



IC-SET70-1B

Toyota Landcruiser 7X series 4.5l V8 D-4D 07-16

CHECK YOUR PACK LIST

Once you have unpacked the intercooler from the box make sure you have all parts that are listed on the packing list below.

| <u>VDJ7X INTERCOOLER KIT</u> | | |
|-------------------------------------|--------------------|---------------------------------|
| <u>QTY</u> | <u>PART</u> | <u>DESCRIPTION</u> |
| 1 | IC-79-1 | VDJ70 INTERCOOLER UNIT |
| 4 | IC-CLAMP11-22 | HOSE CLAMP 11-22mm |
| 4 | IC-JOINER-5/8 | 5/8 TO 5/8 BARB JOINER |
| 1 | IC-HOSE5/8 | 5/8 HEATER HOSE 115mm |
| 1 | IC-HOSE5/8 | 5/8 HEATER HOSE 340mm |
| 3 | IC-CLIP5/8 | p-clip to suit 5/8 heater hose |
| 10 | IC-Clamp40s30 | Murray HOSE CLAMP 57-79mm |
| 1 | IC-SHS250 | 2.5" SILICONE STRAIGHT |
| 1 | IC-70SIL-1 | 2.5" SILICONE 90* |
| 1 | IC-70SIL-2 | 2.5" SILICONE 90* |
| 1 | IC-70SIL-3 | 2.5" SILICONE 180* |
| 1 | IC-70SIL-4 | 2.0" SILICONE 45* |
| 1 | IC-70PIPE-1 | 2.5" COLD PIPE |
| 1 | IC-70PIPE-2 | 2.5" COLD PIPE LONG INC FITTING |
| 4 | Ic-spacer-2 | Spacer M8 3mm Toyota |
| | | |



TOOLS REQUIRED:

Removal

- 1/4 or 3/8 inch drive ratchet
- 1/4 or 3/8 inch extensions
- Sockets and ring spanners 10mm and 12mm
- 22mm open ended spanner
- Philips head screwdriver
- Spray lube (e.g. WD40, Innox, Rust Off)
- Portable light

Installation

- 1/4 or 3/8 inch drive ratchet
- 1/4 or 3/8 inch extensions
- 10mm, 12mm and 13mm(1/2") socket
- 13mm and 22mm open ended spanner
- Spray lube (e.g. WD40, Innox, Rust Off)
- Portable light

IMPORTANT:

- Take care when handling the intercooler as the fins can easily be damaged.
- Before installing your intercooler, park your vehicle on level ground ensuring it is in gear (or Park) and the handbrake is applied.
- Wear protective clothing including eye wear when installing the intercooler kit.
- Wait until the vehicle's engine has completely cooled BEFORE you begin to remove the existing intercooler.

Removing intercooler

Standard engine bay



1. Once the engine is cold, remove the 2 x 12mm bolts that hold the heater hoses to the driver's side of the intercooler. These can be pushed to the side as far as possible.



2. Undo the 4x 12mm (2x front on intercooler & 2x back of intercooler) bolts that mount the intercooler. Also undo the 4x 12mm (2x passenger side & 2x drivers side) bolts on the outlet pipes of the intercooler.

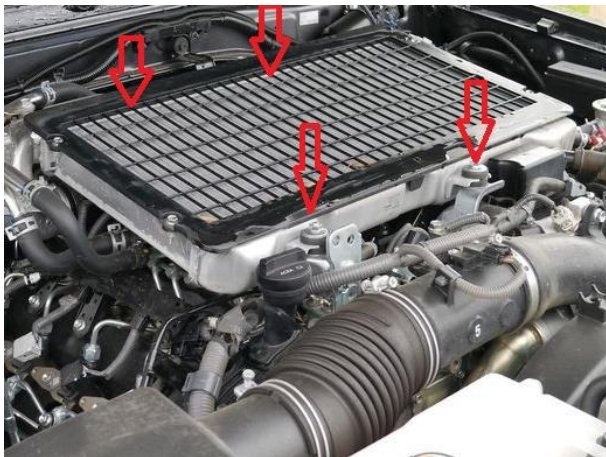


Drivers Side



Passenger Side

3. Once the intercooler x4 mounts and the outlet pipes have been removed you can now undo the hose clamp on the inlet pipe (Phillips head screw driver/10mm socket). Once the intercooler is removed, undo the lower clamp on this pipe as well (Phillips head screw driver/10mm socket). Remove the standard rubber hose.



