



# LONG RANGE AUTOMOTIVE/LONG RANGE AMERICA

Product Information/Install Instructions for

Toyota Tundra Four Door 2007-2020

Kit P/N TTUNDRADCR



## CONTENTS

## PAGE

PRODUCT INTRODUCTION/TANK PART NUMBERS & SPECIFICATIONS.....	2
I. BEFORE YOU BEGIN.....	3-5
A. INTRODUCTIONS.....	3
B. DO's AND DON'Ts.....	3
C. SAFETY PREPARATIONS.....	3
D. INSTALLATION KIT CONTENTS.....	4
E. TOOLS NEEDED.....	5
II. REMOVING THE OEM TANK.....	6-7
III. VEHICLE PREPARATION.....	8-10
IV. TANK PREPARATION.....	11-13
V. TANK INSTALLATION.....	14-16
VI. FINAL INSTALLATION CHECKLIST.....	17
LONG RANGE AUTOMOTIVE REPLACEMENT TANK USER GUIDE.....	18-19

**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 Tundra Four Door 2007-2020

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	TTUNDRADCR
Type	Replacement
Capacity –Gallons	46
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).

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.**

## I. BEFORE YOU BEGIN *(continued)*

### D. INSTALLATION KIT CONTENTS

HARDWARE	HOSES & CLAMPS	MISC PARTS
4 x M8 X 25mm Bolt	1 x 6mm Hose @ 32" Long	1 x Roll Over Valve
3 x M10 X 30mm Bolt	1 x 8mm Hose @ 17" Long	1 x Grommet
2 x M10 x 100mm Bolt	1 x 19mm Hose @ 27" Long	1 x BS 337 "O" Ring
8 x M8 x 20mm Washer	1 x 12mm Hose @ 10" Long	1 x BS 357 "O" Ring
6 x M10 x 25mm Washer	2 x Conduflex 13mm @ 12" Long	1 x FLVV Long (Fitted To Tank)
4 x M8 Nyloc Nut	1 x Conduflex 20mm @ 15" Long	1 x Front Secondary Bracket
5 x M10 Nyloc Nut	4 x 1/4" Hose Clamp	1 x Pump Hold Down Ring
12 x M5 x 10 Pan Head Screws	2 x 1/2" Hose Clamp	2 x 3mm 4.75" x 11.22" Rubber
12 x M5 Spring Washers	2 x 1" Hose Clamp	1 x Back Flow Valve (Flaps Reversed)
6 x M5 Washers		1 x Strap Rubber @ 28" Long
		1 x Strap Rubber @ 26" Long
		2 x Straps
<b>BRASS</b>		
1 x P6 5/16" x 1/4" Elbow		
2 x P6 1/2" x 1/4" Elbow		
1 x 3/8" x 3/4" x 1/4" Tee (LRA)		

