

NISSAN CG TO BMC RIBCASE

To fit the Nissan CG engine to an A-Series “ribcase” transmission the bellhousing needs to be trimmed to clear the cylinder head and starter motor.

DOWEL PIN

The top section of the bellhousing needs to be cut away to clear the Nissan cylinder head. This means the upper dowel hole is lost. To ensure the input shaft runs true with the crankshaft the following steps must be followed.

Place the transmission on a bench and fit the Barratt Engineering adaptor plate, locating it on the lower dowel pin, see image below.



The adaptor can now be bolted lightly to the gearbox and aligned using a set square. The square needs to be pressed firmly into the corner of the notch provided and aligned with the edge of the upper dowel pin.



With the plate aligned the bolts can be tightened fully. The two parts should now be drilled and reamed using the (4.8) drill and (5H7) reamer provided.



CYLINDER HEAD CLEARANCE

The top of the bellhousing can now be cut flush with the top of the adaptor plate and trial fitted on the engine.

If a crankshaft position sensor is being fitted additional clearance will be required. Care should be taken to ensure the plug can be easily fitted and removed.



STARTER MOTOR CLEARANCE

Finally, clearance will need to be made for the starter motor using the window in the adaptor plate as a template.



NOTES

In all areas where material has been removed it is advised that sharp edges and corners are avoided to reduce the risk of cracking and stress concentration in the casting. Corners are best formed by drilling with a 10mm diameter bit or larger.

CONCENTRIC CLUTCH SLAVE CYLINDER

1. Remove 3x nuts and studs from the transmission front cover.
2. Fit the adaptor plate with spacers and bolts.
3. Mount the slave cylinder with 3x bolts and washers, as shown above.
4. Make up pressure feed and bleed lines (parts not included)
 - i. The bleed fitting is M9x1.25. Citroën 2CV unions can be used.
 - ii. Mount the bleed valve somewhere accessible. Bleeding is significantly easier than the BMC type slave cylinder.