

Material		
Item	Specification	Fill Capacity
Additive Friction Modifier XL-3 (US); CXL-3 (Canada)	EST-M2C118-A	4 oz (Traction-Lok® only). 6 oz (If equipped with rear differential oil cooler).
Maximum Strength Retaining Compound Loctite® 638™	—	—
Motorcraft® SAE 75W-140 Synthetic Rear Axle Lubricant XY-75W140-QL (US); CXY- 75W140-1L (Canada)	WSL-M2C192-A and GL-5	8.8-in rear axle. ^a
Motorcraft® SAE 75W-85 Premium Synthetic Hypoid Gear Lubricant XY-75W85-QL	WSS-M2C942-A	SVT 8.8-in rear axle. ^a _b
Premium Long-Life Grease XG-1-C or XG-1-K (US); CXG-1-C (Canada)	ESA-M1C75-B	—
Silicone Gasket and Sealant TA-30	WSE-M4G323- A4	—

^a Service refill capacities are determined by filling the axle to a level of 5mm below the bottom of the filler hole. The vehicle must be on a level surface.

^b Vehicles equipped with a rear differential oil cooler. Refer to the procedure.

General Specifications

Item	Specification
Clearance, Tolerance and Adjustments	
Differential pinion gear thrust washer thickness	0.762-0.813 mm (0.030-0.032 in)
Differential side gear thrust washer thickness	0.762-0.813 mm (0.030-0.032 in)
Maximum axle shaft end play	0.762 mm (0.030 in)
Maximum differential case runout	0.076 mm (0.003 in)
Pinion bearing preload	1.8-3.3 Nm (16-29 lb-in)
Pinion flange runout	0.25 mm (0.010 in) T.I.R.
Ring gear backlash	0.203-0.304 mm (0.008-0.012 in)
Variation between teeth maximum backlash	0.102 mm (0.004 in)

Torque Specifications

Description	Nm	lb-ft	lb-in
Differential bearing cap bolts	122	90	—
Differential housing cover bolts (steel cover)	46	34	—
Differential housing cover bolts (aluminum cover)	32	24	—
Differential housing cover cooler line fittings	23	17	—
Differential oil cooler pump	11	—	97
Differential oil temperature sensor	10	—	89
Differential pinion shaft lock bolt	35	26	—
Differential ring gear bolts	135	100	—
Filler plug	30	22	—
Handle adapter for 205-S127	2.2	—	20
Lower arm bolt	175	129	—
Rear differential cooler line bolts	10	—	89
Shock absorber lower bolts	115	85	—
Tool 205-022 nut	27	20	—
Upper arm bushing nut	175	129	—
Wheel speed sensor bolt	15	—	133

Differential Housing Cover

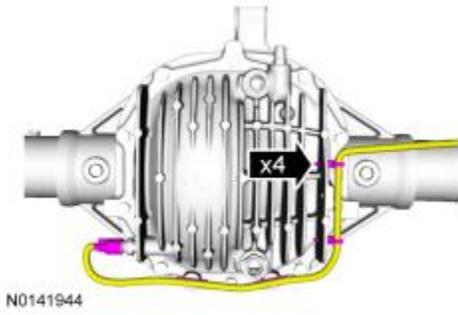
Material	
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Additive Friction Modifier XL-3 (US); CXL-3 (Canada)	EST-M2C118-A
Motorcraft® SAE 75W-140 Synthetic Rear Axle Lubricant XY-75W140-QL (US); CXY-75W140- 1L (Canada)	WSL-M2C192-A and GL-5
Motorcraft® SAE 75W-85 Premium Synthetic Hypoid Gear Lubricant XY-75W85-QL	WSS-M2C942-A
Silicone Gasket and Sealant TA-30	WSE-M4G323-A4

Removal

NOTE: Aluminum cover shown, steel cover similar.

