



FITTING INSTRUCTIONS FOR

MFK1260CL/A and MFK1260HTA

HOLDEN /CHEVY V8 PETROL (post 1986)

TO

LANDCRUISER 4.0ltr PETROL 4-SPEED AUTOMATIC TRANSMISSIONS

Thank you for purchasing a product manufactured by Marks 4WD Adaptors. The following instructions are intended as a guide. We recommend that you purchase a service manual pertaining to your vehicle for specific torque values, wiring diagrams and other related information.

This kit has been designed to directly replace the Land Cruiser 4.0 Litre 3F petrol engine.

Engine Removal

1. Remove the bonnet from vehicle.
2. Disconnect and label all the hoses and wiring attached to the old engine.
3. Remove air-conditioning compressor and power steering (if fitted).
4. Remove the complete exhaust system from vehicle.
5. Drain radiator and engine of all fluids.
6. Remove the radiator from the vehicle.
7. Support the transmission with a jack and remove the bellhousing to engine bolts.
8. Undo and remove the front engine mounting rubbers and remove the engine assembly from the vehicle using suitable engine lifting equipment. Do not discard the old engine, as some parts are required for the conversion.
9. Remove the Land Cruiser torque converter and flex plate.
10. Remove the oil pressure and water temperature senders from the Toyota engine.

Adaptor Kit Preparation

1. Fit the two M10 x 20 dowels (MFC197) to the gearbox side of the new adaptor housing.
2. Fit the adaptor housing assembly to the rear of the GM engine using the 6 SHCS supplied. Check the thread in the engine block. Later engines may have metric threads (M10 x 1.5 mm). We have supplied both metric and imperial SHCS for this reason. Make sure that the engine is fitted with the 2 locating dowels.
3. Fit the flywheel cover plate using the 3 bolts (MFC432), 3 spring washers (MFC435) and 3 flat washers (MFC436).
4. Fit the starter motor to the engine using the GM bolts. Seal the plate around starter motor using silastic.

NOTE: Due to various Chevy petrol starter motor offsets, a small portion may have to be ground out of the starter locating hole in the flywheel cover plate. If the hole in the cover plate supplied is in a totally different position, then you have ordered the incorrect kit. Chevy petrol engines have two different size flywheels and therefore have two starter motor offsets, the cover plate supplied in the kit suits the 168t ring gear.

Note: The crank adaptor supplied in this kit is specifically designed for a particular vehicle model. They are not interchangeable. Please check the distance the torque converter bolt holes are behind the original bellhousing face and the diameter of the spigot on the torque converter.

The following information is derived from original Toyota Manuals. If your vehicle does not match this table please **do not** proceed and contact Marks 4WD Adaptors.

NOTE: The FJ80 3F flex plate should protrude 14.5mm from the face of the adaptor housing giving 2mm clearance (end float) up to the torque converter.

Model	Spigot Diam	Original Bellhousing to Torque converter bolt holes.	Reference
FJ80	42/35	16.5	From Toyota Manual Page - AT37,RM184E JAN 1990
HZJ80	32	41.2	From Toyota Manual Page - AT37,RM184E JAN 1990
FZJ80	40	37.2	From Toyota Manual Page - AT77,RM315E AUG 1992
HDJ80	32	43.8	From Toyota Manual Page - AT77,RM315E AUG 1992

5. Fit the crankshaft adaptor to the engine with a manual GM flywheel (not an auto flex plate) between the adaptor and the crankshaft boss. Secure them using the six 7/16" UNF x 1 1/2" SHCS, use loctite on all crankshaft bolts and torque to specification. **NOTE:** Check the torque converter spigot diameter if it measures 42mm diameter proceed. If it measures 35mm diameter fit the MFC670 reducer bush as supplied and then proceed.
6. Fit the Toyota flex plate and secure it using the original bolts. Use loctite on all crankshaft bolts and torque to specification.

Chevy Engine and Engine Mount Set Up

NOTE: Fitting 6.2 and 6.5 Ltr Diesel and Big Block Chevy engines will require modification of the firewall behind the right hand cylinder head .

The engine can be moved forward 20mm by slotting the holes in transmission and engine chassis mounting brackets. The rear drive shaft will need the addition of a spacer (Part No. MFK1421) to be fitted between the transfer case rear output flange and the drive shaft. The front drive shaft usually has enough spline length to compensate, if not, get the shaft shortened by a drive shaft specialist.

Welded Engine Mountings.

NOTE: The most accurate way to position the engine mounts is to trial fit the new engine to the transmission.

1. Grind the original 6-cylinder chassis mounts off the chassis, as they are no longer required.
2. Bolt the GM rubbers to the GM block.
4. Guide the engine into position and secure it to the automatic transmission using 2 bolts one on each side of the engine.
5. Loosely fit the new chassis mounts to the engine mount rubbers. The smaller mount is fitted on the passenger side of the vehicle.
6. Lower the engine to allow the new chassis posts to locate on the chassis rails. When they look all OK, tack weld them into position.
7. Remove the bolts that hold the chassis mount rubbers to the new chassis posts.
8. Remove engine and adaptor assembly and complete the welding. Before welding the top shoulder of the new chassis mounts, we recommended that you heat the top shoulder with an oxy and fold it down to follow the profile of the chassis rail.
9. Paint the newly welded area.
10. The next stage is fitting the engine to the automatic transmission.
11. Lubricate with a small amount of grease the torque converter spigot hole in the back of the crank adaptor.
12. Lift the engine into position and secure it to the bellhousing using the original Toyota bolts.
13. Using the access hole machined into the bottom of the adaptor. Secure the torque converter to the flexplate using the original Toyota bolts, washers etc. Refer to the Toyota manual if required.
14. Fit the torque converter bolt cover plate and secure it using the bolts and washers supplied in the kit.

Engine completion.

1. Fit the Toyota oil pressure sender using the adaptor supplied.
2. Fit the water temperature sender using the adaptor supplied.
3. Fit heater and radiator hoses.
4. Fit the Toyota power steering pump, air-conditioning compressor, and alternator with the appropriate mount and drive kit, Marks 4WD Adaptors manufacture these kits, see our website for details. Alternatively you can use the GM accessories if they can be fitted.
5. Complete the wiring.
6. Fit the tachometer interface (MFK1165) as per instructions.
7. Complete the exhaust system.
8. Check and fill all fluid levels.
9. Double check, all of the mounting and adaptor bolts are tight.
10. Start the engine and check for-

Fuel leaks.

Oil leaks.

Water leaks.

Exhaust leaks.

Allow the engine to warm up and recheck the above.

10. Refit the bonnet.

The components supplied in the kit are designed for specific type conversions. Modifications to any components without the written consent from Marks 4WD Adaptors will void any possible warranty or return privileges. Should you have any further questions that are not covered in the instruction sheet, please contact our sales department for assistance.

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