

G TURBO

HEAT EXCHANGER

TOYOTA FJA300 LANDCRUISER



Installation Guide

Version 1.1 (2025)





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INTRODUCTION

Welcome to your FJA300 series upgrade.

We're thrilled you've chosen us to enhance your ride. Our passion for innovation and quality is reflected in every product we create for the FJA300 platform and beyond.

This guide is your go-to for a smooth, easy installation. It's packed with clear steps and expert tips to help you every step of the way.








Got questions or feedback? Don't hesitate to reach out —we're always here to help! Our contact details are provided on the last page of this document.

We wish you all the best in your upgrade journey.

The GTurbo team


























PREPARATION

INCLUDED IN YOUR KIT

-  Top Plate
-  2 x CNC Top Bolts
-  1 x J Hose
-  1 x) Hose
-  12-27mm Clamp
-  25/27 Hose Crimp
-  Bottom Grommets
-  GTurbo heat exchanger core
-  Top vibration spacer mounts
-  AN-12 90 Degree Fitting
-  AN-12 45 Degree Fitting



REQUIRED TOOLS

- | | |
|---|---|
|  Pry pick screw driver |  Adjustable spanner |
|  Needle nose pliers |  3 x hose clamps |
|  Pliers |  Body clip remover |
|  6mm Allen key |  8mm hose clamp |
|  5mm Allen key drive |  driver |
|  ratchet |  Measuring tape |
|  10mm Socket (3/8) |  1 x Toyota Genuine |
|  12mm Socket (3/8) |  Super Long Life Coolant |
|  14mm Socket (3/8) |  08889-80431 |
|  Drill |  1 x Thread Locker Rapid |
|  10mm Drill bit |  Stick 8567 |
|  8.5mm Drill bit |  black chassis spray |
| |  paint |

We recommend
Knipex i220



SAFETY MEASURES AND CONSIDERATIONS

Please read the following safety precautions and considerations carefully before commencing installation.



WARNING: FAILURE TO FOLLOW THESE INSTRUCTIONS MAY RESULT IN POOR INTERCOOLER PERFORMANCE, AIRLOCKS, DAMAGE TO ELECTRIC PUMPS, OR COOLANT LEAKS. INCORRECT INSTALLATION OR INSUFFICIENT BLEEDING CAN CAUSE SYSTEM FAILURE.

COOLING SYSTEM CONTEXT & RISKS

1. The heat exchanger circuit is independent of the engine's cooling system. There is no risk of engine overheating or head gasket damage, but intercooler performance and turbo cooling will suffer if installation is incorrect.
2. The F33A-FTV engine uses a dedicated intercooler cooling loop with its own electric pump and radiators. Improper plumbing or restrictions can overload this pump or reduce flow.
3. Airlocks are the most common issue. Trapped air can cause cavitation, pump damage, poor coolant circulation, and high intercooler temperatures.
4. Symptoms of air in the system include fluctuating intake temperatures, gurgling noises, or an electric pump running irregularly. Proper bleeding is critical.

INSTALLATION & FITMENT CONSIDERATIONS

1. Mount securely with the supplied vibration isolators to prevent stress on hoses and brackets.
2. Route hoses away from hot exhaust components, belts, and sharp edges. Avoid kinks or sharp bends.
3. Use correct clamps and tighten only to specification. Overtightening can deform fittings or damage hoses.
4. Apply thread sealant to AN fittings as required. Do not overtighten, this can crack or distort fittings.
5. Paint or coat all drilled holes and exposed metal to prevent corrosion.

POST-INSTALL & VALIDATION

1. After filling and bleeding, run the electric pump (start vehicle) and check for gurgling, cavitation, or inconsistent flow.
2. Cycle the system several times and confirm coolant flow through the added core. Tilting the vehicle slightly can help purge trapped air.
3. Use a coolant system pressure tester to check for leaks at all joints and fittings.
4. On initial drives, monitor intercooler performance under load. Poor cooling may indicate airlocks or restricted flow.
5. After the first drive, re-tighten clamps, recheck coolant level, and inspect for leaks or vibration.
6. Periodically inspect the core for bent fins, debris buildup, or stone strikes that may reduce airflow and effectiveness.

