

## Direction-Plus Ryco Pre-Filter Kit Installation Guide

### For Toyota Land Cruiser 200 Series

This document is to be used as a guide for the installation of the **Direction-Plus Ryco pre-filter kit (RC615DPK)** to a **2008+ Toyota Land Cruiser 200 Series V8 Diesel**. It is recommended that the installation of the product be carried out by a competent qualified mechanic.

#### Important Before Starting

- Ensure you have the correct tools to complete the fitment
- Read the instructions in full and familiarize yourself with the installation, before commencing any work

#### Maintenance / servicing

- Ryco filter element is to be replaced every 40,000km or as per your vehicles service interval

#### Kit contents



1x LC200 3PCE BRACET (PL615-BR)	2x DP BAGS (DPBAG)	2x M8 x 16 BOLT (SSSS304M816)
1x RYCO ASSY (Z980SK16L)	1x DEFENCE STICKER (DPLABEL7)	2x 8mm Spring Washer (FMSW8)
1x WINDSCREEN LABEL (DPLABEL1)	1m 12MM HOSE (DPFH12-GAT)	1x DP ZIP LOCK BAG (DPZIPBAG)
1x ENGINE BAY LABEL (DPLABEL5)	9x CABLE TIE (802078)	2x PUSH ON 90 DEG - 12MM (DPP0090-08)
1x DP STICKER (DPLABEL6)	2x CLAMP 12MM (FMC12)	1x RYCO FILTER KIT BOX (RCBOX)
1x DP HOLO SECURITY SEAL (DPLABEL8)	2x FITTING 12MM (DP816-8-M1615)	1x S102XK WIRELESS SENSOR KIT (S102XK)

\*Kit contents are subject to change based on component availability and/or refinement

## Mounting Location

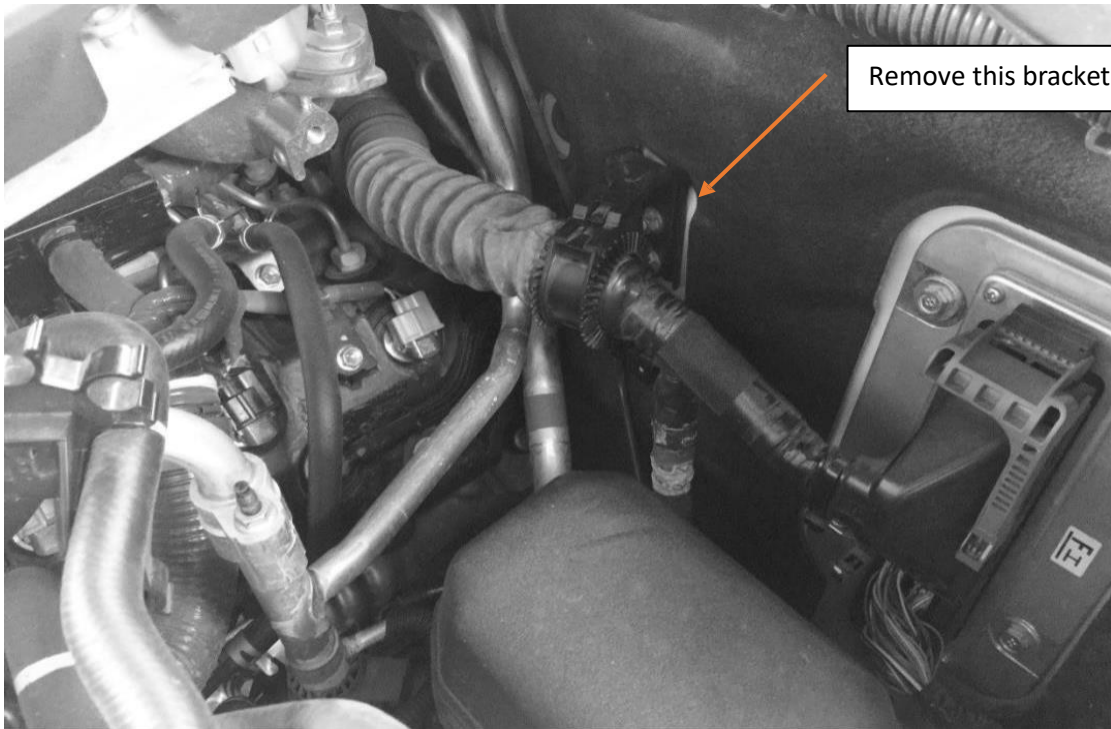


## Tools Needed:

- Spanners
- Sockets
- Screw Drivers
- Pliers
- Snips/Cutter
- Rags
- Small container for priming
- We suggest using a thread sealant like Loctite 567 or equivalent.

