



Fitting Instructions for MFK1260CS, MFK1260CLS, MFK1260CDS & MFK1260G3

Chevy V8 Engines to Toyota LandCruiser 80 Series 3F Petrol—5 Speed Manual Transmission



Important Information

This instruction booklet can be used standalone for the above stated conversion but we would also recommend having a workshop manual for your vehicle to cover any factory Toyota torque / installation settings to complete the engine installation to your Toyota LandCruiser.

The instruction booklet describes the required modifications (if any) and installation process in order for our kit to fit and work properly.

Marks 4WD Adaptors cannot and will not take responsibility for knowing everything that may impact on your conversion. Before beginning any work, thoroughly work through the sequence of changes, work and potential impact of your conversion. You must ensure you completely understand all the factors that may impact on achieving your desired results.

Engine Removal

1. Remove the bonnet from vehicle
2. Disconnect and label all the hoses and wiring attached to the old engine.
3. Remove the air-conditioning compressor and power steering (if fitted).
4. Remove the complete exhaust system from vehicle.
5. Drain the 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 clutch and pressure plate.
10. Remove the oil pressure and water temperature senders from the Toyota engine.
11. If the new engine uses a different grade of fuel than the original engine, drain the fuel tank and fuel lines.

Adaptor Housing Preparation

NOTE: All models. A small portion of the adaptor housing will need to be ground for clearance of the slave cylinder hydraulic hose. Disconnect and label all the hoses and wiring attached to the old engine.

1. Fit the two M8 x 20 dowels to the rear of the new adaptor housing.
2. Fit the adaptor housing assembly to the rear of the Chev engine using the 6 SHCS supplied. Make sure that the engine is fitted with the 2 locating dowels.
3. Fit the flywheel cover plate using the 3 bolts, 3 spring washers and 3 flat washers.
4. Fit the starter motor to the engine using the Chev bolts. Seal the plate around starter motor using sealant

CHEVY NOTE: Due to various Chevy petrol starter motor offsets, a small portion may have to be ground off 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 and diesel engines have different size flywheels and therefore have different starter motor offsets. Please call our sales staff for further recommendations should this problem arises.

Engine Mountings—MFK680CK

NOTE: When fitting a 6.2 or 6.5 Chevy diesel and 454 big block engines, firewall modification will be required. To reduce the amount of modification required slot the transfer case crossmember mounting holes to allow the engine and transmission to move forward approximately 20mm. Before altering, the firewall have a good look on the inside, particularly on the passenger side (LHS) as the air conditioning is very close to the firewall.

1. Fit the new engine mounting rubbers to the engine block. Secure them using the nuts, and washers supplied in the kit.
2. Fit the new chassis brackets to the engine mounting rubbers using the bolts, washers, and nuts supplied. **NOTE:** The longer bracket (MFC681) to the RHS and the (MFC680) to the LHS.
3. Lift the engine into the engine bay using suitable lifting gear.
4. Attach the adaptor to the bellhousing using two M12x1.25x50 bolts, and two M12 spring washers supplied in the kit.

5. Lower the engine so that the top flange plate sits on top of the chassis rails. **NOTE:** The top flange will not sit flat on the chassis.
6. Tack weld the brackets to the side of the chassis and remove the engine.
7. Complete the welding of the bracket to the side of the chassis.
8. Use an oxy acetylene torch to heat the top flange plate until its cherry red. Then shape it to the chassis rail using a hammer.
9. Complete the welding and allow them to cool.
10. Paint the chassis and brackets.

