LONG RANGE AUTOMOTIVE/LONG RANGE AMERICA

Product Information/Install Instructions for

Toyota Tacoma Dual Cab Short Bed (Late 3G) 2018+

Kit P/N TTACDCR 2018+

CONTENTS PAGE

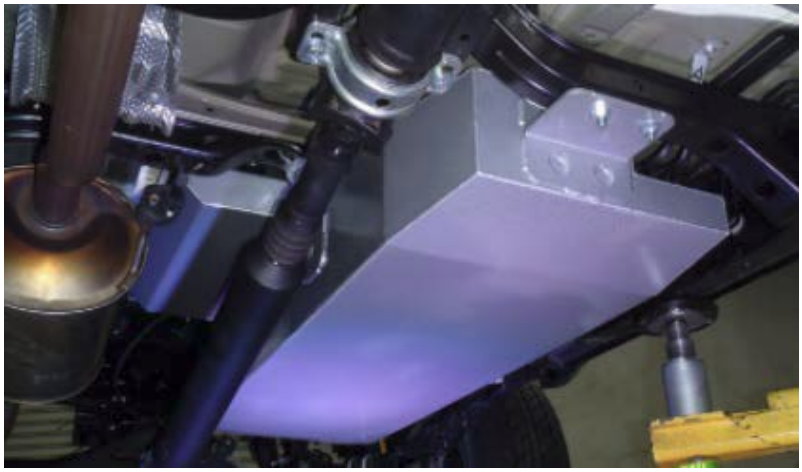
NOTE: This product is **NOT FOR SALE TO, OR USE BY, CALIFORNIA RESIDENTS**. This product has not been approved, certified, rated or otherwise passed upon by any Federal or State regulatory agency.

PRODUCT INFORMATION/INSTALL INSTRUCTIONS

Toyota Tacoma Dual Cab Short Bed (Late 3G) 2018+

Direct-fit extended range fuel tank to serve expedition, long-distance travel and hauling needs...buy fuel when the price is right and be prepared for the long haul. These tank kits from Long Range Automotive of Melbourne, Australia were developed to meet the needs of North American light truck and SUV owners. We provide additional fuel capacity from a high-quality aluminized steel auxiliary or replacement tank that integrates seamlessly with factory fuel systems and emission controls in North American vehicles. These tanks are built by specialists with three decades of experience, serving customers around the world.

Part Number	**TTACDCR 2018+**
Type	**Replacement**
Capacity –Gallons	**32**
Fill Point	**OEM**
Fuel	**Petrol/Gas**
Location	**LH of Drive Shaft**
Relocate Spare	**No**
Exhaust	**Standard**



This tank **may** be installed by a general automotive shop or mechanically competent vehicle owner, given adequate tools, skills and the help of a friend. **We strongly recommend that, to avoid potential injury and property damage, the tank be installed by a trained professional.** Please call if you have pre-install questions (800-224-7801 x101 Ward Harris).

Long Range Automotive fuel tanks are imported by Long Range America, LLC
LongRangeAmerica.com
1-800-224-7801

I. BEFORE YOU BEGIN

A. INTRODUCTIONS

1. We at **Long Range Automotive** (LRA) and **Long Range America** (LRAM) appreciate your selection of a Long Range Automotive fuel system for your vehicle. Please read this entire Guide before beginning installation.
2. This Guide provides information necessary to install this LRA product in your vehicle. **PLEASE NOTE**: We strive to be detailed and accurate with this information...however, errors and omissions can occur. Changes to install instructions can occur without notice. These Guides are constant works in progress...we are constantly working to make them as user-friendly, detailed and accurate as possible, and we welcome install feedback notes, photos, comments and suggestions to make them so. If you see an error or omission, or need additional information not provided in this manual, please contact Long Range America at 800-224-7801, extension 101 (Ward Harris).
3. This product is designed to suit vehicles as delivered when new. Modifications such as suspension, skid plates, bumpers, hitches and other aftermarket additions may impact or prevent installation.

B. DO's AND DON'Ts

1. **DO: WE HIGHLY RECOMMEND ALL WORK TO BE COMPLETED BY A PROFESSIONAL INSTALLER.**
2. **DO:** Review these install instructions and plan your installation - tools, helpers and questions - ask ahead of time.
3. **DO:** Call 800-224-7801 ext. 101 (Ward Harris) with any questions - he will get you the right answer from the right source.
4. **DO:** Use **fuel rated thread sealer** or Teflon tape on all fittings.
5. **DO:** Keep all fuel lines away from the exhaust system and any sharp edges.
6. **DO:** Use Long Range Automotive fuel systems and parts in conjunction with original manufacturer's equipment or other Long Range Automotive systems and components.
7. **DON'T:** DO NOT have any open flames or heat sources in the installation area.
8. **DON'T:** DO NOT CUT any of the existing fuel pipes while in the vehicle or while attached to the fuel tank.
9. **DON'T:** DO NOT USE Long Range Automotive fuel systems and components with other aftermarket fuel systems. This type of use can result in malfunction and will void the Limited Warranty.