4. Also unplug the air temp sensor and MAP sensor from the back side of the intercooler, don't forget the vacuum line on the bottom side of the MAP sensor.



5. The intercooler can now be lifted off the outlet flanges and removed from the inlet hose and removed from the vehicle.
6. Remove the 2 inlet pipes by undoing the hose clamps on the throttle bodies. Using a Phillips head screwdriver or 10mm socket.

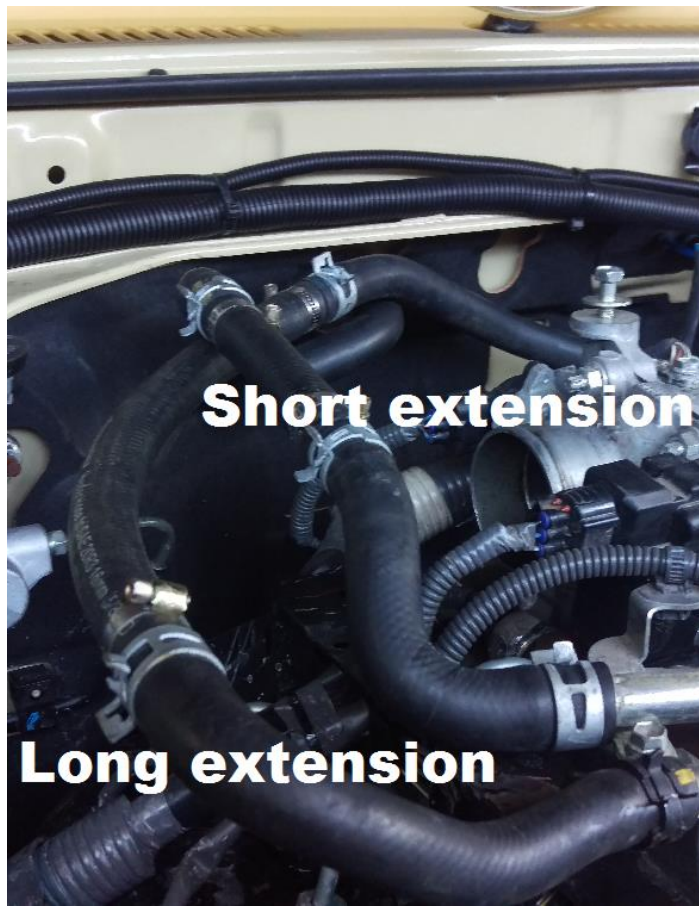
Installing Your Legendex Intercooler

Finished Legendex Intercooler



1. First replace the heater hoses, below is a completed swop. The longest hose is the front hose, the shortest is the back hose.

Before starting make sure the motor is cold, this is to make sure the coolant will not burn you, when it leaks. Also have rags ready for the clean up.



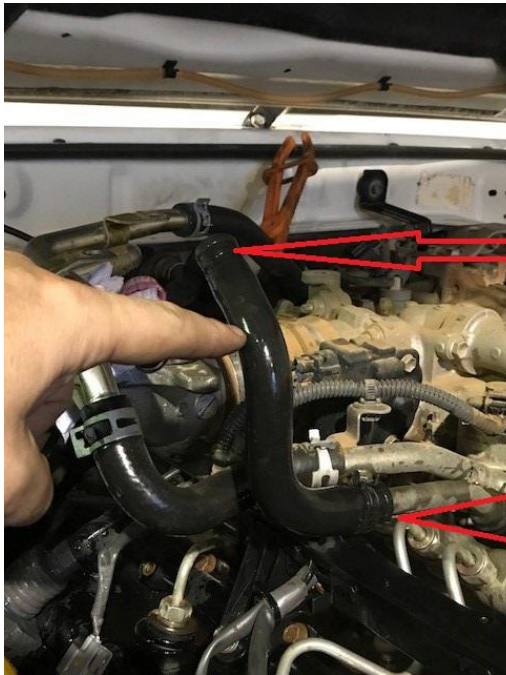
2. the intercooler is removed under the hoses at the rear of the hard line's one at a time making sure you keep them as high as **possible to not spill too much coolant.**

If you have heater hose pliers that would be helpful.