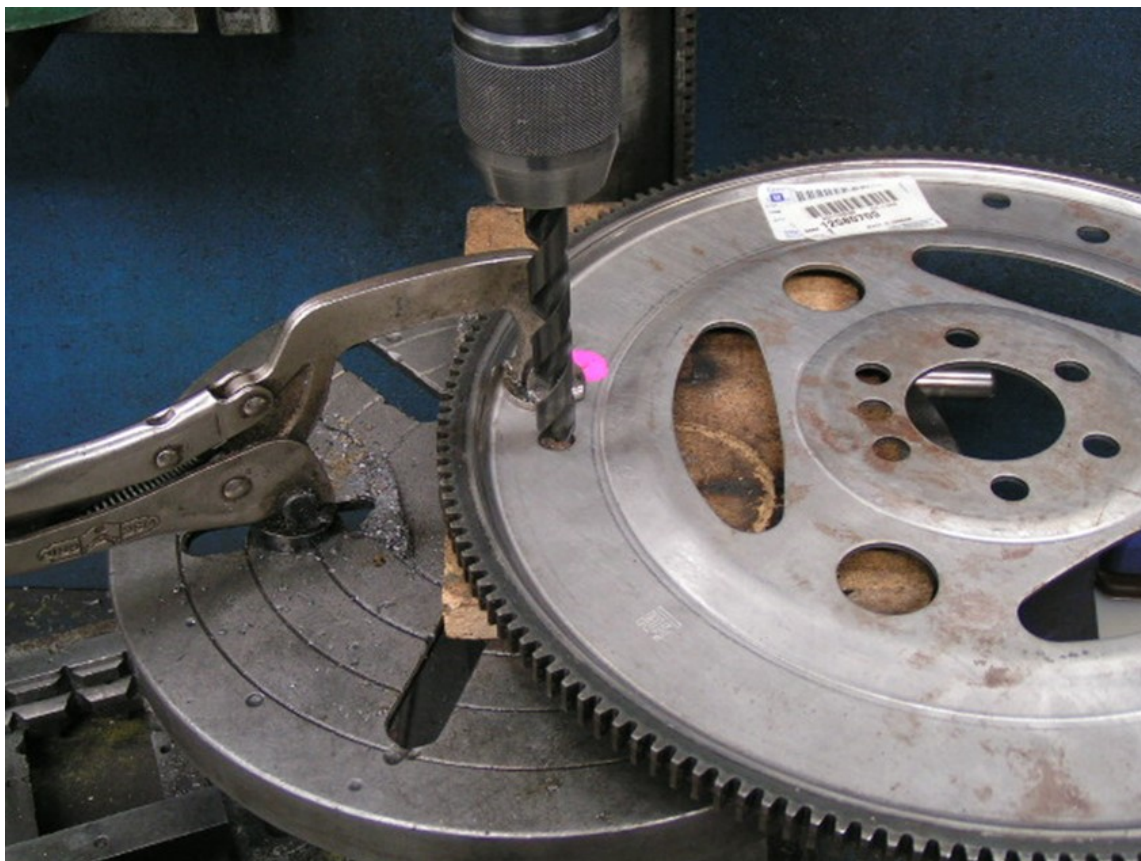
LS Engine Mountings

Our MFK1765EM FZJ80/105 kit can be used but you will need to source factory chassis posts from a FZJ80/105 model and these will need to be welded onto the FJ80 chassis.