INSTRUCTIONS

STEP 1

A

Unclip the seven pop clips securing the plastic trim cover



B

Remove the plastic trim cover



STEP 2

A

Remove drivers side (RHS) horn



B

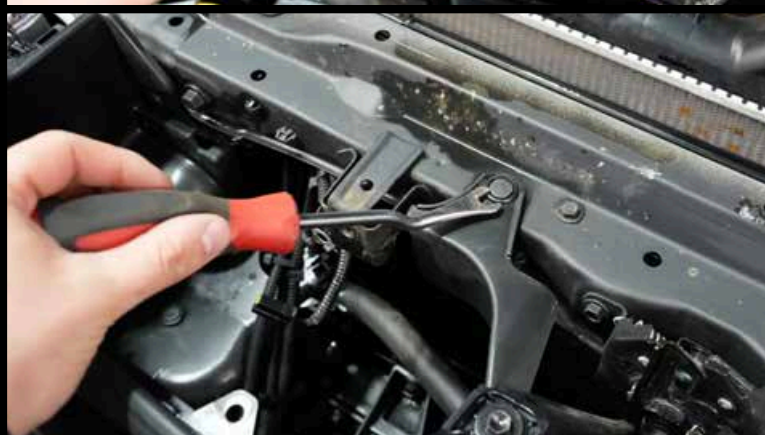
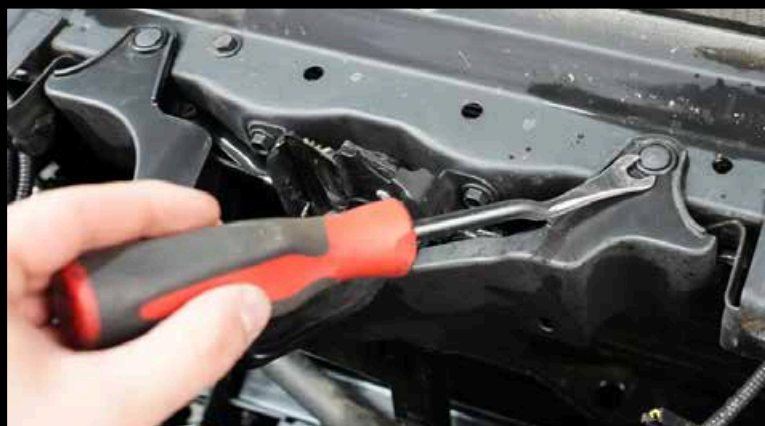
Remove passenger side (LHS) horn



STEP 3

A

Remove the two clips holding the plastic trim on the passenger side (LHS)



B

Remove the plastic trim



The plastic trim now has to be removed on the drivers side. To do this, continue onto steps 3C and 3D

C

First remove the two clips.

**D**

Then remove the plastic trim



STEP 4**A**

Loosen the three bolts securing the bonnet latch. Then remove the bonnet latch.

**B**

Unplug the bonnet latch sensor

**C**

Remove the pull cable and put the bonnet latch aside

**D**

With the bonnet latch removed, loosen the 10mm bolt attaching the bracket to the upper support panel



STEP 5**A**

Loosen the 10mm bolt to remove the high-pressure air conditioning bracket.

**B**

Remove any remaining bolts to the upper radiator support panel.

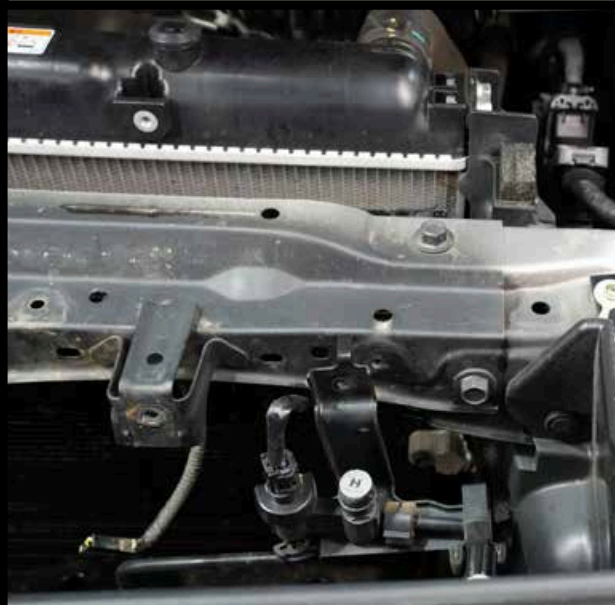
**C**

Remove the clips attached to the upper radiator support panel.



