



DomiWorks Engineering

Volvo Redblock to S55/S65 adapter kit

Installation Guideline

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The information in this document is guidelines of how to install this kit to your engine. Failing to follow these guidelines may result in permanent damage to the included components, which DomiWorks Engineering cannot be held responsible. Always work calm and methodical and always wear appropriate safety equipment.

Contents

This kit includes the following items

- 1x Adapter plate, fits Volvo Redblock engine and BMW DCT (S55 or S65) gearbox
- 1x Redblock DCT Coupler hub (different lengths depending on which kit is bought)
- 1x Crankshaft hall-sensor
- 1x Sensor holder
- 8x Flywheel bolts

Adapter plate bolts:

- 4x M12x20 screws
- 2x M12x30 screws
- 2x M10x20 screws
- 2x M6x5

S55 bolts:

- 1x 14.5 Guiding dowels
- 2x M12x40 screws
- 3x M10x55 screw
- 3x M8x50 screws
- 3x M8 washers

S65 bolts:

- 2x 14.5 Guiding dowels
- 10x M10x40
- 1x M10x50

If anything is missing please contact sales@domieng.com



Installation of new crankshaft sensor

Install the crankshaft sensor into the crankshaft holder and mount it on the adapter plate with the included screws.. Turn it approximately until it is halfway through, protruding equally on each side. The gap adjustment is later made when flywheel and adapter plate is in place.

Installation of adapter plate

Mount the adapter plate on the engine aligning with the engine dowels. Gently tap the adapter in place and mount the included bolts in the corresponding bolt hole. This is common for all variants of adapter plate. See page 4.

Installation of flywheel and DCT coupler hub

Please read through the following text for correct mounting of the DCT coupler hub!

The Volvo Redblock OEM manual flywheel center bore is not sufficient to get a proper aligning of the hub. It is therefore necessary to make minor modification to get a proper alignment of the hub.

It is required to make the center bore of the flywheel a little bit larger to match the guiding lip of the DCT coupler hub. Preferably this is done in a lathe, index the flywheel by measuring the runout on the guiding lip on the backside of the flywheel, the runout should be held to less than 0.02mm. (The guiding lip that guides on the crankshaft).

Always measure the lip on the DCT coupler hub before making the cut, the center bore should be +0.02mm to get a tight fit.

When the flywheel has been modified, mount in onto the crankshaft and the DCT coupler hub on top of it. Install the flywheel bolts and tighten them down.

Adjust sensor gap

Adjust the sensor gap to approximately one (1.0) millimeter between trigger teeth and sensor. Tighten the sensor bolt to make sure it doesn't move.

On the S65 DCT kit the sensor has been moved 14 degrees clockwise.

On the S55 DCT kit the sensor has been moved 21 degrees anti-clockwise.

Sensor wires are Brown: Supply (5v), Blue: Sensor Ground, Black: Output signal.

Installation of gearbox

Insert the included dowel guides into the adapter plate. Make sure to apply spline grease on the input shaft and the DCT coupler splines before mounting the gearbox to the adapter plate.

Guide the gearbox, aligning the input shaft with the DCT coupler hub and the bellhousing onto the dowel guides. The gearbox should not be forced into position. When mounted, insert bolts on their corresponding place. Tighten them down. See page 6, 7 and 8 for bolt reference.



