



LONG RANGE AUTOMOTIVE/LONG RANGE AMERICA

Product Information/Install Instructions for

Toyota Land Cruiser 40/42 Series (All Years) *Petrol (Gas)/Diesel*

Kit P/N TLC40RA



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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 Land Cruiser 40/42 Series (All Years) *Petrol (Gas)/Diesel*

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	TLC40RA
Type	Auxiliary
Capacity –Gallons	21
Fill Point	NEW
Fuel	Petrol (Gas)/Diesel
Location	Behind Rear Axle
Relocate Spare	NO
Exhaust	MODIFY (exhaust to exit right-hand side in front of rear wheel, not supplied in kit)

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.**

I. BEFORE YOU BEGIN *(continued)*

D. INSTALLATION KIT CONTENTS

HARDWARE	HOSES & CLAMPS	MISC PARTS
<p>2 x M10 x 30mm Bolt</p> <p>2 x M10 x 50mm Bolt (use w/ spacer block)</p> <p>2 x M10 Nyloc Nut</p> <p>4 x M10 Washer</p> <p>2 x M8 x 85mm Bolt</p> <p>2 x M8 x 100mm Bolt (use w/ spacer block)</p> <p>2 x M8 Nyloc Nut</p> <p>4 x M8 Washer</p>	<p>1 x 44mm Fuel Hose @ 3.94" Long</p> <p>1 x 8mm Fuel Hose @ 47.24" Long</p> <p>1 x 12mm CMP Hose @ 19.69" Long</p> <p>1 x 6mm CMP Hose @ 59.06" Long</p> <p>10 x 1/4" Hose Clamp</p> <p>2 x 1/2" Hose Clamp</p> <p>2 x 1-1/2" Hose Clamp</p>	<p>1 x Filler Neck w/Fast Fill Vent #FNTLC40RA</p> <p>1 x Locking Fuel Cap Petrol/Diesel</p> <p>1 x WZ14 Filter</p> <p>1 x Filler Neck Mounting Grommet</p> <p>1 x 3 Port Solenoid Valve</p> <p>1 x Spacer Block @ 100mm x 50mm x 20mm</p> <p>1 x Spacer Block @ 150mm x 50mm x 20mm</p> <p>1 x Spacer Block @ 300mm x 50mm x 20mm</p> <p>10 x 7" Cable Tie</p> <p>5 x 11" Cable Tie</p>
BRASS	ELECTRICAL	<p>Magnet (for use inside auxiliary tank)</p>
<p>1 x P3 1/4" x 1/4" 6mm Straight</p> <p>2 x P6 1/2" x 1/4" 12mm Elbow</p> <p>1 x P6 5/16" x 1/4" 8mm Elbow</p> <p>1 x P14 x 1/4" 6mm Tee</p> <p>1 x 1/4" Plug</p>	<p>1 x 220-004 VDO Sender Unit set up in tank w/5 x M5 Pan Head Screw and 10-117 Ohm Board w/15.75" long Earth (ground) wire soldered on</p> <p>1 x 10 Amp Fuse & Holder</p> <p>1 x 4mm Single Core Wire @ 39.37" Long</p> <p>1 x 3mm Five Core Wire @ 39.37" Long</p> <p>1 x 3mm Two Core Wire @ 196.85" Long</p> <p>1 x On-Off Switch</p> <p>1 x Change Over Relay</p> <p>6 x Red Insulated Terminal</p> <p>1 x Red Plain Terminal</p> <p>1 x Blue Insulated Terminal</p> <p>3 x Red Earth (ground) Eye</p>	

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
 - b) Socket Extensions
3. Drill
 - a) Metric Drill Bit Set
4. Hole Saw
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