STEP 6**A**

Loosen the (4) 14mm bolts
attaching the radiator
support panel

**B**

Remove the radiator
support panel



STEP 7



Unbox your new GTurbo heat exchanger

A

then



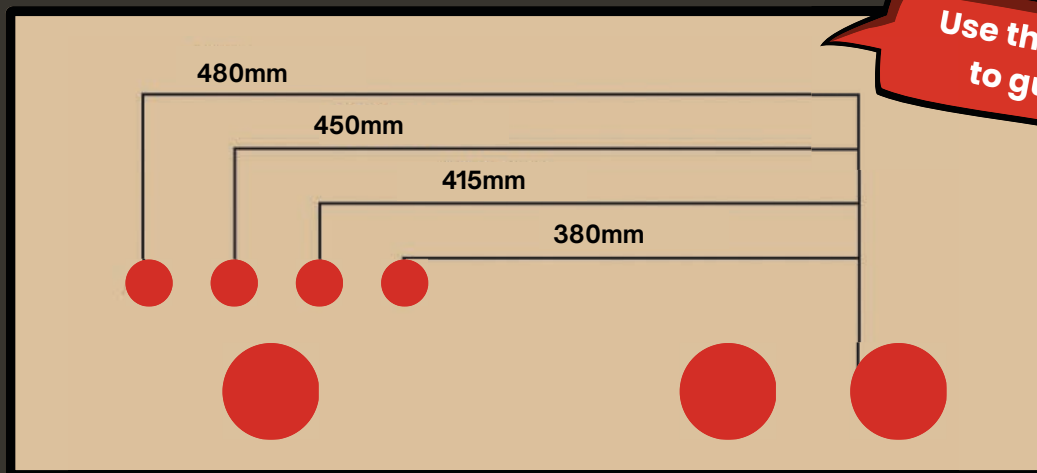
Locate the Heat Exchanger mounting bracket

B

STEP 8

A

Mark the following points using a scribe or pen, then centre punch the marks: From the inner edge of the passenger-side mount hole, mark out the bracket positions at 380mm, 415mm, 450mm, and 480mm.



Use this diagram to guide you

**B**

Drill holes at the marked points drill the holes using an 8.5mm bit.

**C**

Coat holes with chassis black paint to prevent rust.

**D**

Install the (4) M6 Allen bolts and apply thread locker.

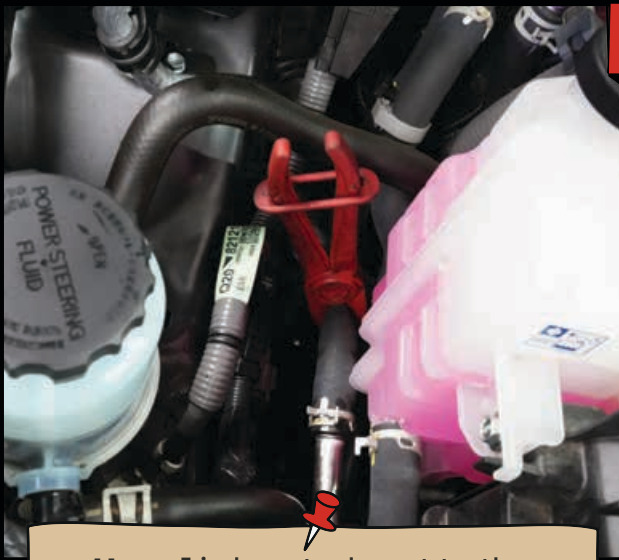


STEP 9

A

Clamp the three hoses as shown in the pictures in both Step 9A and 9B

Knipex i220 hose clamps are recommended



Hose 1 is located next to the coolant reservoir (9A)
Hose 2 and 3 are feeding the factory heat exchangers (9B)

B

Remove the hose clamp and disconnect the hose



C

Remove the hose



STEP 10**A**

Apply thread sealant to the lower coolant outlet

**B**

Install the AN-12 90° fitting in an upright position.