## **I. BEFORE YOU BEGIN (*continued*)**

---

### **E. TOOLS NEEDED**

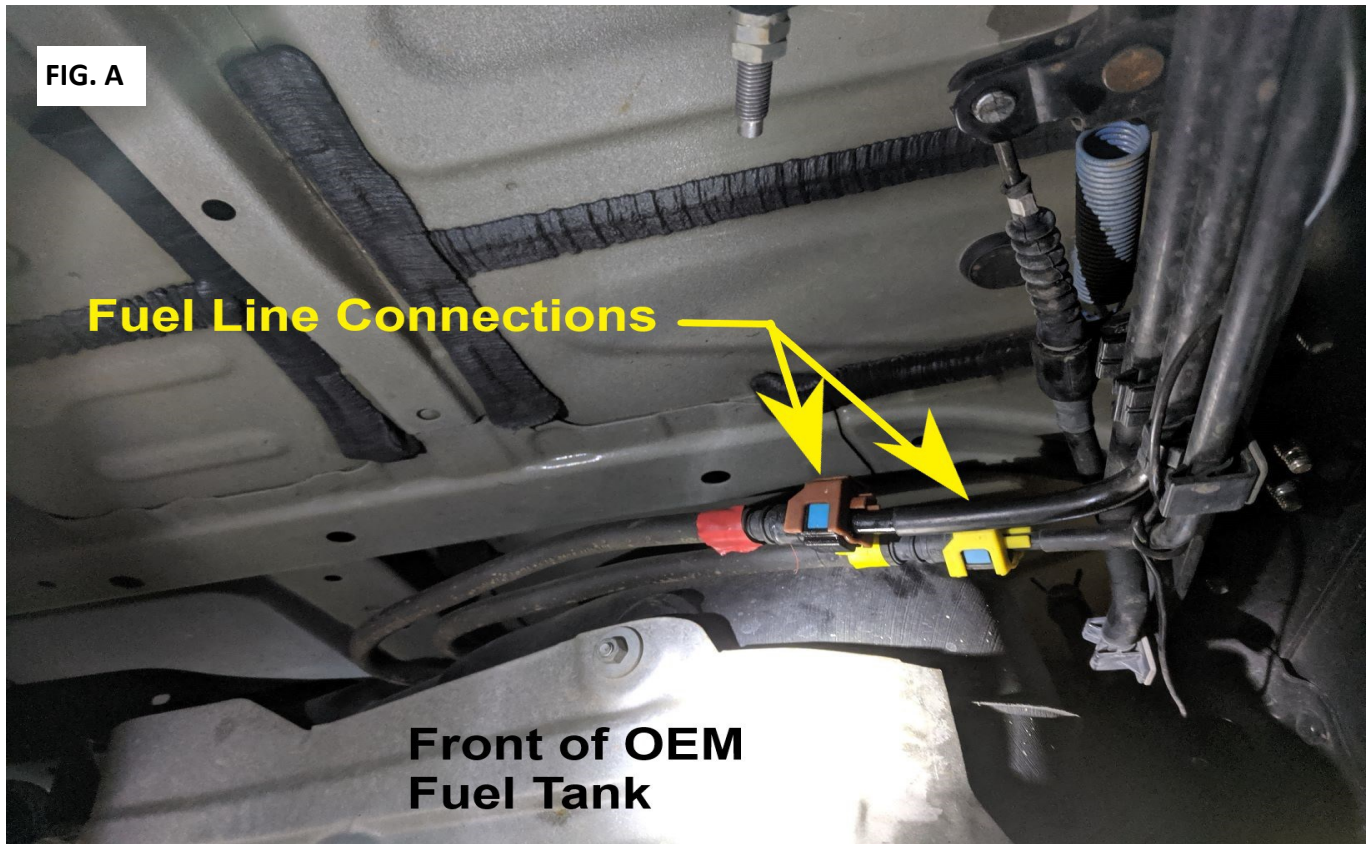
1. Safety Items
  - a) Safety Glasses
  - b) Hearing Protection
  - c) Gloves
2. Ratchet Wrench
  - a) Metric Socket Set
3. Drill
  - a) Metric Drill Bit Set
4. Catch Pan/Spill Mats
5. Vehicle Owner's Manual
6. Mallet
7. Hydraulic Jack
8. Flat Screwdriver
9. Digital Multimeter
10. Fuel Rated Thread Sealer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

## II. REMOVING THE OEM TANK

---

### A. DISCONNECT FILLER HOSES, PICK UP/RETURN LINES

1. Disconnect OEM filler and fast fill vent hoses at the tank and the vent line.
2. Color-code the fuel lines above the connections to match the locking clips, to avoid confusion on re-connection (Figure A).



3. Disconnect pick up and return lines at front of left-hand rear wheel arch (**CAUTION: Fuel will be under pressure and will spray**). Make sure to capture any fuel leakage.

### B. REMOVE THE OEM FUEL TANK

1. Place jack under the OEM fuel tank. Raise the jack until it just supports the tank.
2. Remove the tank support straps from the supported tank using a 14mm socket for the bolts on the frame rail side. The strap is secured on the driveshaft side by a pin. Keep all OEM hardware as it will be used to install the new tank.
3. Lower tank approximately 6 inches and slide toward the drive shaft, allowing access to the top of the sending unit.

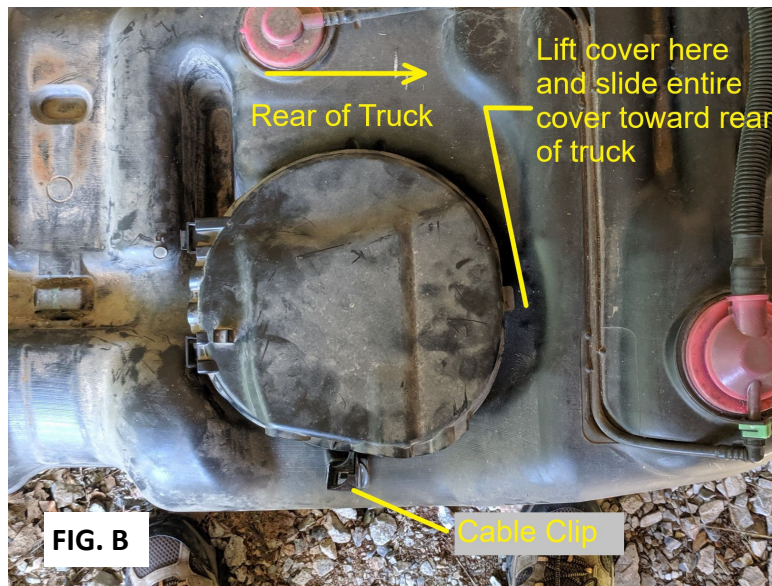


## II. REMOVING THE OEM TANK *(continued)*

---

### B. REMOVE THE OEM FUEL TANK *(continued)*

4. Flex Fuel vehicles have a plastic cover over the fuel gauge sending unit that will have to be removed to access the top of the sending unit. It can be removed per the photo (Figure B):