C. SAFETY PREPARATIONS

1. **BEFORE BEGINNING INSTALLATION, TURN OFF THE KEY AND DISCONNECT THE VEHICLE BATTERY.**
2. **ALWAYS WEAR THE PROPER SAFETY EQUIPMENT (SAFETY GLASSES, HEARING PROTECTION, GLOVES, ETC. AS APPROPRIATE).**
3. **BE SURE TO KEEP HEAT, SPARKS AND OPEN FLAME AWAY FROM THE INSTALLATION AREA.**

D. INSTALLATION KIT CONTENTS

HARDWARE	HOSES & CLAMPS	MISC PARTS
3 x M8 x 20mm Bolt	1 x 19mm Fuel Hose @ 16" Long	1 x BS356 "O" Ring
5 x M10 x 30mm Bolt	1 x 8mm Hose @ 8" Long	1 x Front Secondary Bracket
6 x M8 x 25mm Washer	2 x 8mm EFI Hose @ 31.5" Long	1 x Rear Secondary Bracket
10 x M10 x 25mm Washer	2 x 16mm Conduflex @ 31.5" Long	1 x Hold Down Ring
1 x M10 Spring Washer	2 x 1" Clamps	1 x FLVV (Attwood) Valve with P6 3/4" x 3/8" Elbow (fitted to tank)
3 x M8 Nyloc Nut	6 x EFI Hose Clamps	1 x LRA Modified Back Flow Valve
5 x M10 Nyloc Nut		1 x Reinforcing Plate for Front Inboard Mount with M10 Nut Welded
6 x M5 x 8mm Cap Screw		2 x 14" Cable Tie
6 x M5 x 8mm Pan Head Screw		1-TTACDCR 2018+ Filler Kit (Contains Toyota P/Ns 77201-04130 Fuel Filler Pipe Assembly, 77213-04080 Fuel Hose - Tank To Pipe, 77300-47010 Fuel Cap)
1 x M10 x 30mm Bolt with 150mm Strap		
1 x M10 x 30 1.25p 14mm Head Bolt		
12 x M5 Washer		
BRASS		
1 x P6 5/16" x 1/4" Elbow with 5/16" Bundy Tube @ 3.14" Long		

E. TOOLS NEEDED

1. Safety Items
    a) Safety Glasses
    b) Hearing Protection
    c) Gloves
2. Ratchet Wrench
    a) Metric Socket Set
    b) Socket Extensions
3. Drill
    a) Metric Drill Bit Set
    b) T55 TORX Bit
    c) T30 TORX Bit
4. Sharp knife/cutter
5. Catch Pan/Spill Mats
6. Vehicle Owner's Manual
7. Mallet
8. Hydraulic Jack
9. Flat Screwdriver
10. Digital Multimeter
11. Fuel Rated Thread Sealer
12. Circuit Test Light
13. Glue or Glue Gun

II. REMOVING THE OEM TANK

NOTE: The easiest way to install this tank is to remove the cargo bed. It is possible to complete the installation without doing so, but we recommend bed removal in order to shorten install time, ease access and reduce/eliminate potential for kinked supply and return/vent hoses The bed is made of composite plastic and weights less than steel. Two techs will take less than twenty minutes to remove in most cases. **SPRAY BED BOLTS IN ADVANCE TO EASE REMOVAL.**

A. **REMOVE THE CARGO BED (OPTIONAL)**

1. From under the truck, unplug reverse camera harness (if equipped) and protect plug ends. Unclip retainer grommet that secures the harness to the bed through the rear of the bed.
2. While under the truck, disconnect the clips securing the rear lamp wiring harness to the underside of the bed along the rear and by each taillight.
3. Disconnect the tailgate cable and remove the tailgate.
4. Using a 10mm wrench, remove the 2 bolts securing each taillight. Leave bulbs in the taillight housings, just unclip the harness from the bulb holder. Pull taillights from the pop-pins and disconnect from the wiring harness. Set taillights aside (keep track of the mounting hardware for reinstall).
5. If you have a 110V outlet in the bed, it will need to be removed as well. It is easier to remove the “cubby” from inside the bed to unplug the outlet and remove the clip. The “cubby” is secured with 6 bolts, a T30 TORX bit will remove them. Unplug connection, unclip wire and push harness back through to the taillight area.
6. Remove remaining wire harness clips at the taillights and drop the harnesses down through the holes.
7. From the driver side wheel well, use a 12mm wrench to remove the bolt securing the filler hose/vent to the frame.
8. Remove fuel cap and insert a rag into the filler neck. Push neck into bed to be sure it is loose (there is a grommet connection only).
9. While inside the bed, use a T55 TORX bit to remove the 6 bed bolts.
10. **OPTIONAL:** You may wish to to remove the rear bumper to make bed removal easier.
11. Make sure everything is disconnected as you lift off the bed, including wiring, filler neck and any other items that may have been relocated /reattached to the bed during customization.
12. Mark and remove driveshaft.

B. REMOVE THE OEM TANK

1. If your vehicle has a fuel tank skid plate, remove it.
2. On the Late Model (2018+) Tacomas, Toyota eliminated running two separate hoses for the fuel supply/ return and combined them into one assembly:

3. Have a bucket and rags ready to catch fuel.
4. Before removing hose assembly, mark both ends with a paint pen for re-assembly:

B. REMOVE THE OEM TANK *(continued)*

5. Disconnect the feed and return lines by squeezing the blue squares on either side of the connection and pulling the connection apart simultaneously. Pull the orange clip down on the other line to expose the blue squares and repeat (**CAUTION**—fuel under pressure, it will spray out when line is disconnected). It will be easier to squeeze the clips and release if the clips are first cleaned or blown out with compressed air.
6. Disconnect the other end from the fuel tank sending unit.
7. Slice the single supply hose from the factory Tee fitting and remove:

8. Install new hose with clamp to Tee fitting.

B. REMOVE THE OEM TANK *(continued)*

9. From above, disconnect the charcoal canister from the tank. These are squeeze-type fittings, like on the fuel lines. Set hose aside, it is not used with the new tank.

