



Toyota Hilux N70 1KD-FTV Direction-Plus™ COMBO KIT Pre-Line Plus Pre-Filter & ProVent Kit Installation Guide

PreLine-Plus Pre-Filter Installation Guide

This document is to be used as a guide for the installation of the Direction-Plus™ Pre-Line Plus Kit to a **Toyota Hilux N70 1KD-FTV (2004-2015)**. It is recommended that the installation of the product be carried out by a competent qualified mechanic.

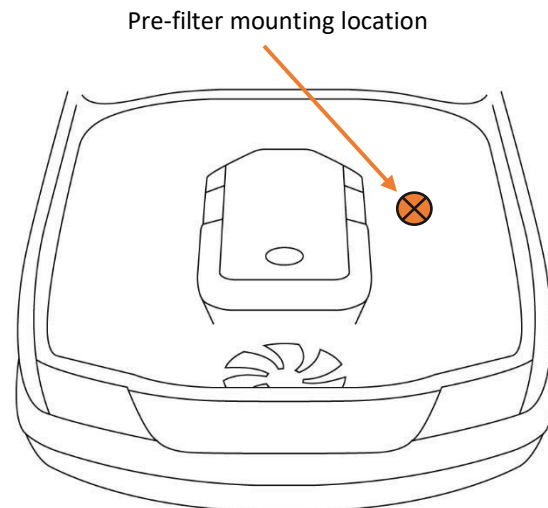
Important before starting

- Ensure the engine bay is clean and free from contaminates
- The filter head has direction arrows indicating the direction of flow
- You have the correct tools to complete the fitment
- Read the instructions in full and familiarize yourself with the installation, before commencing any work

Kit contents

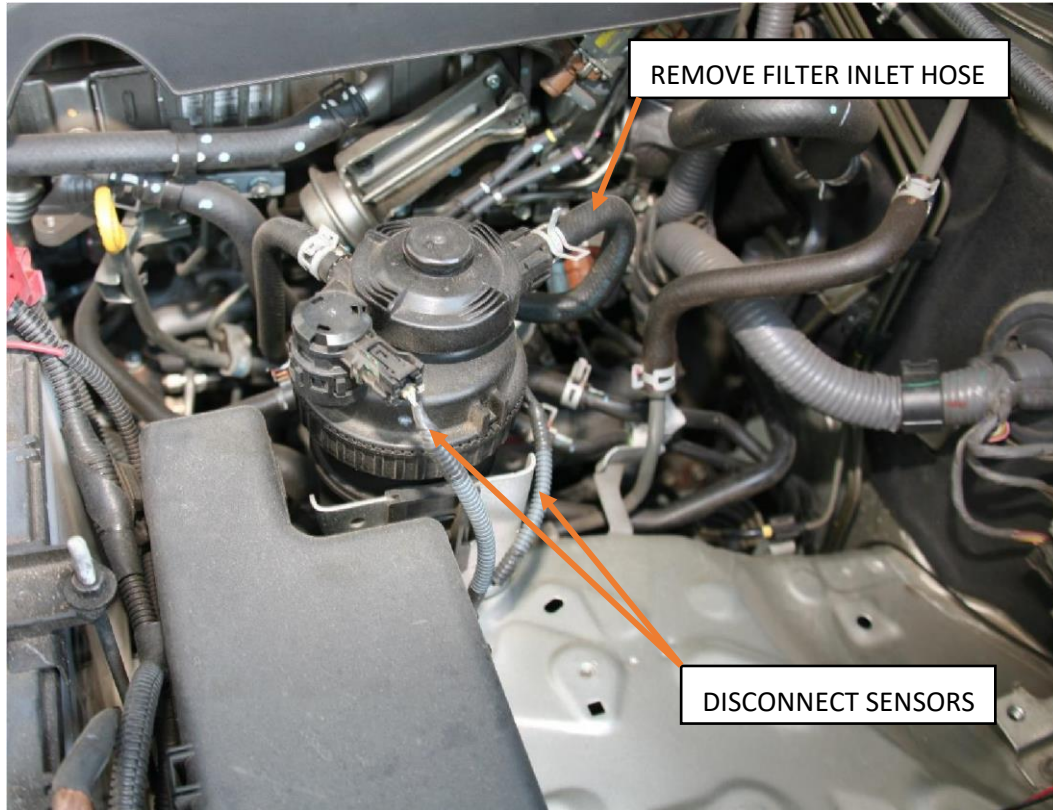
- 2x M16 ADAPTER - 10MM
- 2 BOLTS 2 NUTS 4 WASHERS
- 1x BRACKET - HILUX
- 1x DFL10 - FUEL LINE RUBBER (10MM)
- 1x WATER ALARM KIT
- 2x M16 FLAT WASHER
- 1x ENGINE BAY LABEL
- 1x PL150DP + WATER SENSOR
- 2x HOSE CLAMP - 10MM
- 2x PUSH ON 90 DEG - 10MM
- 1x WINDSCREEN LABEL