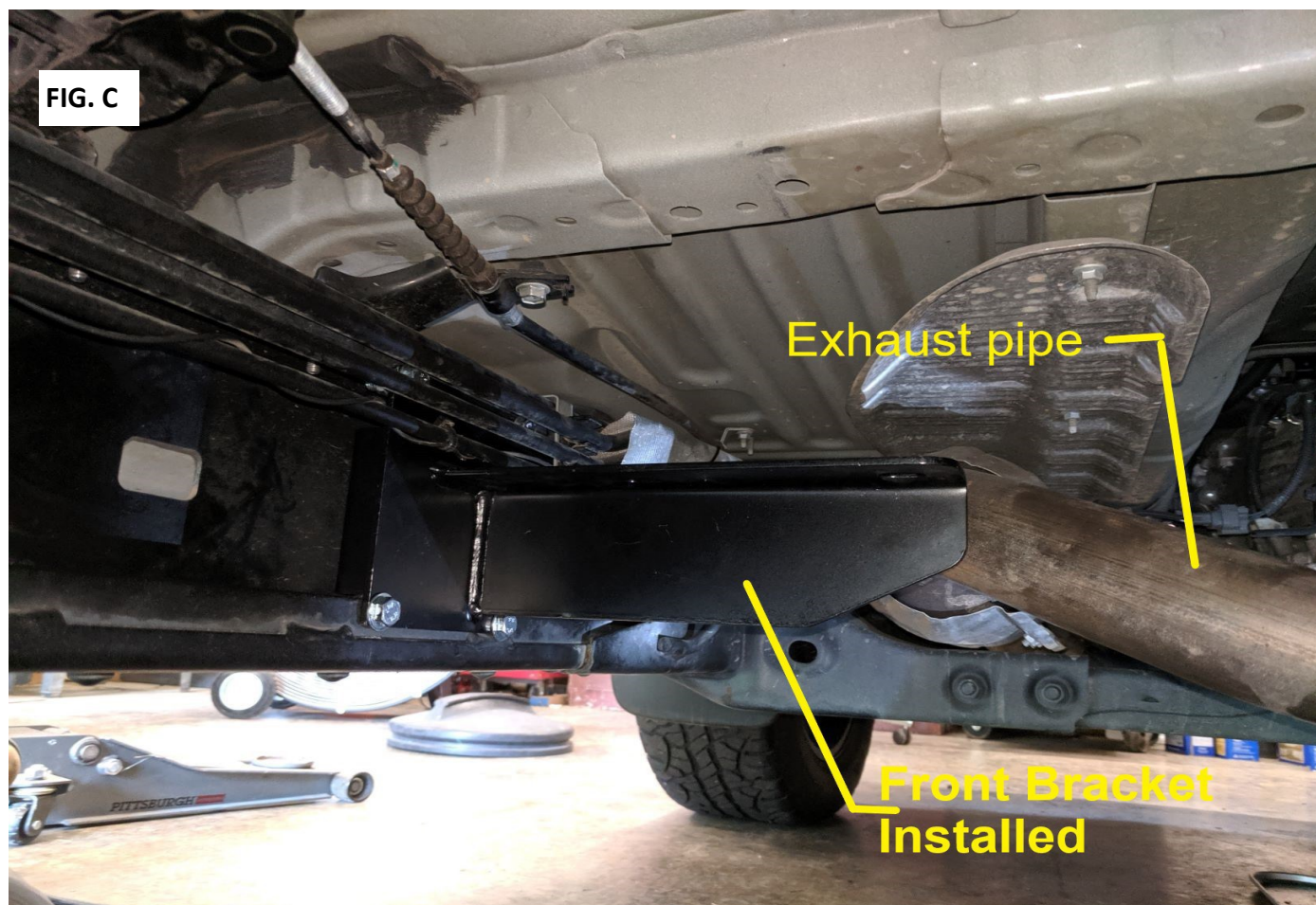
5. Disconnect the electrical connector from the top of the sending unit by depressing the tab on the top of the connector.
6. Flex Fuel vehicles have three fuel lines on the top of the fuel gauge sending unit. Disconnect the blue and red lines from the top of the sending unit by sliding the yellow locking tab back to the open position.
7. Once the locking tabs are open, remove the blue and red fuel lines from the top of the fuel gauge sending unit. The black line can remain attached to the top of the sending unit since it was already removed from the steel line it connects to on the vehicle frame.
8. Cut or remove the wire harness clip on the top of the tank on the driver's side of the OEM tank.
9. Finish lowering the tank, insuring nothing snags on the way down.

### III. VEHICLE PREPARATION

---

#### A. CREATE NEW TANK MOUNTING POINT

1. New front mount will be located on the left-hand chassis rail just behind where the exhaust crosses over between two slotted holes (Figure C).