**C**

Install the 90-degree hose to the AN fitting

**D**

Use the ear clamp pliers to secure the hose crimp (included in your kit)

**E**

Install the rubber mount on the bottom (passenger side only) of the heat exchanger.



STEP II

A

Install the heat exchanger onto the support panel mount fitted in Step 8D.



Ensure the rubber grommet aligns with the hole in the support panel

B

Attach the 90-degree hose



C

Install the upper J hose



STEP 12**A**

Apply thread sealant to the upper inlet.

**B**

Install the 45° AN fitting and connect the supplied J hose.

**C**

Secure everything with the provided clamps as needed.

D

Install the (2) supplied upper mounts to the core



STEP 13**A**

Refill the reservoir with Toyota Super Long Life Coolant

**B**

Bleed the system thoroughly until all air bubbles have exited through the core's bleed hole.

**C**

Once complete, apply thread sealant and install the supplied bung.

**D**

We recommend using a coolant system pressure tester to check for leaks after the system has been drained.



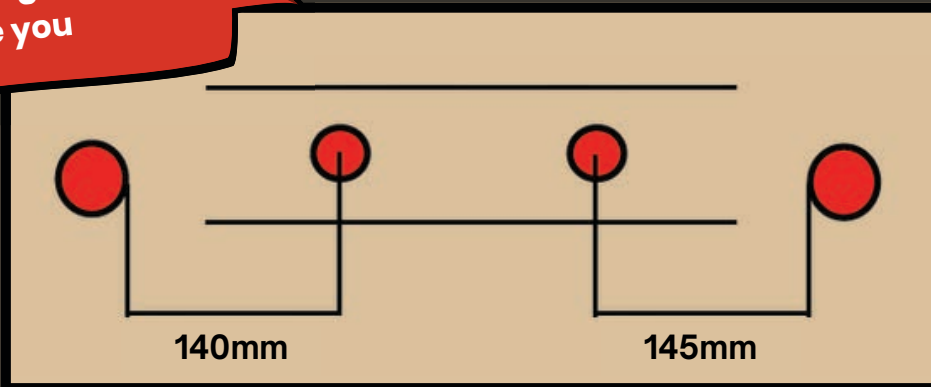
STEP 14

A

Measure and mark 140 mm from the outside edge of the hole circled below

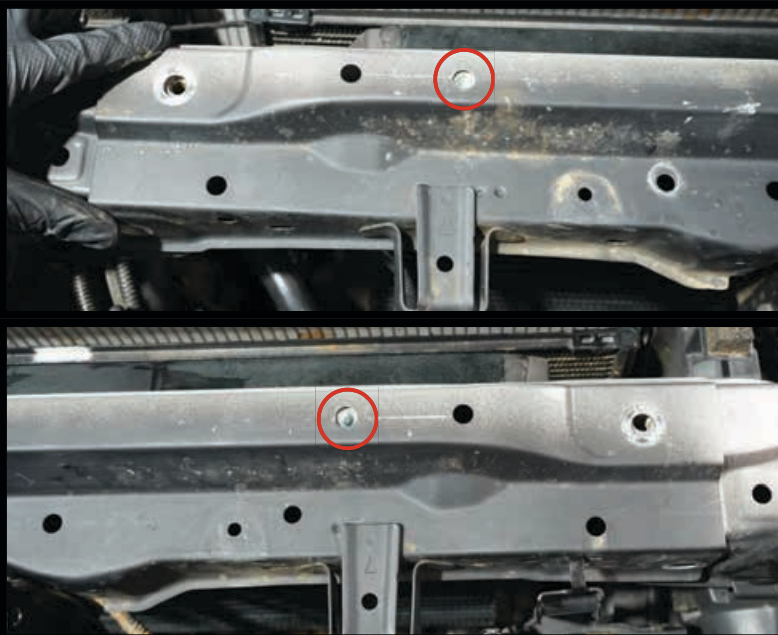


Use this diagram to guide you



B

Drill a 10 mm hole through the upper radiator support, ensuring it's centered within the raised section.



