

No.: 13 TL-3
January 31, 2013

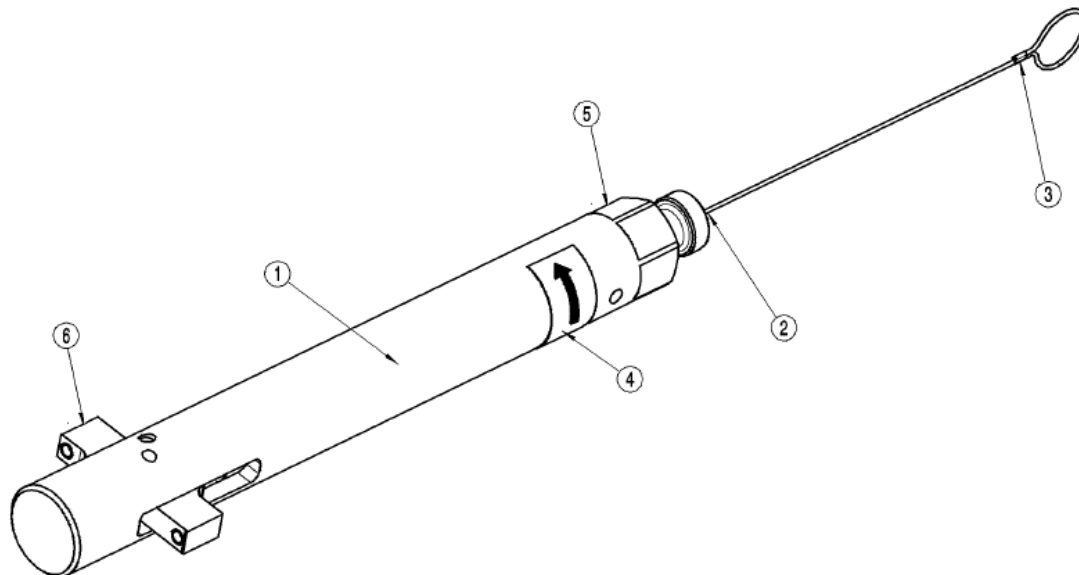
TO: Service Locations

FROM: Service Operations

SUBJECT: **W470589046300 – DD Platform Oil Pan Bulkhead Tool**

ISSUE

The Detroit Specials Tools group has created an oil pan bulkhead tool that is able to service the bulkhead round nut inside the oil pan without removing the oil pan from the engine. Magnets on the retractable arm secure the round nut during the repair procedure. The tool is essential and will be invoiced and sent to all DD engine certified repair facilities.



1. Shaft
2. Plunger
3. Leash
4. Directional Label
5. Hex Fitting
6. Magnetic retractable arm

REQUIRED ACTION

In the event of an oil leak around the bulkhead area of the oil pan follow these instructions;

NOTE:

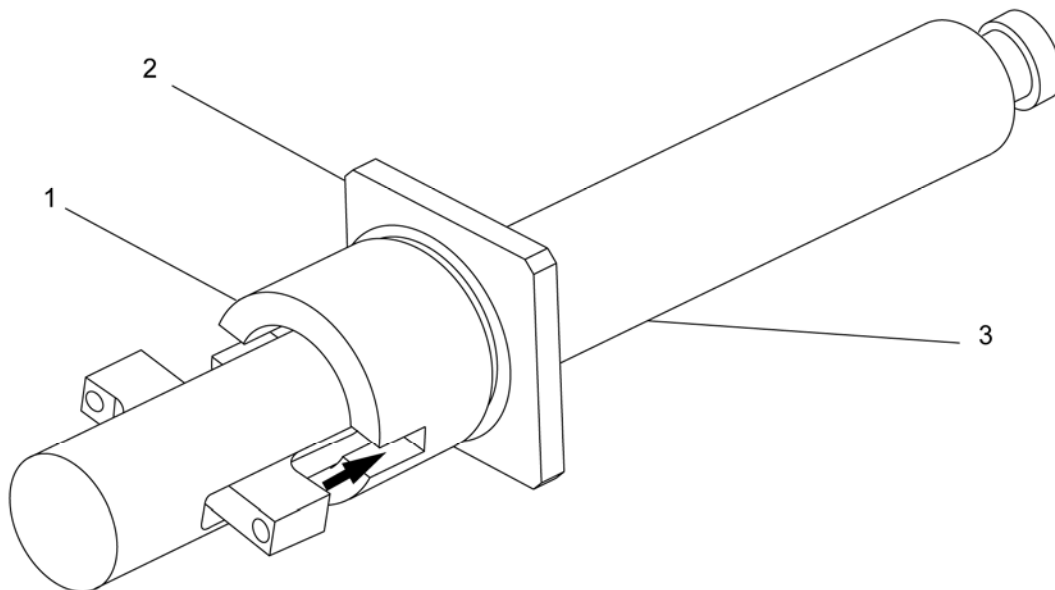
Unless the leak is dripping it is best to schedule the repair during an oil change.

