

Tips and Best Practices

Turn by hand only!

Bob Peltz – JLI Technical Field Support Manager

Hello everyone,

I was working with the customer service team over the past few months. I noticed a trend of several Ford vehicles equipped with plastic drain plugs not being serviced properly resulting in catastrophic engine damage.

My Findings

The oil drain plug can be damaged during removal. The oil drain plug is plastic and equipped with two locking tabs that when installed properly the tabs prevent the oil drain plug from backing out. If a damaged oil drain plug is installed it may back out resulting in catastrophic engine failure.

During my research I found the following:

- The oil drain plug should be removed by hand
- If the oil drain plug is not removed properly one or both locking tabs may break off
- If a locking tab breaks off the oil drain plug it must be replaced
- The O-ring needs to be inspected, if damaged replace oil drain plug as the O-ring is not replaceable
- Install by hand, turn clockwise 120 degrees until the locking tabs lock in place
- Ford uses several styles of plastic oil drain plugs.
- Replacement oil drain plugs may have to be purchased at a Ford dealer, while other styles may be purchased from Service Champ or other aftermarket suppliers.
- The oil drain plug should be installed by hand turning clockwise until it locks in place (about 120 degrees of rotation)



Lock Tabs are the area of concern



Tips and Best Practices

Lock Tabs are the area of concern



The Solution

My recommendations:

- Refer to ALLDATA for removal and installation procedures.

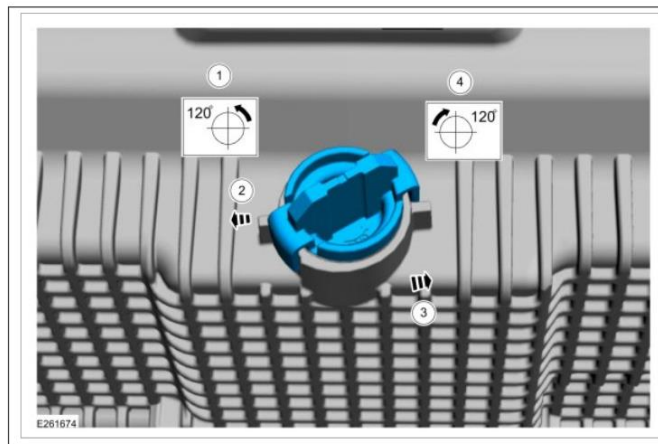
NOTE: The drain plug should be removed and installed by hand, do not use tools.

1. Turn the oil drain plug by hand counterclockwise 120 degrees.

Use the General Equipment: Oil Drain Equipment

2. Pull the oil drain plug out of the oil pan.
3. After the oil has drained, push the oil drain plug into the oil pan.
4. **NOTICE: Overtightening will damage the oil drain plug and possibly the oil pan.**

Turn the oil drain plug by hand clockwise 120 degrees.



The Benefits

By performing the steps properly, the franchisee is able to reduce its exposure to a costly engine failure.

Tips and Best Practices

The Application

Be sure to perform the quality check following the “pressure up” indication specifically looking for oil leakage in the oil filter area and *specify* the oil drain plug. This protects you and allows your customer to “Leave worry behind”.

Field Technical Support Manager, Bob Peltz has over 35 years of ASE Master Certification. You can contact him at robert.peltz@shell.com with any questions or for automotive repair technical assistance.