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

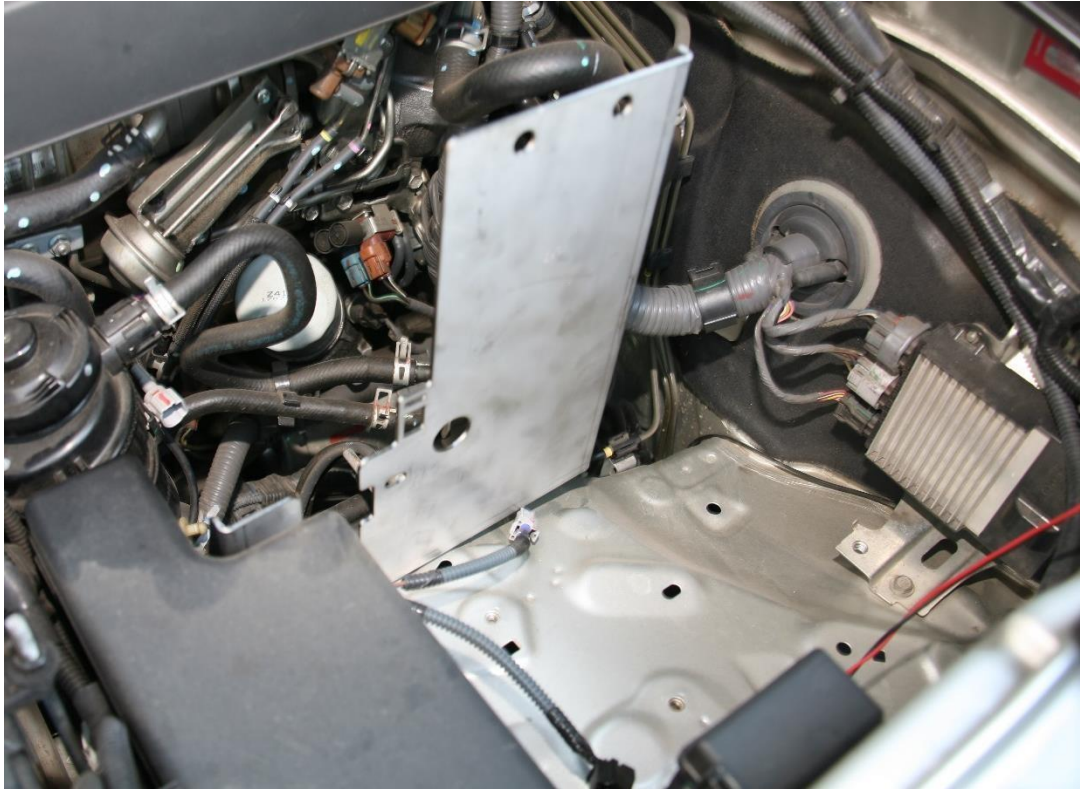


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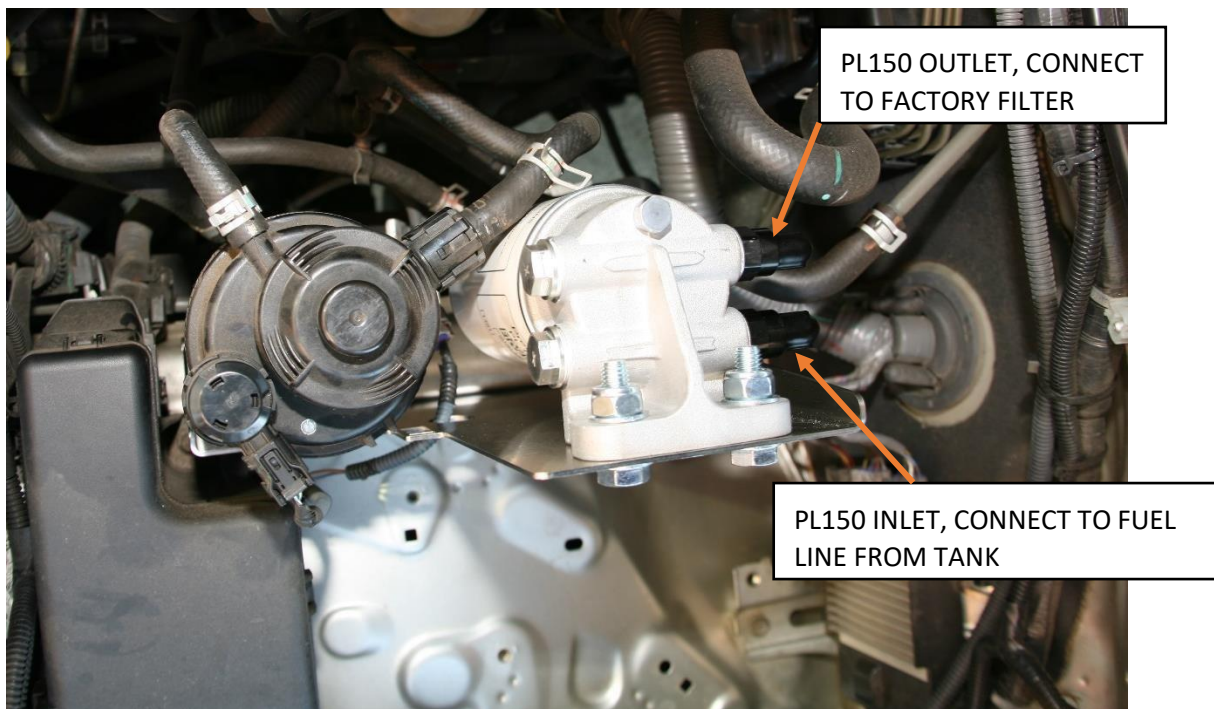
1. Disconnect factory fuel filter inlet hose from both ends and remove from the vehicle. Retain this hose in a safe place so the vehicle can be returned to factory in the future



2. The pre-filter will be mounted we be mounted on the passenger side inner guard, next to where the factor fuel filter is mounted
3. Disconnect the two plugs attached to the factory fuel filter
4. Remove the factory fuel filter from its mounting bracket and place off to one side
5. Remove the factory fuel filter mounting bracket
6. Place the pre-filter mounting bracket into the same location as the factory fuel filter
7. Using the factory bolts that were removed from the factory fuel filter mounting bracket secure the pre-filter mounting bracket



- Using the supplied 10mm bolts, washers and nuts, mount the PL150DP pre-filter assembly onto the engine side of the bracket. This will allow the fitment of a dual battery system.



- Install the M16-12mm adaptors and M16 washers into the filter head ports that are facing towards the rear of the vehicle.
Note: it may be required to remove the pre-installed plugs and reinstall them based on the specific installation.