1. Remove the oil filter.
2. Drain the oil from the engine.
3. Remove the oil drain plug and discard the seal ring.
4. Ensure the arm on the tool is in the retracted position by depressing the plunger.

NOTE:

The leash is designed to retrieve the tool if it accidentally enters the oil pan completely. However, it may be difficult to remove the tool.

5. Insert the tool into the bulkhead (2) and retract the magnetic arm.
6. Carefully turn the tool (3) in the direction the label indicates while pulling it against the round nut (1) with slight pressure.



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NOTICE:

Do not use any power or air tools while performing repairs with this tool or it will cause damage to the tool and oil pan.

7. Use a 21mm wrench or crows-foot socket to remove the round nut.
8. Once the nut has been removed, leave the tool inside the oil pan.

9. Remove the bulkhead over the shaft of the oil pan tool; discard the O-ring.
10. Inspect the area on the oil pan where the bulkhead is mounted. If cracked, the oil pan must be replaced.
11. Inspect the bulkhead for bending or stripped threads. If the threads that the round nut mounts on inside the oil pan will have to be removed, then the round nut can be replaced along with the bulkhead.
12. If the oil pan passes inspection, clean the bulkhead with a mild detergent and then install a new O-ring in the channel on the bulkhead.
13. Install the bulkhead into place over the shaft of the oil pan tool.
14. Using care, hand-tighten the round nut back onto the bulkhead.
15. Using a 21mm crows foot socket, torque the round nut to 100 – 130 N·m (73 – 95 lb·ft).
16. Detract the magnetic arm and remove the oil pan bulkhead tool.
17. Install the oil pan drain plug with a new seal ring and torque the plug to 45 N·m (33 lb·ft).
18. Install the oil filter and cap. Torque to 55 N·m (40 lb·ft).
19. Prime the lubrication system. Refer to “Priming the Lubrication System” in the Engine Manual (DDC-SVC-MAN-0081) of Power Service Literature.
20. Refill the oil pan with lubricating oil. Refer to “Engine Oil Capacities” in the Engine Manual (DDC-SVC-MAN-0081) of Power Service Literature.

**WARNING:****PERSONAL INJURY**

To avoid injury before starting and running the engine, ensure the vehicle is parked on a level surface, parking brake is set, and the wheels are blocked.

**WARNING:****ENGINE EXHAUST**

To avoid injury from inhaling engine exhaust, always operate the engine in a well-ventilated area. Engine exhaust is toxic.

20. Start the engine and inspect for leaks.

ADDITIONAL INFORMATION

Ordering Information:

Additional tools can be ordered through Paragon using a DDE supplier prefix.

- DDE W470589046300 – DD Platform Oil Pan Bulkhead Tool

CONTACT INFORMATION

Please contact the Detroit™ Customer Support Center at 800-445-1980 or email csc@daimler.com if you have any questions.