The universal LS engine mount kit can also be used; part number —713088-S

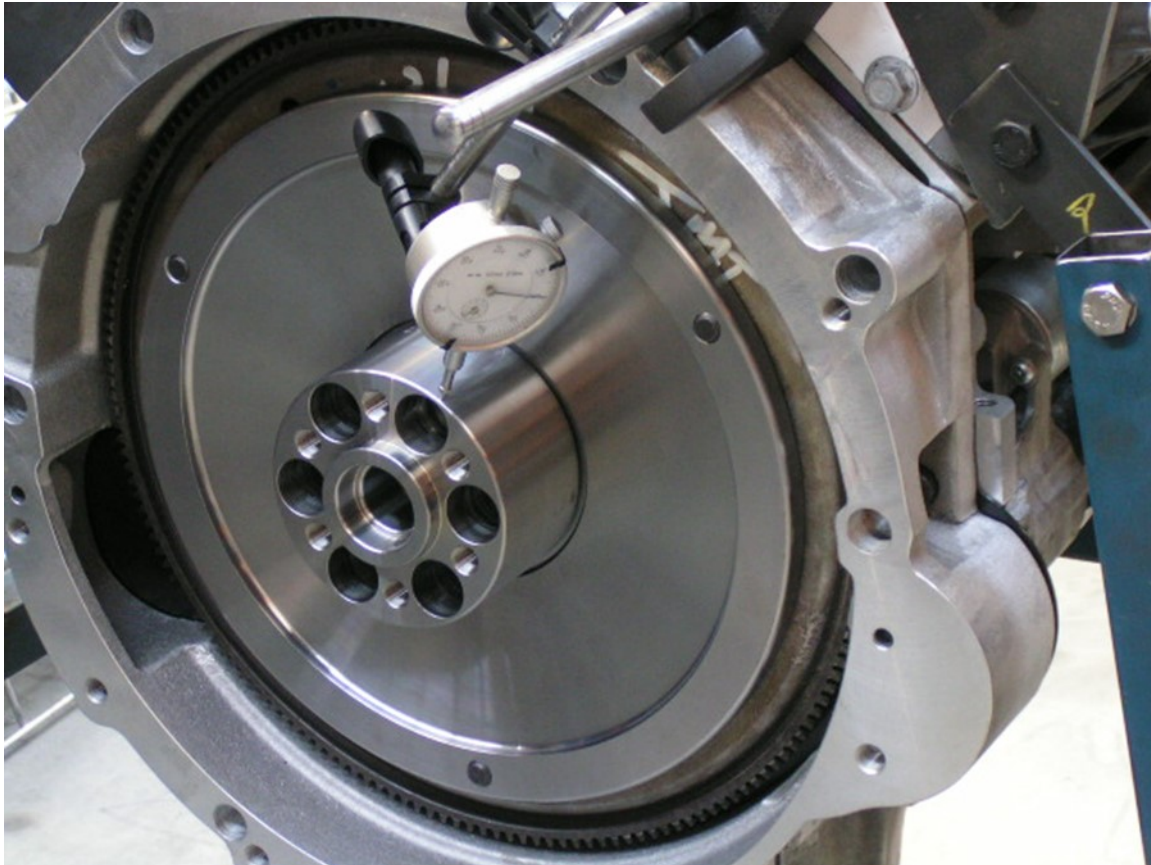
Final Engine Preparation

1. Fit the flexplate to the back of the new flexplate stiffener. **Note:** you may need to drill one of the converter bolt holes out to suit the bolts supplied in the kit. See the following photos
2. Use the aligning bung supplied in the kit, this will ensure perfect alignment between the two parts.
3. Secure them using the bolts and washers supplied in the kit. Check the packing list for clarification of the bolts used. Torque the M10 bolts to 61nm/45ftlb.