10. Disconnect the vent hose from the vent tube on the filler neck. This connector has a yellow clip on it that must be released to expose the squeeze buttons like on the fuel line. It is not necessary to remove this hose from the OEM tank, as this line will be replaced with the 8-inch length of 8mm rubber hose included in the install kit.

B. REMOVE THE OEM TANK *(continued)*

6. Remove the shield from the top of the fuel pump/fuel gauge sending unit. The shield has a few clips in it, place a finger at each of the circled locations in the photo below, squeeze and pull to release the clips and lift off the cover. Set the cover aside, it will not be reused. Unplug the wiring from the fuel pump/fuel gauge sending unit.

7. Loosen the hose clamp on the filler neck to tank connection and remove rubber fill hose from the tank.

B. REMOVE THE OEM TANK *(continued)*

8. Support the tank. Using a 14mm wrench, remove the driver-side bolts securing the straps from the frame and let the straps hang free. Remove the 2 clips and pins that secure the passenger ends of the tank straps. Retain the better of the two bolts, as it will be reused for the rear driver-side mount on the new tank. Set the straps and other hardware aside, they will not be reused.

9. Carefully lower the tank making sure all connections are disconnected and free to move.

III. TANK PREPARATION

A. FUEL PUMP/GAUGE SENDING UNIT SWAP

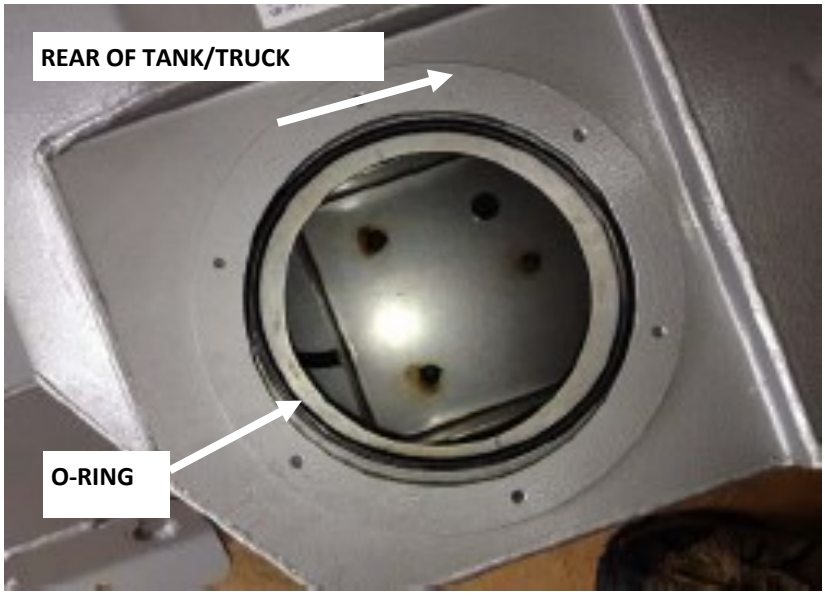
1. Carefully cut the plastic line at the connector to remove it. This is most easily done with the line lightly secured in a vise. Set the remaining plastic line aside, it will be replaced with the 31.5-inch length of 8mm EFI hose.

2. Be sure the top of the OEM tank is clean. Remove the retaining ring from the pump/sender. There is a tool for this, but you can remove it using a flathead screwdriver and a hammer to drive it off (release the locking tabs as you go).
3. Carefully pull the pump out of the tank, prepared for fuel to go everywhere as the pump sits in a sump on the assembly that retains fuel. Be careful when removing as the sender float is also attached to the assembly.

A. FUEL PUMP/GAUGE SENDING UNIT SWAP *(continued)*

4. Cut the ear/tab off the pump/sender plate. Snips work best, then use a razor to remove any burrs.

5. Put the supplied magnet into the new tank, locating it as close to the entry of the swirl pot (fuel pick-up point) as possible.
6. Place O-ring and lower the pump/sender into the tank with the float facing the rear of the truck. Install the hold-down ring from the kit using the included M5 screws and washers.



B. INSTALL TANK HARDWARE

1. Install P6 elbow/Bundy tube with nipple facing driver side of vehicle (using fuel-rated thread sealer). Install 8-inch length of 8mm hose to this nipple using an EFI clamp.

2. Install 31.5-inch length of 8mm EFI hose onto the OEM fitting removed in III.A.1, using the small EFI clamp. Connect fitting to the pump/sender and secure with the OEM yellow retaining clips.
3. Slide the Conduflex onto this hose and route to the passenger side of the vehicle.

IV. VEHICLE PREPARATION

A. INSTALL MOUNTING BRACKETS

1. Bolt the front cross member support plate to the vehicle using 2 M8 x 20mm bolts from the rear face of member.
2. Fit the rear inboard secondary bracket using one of the OEM inside strap mount holes, M8 x 20mm bolt, and two M10 x 30mm bolts, one with strap welded on.

REFER TO BRACKET FIT KIT INSTRUCTIONS BELOW




A. INSTALL MOUNTING BRACKETS *(continued)*

3. Trim the front spring eye bolt flush with nut on left-hand side (THIS NEEDS TO BE DONE BEFORE THE NEW TANK GOES IN).

4. Screw M10 x 30mm fine thread bolt with the 14mm head into front outside mount, using OEM M10 strap bolt for rear outside mount and new M10 x 30mm bolt washer and Nyloc for inside rear.
5. Once these three mounts are secure, drill inside front mount and secure with M10 x 30mm bolt and plate with nut welded on.
6. Using existing holes in the front X-member, secure with M10 x 30mm bolts, nuts and washers.