10. Measure from the steel pipe on the firewall (this pipe comes from the tank) to the inlet port of the PL150DP head (the arrows on the head indicate direction of flow) and cut to length a piece of the supplied 10mm hose
11. Lubricate the barbed end of one push-lock fitting and the inside portion of the hose to be fitted with a push-lock fitting with diesel fuel or WD40
12. Insert the barbed end of one push-lock fittings into the pre-lubricated end of the hose. Ensuring that the hose stops firmly against the inside of the bell cover.
13. With the assembled hose, screw the push-lock fitting on to the inlet port of the pre-filter. Connect the other end of the same hose to the steel fuel line coming from the tank and secure using a supplied 10mm hose clamp
14. Lubricate the barbed end of the remaining push-lock fitting and the inside portion of the remaining hose to be fitted with a push-lock fitting with diesel fuel or WD40
15. Insert the barbed end of the remaining push-lock fittings into the pre-lubricated end of the hose. Ensuring that the hose stops firmly against the inside of the bell cover.
16. With the now assembled hose, screw the push-lock fitting on to the outlet port of the pre-filter.
17. Measuring the hose in place between the outlet port of pre-filter the inlet of the factory fuel filter, cut the hose to length
18. Connect the 10mm fuel hose to the inlet of the factory fuel filter and secure with a supplied 10mm hose clamp
19. Using the supplied nylon cable ties, secure any loose hose from rubbing on any other components
20. Bleed the fuel system by pumping the hand primer on the factory filter until firm
21. Start vehicle and run the vehicle, whilst checking all connections for leaks
22. Refer supplement guide for fitting the water alarm system

END OF GUIDE

Toyota Hilux N70 1KD-FTV Direction-Plus™ ProVent® Ultimate Catch Can Installation Guide

This document is to be used as a guide for the installation of the **Direction-Plus™ ProVent® Ultimate Catch Can Kit to a Toyota Hilux N70 1KD-FTV (2004-2015)**. It is recommended that the installation of the product be carried out by a competent qualified mechanic.

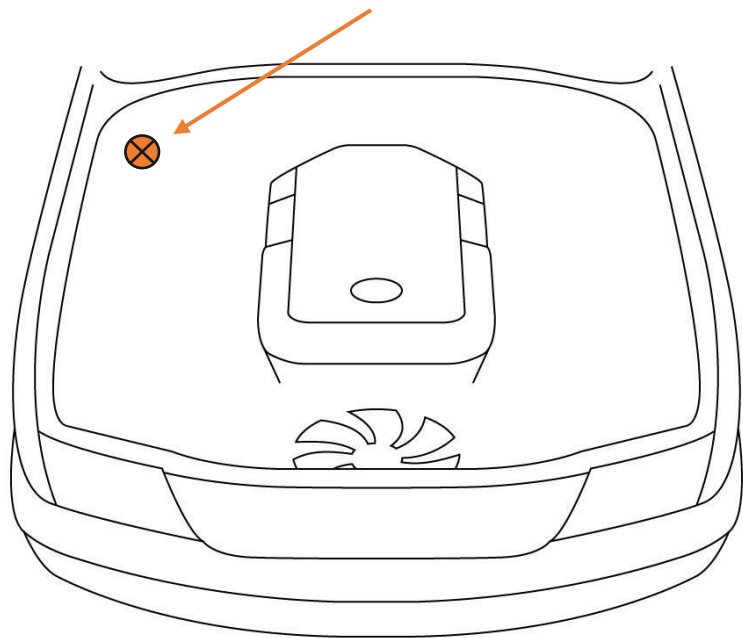
Important Before Starting

- 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

Included in the kit

1 x Mann + Hummel ProVent 150
1 x Mounting Bracket
2 x M8x25 Bolts
4 x M8 Flat Washers
2 x M8 Spring Washers
2 x M8 Stainless Steel Nuts
1 x M6x12 Bolt
1 x M8x12 Bolt
1 x M6 Spring Washer
1 x M8 Spring Washer
3 x 16mm Hose Clamps
2 x 19mm Hose Clamps
1 x 16mm to 19mm Hose Joiner
8 x Cable Ties
600mm of 19mm Hose
560mm of 16mm Hose
1000mm of 12mm Hose
1x Drain Tap Assembly
2 x 12-20mm Hose Clamps