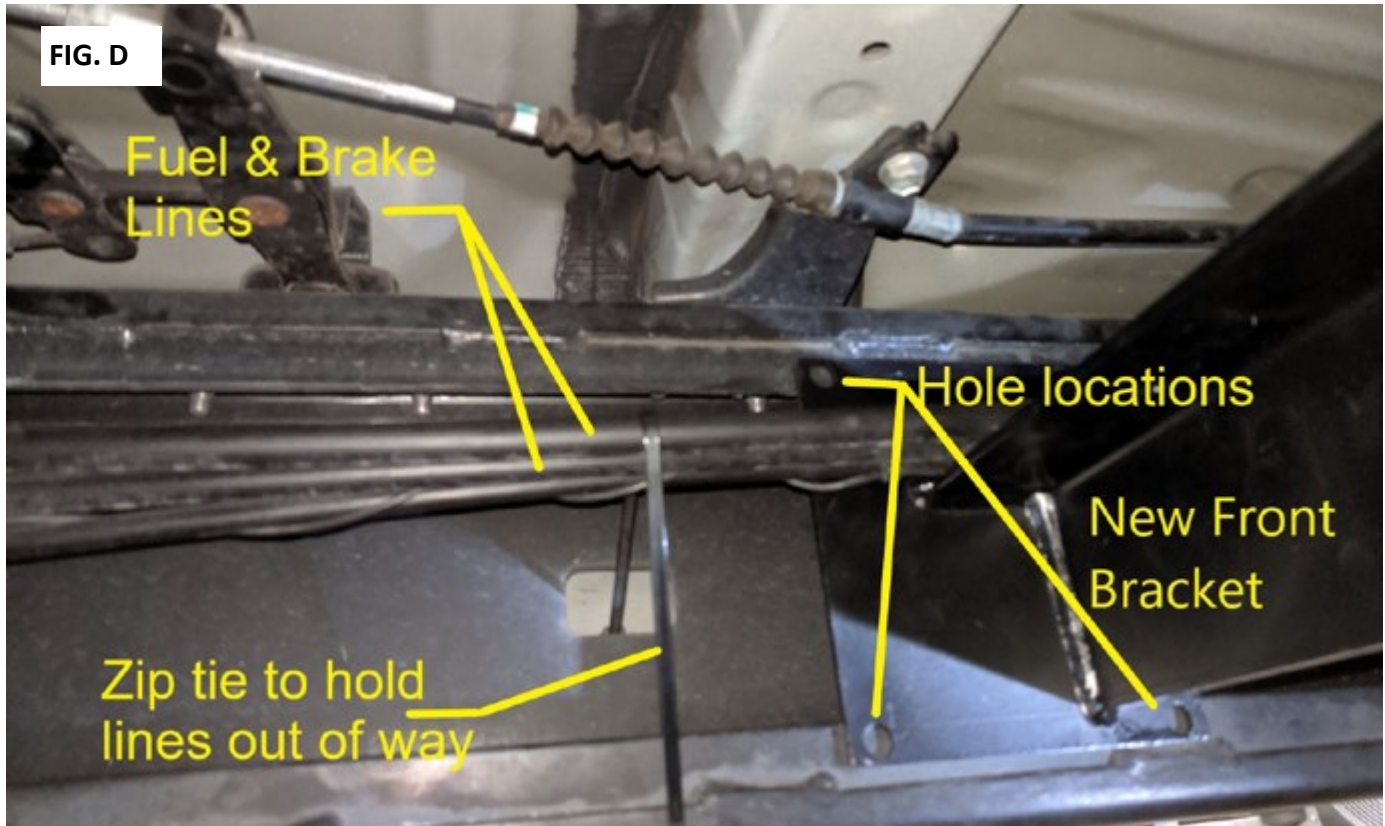


### III. VEHICLE PREPARATION *(continued)*

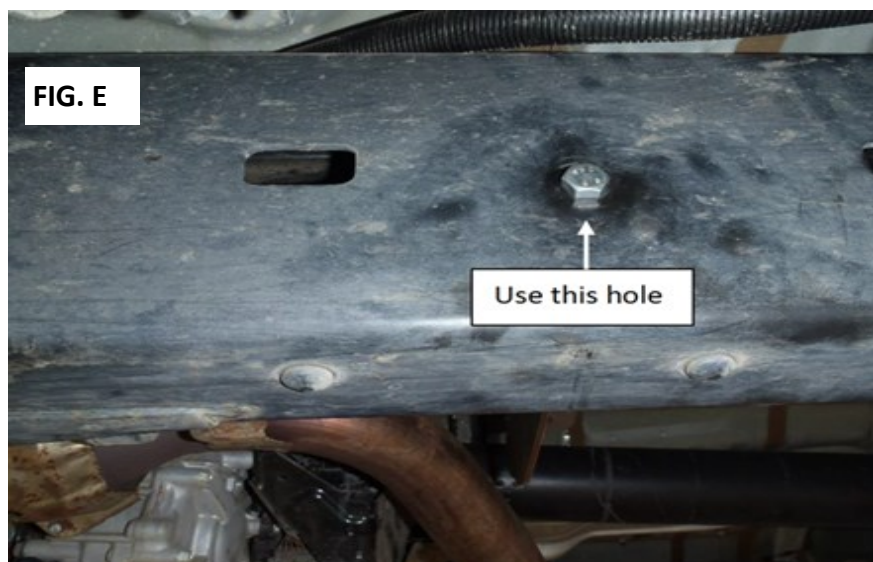
---

#### A. CREATE NEW TANK MOUNTING POINT *(continued)*

2. Loosen the three brackets holding the fuel and brake lines and tie the lines down out of the way with a zip tie (Figure D).