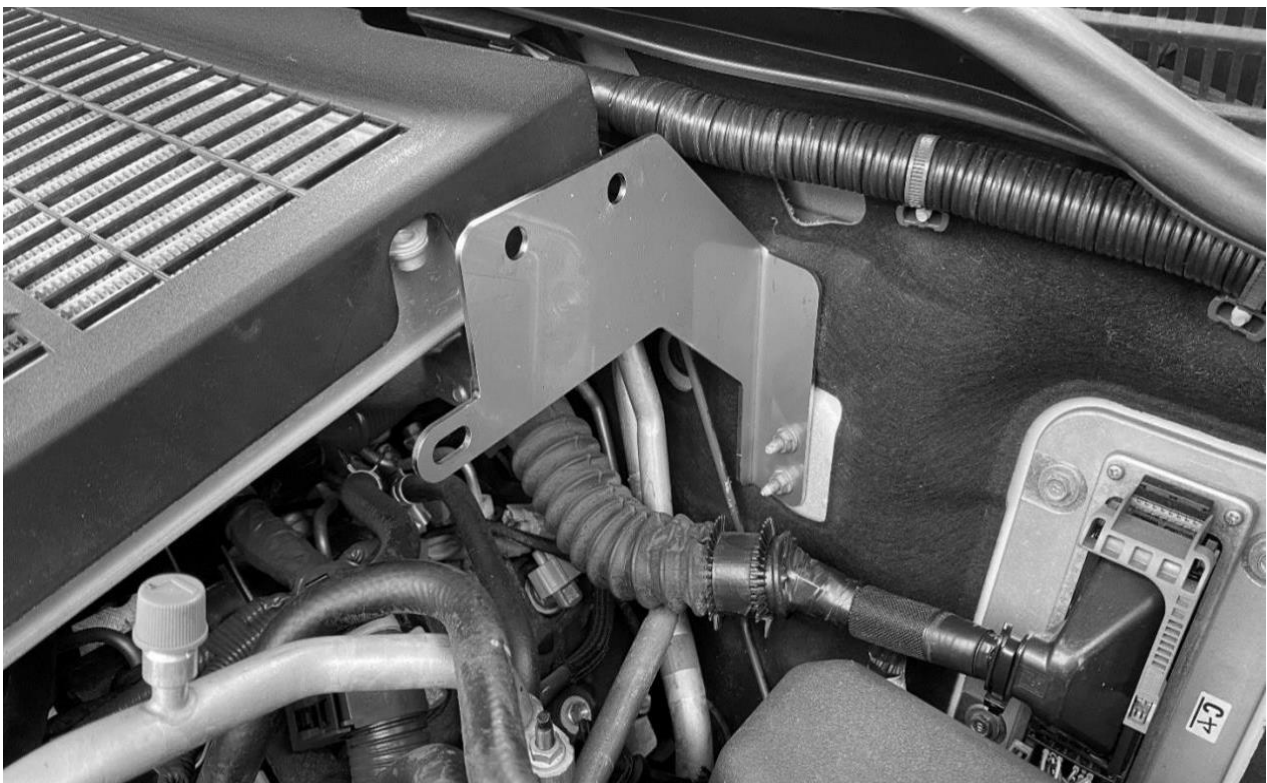
### Installation Guide

1. Begin by locating the bracket located on the passenger side firewall which supports the wiring harness. Unclip the wiring harness and remove the bracket from the vehicle. It is secured in place by two M6 nuts.



*Rear passenger side of engine bay, looking from passenger side*

2. Using the original M6 nuts, mount the new bracket to the firewall and reinstall wiring harness bracket Do not fully tighten yet!