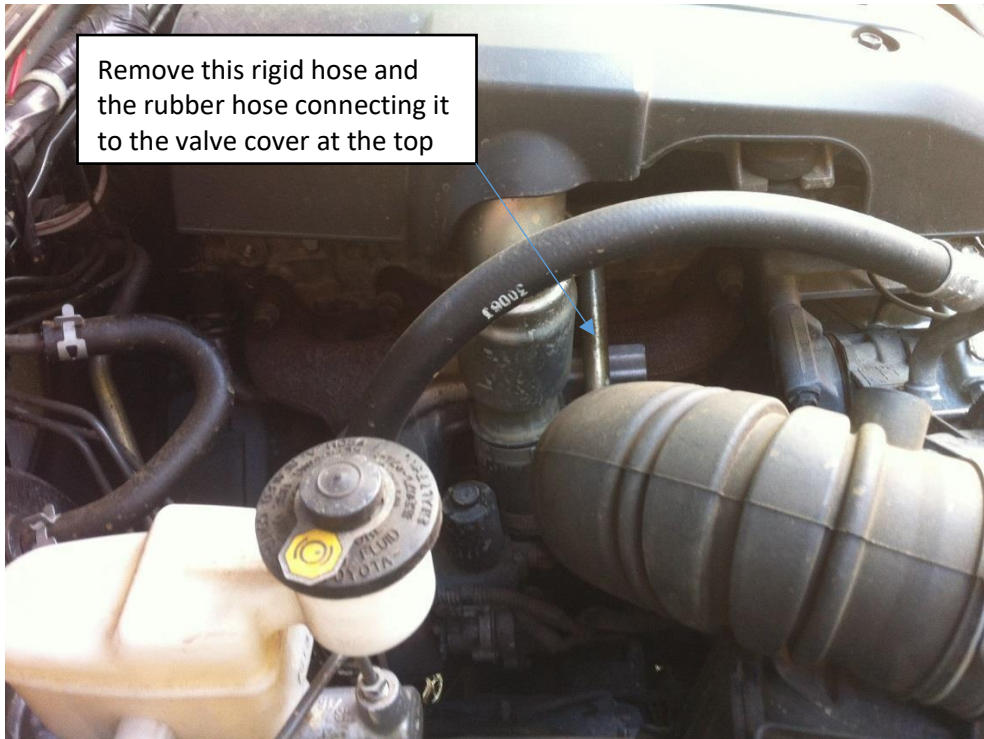
Approximate mounting location



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

Installation Guide

1. Begin by removing the factory bypass hose which runs from the top of the rocker cover, down to the air inlet hose just before the turbocharger. You will need to leave the rubber 25mm to 16mm reducer in place on the inlet pipe. Note: You may need to remove the engine cover and intercooler for better access.



