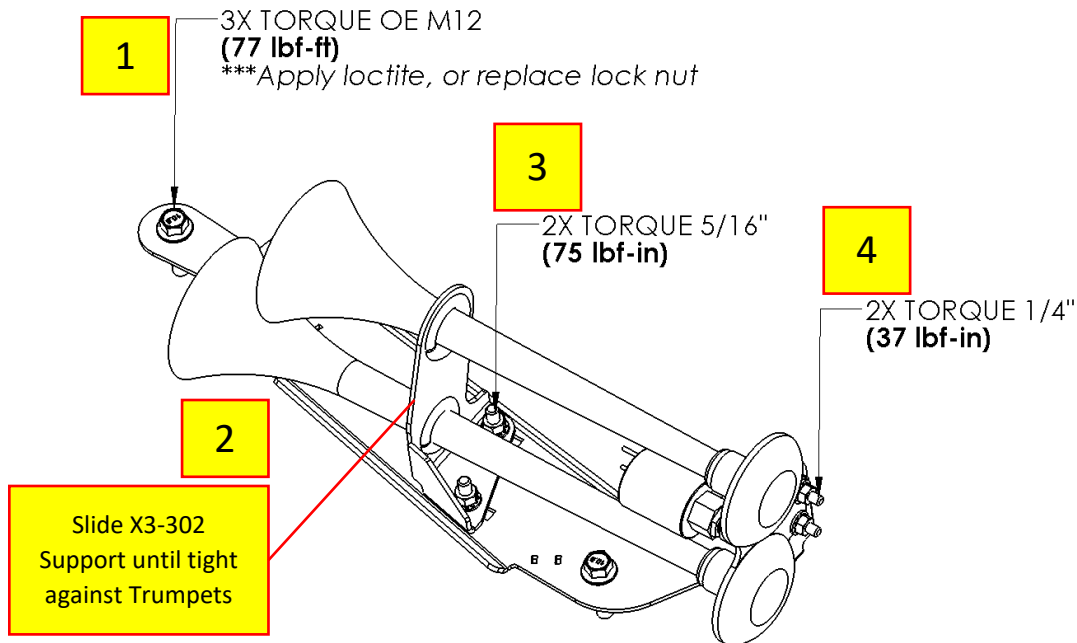


Figure 36- Final Tightening of Air Horn Brackets and Air Horn

8.11.15. Route the air tubing towards the air tank, as desired and safely secure to frame away from heat and sharp edges using zip-ties. Attach to the appropriate fitting.

8.11.16. Final installation of Air Horn should match below pictures.

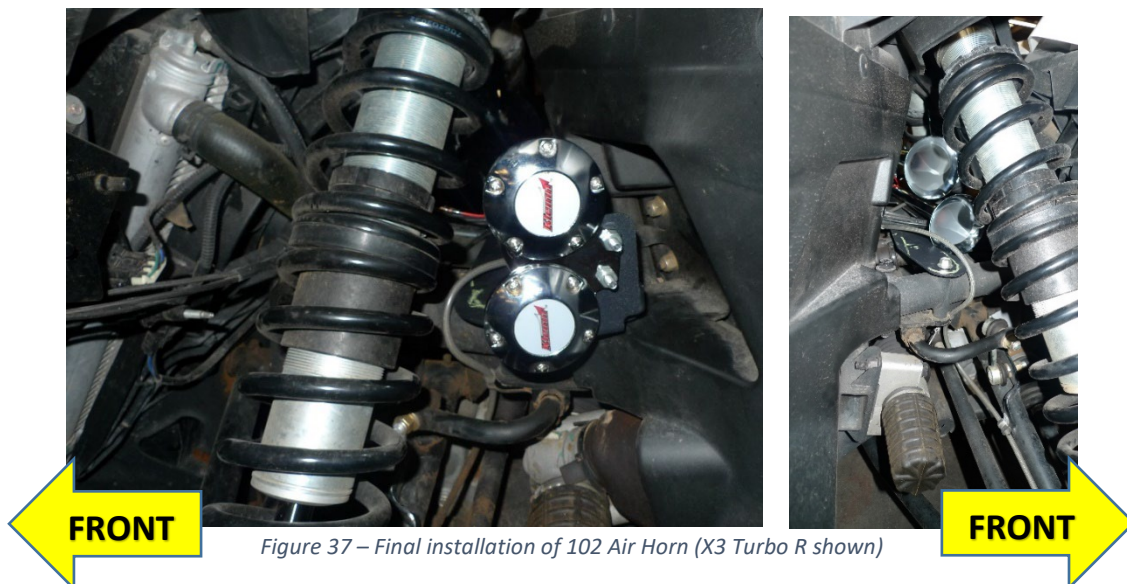


Figure 37 – Final installation of 102 Air Horn (X3 Turbo R shown)



CANX3-KIT Install Guide

8.12. Install Remote Quick Connect Kit to Vehicle

- 8.12.1. Attach the Quick Connect Coupler Kit to vehicle, as desired using the included hardware.
- 8.12.2. Route and attach the included air tubing as desired. Refer to [Figure 13](#) for connections.



