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Service Bulletin

## Detroit New Final Drive Top Performance Axles with Active Lube Management

Detroit has launched its New Final Drive Top Performance axles with the active lube management (ALM) system. This new axle requires different amounts of oil than previous Detroit axles and standard performance axles. The oil fill and check-hole location is located on the carrier of the axle, and not on the back of the axle housing. The new fill location is only on the Detroit New Final Drive Top Performance axles with ALM.

### NOTICE

Standard and Top Performance axles use the same axle housing, however, on Top Performance axles the plug in the back of the center section of the axle housing is factory-installed from the inside to prevent using it as a check and fill point. Changing this configuration may lead to improper lubrication of the axle, axle damage, or loss of performance.

## Identifying Detroit Performance Axles

There are two ways to identify with which axle a vehicle is equipped.

1. Access ServicePro or PartsPro by VIN to get the correct axle model for the vehicle being serviced. [Table 1](#) lists the model number designation for standard and top performance axles.
2. Inspect the axle. Go to "Oil Fill Location, Top Performance Axles with ALM System" below.

| Detroit Performance Axle Identification |                      |
|-----------------------------------------|----------------------|
| Axle Designation                        | Model Number Example |
| Standard Performance                    | DART400-4S           |
| Top Performance                         | DART400-4T           |

Table 1, Detroit Performance Axle Identification

## Oil Fill Location, Top Performance Axles with ALM System

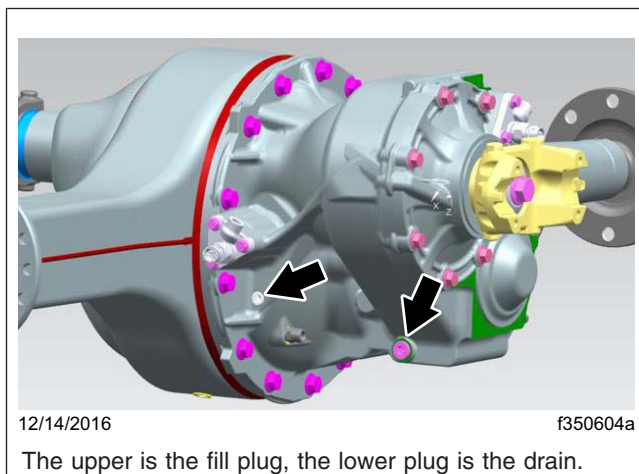
The oil fill location for Detroit New Final Drive Top Performance Axles with Active Lube Management is located on the axle carrier. The forward drive axle fill and check location is on the right hand side of the carrier. See [Fig. 1](#). The rear drive axle oil fill and check location is on the left hand side of the carrier. See [Fig. 2](#).

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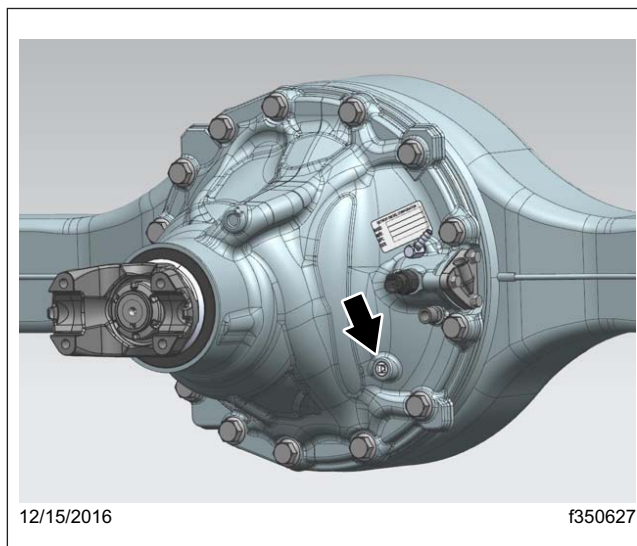
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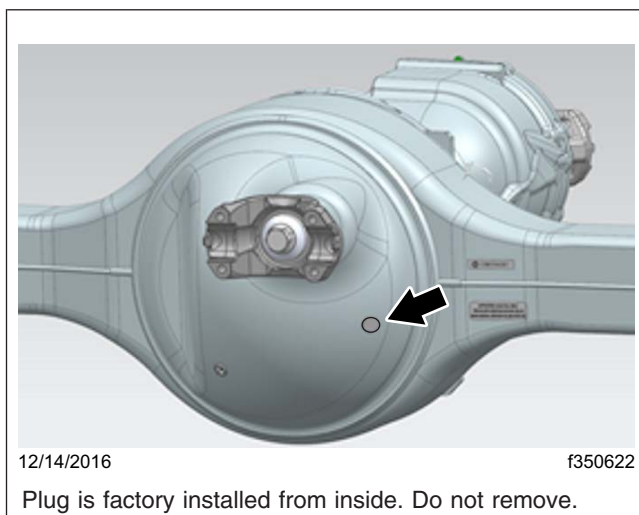
**Fig. 1, Forward Detroit New Final Drive Top Performance Axles with ALM — Oil Check and Fill Location**