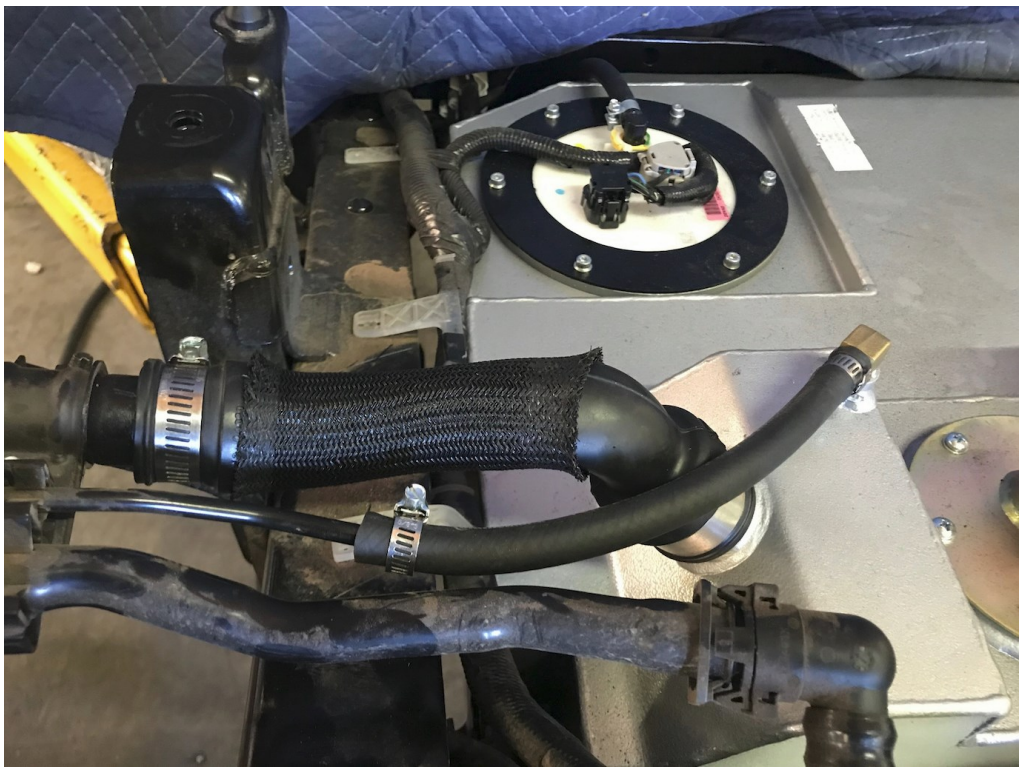
B. REFER TO FILER NECK INSTALLATION ADDENDUM BELOW

3. Install new parts to vehicle.

V. TANK INSTALLATION

A. JACK TANK INTO POSITION/SECURE TANK

1. Carefully lift the tank into position stopping part way to feed the fuel pump lines between cross member and chassis rail. CONFIRM CLEARANCE AT THE LEAF SPRING BOLT (the one trimmed in IV.A.3)!
2. Insert the backflow valve into the filler neck on the new tank. Fit the filler hose to the tank as shown below:



3. Connect the lines at this time. Also connect the pump assembly wiring. Feed the fill hose onto the neck as you jack into position. **MAKE SURE NOT TO KINK FILL OR VENT HOSES!**
4. Install all mounting bolts, finger-tighten (in case tank needs to be shifted slightly).
5. Carefully remove the plastic connector from one end of line which goes to the charcoal canister, refit to new 19mm hose.
6. The other end of hose connects to the FLVV (the Fill Limit Vent Valve is designed to maximize fuel tank capacity and facilitate automatic nozzle shutoff)/Attwood valve. Secure with 1”clamps.
7. Refit the emission line to the charcoal canister.
8. Connect the 8mm breather. You will need to unclip the breather line from the filler so that there are no low points in the line.
9. Tighten the filler hose.
10. Tighten all mounting bolts, making sure all are secure.

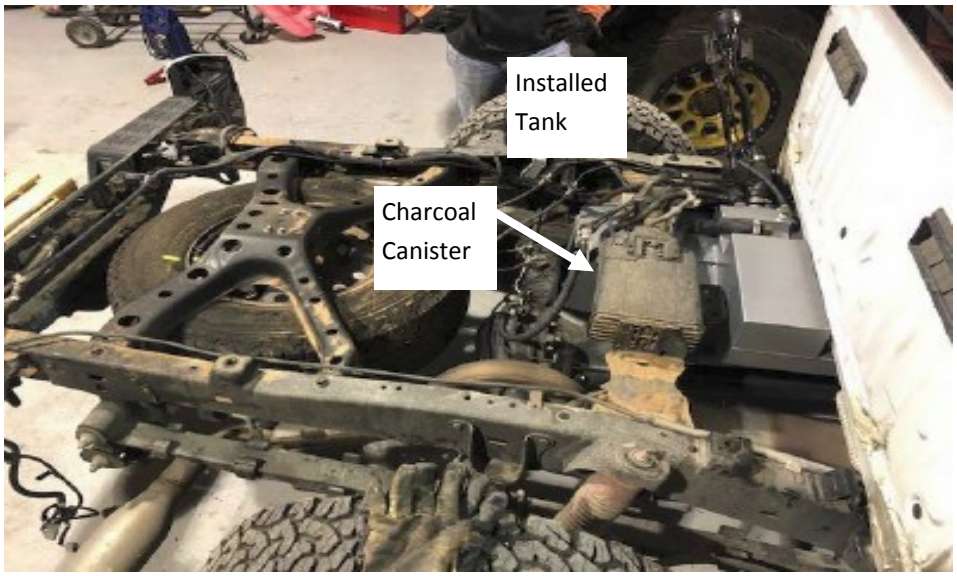
V. TANK INSTALLATION *(continued)*

B. **INSTALL CARGO BED (OPTIONAL—IF BED WAS REMOVED)**

1. Set bed on frame.
2. Position and reinstall wiring/clips.
3. Reinstall six bed bolts.
4. Reinstall/attach tail light housings.
5. Re-bolt fuel neck.
6. Replace fuel cap.