Figure 38 – Example of Air Coupler Mounted to Bumper

End of Section

9. On-Vehicle Electrical Installation

CAUTION: Follow all recommended safety precautions for working on vehicle's electrical system; consult vehicle owner's manual for further instruction.

9.1. Relay and Fuse Diagram for System

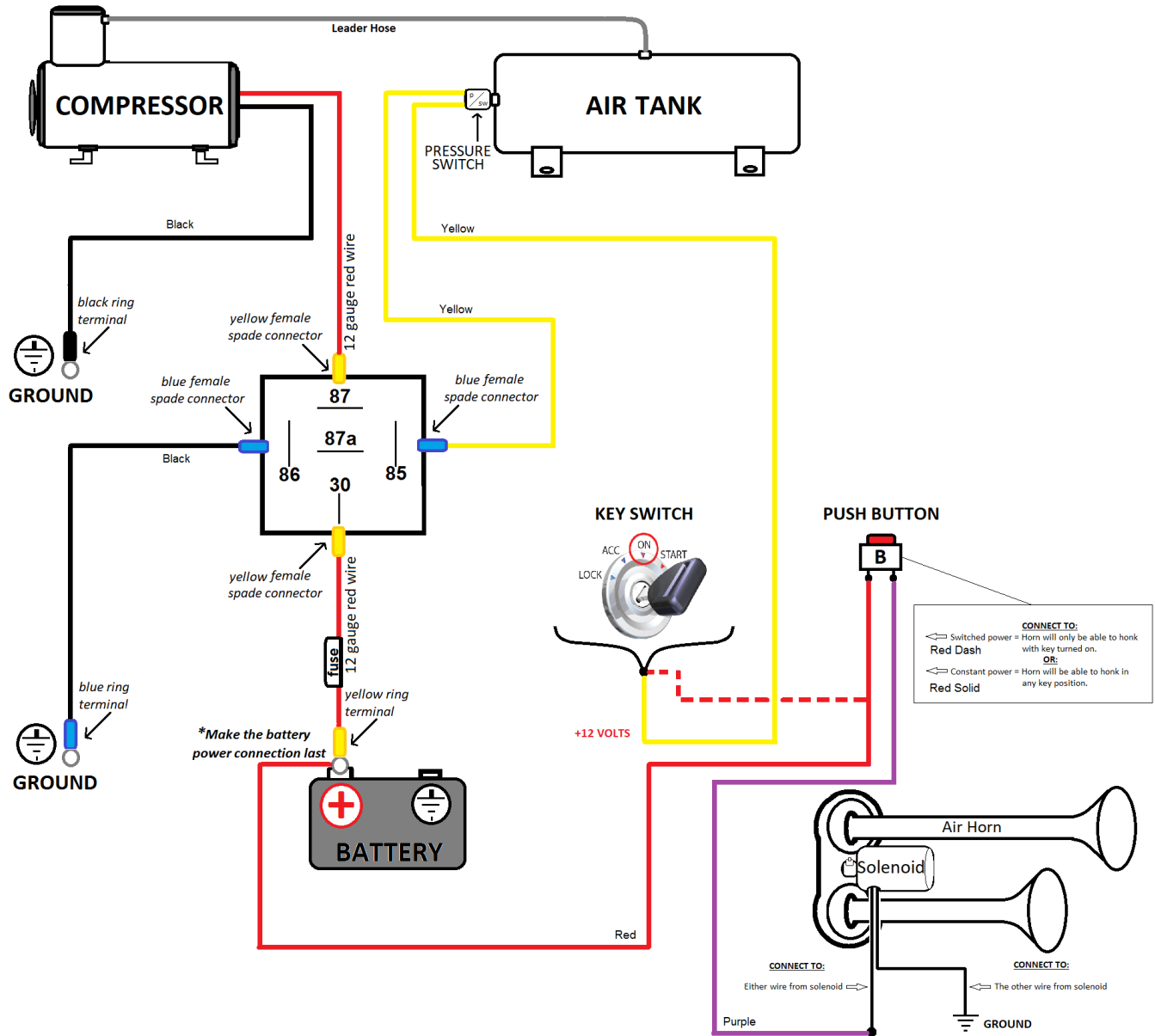
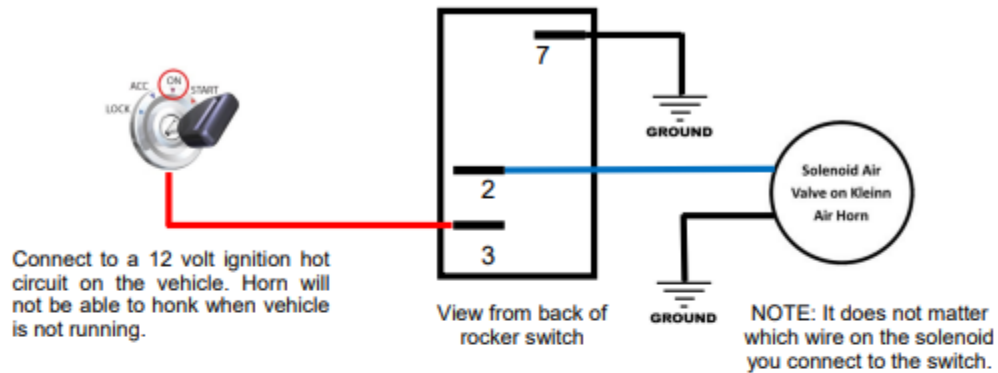