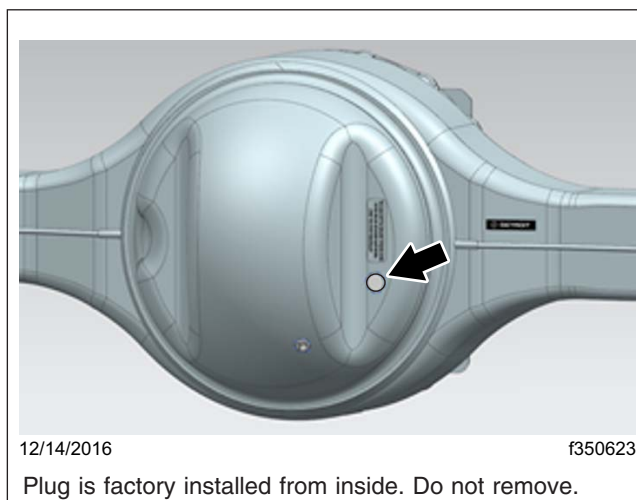
**Fig. 2, Rear Detroit New Final Drive Top Performance Axles with ALM — Oil Check and Fill Location**

## Where NOT to Check and Fill Top Performance Axles

On Detroit New Final Drive Top Performance Axles with ALM, the plug in the back of the center section of the axle housing is factory-installed from the inside to prevent using it as a check and fill point. Do not remove this plug. The plug location is shown in **Fig. 3** and **Fig. 4** below.



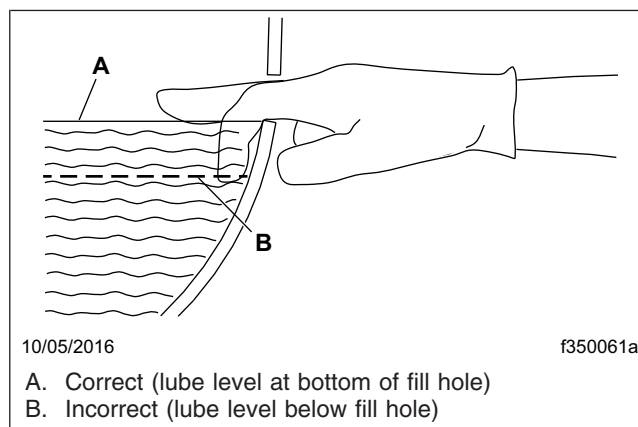
**Fig. 3, Plug on back of axle housings of axle with ALM system.**



**Fig. 4, Plugs on back of axle housings of axle with ALM system.**

## Oil Fill Procedure

The oil check and fill procedure is the same for all axles. See [Fig. 5](#). Only the check and fill location is different for Detroit Top Performance Axles. It is now located on the axle carrier for those axle equipped with the ALM system.



**Fig. 5, Axle Lubricant Level Check**

Axle oil volumes for Detroit New Final Drive Top Performance Axles with ALM system are shown in [Table 2](#). The oil volume must be checked after filling the axle. The correct oil volume is when oil is level with fill hole as seen in [Fig. 1](#) or [Fig. 2](#). Only approved 75W-85 oil can be used in Detroit New Final Drive Standard Performance Axles, and Top Performance Axles with ALM system. The oil must meet DFS 93K219.03.

| Oil Fill Volumes for Detroit Top Performance Axles with ALM System |                      |             |
|--------------------------------------------------------------------|----------------------|-------------|
| Axle Type                                                          | Oil in Hubs (2 hubs) | Oil in Axle |
| NFD Model 4 Forward Axle TP                                        | 1.8 L                | 9 L         |
| NFD Model 4 Rear Rear Axle TP                                      | 1.8 L                | 7.5 L       |
| NFD Model 4 Forward Axle SP                                        | 1.8 L                | 14 L        |
| NFD Model 4 Rear Rear Axle SP                                      | 1.8 L                | 11 L        |
| NFD Model 6 TP                                                     | 1.8 L                | 9.5 L       |
| NFD Model 6 SP                                                     | 1.8 L                | 11 L        |

**Table 2, Oil Fill Volumes for Detroit Axles with ALM System**

for more information, go to: [Detroit Fluids Specification \(DFS\) Axle Gear Oil Approval List](#).

## All Other Detroit Axles

The following Detroit axles have the same check and fill locations as shown in [Fig. 6](#) and [Fig. 7](#).

- New Final Drive Standard Performance
- Model 4
- Model 6
- Model 2

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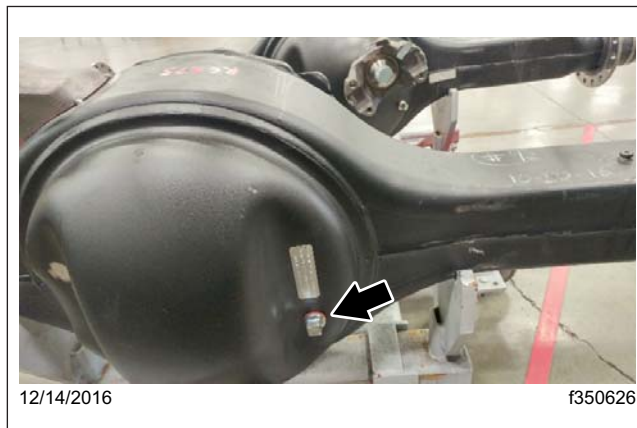
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**Fig. 6, Forward Rear Axle Fill Location**



**Fig. 7, Rear Rear Axle Fill Location**

Follow the instructions in the vehicle's maintenance manual when servicing these axles.

## Warranty

This bulletin is informational only. Warranty does not apply.