C. FINISH INSTALLATION

1. Refit the drive shaft.
2. Check all clearances and neatly cable tie all hoses and wiring.
3. Reconnect vehicle battery.
4. Fill tank with fuel, check again for leaks. **DO NOT OVERFILL OR "TOP OFF" TANK WHEN FILLING, DAMAGE TO YOUR EMISSION SYSTEM MAY RESULT.**



Installed Tank—Driver Side

VI. FINAL INSTALLATION CHECKLIST

A. Are all hose clamps tight and secure?

B. Are all nuts and bolts secured?

C. Are mounting brackets and straps secure?

D. Are Fuel Gauge Sending Unit bolts secured?

E. Are all fuel lines secure with no kinks?

F. Does tank interfere with, or rub on, other vehicle components?

G. Is tank calibration accurate?

☐ **Congratulations! You have completed the install!**

TANK USER GUIDE

WELCOME

And congratulations on the purchase of your new tank from Long Range Automotive of Melbourne, Australia. Properly installed and maintained, the tank is easy to operate and will provide you with years of service.

As North American agent, Long Range America is here to help along the way. Your first stop with questions about tank, installation and use is this guide, followed by a call to your installer and if need be, a visit to our website for more help.

Your kit is covered by a three-year limited warranty you can see on our website here https://longrangeamerica.com/tank-warranty-registration/tank-limited-warranty/ and we strongly encourage you to register your purchase with us at this link https://longrangeamerica.com/tank-warranty-registration/

Why register? We want you to have a flawless experience, but some-times things happen (we need to make repairs, replacements, etc.). Registration is our way of keeping track of our tanks after they leave the warehouse.

We need to collect this information within thirty days of kit purchase – whether direct sale from LRAM or through one of our authorized dealers. In addition, we occasionally make improvements to our in-service products and there may even be recalls. For these reasons, we need this information. Please help us serve and support you!

OPERATIONS

New Configuration:

Your new tank is configured similarly to the OEM tank, and operates in a similar manner.

Adding Fuel:

The fill point is in the same location, and fills identically to the OEM tank.

While Driving:

The fuel gauge should function as with the OEM tank, though this can differ from vehicle to vehicle. In general the Long Range replacement tank has a greater surface area than the original tank, and there is a portion of fuel above the full limit of the float that needs to be used before the gauge starts to move. It is important to remember that the actual fuel gauge will read correctly at empty. Low fuel warning lights will generally come on at the same level as the original tank but with a greater reserve capacity as the tank has a larger surface area. There may be some variance due to the differing tank size. We suggest that to become familiar with how your fuel gauge registers once you have your Long Range tank fitted you refill your tank from quarter, half and three quarters of a tank and take note of the number of gallons you can put in. Another tip is to reset one of your trip meters every time you fill your tank, over time you will be able to establish how far you can travel in different driving conditions.

OPERATIONS *(continued)*

While Driving (continued):

The Distance To Empty (DTE) function on your trip computer will not remain accurate. The vehicle's Engine Control Unit (ECU) has the capacity of the original tank programmed into it and the DTE counts down as the float starts to move from Full to empty. The closer you get to empty the more accurate the DTE becomes. It is incorrect to say that once the fuel gauge starts to move you only have the capacity of the original tank left.