Figure 39 – Suggested Ignition Relay Diagram for Air Horn System

9.2. Illuminated Rocker Switch Electrical Hookup Guide

“KLEINN” logo illuminated schematic



“AIR HORN” illuminated schematic

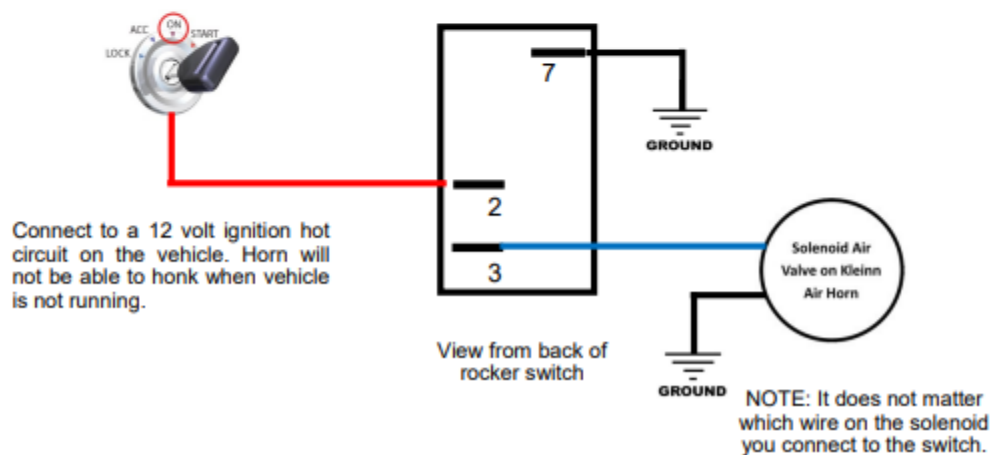


Figure 40 – Wiring Guide for Illuminated Rocker Switch

9.3. Install Horn Button

- 9.3.1. It's recommended to install Horn Push Button (E4) in OEM location designed for aftermarket switches and accessories, found at center console, as shown below.



Figure 41- Center Console for Rocker Switch Install

9.4. Disconnect Vehicle Battery(s)

- 9.4.1. Remove Passenger side seat or move it forward to expose Battery. Consult Owner's Manual.

9.5. Connect Wiring to Relay(s) and Fuse(s), then Attach to Vehicle

- 9.5.1. Find a suitable location for supplied relay(s) and fuse(s). Shown below is an example location on rear firewall behind Passenger seat next to battery. Use supplied self-tapping screws, as necessary.

