Replacing and/or testing the overrunning alternator pulley (OAP/OAD) is very difficult to carry out with commercially available workshop equipment.

To combat this, Schaeffler Automotive Aftermarket offers a 12-piece INA tool kit (part no. 400 0241 10), which can be used to correctly replace or test all OAPs and OADs currently on the market.

Key for image 1:
1. Multipoint adapter, 17 x 20 with 33 teeth, wrench size 21 mm
2. Hexagonal adapter, wrench size 21/28 mm
3. Torx bit with TX50 hexagonal shank, wrench size 12 mm, 53 mm long
4. Hexagon bit with hexagon socket shank, wrench size 10 mm, 40 mm long
5. Multipoint bit with hexagonal shank, XZN M10, wrench size 12 mm, 53 mm long
6. Adapter with three pins, wrench size 21 mm
7. Hexagonal adapter, wrench size 17/21 mm
8. Multipoint bit with 1/2-inch shank, XZN M10, 73 mm long
9. Multipoint bit with 12 x 14 multipoint adapter (31 teeth, wrench size 21 mm) and 1/2-inch shank, XZN M10, 75 mm long
10. Multipoint bit with 1/2-inch shank, XZN M10, 103 mm long
11. Torx bit with 12 x 14 multipoint adapter (31 teeth, wrench size 21 mm) and 1/2-inch shank, TX50, 75 mm long
12. Torx bit with 1/2-inch shank, TX50, 73 mm long

Note:
When fitted, the function of an overrunning pulley is difficult to assess. It is therefore recommended that you remove the overrunning pulley before testing it.

Test instructions:
The corresponding adapter must be selected from the tool kit when removing or testing the OAPs or OADs.

Image 1: Overview of the contents of the tool box 400 0241 10

Image 2: A protective cover must be provided with OAPs and OADs to protect them from dirt.

Image 3: The corresponding adapter is inserted into the overrunning pulley.
Test instructions for overrunning alternator pulleys (OAP/OAD)

It is recommended you use a suitable tool to make testing with the adapter easier. In doing so, you will achieve better leverage.

Grasp the outer ring of the overrunning pulley with one hand. With your other hand, twist the tool (see images 4 to 7).

**Note:**
A small number of overrunning pulleys have a left-handed thread instead of a right-handed thread. The functions of the left-handed thread are exactly the same as those for the right-handed thread, but reversed.

If one of the two functions — as described in images 4 to 7 — is not evident during testing, the OAP/OAD must be replaced!

**Characteristics to look out for when testing an overrunning alternator pulley (OAP):**

- **Image 4:** The tool jams immediately and cannot be turned when moved in an anti-clockwise direction.
- **Image 5:** The tool can be continuously turned in a clockwise direction with slight resistance.

**Characteristics to look out for when testing an alternator decoupler (OAD):**

- **Image 6:** You will notice an increasing spring force when the tool is moved in an anti-clockwise direction.
- **Image 7:** The tool can be continuously turned in a clockwise direction with slight resistance.


Issued 05.2011
INA 0072
Technical subject to change
© 2011 Schaeffler Automotive Aftermarket