

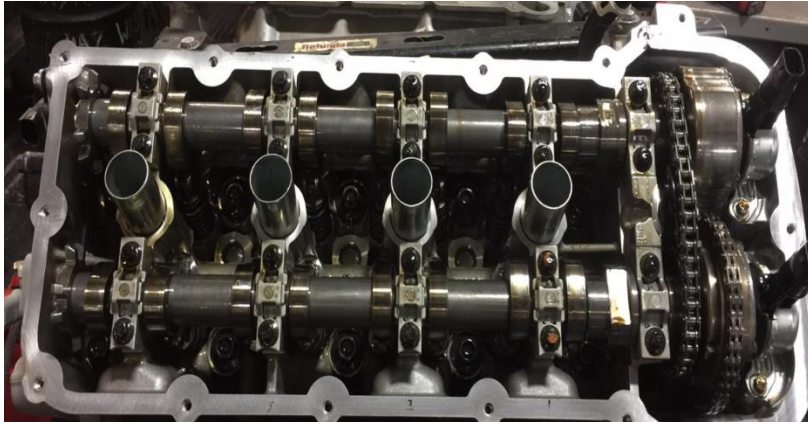
General Service Bulletin (GSB):	Engine Oil Maintenance Inspection
GSB Overview:	This bulletin provides information and sample images of engine condition relating to proper and improper engine oil maintenance to determine if maintenance records should be reviewed.
NOTE: This information is not intended to replace or supersede any warranty, parts and service policy, Work Shop Manual (WSM) procedures, technical training, or wiring diagram information.	

## GSB Topics Covered Include

- **Proper Maintenance Examples**
- **Marginal Maintenance Examples**
- **Improper Maintenance Examples**
- **Oil Filter Identification**
- **Other Resources**

# Engine Oil Maintenance Inspection

## Proper Oil Change Maintenance



Proper maintenance performed at the recommended maintenance intervals.

### **NOTE**

- No sludge accumulation on the valvetrain.
- No build of sludge on the underside of the valve cover.
- Oil is clean and not thick.

# Engine Oil Maintenance Inspection



- No sludge accumulation on valvetrain
- Oil is starting to varnish. The oil change intervals should be evaluated for timeliness.
- The level of varnish in the engine can be scraped with a fingernail.

**If failure occurred, the failure could be warrantable.**

**Maintenance records should be evaluated prior to repairs. Consult the Warranty and Policy Manual prior to Warranty Cancellation.**



# Engine Oil Maintenance Inspection

Proper Oil Change  
Maintenance



- Ford Engine with 140,000 miles
- Regular maintenance performed with Motorcraft oil and filters

Improper Oil Change  
Maintenance



- Ford Engine with 27,304 miles
  - No maintenance history available
  - Heavy oil sludge on valvetrain.
- Any lubrication-related condition should not be covered by warranty or ESP. Consult the Warranty and Policy Manual prior to Warranty Cancellation.**

# Engine Oil Maintenance Inspection

Improper Oil Change Maintenance – No Record of Service



**3.5L GTDI @ 15,899 miles**

No maintenance history

**Note in photos:**

- Heavy oil sludge build-up on cam caps, head and VCT Solenoids from lack of oil changes.
- Heavy oil sludge build-up on underside of valve cover.

**Any lubrication-related condition should not be covered by warranty or ESP. Consult the Warranty and Policy Manual prior to Warranty Cancellation.**



# Engine Oil Maintenance Inspection



- Sludge accumulation on valvetrain.
- Oil is thick and broken down.
- The bearing shown has significant signs of lubrication restriction from sludge accumulation.

**This failure is not warrantable.**

**Consult the Warranty and Policy Manual prior to Warranty Cancellation.**

# Engine Oil Maintenance Inspection

## Improper Maintenance- Insufficient Records and Sludge



F-250, 6.8L 3V, **58,251 miles**

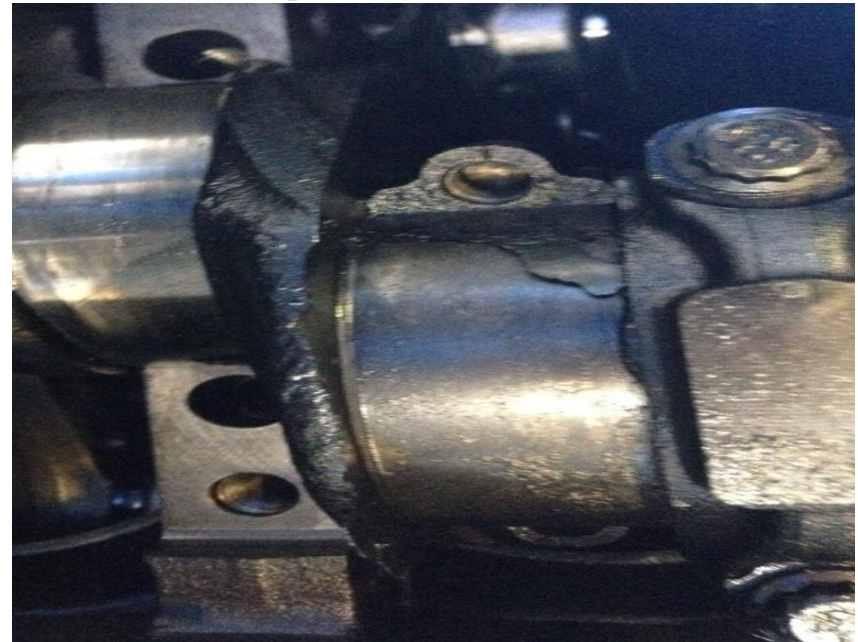
- 3 oil changes performed
- Heavy oil sludge on valvetrain
- Heavy oil sludge on underside of valve cover.