C

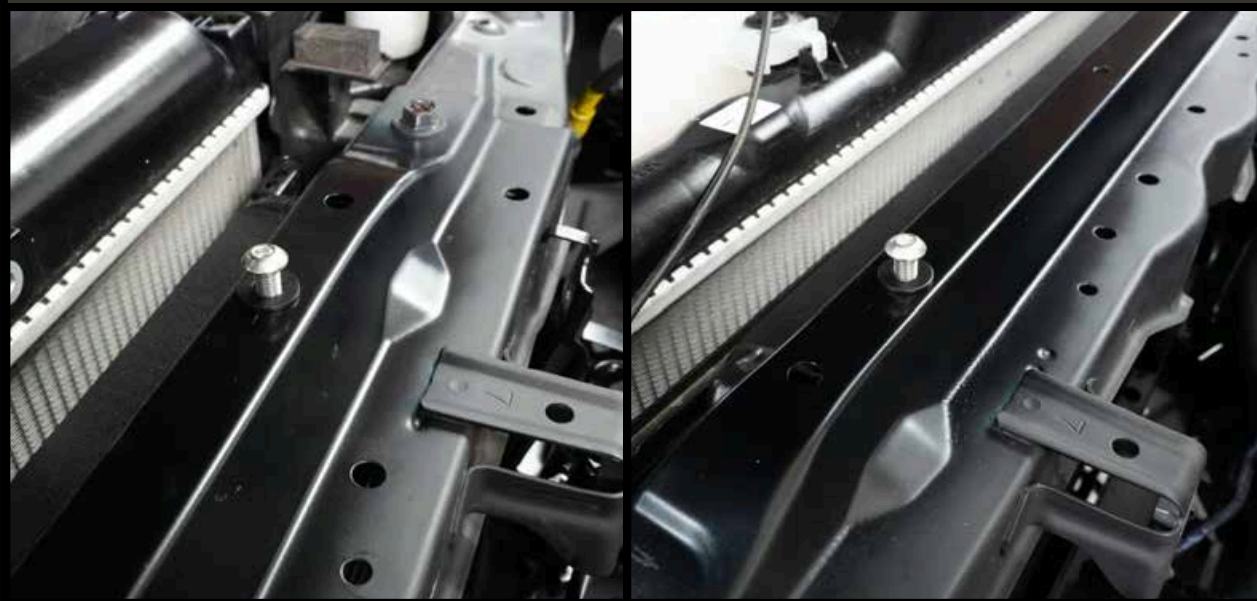
Remember to paint all newly cut or drilled holes with chassis paint to protect against rust.



Doing this ensures the core stays centred while the four mounting bolts are tightened.

D

Reinstall the upper radiator support panel and loosely fit both heat exchanger mounting bolts.

**E**

Once the supports are secure, remove the temporary bolts.

STEP 15

A

Install the (4) radiator support panel bolts



B

Complete the following:

- 1** Discard all plastic trim
- 2** Re-install the bonnet latch support and bonnet latch
- 3** Reinstall the A/C high-pressure line
- 4** Reinstall the LHS and RHS Horn



STEP 15

A

Install the 10mm Grill Support bolt



B

Retrieve the driver's-side trim panel.