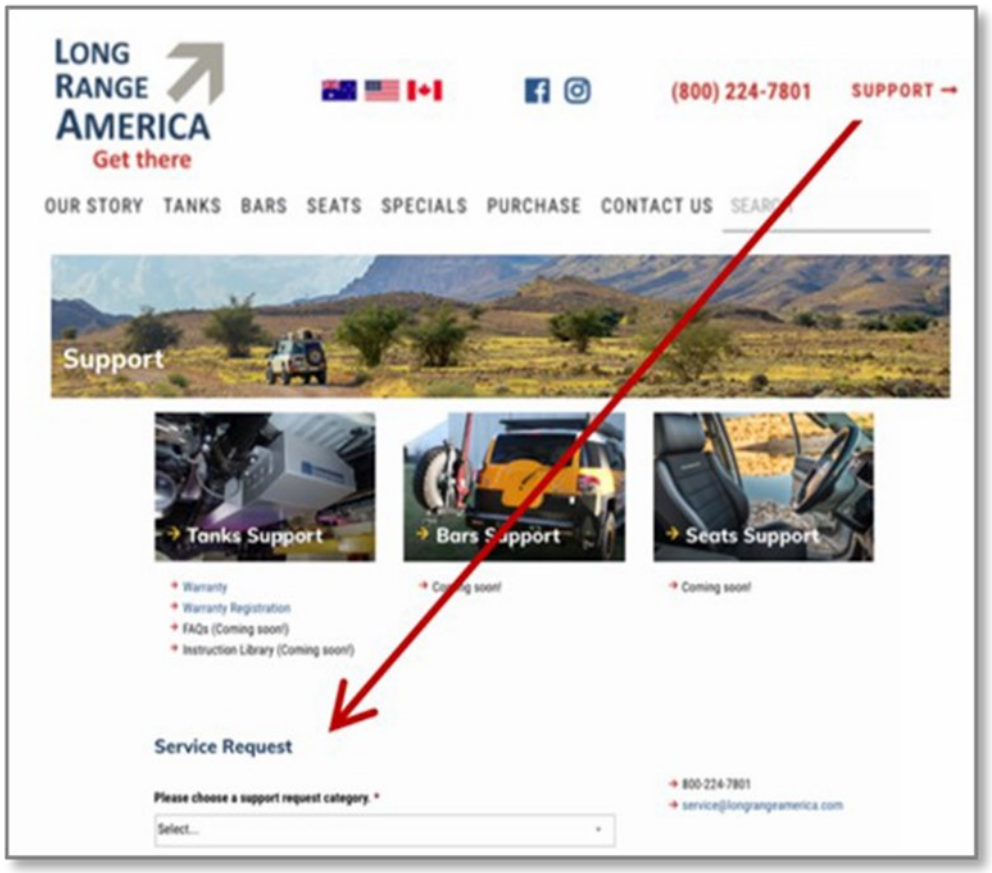
QUESTIONS & SUPPORT

- **Will I fill the tank in the same way as before?** See instructions on page 22.
- **Will my fuel gauge and DTE work correctly?** See instructions on page 22 and above.
- **Who do I call with questions, or for assistance?** Your first contact should be to the installer. If you are the installer, or if the installer cannot answer your question, please contact Long Range America in any of the following ways – **our business hours are 8am to 5pm (Pacific Time) Monday to Friday.**
  - Website via https://longrangeamerica.com/support/ (see below)
  - Email via service@longrangeamerica.com
  - Phone via 1-800-224-7801 x101 (Ward Harris)

And let us know how we can better serve you!

Best regards,

LONG RANGE AMERICA



LONG RANGE AMERICA

INSTALLATION ADDENDUM FOR 2018+ TACOMA

Version 1 3-8-21

To fit the factory-installed filler neck to the LRA tank Our solution involves reuse of the factory OEM fuel filler pipe and fuel filler cap in combination with the provided OEM rubber connector hose (line item 2 above) as follows.

1. (Tank body already installed in vehicle frame) The factory fuel filler assembly will have a rubber connector hose permanently affixed to the metal fuel filler pipe, with a razor knife, cut the rubberhose from the metal filler pipe (Figure 1).

Figure 1: Factory OEM connector hose being removed.

2. With a small flat blade screwdriver or pick, remove the rubber rings from either end of theprovided OEM rubber connector hose (Figure 2).

Figure 2: Rubber rings being removed from provided OEM filler hose.

3. Place hose clamps onto the ends of the rubber connector hose and slide the larger end if the rubber connector hose over the tank nipple. A small amount of WD-40 or other light oil and warming the hose with a heat gun can aid in installation. Then slide the factory OEM fuel fillerpipe into the rubber connector hose and tighten both hose clamps (Figure 3).

Figure 3: Factory OEM fuel filler pipe and provided OEM connector hose installed.

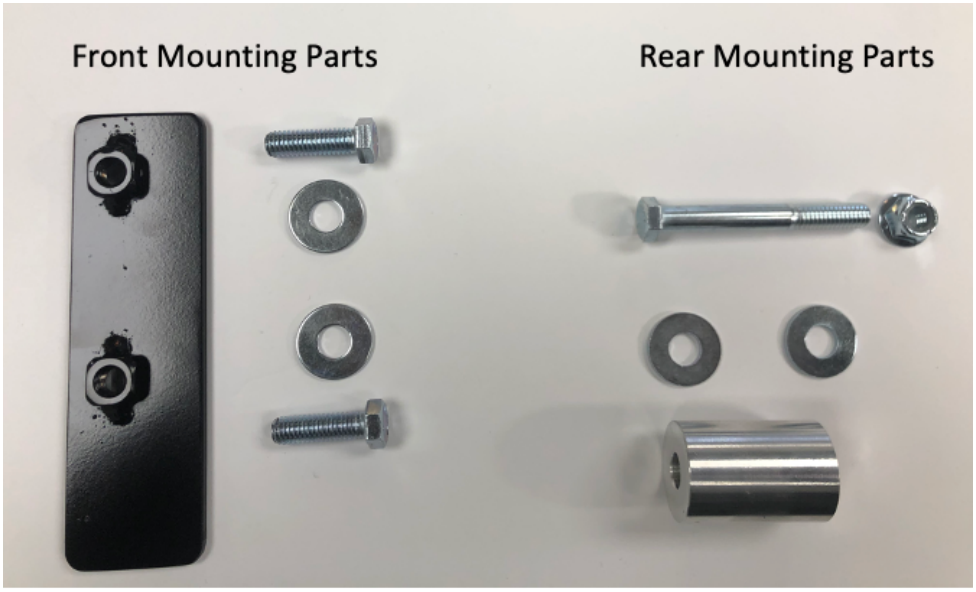
4. Connect the fuel tank vent and charcoal canister lines via the factory OEM quick connectors. The Fuel tank vent should have been modified as per the LRA instruction, reusing the OEM quick connector, and the charcoal canister line would have remained unmodified (Figure 4). It should be noted that the rubber connector in this photo is lightly kinked, which creates a possible u-bendwhich gasoline can become trapped in. This may be another contributing factor to the fuel regurgitation issue.

