

# **TECHNICAL BULLETIN**

3/98

Crankshaft Rear Oil Seal Remover/Installer – Special Tool 303-538 MODEL 1997 MY-ON XK8 Range 1998 MY-ON V8 XJ Series VIN

001001-ON 812256-ON

## Issue:

This bulletin is for information only and describes the correct use of the crankshaft rear oil seal remover/replacer, 303-538, is introduced.

## Action:

## OIL SEAL REMOVAL

- 1. Ensure that the center bolt of the tool is unscrewed below the face of the tool body.
- 2. Position the tool against the rear face of the crankshaft boss and enter the two locating screws into the threaded bores in the crankshaft.
- 3. Lightly tighten the two screws so that they are fully engaged in the crankshaft when there is clearance between the locknuts and the tool body.



**ILLUSTRATION 1** 

- 4. Hold the tool body against the crankshaft boss while tightening the two locknuts evenly to secure the tool against the boss.
- 5. Install the punch in one of the holes around the outer edge of the tool body which line up with the face of the oil seal.
- 6. Hold the punch against the seal and then strike the punch with a hammer to pierce the seal casing to provide a pilot hole.
- 7. Repeat the operation two further times to provide three, equally spaced, holes.

8. Install a self tapping screw to each of these holes and then tighten each screw one and one half turns.

**Caution:** Do not tighten the screws more than two turns as this may cause them to break.

- 9. Prevent the two locating screws from rotating while fully loosening the two locknuts.
- 10. Tighten the tool center bolt to press the tool body away from the crankshaft boss. Since the rear oil seal is now attached to the tool body by the three self-tapping screws, the seal will pull out of the housing.
- 11. The seal will now be free of the housing but attached to the tool body and suspended on the locating bolts.
- 12. Unscrew the locating bolts and remove the assembly from the engine.
- 13. Remove the self tapping screws and discard the seal.
- 14. Thoroughly clean the area.

## OIL SEAL INSTALLATION:

1. Install the new seal over the crankshaft boss, without lubricant, using the transit sleeve supplied with the seal.

**Caution:** The transit sleeve must always remain in the seal before it is installed on the engine.

- 2. Discard the transit sleeve.
- 3. Ensure that the center bolt of the tool is unscrewed below the face of the tool body, place the tool against the seal outer face and then enter the two locating screws fully into the threaded bores in the crankshaft boss.
- 4. Lightly tighten the two screws so that they are fully engaged in the crankshaft boss and there is clearance between the locknuts and the tool body.
- 5. The tool body is now suspended on the screws; hold the tool body against the seal and lightly tighten the locknuts evenly to retain the body against the seal.
- 6. Check that the tool and seal are held squarely against the crankshaft boss.
- 7. Hold the locating screws securely while tightening the locknuts evenly to provide a compressing force to place the seal in the housing.
- 8. Remove the locating screws and the tool from the crankshaft and then check that the seal is correctly located in the housing.