C

Mark the trim as shown by the yellow line



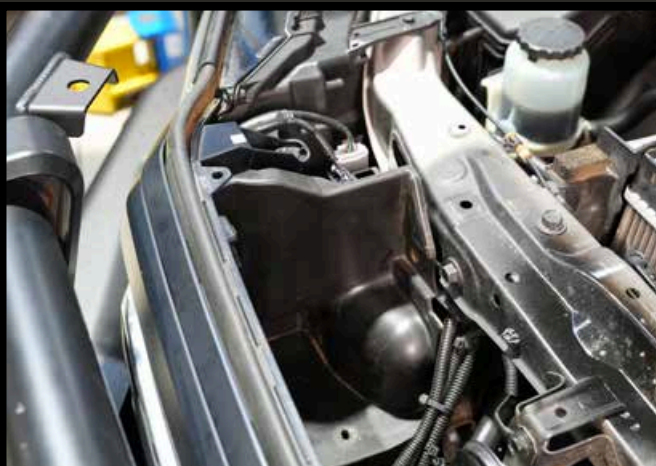
D

Cut along the marked lines



E

Install the driver's-side trim panel

**STEP 16****A**

Mark the following points: Identify the center hole on the plastic shroud. From this point, measure 200 mm to either side; On the driver's side, measure 70 mm inward; On the passenger side, measure 35 mm inward.

**B**

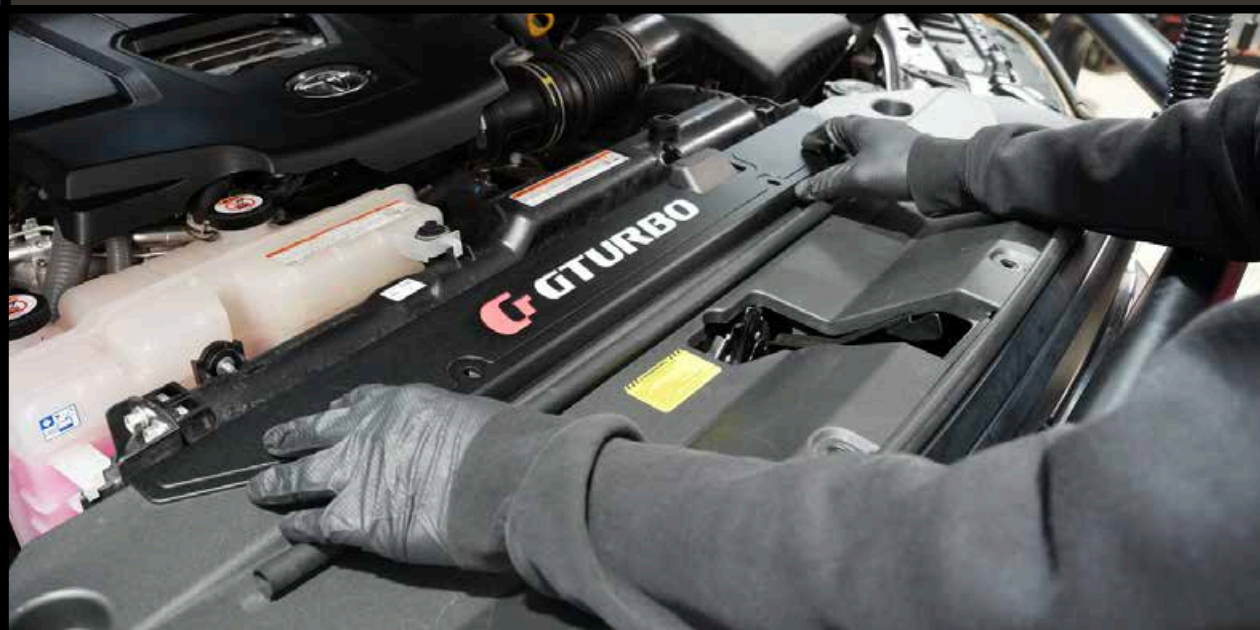
Drill 10 mm holes at the marked points.

C

Reinstall plastic shroud

**D**

Install the GTurbo cover panel with the (2) M5 allen key bolts









INSTALLATION COMPLETE

Great work! You've now equipped your vehicle with a high-efficiency heat exchanger engineered to maximise cooling performance and maintain stable intake temperatures.

WHAT'S NEXT?

-  Inspect all hose connections and clamps
-  Top up coolant as needed after a warm-up run
-  Confirm proper coolant flow
-  Recheck coolant after first few drives



After the first few drives, re-check all mounting points and connections to ensure nothing has shifted during bedding-in.



CONTACT US

We're here to help you get the most out of your diesel performance. Whether you have questions about our products, need advice on the right upgrade, or want to book a tune, the GTurbo team is ready to assist.

GTURBO

PERFORMANCE BY DESIGN

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