3. Use the round hole in the rail for bracket location (see Figure E).



### III. VEHICLE PREPARATION *(continued)*

---

#### A. CREATE NEW TANK MOUNTING POINT *(continued)*

4. Bolt bracket in place with M10 x 30mm bolt washer and Nyloc nut.
5. Unclip the 2 top lines just in front of bracket, move down temporarily, while you drill 4 holes 8.5mm diameter, using the bracket holes as a template.
6. Re-clip the two lines lowered for drilling. Drill out the two inboard strap pin mounts to 10.5mm (see Figure F).





## IV. TANK PREPARATION

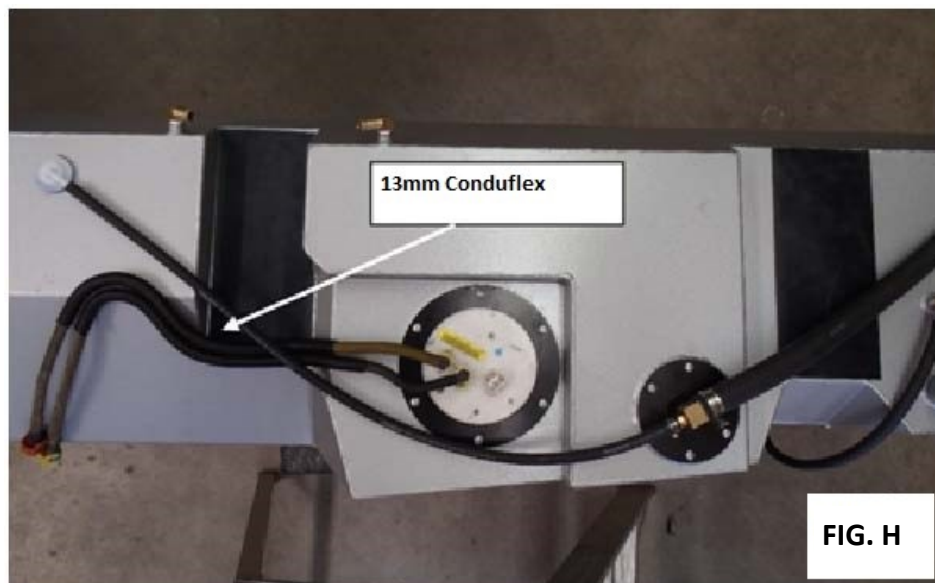
---

### A. PLACE MAGNET IN TANK/FIT OEM FUEL PUMP/GAUGE TO NEW TANK

1. Place magnet supplied in the Installation Kit inside new tank, as close as possible to fuel pick up or fuel entry to swirl pot.
2. Fit OEM fuel pump and fuel gauge sending assembly to tank.
3. Using BS 357 O-ring hold down ring and M5 x 10mm pan head screws with spring and flat washers, use slot in flange to locate the rotation of pump.