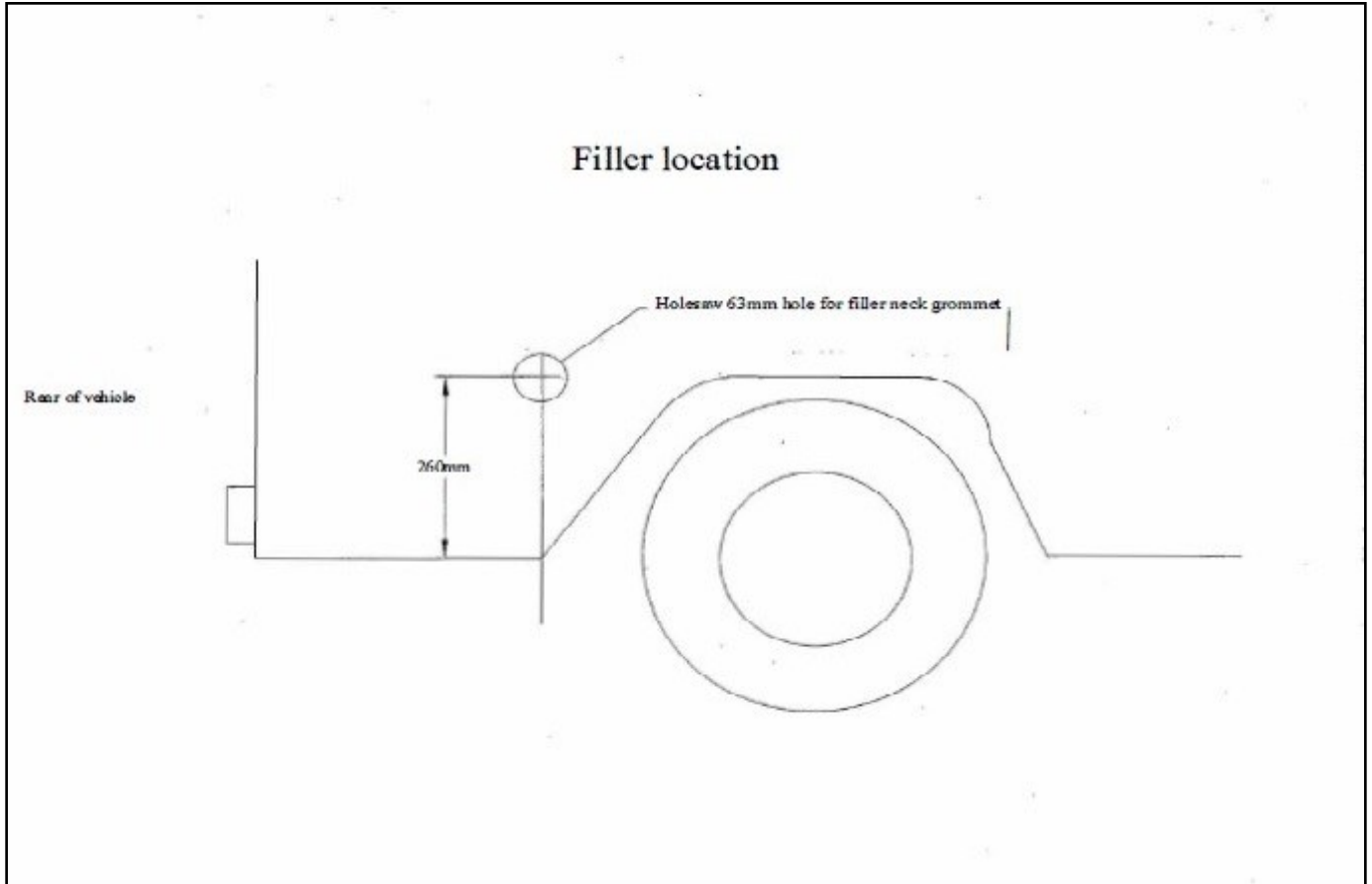
II. VEHICLE/FILLER/TANK PREPARATION

A. REMOVE EXHAUST SYSTEM

1. Remove section of exhaust system from tank location area (due to vehicle age, exhaust set up will vary from vehicle to vehicle). Revised exhaust to exit on right-hand side in front of rear wheel (parts not supplied in kit, customer-provided).