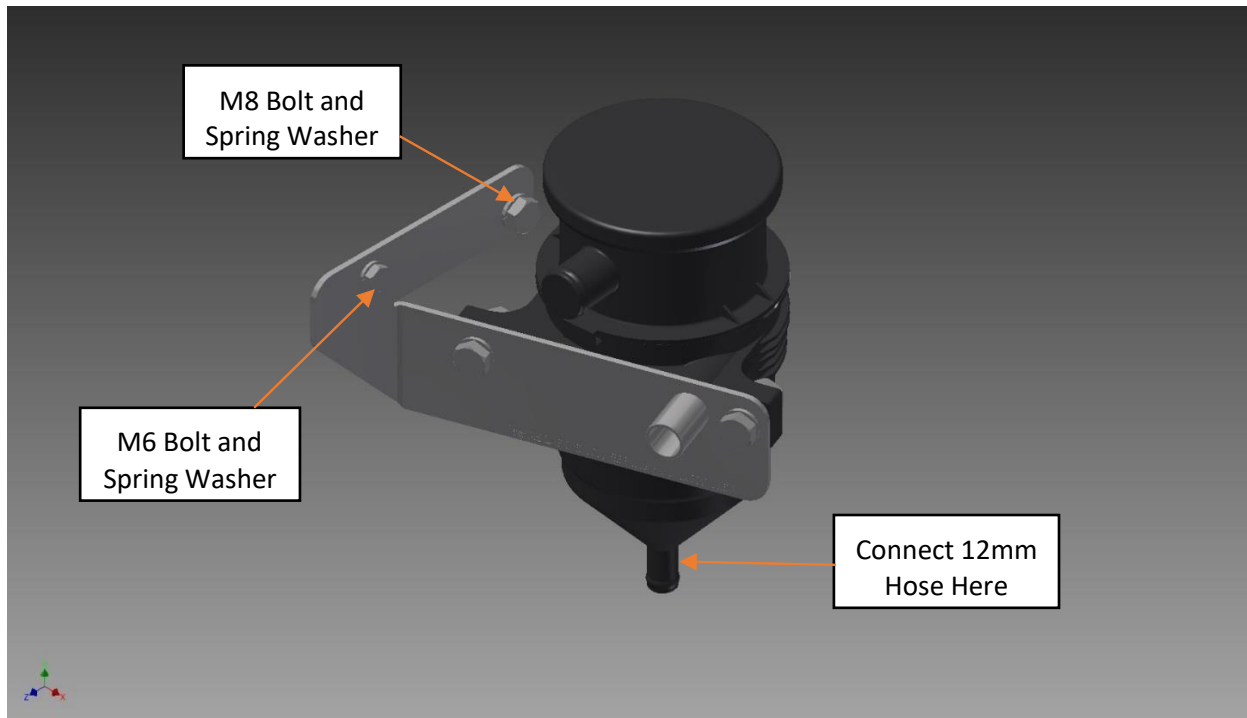
Hilux Engine Bay – Exhaust side

2. Connect the 12mm Hose to the underside of the catch can body, using a 12-20mm Clamp to secure it in place.



ProVent® 150 with 12mm hose connected and secured with 12mm spring clamp

3. Install the pre-assembled catch can and bracket assembly to the rear right of the engine bay. There are two existing unused threaded holes in which the unit mounts to. Use the M6 Bolt and spring washer for the front hole and the M8 Bolt and spring washer for the rear hole.



Pre-assembled ProVent® 150 with bracket – Shown with mounting bolts

4. Feed the 12mm Hose down under the vehicle to an out of the way location, making sure it is clear of any suspension, driveline and exhaust components, fit the Tap hose tail into the hose.



Hose tail and tap assembly inserted into 12mm hose, hose clamp not required

5. Use the supplied cable ties to secure the 12mm hose into the location required to prevent movement, just leave a slight amount of slack in the line where the body and chassis join to prevent stretching the hose.

6. Make sure the tap position is closed and avoid placing the tap in a location in which it will fill with dirt and mud.



Left image – Tap Open.