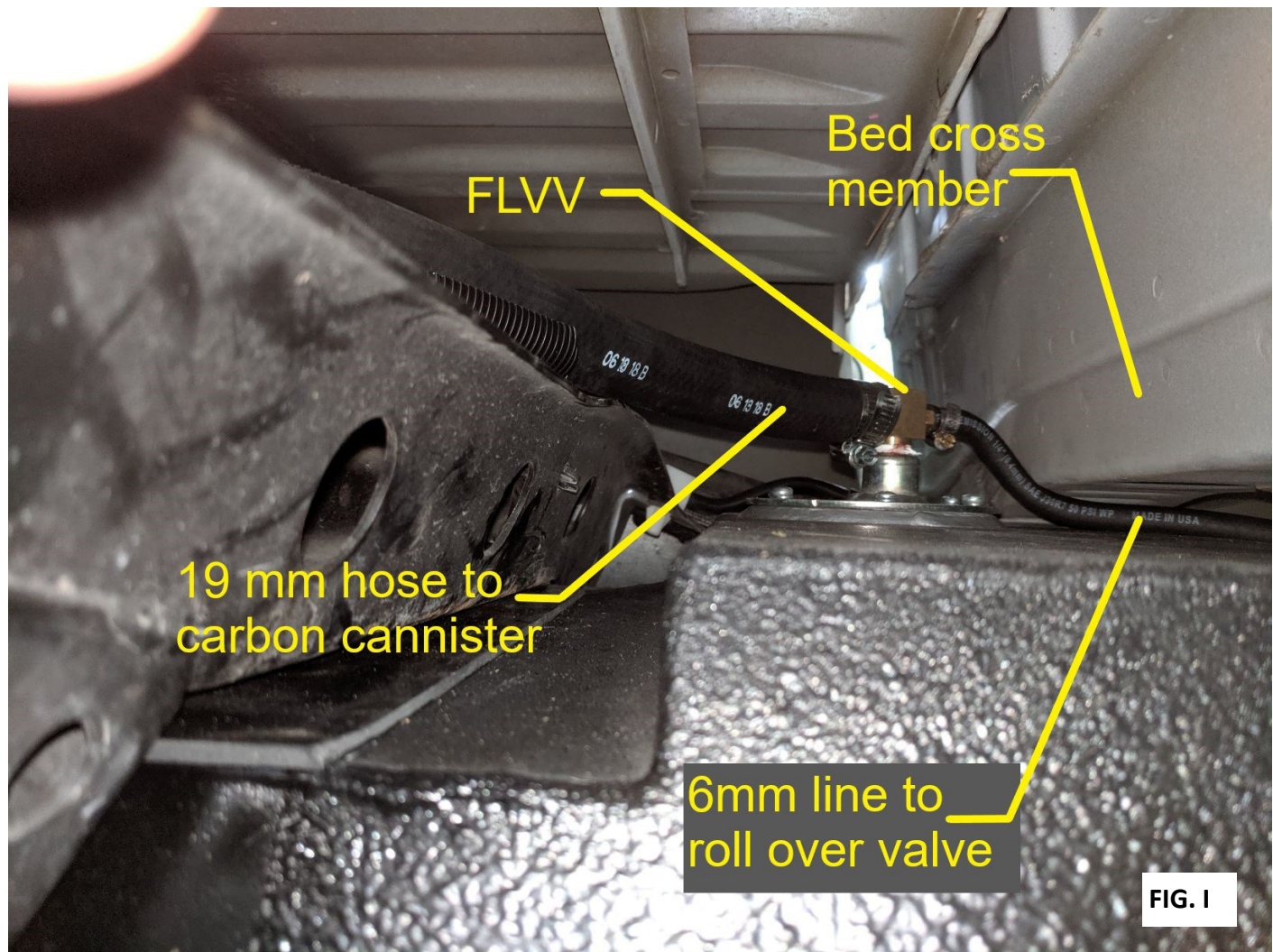
4. Fit the 13mm Conduflex over the pick-up and return lines (see Figure H).



## IV. TANK PREPARATION *(continued)*

### B. INSTALL VALVES AND FITTINGS TO TANK

1. Fit the grommet and roll over valve (a little soapy water on the grommet may ease install) and point it towards the pump assembly.
2. Connect the 32-inch length of 6mm fuel hose to the FLVV (the Fill Limit Vent Valve, or FLVV (aka Attwood Valve) is designed to maximize fuel tank capacity and facilitate automatic nozzle shutoff). ***Do not connect to roll over as yet because the line has to pass over front cross member after the tank is in position.***



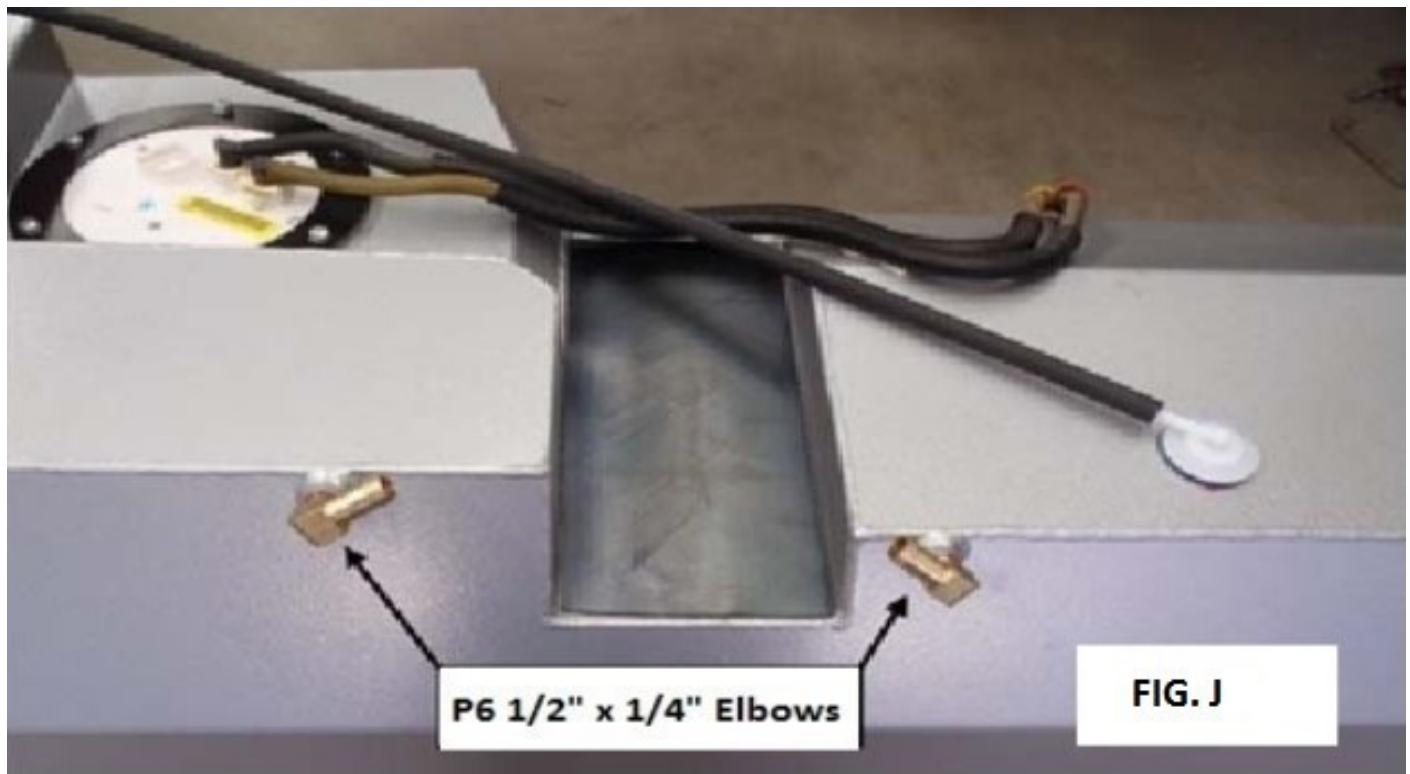
3. Fit the 27-inch length of 19mm hose to the FLVV. Screw the P6 5/16" x 1/4" elbow into tank near filler. Point slightly towards front side of filler.
4. Connect the 17-inch length of 8mm hose to elbow.