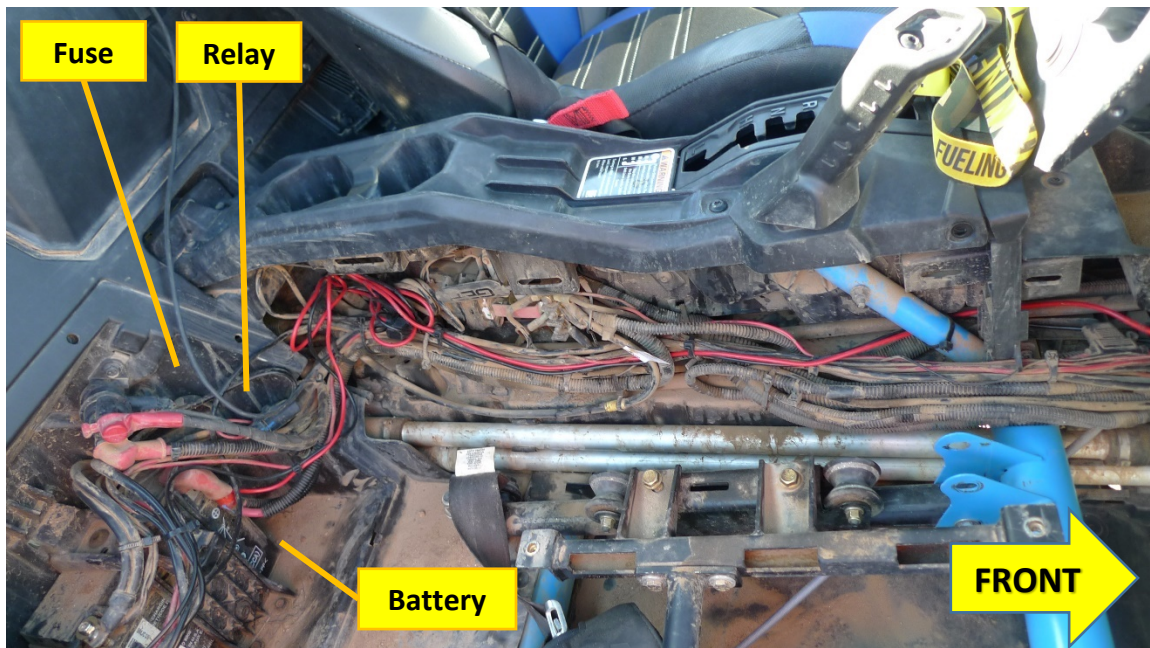


Figure 42 - Relay and Fuse (Example Location) Behind Passenger Seat (2019 X3 Turbo RC Shown)



CANX3-KIT Install Guide

9.5.2. Insert all wiring into included wire loom and ensure loom is away from all sharp edges, hot vehicle parts (i.e., exhaust, engine, radiator), and fasten securely to vehicle using zip ties, or equivalent.

NOTE: Do not cut wires to length until 100% sure of length required for final connections.

9.5.3. Install supplied fuse holder on end of power wire by cutting the loop in fuse holder and connecting supplied Ring terminal to one end and Butt connector on the other end.

CAUTION: Do not install 30-amp fuse until all electrical connections are final.

9.6. [Connect Air Horn Solenoid](#)

9.6.1. Route wiring, as desired up to Air Horn and connect to Solenoid.

9.7. [Pressure Switch](#)

9.7.1. Route wiring, as desired back to Air Tank and connect to Pressure Switch.

End of Section



CANX3-KIT Install Guide

10. Initial Testing of Kit

10.1. Reconnect Vehicle Battery(s)

CAUTION: Before connecting vehicle battery(s), verify all wiring is properly connected and no shorts exists. Use of Multi-Meter, or Test Light is recommended to check continuity of all connections.

10.2. Test Air Compressor

- 10.2.1. Turn vehicle ignition to on position and allow compressor to fill Air Tank. Initial fill may take approximately 1.5-3 minutes; Air Compressor should shut off automatically once full pressure is achieved.
- 10.2.2. If compressor runs excessively (i.e., 5 minutes or more), disconnect electrical power to Air Compressor and listen for air leaks in system. Repair any problems and retest; contact Kleinn technical support if problem persists.
- 10.2.3. Inspect all air line connections (i.e., Air Tank fittings, Quick Connect fittings, Air Horn fittings, etc.) for leaks by using a soap and water solution sprayed directly onto fittings
- 10.2.4. System must be pressurized or at least Air Compressor running
- 10.2.5. If an air leak is found:
- 10.2.6. Safely release air pressure from system (i.e., slowly open drain valve)
- 10.2.7. Disassemble leaky connection, re-seal and reinstall fittings as needed

10.3. Test Train Horns

- 10.3.1. Allow Air Compressor to run and shut-off automatically (i.e., Air Tank is full)
- 10.3.2. Verify all tubing and electrical wire is securely fastened to vehicle, brackets, or kit parts; if necessary, use extra zip ties to hold tubing and wire in place
- 10.3.3. Ensure all nearby persons have adequate hearing protection and provide courtesy warning to neighbors or others in vicinity

WARNING: NEVER operate train horns with ears close to trumpets or in an enclosed space

without substantial hearing protection (i.e., > Ear Plugs and Ear Muffs) for all persons closer than 100 feet from vehicle. Never operate train horns outdoors when persons are near vehicle without adequate hearing protection.