B. CREATE FILL PORT FOR AUXILIARY TANK FILLER

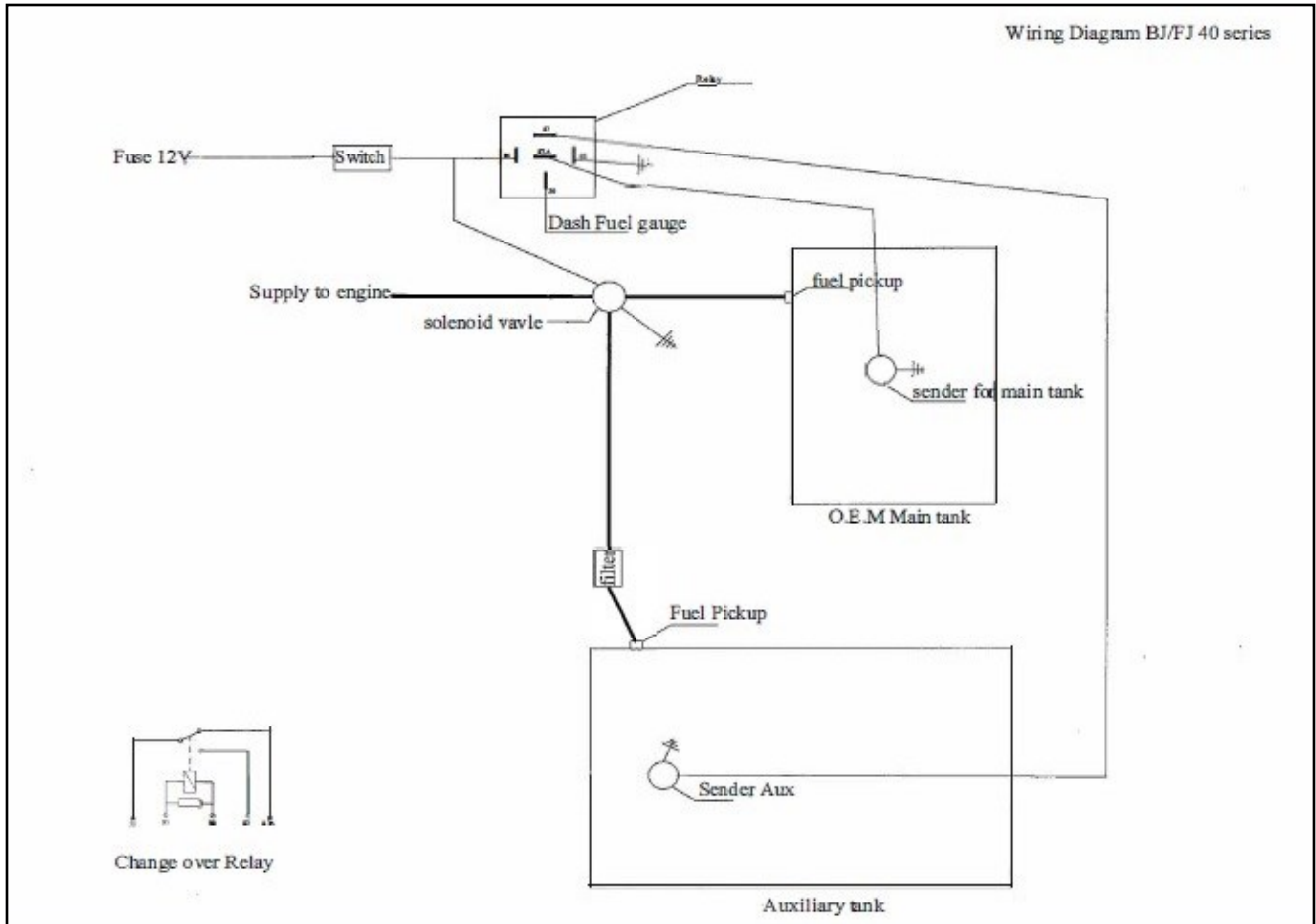
1. Hole saw a 63mm hole in the rear panel for the filler neck grommet as per diagram (included in tank kit):