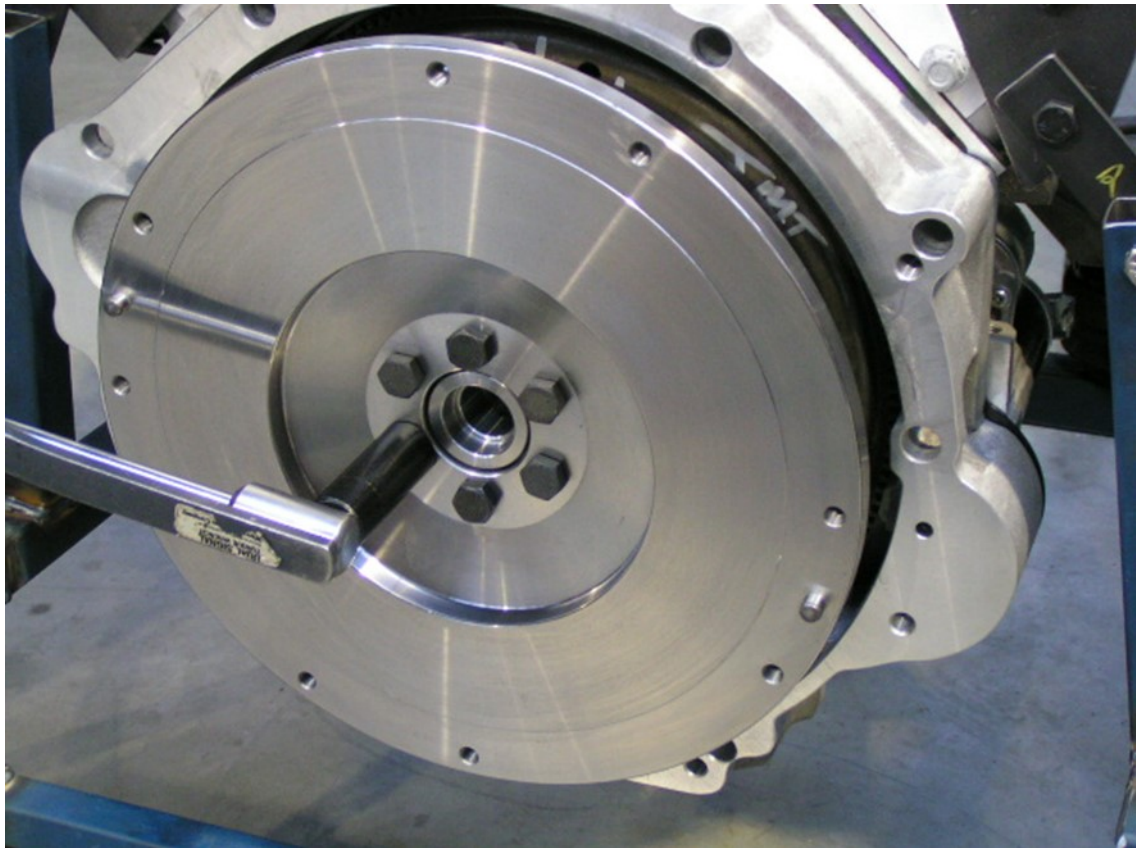




4. Fit the flexplate assembly to the crankshaft with the crankshaft adaptor and secure them using the 7/16" unf socket head cap screws supplied. Torque the 7/16" socket head cap screws to 88nm/64ftlb.
5. Check the crank adaptor for run out, this should not be any more than 0.05mm. If it is you should try to correct it by rotating the adaptor and trying again. See the following photos. **Note:** The following photos are not from this specific conversion, however the parts and torque settings are the same



6. Fit the new spigot bearing (part No. 6202) into the crankshaft adaptor. Use the flexplate aligning tool a drift, use a soft hammer to drive the bearing in until it sits flush in the bore. **NOTE:** The bearing is pre packed with grease, and fitted with rubber seals, the rubber seals should not be removed.
7. Fit the new flywheel to the crankshaft adaptor and secure it using the new bolts supplied. **NOTE:** Torque the bolts to 95nm/70ftlb and use loctite on bolts



8. Fit the clutch assembly to the flywheel and secure it using the original Toyota bolts. Align the clutch plate using a suitable clutch aligning tool. **NOTE:** The original bolts should fit without modification but it is a good idea to double check them in the new flywheel prior to fitting the clutch.
9. Lift the engine into the engine bay using suitable lifting gear. Align the gearbox input shaft spline with the clutch spline by jacking one of the rear wheels off the ground. Put the gearbox in 4th gear and the transfer case in HI range. Rock the wheel backward and forward while pushing the engine back to the bellhousing face.
10. Secure the adaptor to the bellhousing using the original Toyota M12 bolts.

NOTE: When fitting a Chevy engine. The driver side bellhousing bolt that screws into the starter recess in the adaptor housing will need to be cut down to 40mm in length to clear the end of the starter motor.

11. While the rear wheel is in the air, check the clutch operation. If all is well proceed, if not rectify the problem.
12. Fit the engine mountings and secure them with the bolts supplied.

Engine Completion

1. Fit the Toyota oil pressure sender using the adaptor supplied.
2. Fit the water temperature sender using the adaptor supplied. **NOTE 1:** Use Teflon tape or liquid Teflon.
3. Sort heater and radiator hoses, power steering pump & lines, A/C compressor & lines
4. Complete the wiring.
5. Complete the exhaust system.
6. Check all fluid levels.
7. Double check, all of the mounting bolts are tight.
8. Start the engine and check for: Fuel leaks, Oil leaks, Water leaks, Exhaust leaks, etc
9. Allow the engine to warm up and recheck the above.

Image 2.1

Terms and Conditions

Thank you for purchasing this product manufactured by Marks 4WD Adaptors. Components supplied in this kit are designed and machined for a specific conversion only as outlined in this guide. Modifications to or substitution for any of the components without the written consent of Marks 4WD Adaptors will void any possible warranty or return privileges.

The following instructions are intended as a guide and only for Marks 4WD Adaptors kits. If you do not fully understand the steps, modifications or changes required to complete the conversion, contact our sales department for more information. We recommend that you purchase a service manual pertaining to your vehicle for specific torque values, wiring diagrams and other related information.

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