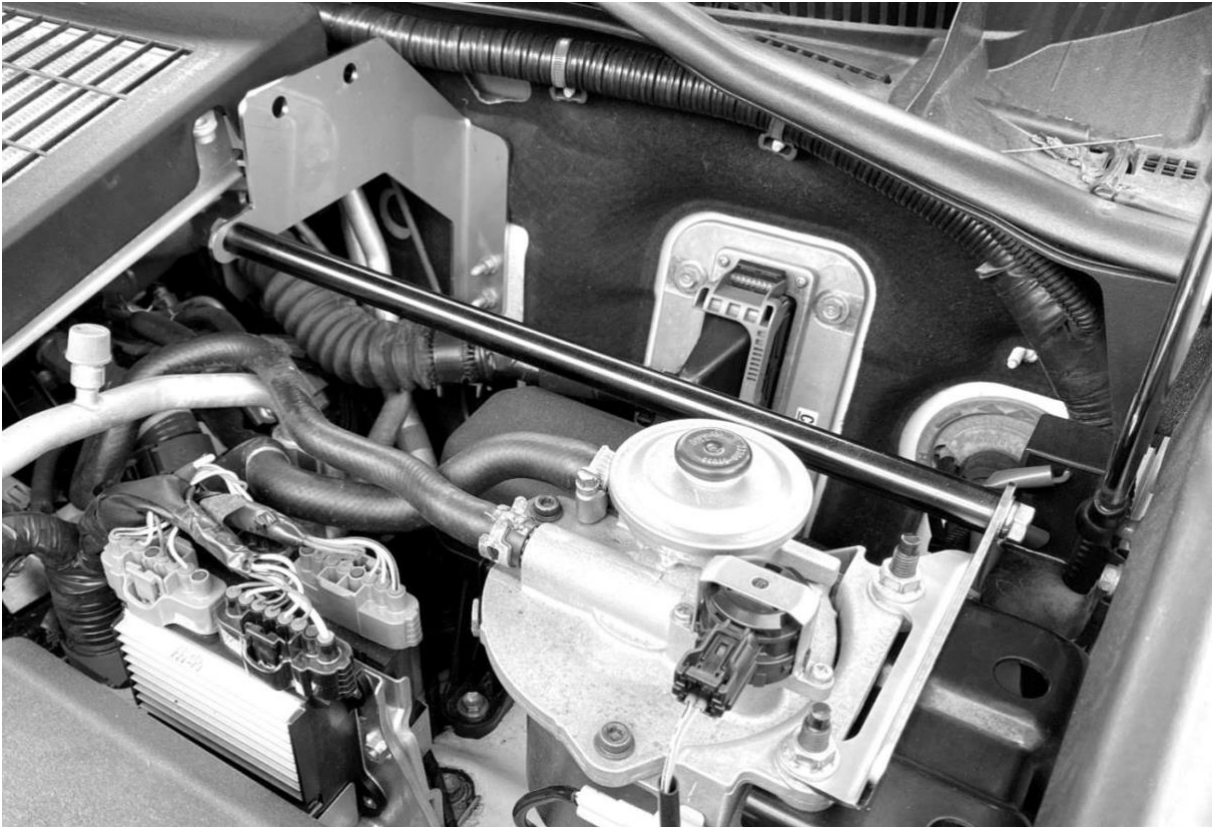


*New bracket secured in place, note factory wiring harness bracket has not been reinstalled in this image.*

3. Install the second bracket to the two bolts retaining the stock fuel filter. Do not fully tighten yet!



4. Install the alloy support shaft between the primary bracket and the bracket you just installed to the factory fuel filter. Use an M8x16 bolt, spring washer and flat washer at each end to secure it firmly in place.



5. Now you can tighten all the mounting bolts to secure the whole assembly in place. Clip the wiring harness back onto the original mount.
6. Using Loctite 567 or similar thread the M16x1.5 fittings into the Ryco filter head, making sure to use an alloy washer under each fitting. Keep the exposed -8 thread clean when installing.
7. Remove clear bowl from filter and fit Wireless Sensor adaptor to the bottom of the filter element including wiring harness.
8. Bolt the fuel filter assembly into place, using the M10x30mm bolts and nyloc nuts, making sure to use a flat washer under each bolt head and nut. Adjust the position of the fuel filter assembly to make sure there is clearance from the A/C line and the wiring harness. Once you are happy with the location, tighten the bolts and nuts to retain in place. You may need to remove the intercooler cover to give clearance to do up the bolts.
9. Follow Ryco install guide for wiring installation – See below
10. Remove the factory fuel line that supplies the factory fuel filter. Trace the line down and you will see it connects to steel line near the rear of the front left upper control arm. Remove the line completely. To this hard line install one end of the supplied fuel line and secure with one of the new stainless EFI hose clamps.

11. Temporarily install one of the 90° -8 hose fittings to the inlet port of the Ryco. Measure and cut the hose to the desired length. It should be around 300-320mm long. Once cut, slide a stainless EFI hose clamp onto the hose and remove the 90° -8 hose fitting and install onto the hose. Make sure the hose is seated all the way on the push lock fitting before securing with a clamp. Finally, apply Loctite 567 to the -8 thread before securing the 90° -8 hose fitting in place. The supply line should look like the following image installed.



12. Push the remaining hose supplied in the kit onto the other 90° -8 hose fitting. Make sure the hose is seated all the way on the push lock fitting before securing with a clamp.
13. Temporarily install the fitting to the outlet port of the Ryco. Measure and cut the line to the correct length to connect to the inlet of the factory fuel filter housing. Once cut, slide a stainless EFI hose clamp onto the hose and remove the 90° -8 hose fitting from the -8 threaded adaptor. Finally, apply Loctite 567 to the -8 thread before securing the 90° -8 hose fitting in place. The outlet line should look like the following image installed.
14. Connect the hose from the pre-filter assembly outlet to the factory fuel filter. Secure in place with an 18-20mm clamp. Use the priming pump on the factory fuel filter to draw the fuel the rest of the way.
15. Once complete start the vehicle, carefully and thoroughly checking for leaks.
16. Run the vehicle for at least 20 minutes to ensure there are no air pockets in the fuel system.

## End of Installation Guide