- 10.3.4. Briefly activate Horns by pressing Horn Button for one (1) second; repeat three (3) times with a short rest period between (i.e., 1-3 seconds)
- 10.3.5. Horns should sound as expected and be loud; [click to listen to example 230 Kit](#)
- 10.3.6. Horn sound/loudness will taper quickly as Air Tank loses pressure
- 10.3.7. Allow Air Compressor to refill tank, if needed and activate Horns for longer three (3) second period to ensure Horns are functioning properly.

10.4. Test Quick Connect Coupler

- 10.4.1. Allow Air Compressor to refill tank, if needed
- 10.4.2. Attach supplied INF-1 inflator kit to Quick Connect Coupler and verify adequate air pressure is available
- 10.4.3. Test fill tires on vehicle, bicycle, etc.
- 10.4.4. Use Air Blow Gun

10.5. Re-install Rear Fenders

- 10.5.1. After successful testing of entire kit, re-install Passenger and Driver side Rear Fenders in reverse order used in [section 8.2 above](#).
- 10.5.2. Install [hardware](#) H11 & H9 through corresponding slot in bottom of both Passenger and driver fenders, as shown in [figure 5, figure 10 & 11 above](#).

End of Section



CANX3-KIT Install Guide

11. General Operation of Kit

11.1. Compressor Operation

WARNING: Never operate Air Compressor above its MAXIMUM PRESSURE RATING (see label on body). Operation exceeding maximum pressure will damage Air Compressor and may result in Dangerous Air System failure.

- 11.1.1. Air compressor is equipped with an automatic thermal overload protection circuit, designed to protect air compressor from overheating and causing permanent damage.
- 11.1.2. Automatic thermal overload protector will automatically reset after 30 minutes.
- 11.1.3. To prevent discharge of vehicle's battery and for best performance, keep vehicle's engine running while using air compressor for any prolonged use (i.e., filling tires, using air tools, etc.).

12. Routine Maintenance

Perform following steps at least once during recommended intervals.

- 12.1. Yearly, or every 12000 miles verify all mounting fasteners are properly torqued; applying witness marks across fasteners and mounting parts is good practice to quickly ensure fasteners have not moved.
- 12.2. Yearly, or every 12000 miles inspect OE wiring, tubing, cables, etc. where Kit parts may touch, to verify no abrasion or rubbing.
- 12.3. Yearly, or every 12000 miles remove all road grime and mud from mounting brackets and

13. Warranty Information

Thank you for purchasing this CANX3-OBA. Shall you experience any unexpected problems during installation or have problems with any part at any time please contact Kleinn support.

kit parts using clean water from a garden hose; pay special attention to corners where dirt may collect. Touch up all paint chips using automotive grade enamel in either spray, or brush form.

NOTE: High-pressure washers may damage part finishes and *must* be used with care. Do this more frequently if traveling regularly off-road, or in winter climates with road salts.

12.4. Yearly, or every 12000 miles check electrical and air fitting connections and wires for abrasion, corrosion, or other damage. Replace damaged components.

NOTE: if system runs continuously or turns on unexpectedly, leaks or intermittent electrical connection may be present.

12.5. Monthly, or every 10 hours of compressor run time, drain moisture from air tank using drain valve installed at bottom of tank.

WARNING: Failure to regularly drain air tank may result in corrosion inside tank and possible failure in tank or air lines, which can suddenly release air pressure causing injury.

12.6. Yearly, or every 12000 miles clean, or replace air compressor air filter element. Replacement frequency depends on operating frequency and conditions of operating environment (i.e., daily use requires more frequent changes). Order replacement filters at Kleinn.com.

NOTE: Never lubricate or add any liquids to the included oil-less air compressor



CANX3-KIT Install Guide

KLEINN MANUFACTURER LIMITED DEFECT WARRANTY:

Kleinn Automotive Air Horns warrants this product to the end-user, when properly installed and under normal conditions of use, to be free from defects in workmanship and materials for a period of one year from the provided date of purchase, to the original purchaser of the product. This warranty does not cover abuse, operation in a manner inconsistent with the product's design, or damage resulting from exposure to the elements. If the defect is considered "under warranty", Kleinn will, at its option, repair or replace the product free of charge to the original purchaser. Kleinn is not liable for any installation charges, loss or damage of any kind incurred in the replacement or repair of any warranted product.

© Kleinn Air Horns 2020, All rights reserved.

PO Box 91278 Tucson, AZ 85752

Phone: (520) 579-1531

Web: www.Kleinn.com