3. Put the short heater hose extension (short) into the driver's side heater hose from the firewall. Now put the long heater hose extension (long) into the passenger side hose from the firewall.

- Now to remove the hardlines from the heater hose. The front hose you need to remove and swap it end for end. As seen below. Then insert the long hose, use clamps to seal the Front / long hose, which goes to the passenger side in the fire wall.



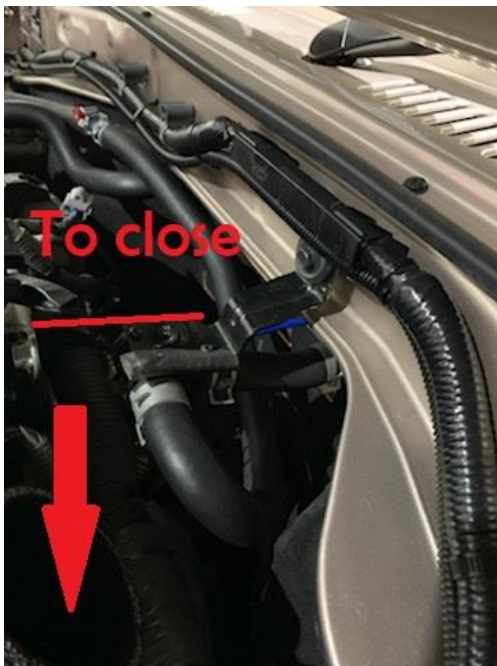
Fit this end on

remove this end

- Now remove the hard lines completely and finished the back short hose which fit into the fire wall in the driver side the last heater hose to the long heater hose extension.

**** Check coolant levels as they may need to be topped up****

- 2017-current Model sometime need the Heater hose Bracket modified**



The heater hose bracket on the 2017-on is 30-50mm higher than the early models. This leave not enough room for the larger intercool pipe. You need to remove this bracket and bend it down 30-50mm
Cut the hose back to the clamp length
Reinstall



Unclip heater cable
 Uninstall bracket
 Keep bracket & clamp

Place upside down in Vice
 and bend it 30-50mm until
 bracket is at a 90 deg angle
 when mounted on firewall.

Cut hose back clamp
 length.
 Now reinstall.

- Now remove the air temp sensor (22mm spanner) and MAP sensor (2x10mm) and 4x rubber mounts (remove the washer from the top then push the steel sleeve out. Does require spray lube) from the standard intercooler.



- Install the rubber mounts to your new Legendex intercooler. Now put the steel sleeve back in the centre of the rubber with the flat face to the bottom. Does require spray lube.



- Install the 2" 45 degree hose (IC-70SIL-4) to the turbo hot pipe with 2x clamps

LEAVE FIRM DO NOT TIGHTEN.