## IV. TANK PREPARATION *(continued)*

---

### B. INSTALL VALVES AND FITTINGS TO TANK *(continued)*

5. Fit the 2-P6 1/2" x 1/4" elbows to drive shaft side of tank. Point slightly upwards (see Figure J). The 10-inch length of 12mm fuel hose will be connected between these elbows after installation, to provide cross-venting between the tops of the two sections of the tank.



6. Glue the two rubbers 11-1/4" x 4-3/4" to top of tank where the straps are located.

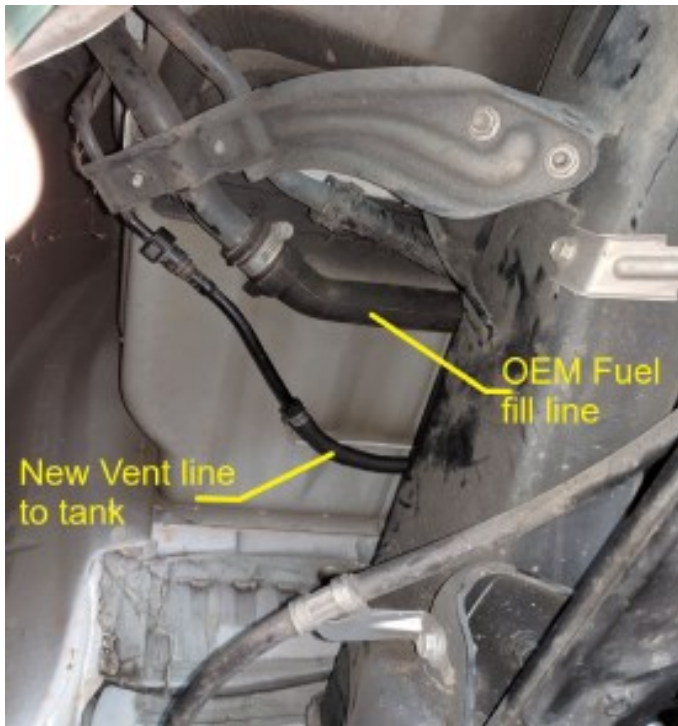


## V. TANK INSTALLATION

---

### A. LIFT TANK INTO POSITION

1. **Safely** lift tank into position feeding 6mm hose over front cross member and 19mm hose over rear cross member.
2. Stop before tank is completely in place and connect pump assembly wiring, pick up and return lines and roll over valve. Be sure not to crush the fuel lines from the fuel pump between the tank and frame when raising the tank.
3. Attach the two remaining hoses to the filler neck.



