

Technical Bulletin

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Instructions for Blue Print Self-Adjusting Clutch Tool – ADG05507

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- A.** Clamping Tool
- B.** Compression Strut
- C.** Threaded Studs
- D.** Knurled Nuts
- E.** Handle (2pc)
- F.** Clutch Alignment Set (BMW)
 - 1. 15mm x 34mm
 - 2. 15mm x 28mm
 - 3. 15mm x 23mm
- G.** Clutch Alignment Tools / Mandrels
 - 1. Blue: 19.75mm diameter
 - 2. Red: 20.75mm diameter
 - 3. Black Stepped: 19mm/15mm/14mm
- H.** Clutch Resetting Tool



Blue Print's Self-Adjusting Clutch Tool (SAC) is an essential piece of equipment to ensure correct installation of a self-adjusting type clutch. Any counteracting forces applied to a SAC during installation could result in accidental rotation of the adjusting ring, resulting in an incorrectly adjusted clutch.



A self adjusting clutch can be identified by the self adjusting mechanism visible on the clutch cover. (see Pic 1)

It is especially important to use the tool when re-using/re-installing a self adjusting clutch, in order to maintain or set the clutch to the correct adjustment.

The tool will need to be assembled prior to use.

- Fit the compression strut (B) into the clamping tool (A) to form the compression tool.
- Attach the compression tool handle (E) to the end of the compression strut.



Note: When using the tool for the first time it will be necessary to remove the circlip and washer from the compression strut before it can be screwed into the clamping tool. It can be refitted afterwards if desired – their purpose is to stop the compression strut from being wound out of the clamping tool by mistake.

Please turn over.



Fitting a new SAC:

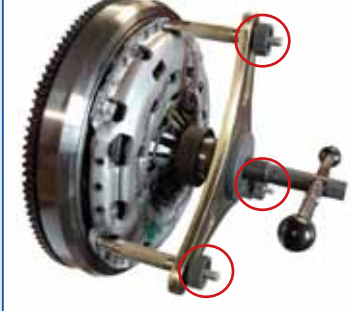
Remove the gearbox. Unbolt the old clutch cover and discard the old cover and disc. Ensure that the flywheel is in good condition. If it is a Dual Mass type then we recommended that you check the play is within the manufacturer's specification.

- Select the correct clutch plate aligning mandrel from the Blue Print SAC kit and centre the new clutch disc to the flywheel.
- Whilst holding the clutch disc in alignment, fit the new cover to the flywheel using three of the threaded studs (C) of the correct thread, using alternate bolt holes (120° apart).

Pic. 2



Pic. 3



Tighten these studs to 'finger tight' – just sufficient to hold the centre plate in place.

Also, install three of the original clutch cover fixing bolts into the three remaining bolt holes – leave finger tight. (see Pic 2)

- Place the assembled compression tool onto the three threaded studs and secure using the three knurled nuts (D). (see Pic 3)

- Turn the compression tool handle clockwise onto the clutch cover diaphragm and compress the spring fingers until the clutch cover's housing makes contact with the flywheel. (see Pic 4)

Pic. 4



before - gap



after - no gap



- Now tighten the three clutch cover fixing bolts to the manufacturer's recommended torque setting. (see Pic 5)
- Turn the compression tool handle anti-clockwise to release the pressure from the clutch cover diaphragm, then remove the knurled nuts, compression tool and threaded studs.
- Fit the remaining three clutch cover fixing bolts and tighten to the manufacturer's recommended torque setting.
- Remove the clutch plate aligning mandrel.

Pic. 5



Removing and refitting of the same SAC:

- Remove three alternate clutch cover fixing bolts (120° apart).
- Fit three of the threaded studs (C) of the correct thread into these bolt holes. Tighten the studs to 'finger tight'.
- Select the correct clutch plate aligning mandrel from the Blue Print SAC kit and insert it into the clutch plate.
- Place the assembled compression tool onto the three threaded studs and secure using the three knurled nuts (D).
- Turn the compression tool handle clockwise onto the clutch cover diaphragm and compress the spring fingers until the clutch cover releases tension on the disc, and the disc is able to be rotated. This will now ensure that the clutch cover's adjusting ring is in the correct position for refitting.
- Remove the three remaining clutch cover bolts.
- Turn the compression tool handle anti-clockwise to release the pressure from the clutch cover diaphragm, then remove the knurled nuts, compression tool and threaded studs.
- Remove the clutch assembly and mandrel, ensuring care is taken not to drop or knock the cover which may affect its adjustment.
- If a Dual Mass Flywheel is fitted, then we recommended that you check the play is within the manufacturer's specification.

NOTE: When re-using a SAC it may become necessary to reset the adjustment.

- This is carried out with the old clutch in place, with the compression tool installed and the diaphragm under tension as per Pic.4.
- Using the clutch reset tool (H) force the adjusting ring anti-clockwise until the second line on the ring is just visible.
- With the adjusting ring in the correct location and the tool in place, remove the tool and clutch.

IMPORTANT NOTE:

This bulletin is provided as a guide only.

Always refer to the specific vehicle manufacturer's instructions, or that of a trusted workshop manual for the correct procedure and technical data for using a SAC tool.

