HILUX N80 1GD/2GD DPF SIMULATOR

This module facilitates the removal of the DPF on 2015+ model Hilux, Prado, Fortuna and Hiace fitted with the 1GD-FTV (2.8L) or 2GD-FTV (2.4L) diesel engine.

With this module, no tune or ECU remap is required. The DPF can easily be refitted and everything returned to standard.

It works by watching data from the MAF sensor and EGT sensor, and simulates valid EGT and differential pressure readings. The engine ECU thinks a DPF is still fitted and everything is normal.

A simulated 5th injector is also added, which means the real 5th injector is disconnected, preventing any possible attempt of a regen without the DPF fitted.

IMPORTANT INFORMATION

- The DPF must be removed and a delete pipe or gutted DPF fitted.
- EGT1, EGT2 + oxygen sensor must be retained in the delete pipe. EGT3 and pipes / hoses for the pressure sensor are no longer required.
- DPF system must already be in <u>normal working order</u> prior to fitment.
- If there are any DPF related trouble codes logged (eg. P2458, P2463) make sure you can clear them and reset soot accumulation prior to fitment.
- If possible, check your soot accumulation with a scan tool. It is a good idea to reset it or perform a forced regeneration prior to fitment if you can.

DISCLAIMER

This product is intended to be fitted to <u>unregistered vehicles</u> for <u>off-road</u> use on <u>private property</u> only. The DPF is an emission control device. As such, any person who removes, disconnects or impairs the operation of it on a road-registered vehicle may be guilty of an offence under Australian law. DPF removal will render your vehicle unroadworthy. By fitting this module, you agree the vehicle is not registered in Australia and will not be used on any Australian road.

Any risk associated with vehicle modification is your responsibility. We accept no liability for vehicle damage, voided warranties, vehicle repair expenses or legal expenses caused by the use of this module.

DPF REMOVAL

- Remove engine cover.
- Unplug and unclip MAF sensor wiring from airbox.
- Undo the hose clamp at turbo end of the induction hose.
- Remove upper and lower airbox (including induction hose) from vehicle.
- Unscrew the **3 EGT sensors** in the DPF. Use a flare nut spanner to ensure they do not round. If they are seized heat may be required.
- Unscrew the **2 pipes** for the differential pressure sensor in the DPF.
- Remove pipe clamp and differential pressure sensor from vehicle.
- Unclamp EGT sensor wires.
- Remove 12mm bolts holding the metal bracket to the head.
- Swing the bracket (complete with EGT sensors and connectors) up on top of the engine out of the way.
- Remove exhaust manifold heat shield (3x 12mm bolts).
- Remove black metal shield from chassis (2x 12mm bolts, near upper control arm).
- Remove turbo heat shield (3x 12mm bolts).



- Remove front wheel.
- Unclip rubber guard in wheel arch to allow access from the side.
- If required, turn steering wheel so 12mm bolts on steering column coupling can be easily accessed from the side.
- IMPORTANT: Ensure ignition key is removed and steering lock is engaged!
- **IMPORTANT:** Mark steering column coupling spline for re-alignment.
- Remove 12mm bolts and slide coupling up column. The steering shaft will drop out of the way (this is required for clearance to remove DPF).
- Unplug oxygen sensor first, then unscrew it and remove from vehicle. Use a deep oxygen sensor socket. Be careful not to damage it.
- From under vehicle, remove 2x spring loaded flange bolts.
- Remove 2x bolts holding lower DPF bracket to engine block.

- From engine bay, remove the front AC pipe mount (2x 10mm)
- Unclip AC pipes from black plastic brackets.
- Completely remove the rear black plastic bracket from vehicle.
- The AC pipes can now gently be moved over to allow clearance for DPF removal. Do not bend or pull on them too hard or they may crack.
- Undo the V band clamp holding the DPF to the turbo.









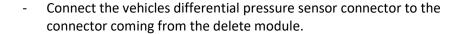


- The DPF can now be removed. It should tilt back, rotate, and come out in an almost vertical position. Watch the flange at the bottom, it will catch on the steel brake line or the steering shaft (if it's sitting in the wrong position).
- Install your delete pipe in the reverse order of removal. Ensure you
 re-fit the rear top bracket (holding the exhaust to the head) before
 tightening the V band clamp.
- **IMPORTANT:** The 1st/2nd EGT and oxygen sensors must be refitted. The 3rd EGT and differential pressure sensor are not required.
- IMPORTANT: Do not cut the EGT sensor probes shorter, the pipe needs the correct length fitting to accept the EGT sensors as they are without the sensor bottoming out on the exhaust. Shortened sensors or sensor probes touching the exhaust pipe will not work.



MODULE INSTALLATION

- Screw the DPF delete module to the vehicle near the ABS module / behind the airbox. Have the wires pointing downward.
- Run the shorter part of the wiring to the MAF sensor and connect the 2 piggy-back connectors into the MAF sensor.
- Run the longer part of the wiring back and along the firewall, and then forward and onto the engine.



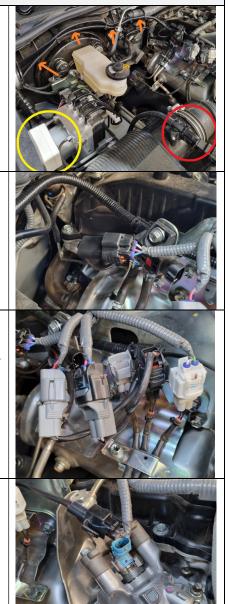
The actual differential pressure sensor is no longer required and can be completely removed if desired.

- Leave EGT sensor #1 connected to the vehicles wiring as standard.
- Connect EGT sensor #2 to the connector from the delete module.
- Connect vehicles EGT #2 wiring to the other delete module connector.
- Connect vehicles EGT #3 wiring to the final delete module connector.

All the EGT connectors are keyed so they cannot be mixed up.

EGT sensor #3 is no longer required.

 Disconnect the 5th injector and plug the connector into the delete module.



INSTALLATION COMPLETE!

If you had sensors unplugged with the ignition on, you might find you now have an engine light. The codes can be cleared with a scan tool (or disconnecting the battery for 10 minutes).

If the engine light is on, clear them and then go for a good drive at highway speed.