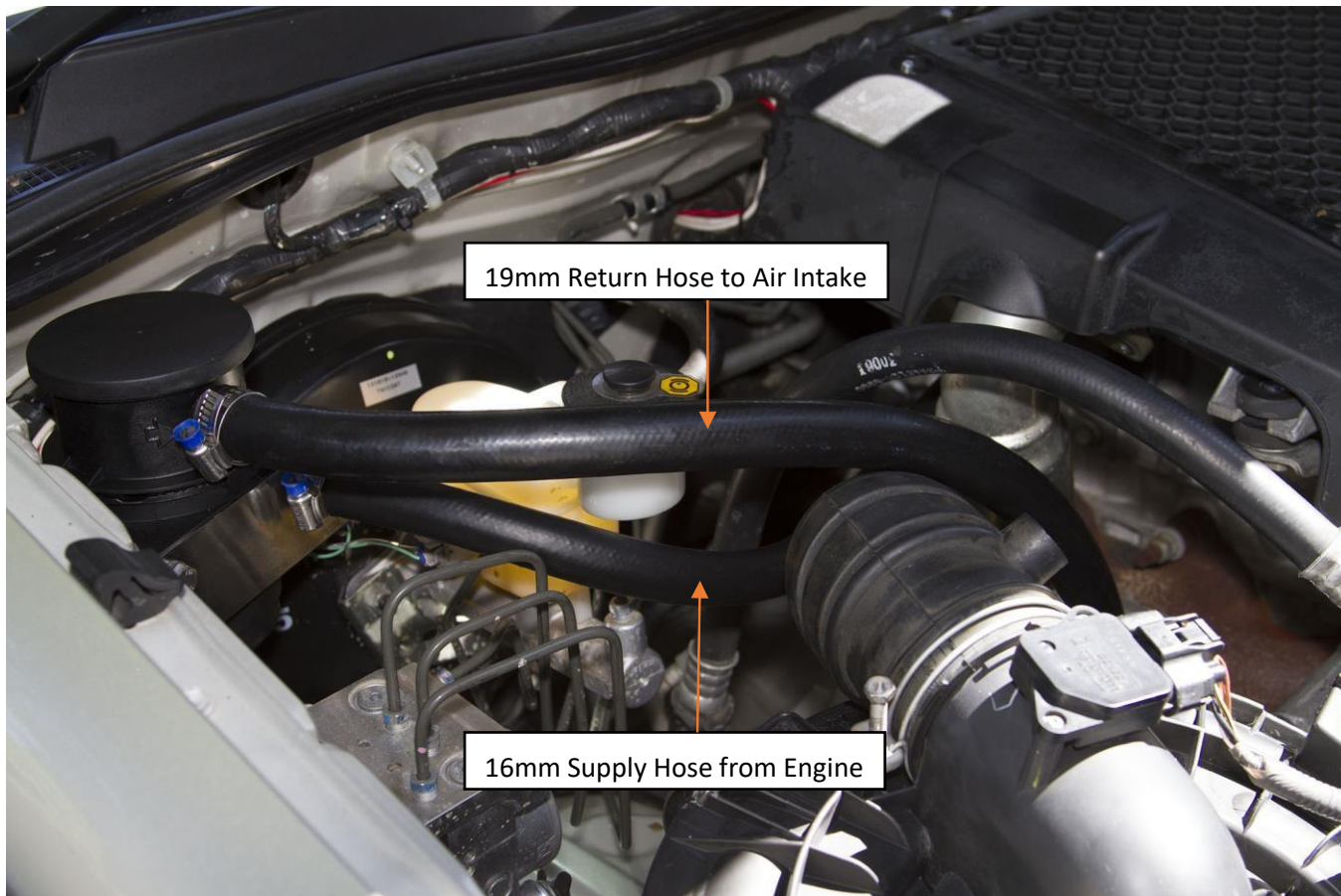
Right image – Tap Closed.

7. Mount one end of the 16mm hose to the fitting on the valve cover in which the factory bypass hose was removed. Use a 16-25mm clamp to secure it in place.
8. Mount the other end of the 16mm hose to the 16mm fitting on the bracket of the catch can, using a 16-25mm clamp to secure it in place. Note: This hose should run behind the intercooler piping and under the front corner of the brake master cylinder.
9. Push the 19mm end of the 16mm to 19mm Hose Joiner into the 19mm hose, using one of the 20-32mm Clamps to secure it in place.



19mm end of hose joiner inserted into 19mm Hose and secured with 20-32mm worm drive clamp

10. Push the 16mm end of the 16mm to 19mm Hose Joiner into the 16mm end of the 25mm to 16mm reducer on the air inlet hose. Secure in place with a 16-25mm clamp.
11. Mount the other end of the hose to the top hose fitting on the catch can body, secure in place with a 20-32mm hose clamp. Note: This hose should run over the intake pipe and in front of the fill port for the brake master cylinder, take care to ensure clearance to the fill port.



End of Installation Guide