II. VEHICLE/FILLER/TANK PREPARATION (continued)

C. WIRING/INSTALLATION

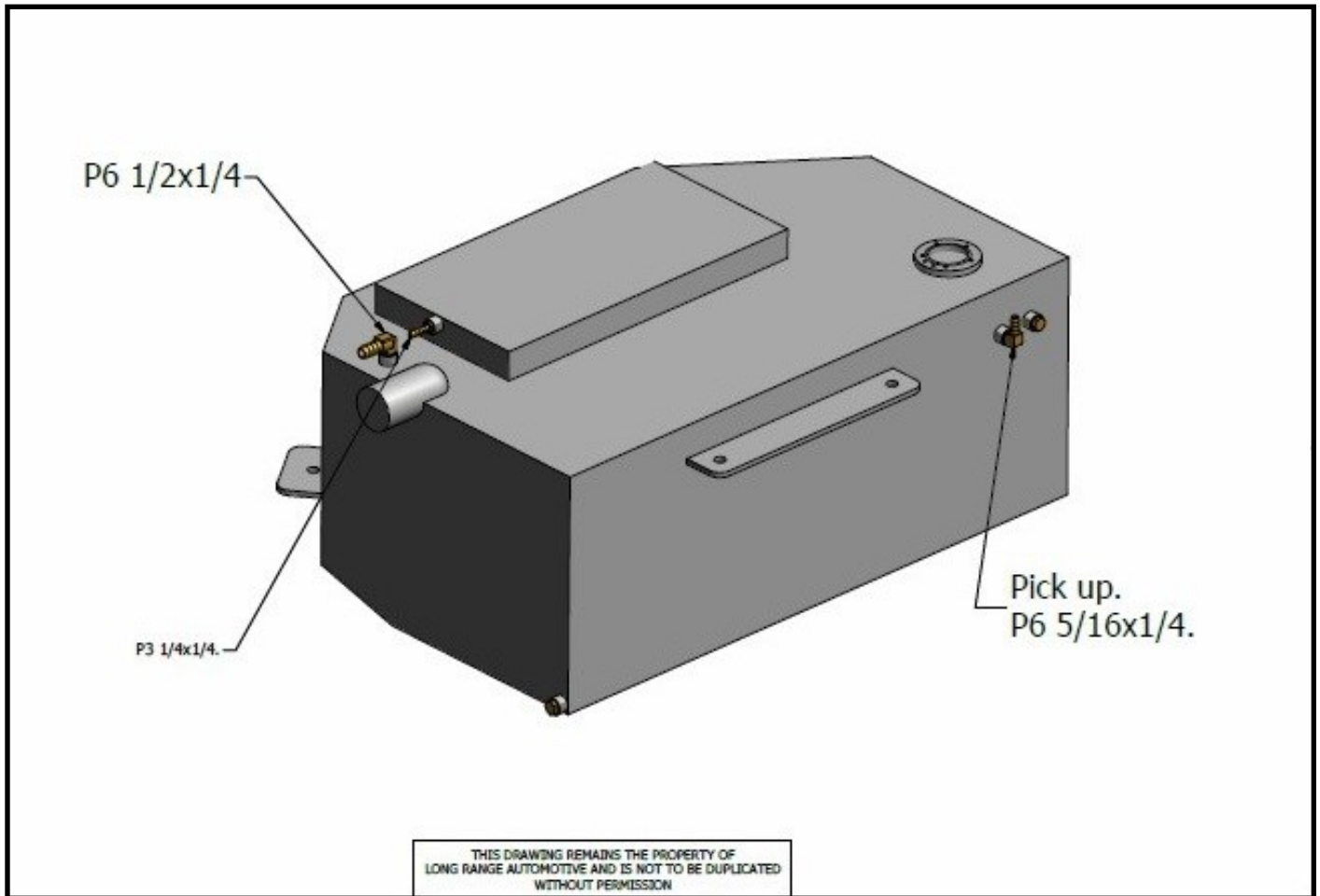
1. Carry out all necessary wiring and installation of switch, relay and solenoid valve per diagram (included in tank kit):



II. VEHICLE/FILLER/TANK PREPARATION *(continued)*

D. SET UP AUXILIARY TANK

1. Drop supplied magnet into tank, as close to fuel pick up point as possible.
2. Screw all fittings into the auxiliary tank as per diagram (included in tank kit):



III. TANK INSTALLATION

A. JACK TANK INTO POSITION/CONNECT HOSES & WIRES AND SECURE TANK

1. Safely jack the auxiliary tank into position and secure with bolts and Nyloc nuts. If installing in a 1971-1979 model, you will need to use the spacer blocks and longer bolts, as there is not as much body to chassis clearance as on the later models.
2. Connect auxiliary tank filler to steel filler neck with supplied hose.
3. Connect 19.69-inch long 12mm hose from the 12mm straight barb on auxiliary tank to 12mm fast fill fitting on filler neck.
4. Tee 6mm line from expansion chamber into vent line on original tank.
5. Finish connection of solenoid valve to fuel pickup line with WZ14 filter between valve and pickup.
6. Connect fuel sender wires.

B. FINISH INSTALL

2. Check all clearances and neatly cable tie all hoses and wiring away from any moving parts or heat sources.
3. Reconnect exhaust system (using customer-sourced parts to reroute exhaust).
4. Reconnect vehicle battery.
5. To test, fill main tank half-full, and the auxiliary tank full, check for leaks. Test system operation and make sure the main fuel gauge is working properly for both main and auxiliary tanks when selected.
6. Check again for leaks.

IV. 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 sometimes 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 installation included addition of a separate fuel filler for the auxiliary tank.

Adding Fuel:

Both tanks are filled separately, when desired.

While Driving:

Your engine will draw fuel from the main tank and the gauge will indicate fuel level for the main tank. As you consume fuel, the gauge will go down and, at some point, you will need to switch over to the auxiliary tank. When you do that is up to you. When you switch to the auxiliary tank, the main fuel gauge will indicate fuel level for that tank.

QUESTIONS & SUPPORT

Frequently Asked Questions:

- **Will I fill the tank in the same way as before?** See instructions on page 11.
- **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

And let us know how we can better serve you!

Best regards,

LONG RANGE AMERICA

LONG RANGE AMERICA
Get there

OUR STORY TANKS BARS SEATS SPECIALS PURCHASE CONTACT US SEARCH

Support

Tanks Support
→ Warranty
→ Warranty Registration
→ FAQs (Coming soon!)
→ Instruction Library (Coming soon!)

Bars Support
→ Coming soon!

Seats Support
→ Coming soon!

Service Request

Please choose a support request category.*
Select...

800-224-7801
service@longrangeamerica.com