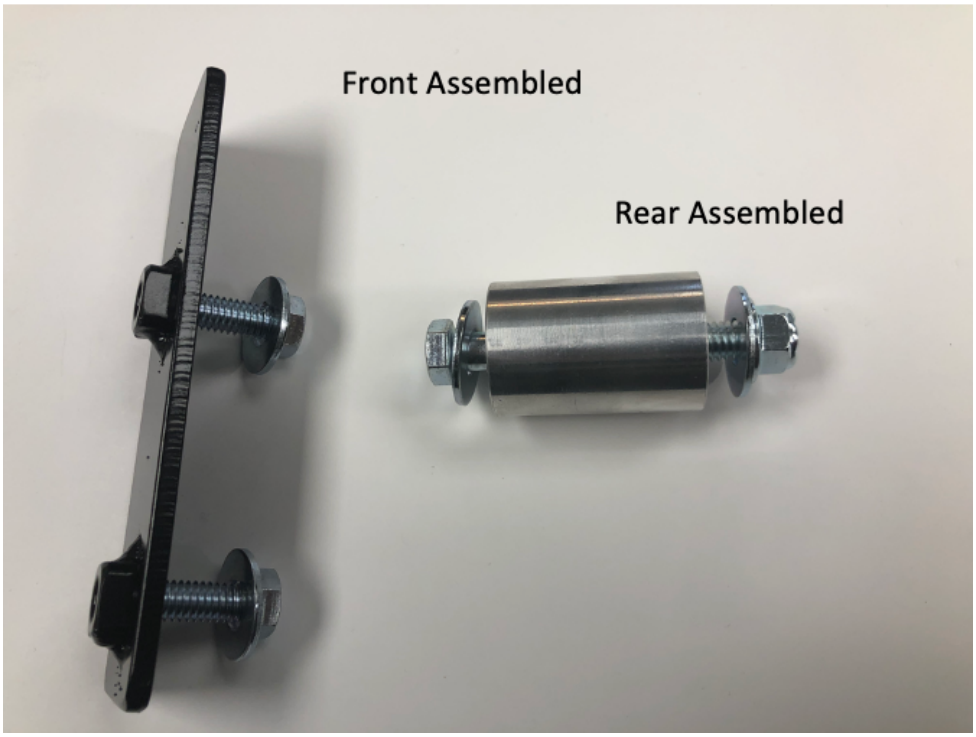
Figure 4: Charcoal canister line and fuel tank vent line installed.

2016+ Tacoma Dual Cab Short Bed
LRA Fuel Tank Fitment Kit Bracket Instruction Supplement

Fitment Kit Contents

Front	Rear
1 x Bracket Plate w/ 3/8” Welded Nuts	1 x USS Spacer
2 x 3/8-16x 1.25” Hex Bolt Grade 5 Zinc Plated	1 x /8-16x 3” Hex Bolt Grade 5 Zinc Plated
2 x 3/8” USS Flat Washers Zinc Plated	2 x 3/8 USS Flat Washers Zinc Plated
	1 x 3/8-16 Nyloc Flange Nut Grade 5 Zinc Plated





Front Bracket Mount

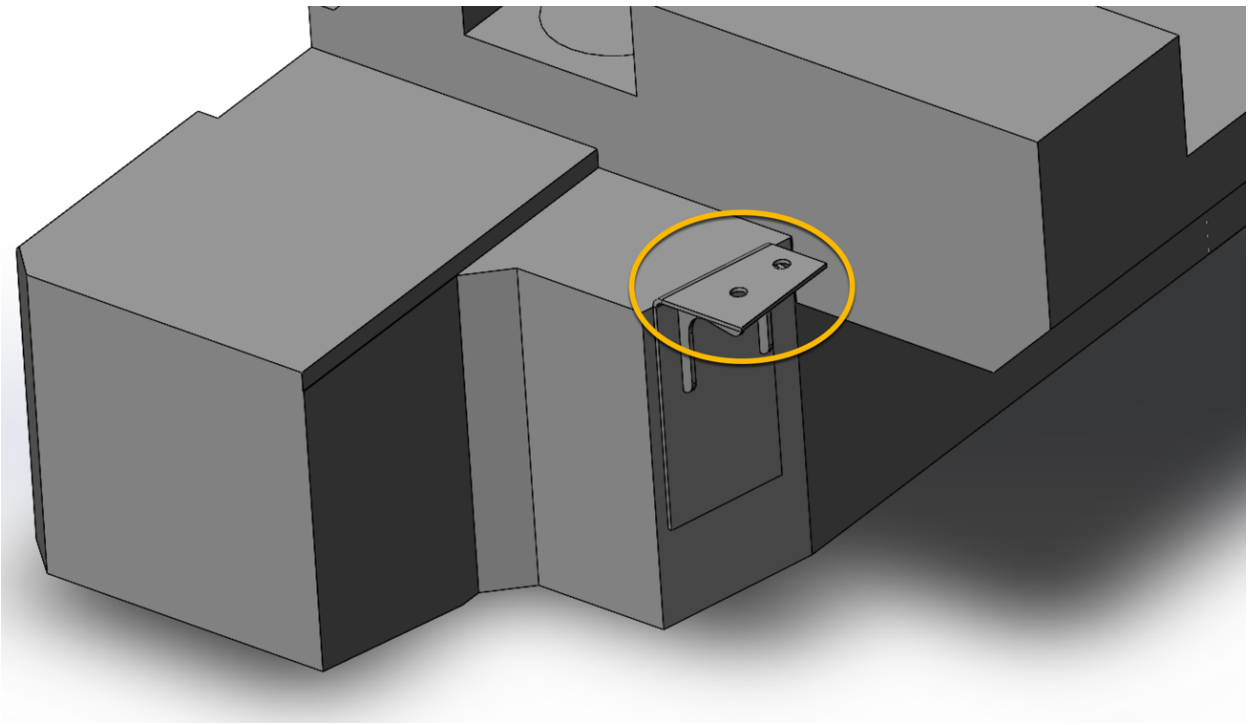
Fit plate behind frame cross-member with welded nuts on top of plate.

