

LS1-2-3 Engine LHS Starter Motor Adaptor Plate - Manual Fitting Instructions

Kit Contents

1x	Adaptor Plate	CAE-276
1x	Thrust Bearing Spacer	CAE-278M
1x	Spigot Bearing Assembly	CAE-282
2x	Dowels	CAE-277
6x	M10 x 50 bolts	0053 010 50
6x	M10 flat washers	0407 010
6x	M10 spring washers	0441 010
2x	M6 x 1 x 25 bolts	0057 06 25
2x	M6 Flat washers	0407 06
2x	M6 Spring washers	0441 06

Note: Due to variations in the late model Commodore Flywheel dimensions it may be necessary to grind a small chamfer on the inside radius of the adaptor plate.

Step 1.

Leaving the flywheel attached to the engine, remove the pressure plate & clutch plate from the flywheel and remove the spigot bearing from the rear of the crank shaft.

NOTE: The GEN III crank has a Welch plug in the rear to block off the inside of the crank, so it is critical you do not use the traditional method of trying to force the spigot bearing out with grease as the Welch plug will fall into the sump. You must use a GM-recommend type of bearing puller for this.

Step 2.

Prepare the bore where the spigot bearing assembly goes by cleaning out any dirt and ensuring there are no burrs etc. Fit the spigot bearing assembly using only a soft-faced hammer or a piece of wood as a drift if needed. We recommend using 'Loctite 680' on the outside of the assembly that goes where the original spigot bearing was, leaving for a period of approx 20min to harden.

Step 3.

Remove the hydraulic thrust bearing from the gearbox. You will now see (2) M6 bolts that hold the nose cone on the front of the gearbox. Remove these bolts and take off the nose cone.

Fit the thrust bearing spacer to the back of the nose cone, ensuring that there is clean and free of burrs etc. Replace the assembly to the front of the gearbox and use the supplied M6 bolts to hold it in place. Ensure the bolts are tight. Replace the thrust bearing back onto the nose cone.

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Step 4.

Remove the existing dowels from the back of the engine block and make sure there are no burrs ect. On the face of the block. Fit the (2) new dowels supplied in the kit. Like the spigot bearing assembly, only use a soft faced hammer of a piece of wood as a drift. If the dowels happen to be loose in the engine block, apply a small amount of 'Loctite 680' to the dowels, leaving for a period of approx 20min to harden.

Step 5.

Fit the adaptor plate to the back of the motor over the new dowels.

Step 6.

Due to the pressure plate and clutch plate being removed, these will need to be re-fitted to the flywheel using a clutch aligning tool. Ensure that all set screws are re-tightened on the pressure plate once fitted.

Step 7.

Before re-fitting the transmission, you will need to relieve out the area on the bell housing where the starter pinion will sit and throw out.

Re-fit the transmission to the engine using the supplied M10 x 50 bolts with washers and spring washers. Ensure that none of these bolts bottom out on the threads in the engine block.

For starter motor fitting, refer to the instructions enclosed with the Starter.

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Warranty

The manufacturer's warranty on all Hi-Torque gear reduction starter motors is for a period of 12 months only from the invoice date, covering the Starter Motor only

Warranty Conditions

- *All claims must be made in the warranty period.*
- *Any starter motor found to have faulty workmanship will be replaced free of charge.*
- *Warranty does not apply to items that have been subject to neglect, misuse, abuse, accidental or intentional damage, unauthorized repairs, modifications, incorrect application or installation.*
- *Warranty does not cover the cost of freight, installation or removal of items.*
- *Warranty of 12 months only applies to items being used for normal road use.*
- *C.A.E. Performance Products recommend that this product be fitted by qualified personnel.*