**Any lubrication related condition should not be covered by warranty or ESP.**

Note: Positive Crankcase Ventilation (PCV) system malfunctions may cause oil sludge if left uncorrected.



# Engine Oil Maintenance Inspection



Oil starvation/lack of maintenance caused the failure in the photos above. Note the bearing damage and bluing of the bearing cap from heat. This damage may occur when the oil deteriorates and burns (causing low level) and loses its lubrication qualities. The bearings may be damaged because they no longer have oil cooling and lubricating them which generates heat (evidenced by bluing/discoloration).



# Engine Oil Maintenance Inspection

## Original factory-installed oil filter identifiers:

- All-white filter can with “FoMoCo” in white lettering in a black box.
- All-black filter can with white “FoMoCo” lettering (6.7L OEM and authorized remanufactured engines).
- All-white filter can , line drawn labels with global language and “FoMoCo” in black.
- All-white filter can with a black or red square.



## Service Oil Filter Identification

# Engine Oil Maintenance Inspection



- Service replacement oil filter identifiers:**

- White “Motorcraft” lettering inside a red box
- Red “Motorcraft” lettering with other labeling in black. (FL-1995)

Although not required for warranty coverage it is highly recommended that Ford and Motorcraft Oil and Filters be used.

Genuine Ford and Motorcraft® Replacement Parts, Motorcraft and Ford-authorized branded re-manufactured replacement parts. These parts meet or exceed our specifications. If you do not use Ford authorized parts they may not meet our specifications.

# Engine Oil Maintenance Inspection

Vehicle owners should be referred to their vehicle's owner guide for scheduled maintenance information on their vehicle.

## Scheduled Maintenance

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### GENERAL MAINTENANCE INFORMATION

#### Why Maintain Your Vehicle?

Carefully following the maintenance schedule helps protect against major repair expenses resulting from neglect or inadequate maintenance and may help to increase the value of your vehicle when you sell or trade it. Keep all receipts for completed maintenance with your vehicle.

We have established regular maintenance intervals for your vehicle based upon rigorous testing. It is important that you have your vehicle serviced at the proper times. These intervals serve two purposes; one is to maintain the reliability of your vehicle and the second is to keep your cost of owning your vehicle down.

It is your responsibility to have all scheduled maintenance performed and to make sure that the materials used meet the specifications identified in this owner's manual. See **Capacities and Specifications** (page 384).

Failure to perform scheduled maintenance invalidates warranty coverage on parts affected by the lack of maintenance.

#### Why Maintain Your Vehicle at Your Dealership?

##### Factory-Trained Technicians

Service technicians participate in extensive factory-sponsored certification training to help them become experts on the operation of your vehicle. Ask your dealership about the training and certification their technicians have received.

### Genuine Ford and Motorcraft® Replacement Parts

Dealerships stock Ford, Motorcraft and Ford-authorized branded re-manufactured replacement parts. These parts meet or exceed our specifications. Parts installed at your dealership carry a nationwide 24-month or unlimited mile (kilometer) parts and labor limited warranty.

If you do not use Ford authorized parts they may not meet our specifications and depending on the part, it could affect emissions compliance.

#### Convenience

Many dealerships have extended evening and Saturday hours to make your service visit more convenient and they offer one stop shopping. They can perform any services that are required on your vehicle, from general maintenance to collision repairs.

**Note:** Not all dealers have extended hours or body shops. Please contact your dealer for details.

#### Protecting Your Investment

Maintenance is an investment that pays dividends in the form of improved reliability, durability and resale value. To maintain the proper performance of your vehicle and its emission control systems, make sure you have scheduled maintenance performed at the designated intervals.

Your vehicle is equipped with the Intelligent Oil-Life Monitor system, which displays a message in the information display at the proper oil change interval. This interval may be up to one year or 10000 miles (16000 kilometers).



# Engine Oil Maintenance Inspection

## Other Resources

Always refer to the current Warranty and Policy Manual whenever a question of warranty coverage is encountered and when initiating warranty cancellation on a vehicle or component.