Install hardware to attach to tank – bolt (2) and flat washers (2).

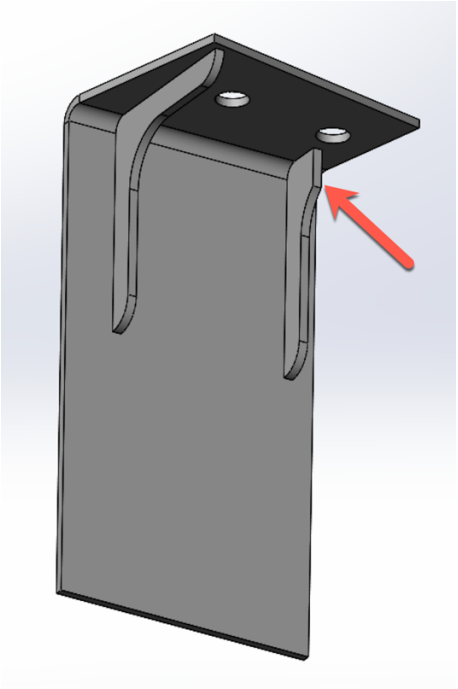
Tighten and torque to 30 ft lbs.

Rear Bracket Mount

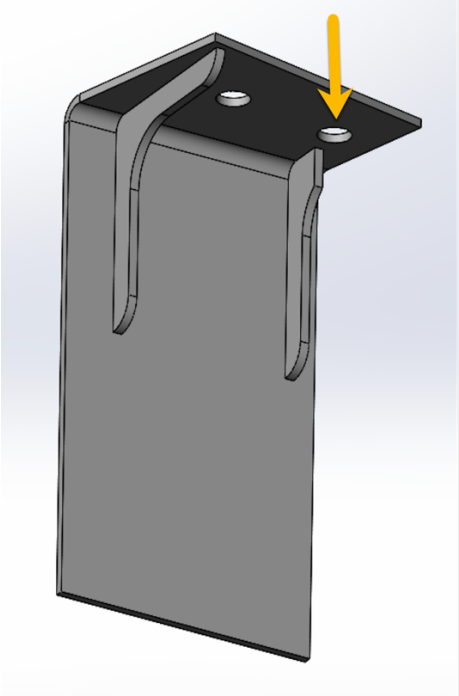
Mounting Tab on Tank - Second, new hole shown below



Begin by trimming gusset as shown

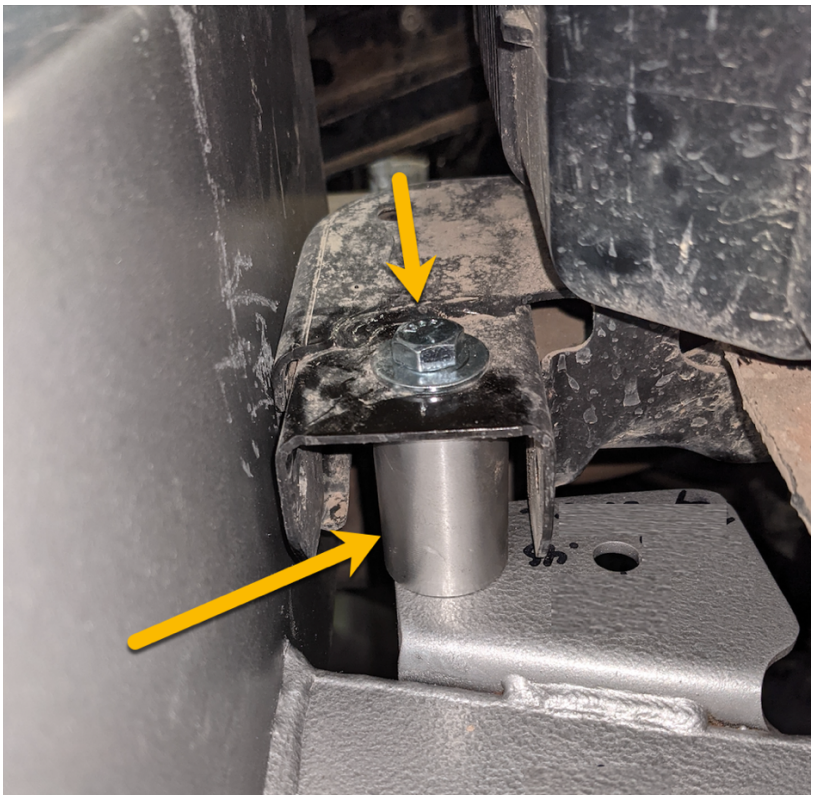


Drill 7/16” hole as shown



Install Rear Bracket Backing Plate w/Provided Hardware – one bolt, two flat washers and one cap nut.

Tighten and torque to 26 ft lbs.



Finished Installation of Rear Mount - 1

Finished Installation of Rear Mount – 2 Close Up