FUEL FILL & VENT LINE AT CONNECTION TO  
FUEL FILL DOOR



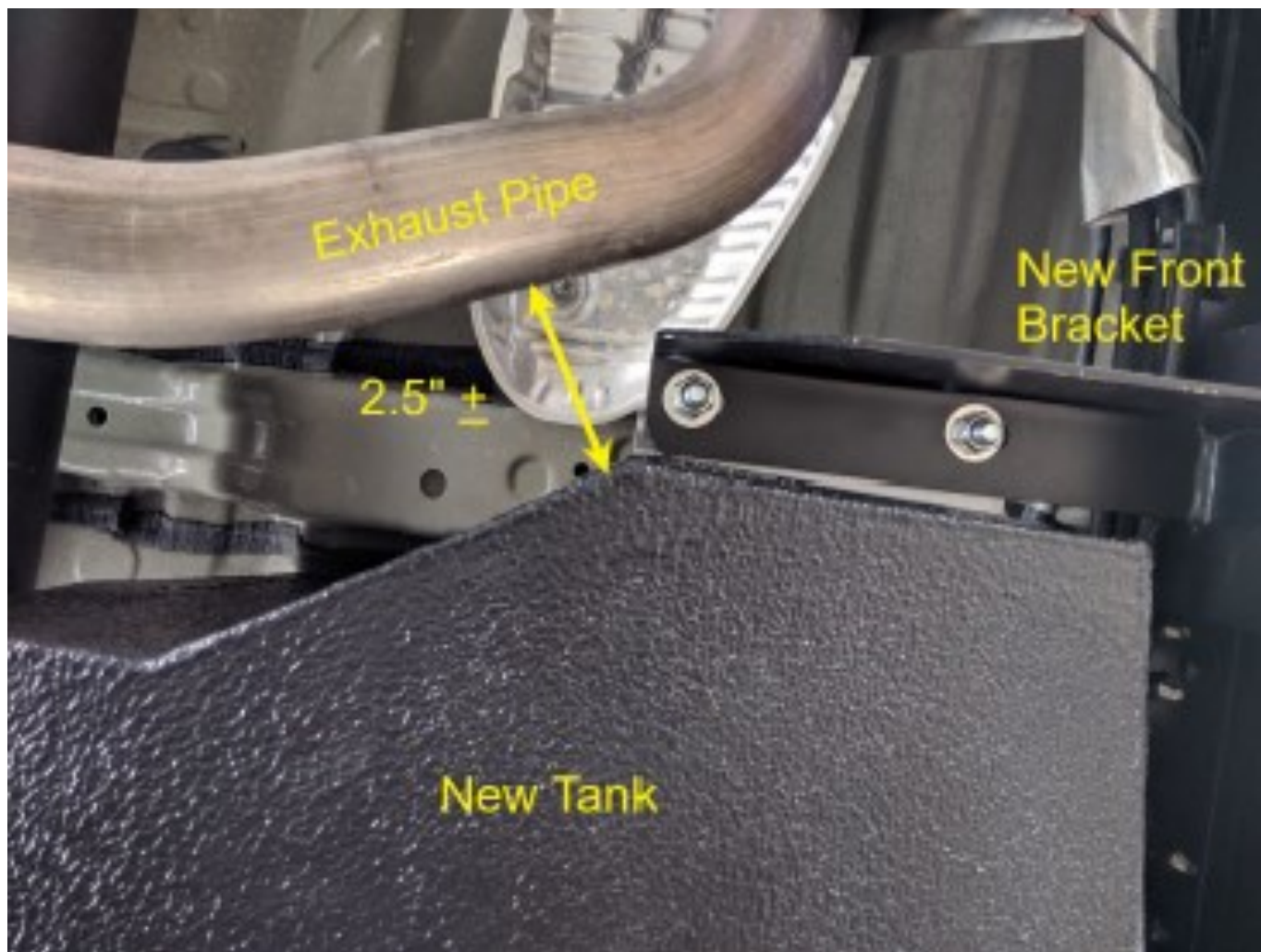
FUEL FILL & VENT LINE AT TANK

## V. TANK INSTALLATION (*continued*)

---

### B. FASTEN TANK TO VEHICLE

1. Feed front mount on top of new front bracket and move tank into place.



2. Fit new straps with M10 x 100mm bolts and Nyloc nuts on drive shaft side of tank and OEM bolts on chassis side.
3. Secure front mount with M10 x 30mm bolts, washers and Nyloc nuts.

## V. TANK INSTALLATION *(continued)*

---

### C. FINISH INSTALLATION

1. Remove 19mm connector from OEM tank and refit to the EE canister.
2. Connect 19mm hose to the connector using 1" clamp. Fit 20mm Conduflex over cross member edge to protect this hose. Connect filler hose to tank using OEM clamp.
3. Remove 8mm connector from OEM tank and fit to new 8mm line and connect in wheel arch.
4. Fit the 10-inch length of 12mm fuel hose between the two elbows installed in Step IV.B.5, page 13 after tank installation and secure with clamps.
5. Check all clearances and neatly cable tie all hoses and wiring.
6. Reconnect vehicle battery.
7. Fill tank with fuel, check for leaks. **DO NOT OVERFILL OR "TOP OFF" TANK WHEN FILLING, DAMAGE TO YOUR EMISSION SYSTEM MAY RESULT.**

## 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 18.
- **Will my fuel gauge and DTE work correctly?** See instructions on page 18 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](mailto:service@longrangeamerica.com)
  - Phone via  
1-800-224-7801  
extension 101 (Ward  
Harris)

And let us know how we can better serve you!

Best regards,

LONG RANGE AMERICA