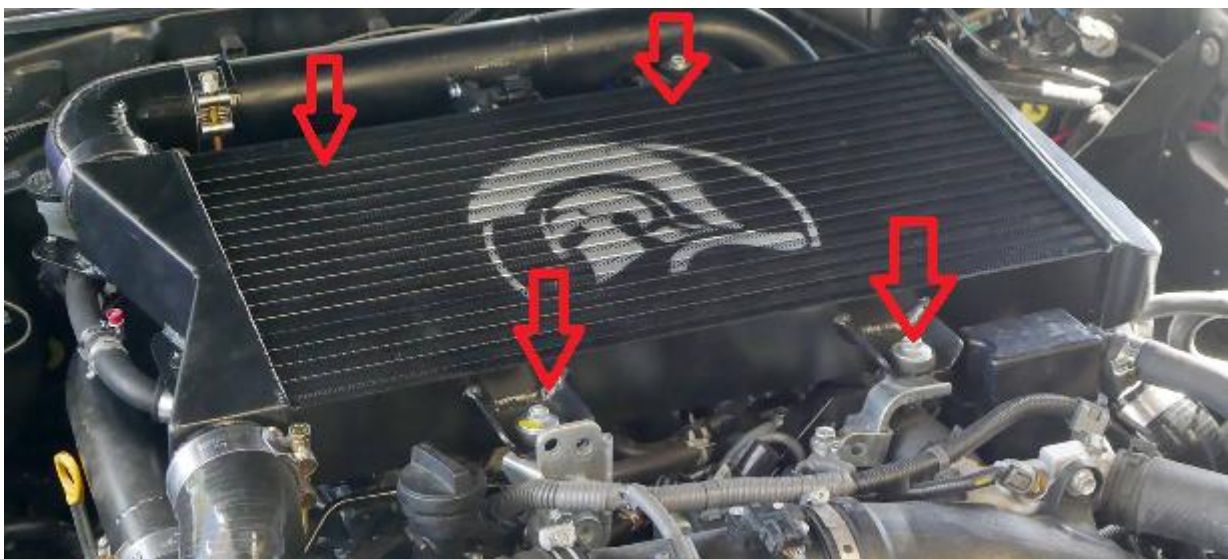


10. Before installing the intercooler put **IC-70SIL-2** onto the passenger side throttle body with 1x clamp, (MAKE FIRM SO CAN STILL ROTATE DO NOT TIGHTEN). Fit the intercooler and the IC-70PIPE-2 to get the rotation correct. Now remove the intercooler without moving the silicone hose on the throttle body. **Now tighten the clamp once it is in the correct position.**

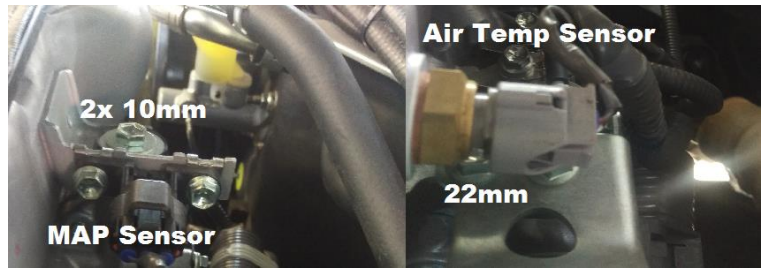


11. At the time make sure that both the 2" 45 bend IC-70sil-4 at the bottom, and the 2 1/2 90 bend IC-70sil-2 are tight. Before you install the intercooler.

12. Now you can fit the intercooler onto the vehicle. The mounting points start with the back Driver side, 12mm bolt, May need to lift the intercooler slightly to help line it on an angle to get the right fit, then the passenger side bolt now the other 2 front nuts, just slowly tighten . **DO NOT tighten 100% yet.** We have provided **4 spacers**, which may be needed for clearance.



13. Remove the air temp sensor and MAP sensor from the standard intercooler. Now screw the air temp sensor into the IC-70PIPE-2. (22mm spanner)



14. You can now install the intercooler cold pipe (IC-70PIPE-2) using the 2.5" Silicone hose(IC-70SIL-1) and 2x clamps double check clearance Before you tighten the hose clamps completely.



15. ****PLUG AIR TEMP SENSOR AND MAP SENSOR BACK IN**
16. ****MAKE SURE THE SHORTER LEG ON THE SILICONE IS MOUNTED TO THE INTERCOOLER**
17. ****ALSO CHECK THE AMOUNT OF CLEARANCE OVER THE CLUTCH MASTER CYLINDER IS SUFFICIENT (about 15mm).**
18. Now you can fit the driver's side cold pipe using the silicone 2.5" 180degree bend (IC-70SIL-3) the 2.5" silicone cold pipe (IC-70PIPE-1) and the 2x clamps.



Final checks once system is fitted

Now that your intercooler is fitted to the vehicle do a final check over of the system:

- Double check all nuts and bolts are tight.
- Check for air leaks on your first test drive
- You may now start the vehicle and run at idle for a couple of minutes.
- Now the vehicle is ready for a test drive. Once returning from test drive and vehicle has cooled check all clamps, nuts and bolts, as some may need re- tightening.
- Also re-check tightness of the clamps, nuts and bolts after 20-50km

Now get out there and enjoy your new Intercooler.



PERFORMANCE EXHAUSTS

... the legend grows