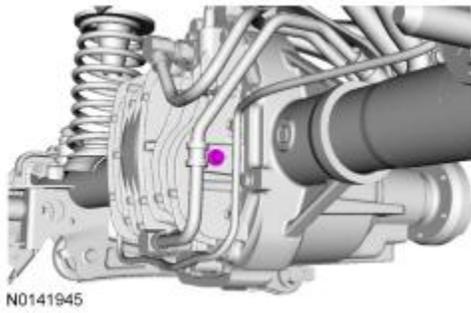
1. If equipped with aluminum cover, remove the panhard rod. Refer to [Section 204-02](#).

2. If equipped.

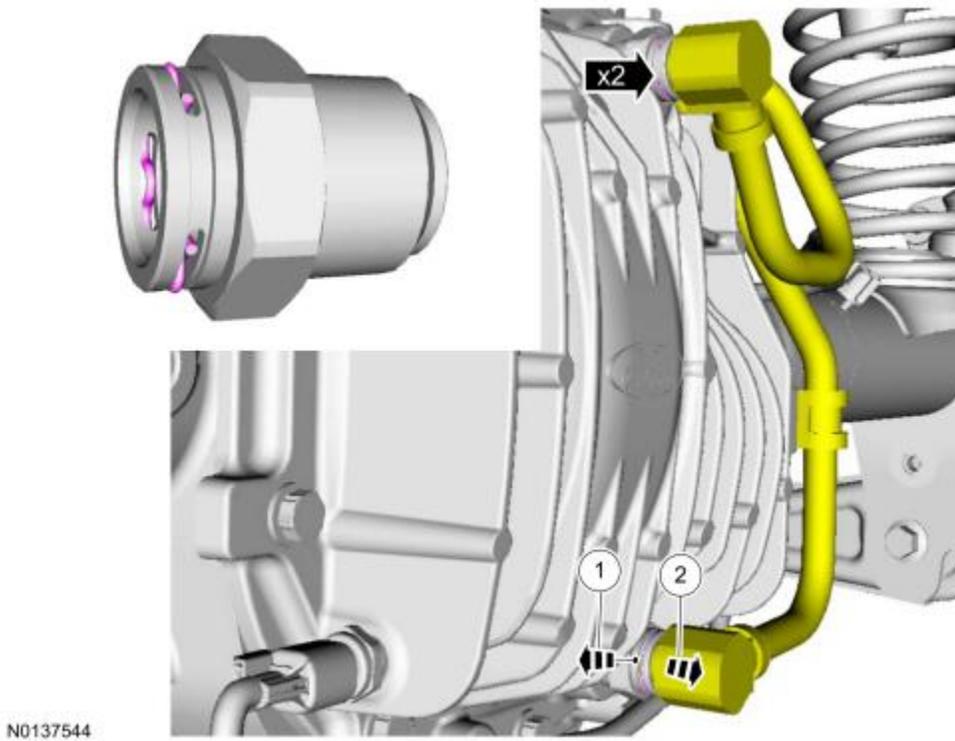


3. If equipped.

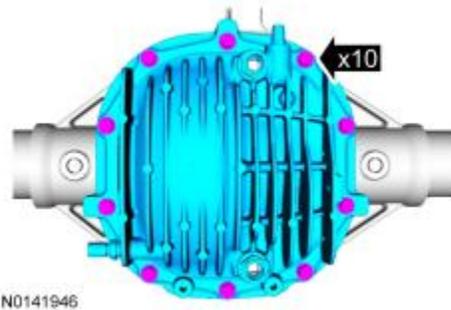
- To install, tighten the bolt to 10 Nm (89 lb-in).



4. If equipped.



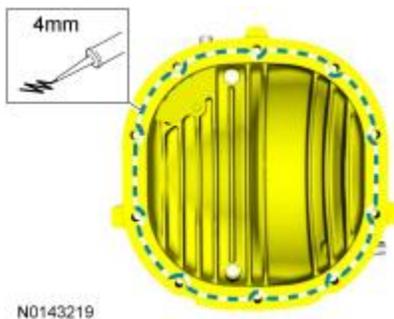
5. **NOTE:** The differential housing cover must be installed within 15 minutes of application of the silicone sealant, or new sealant must be applied. If possible, allow one hour before filling the axle housing with axle lubricant to make sure the silicone sealant has cured.
- To install, tighten steel cover bolts to 46 Nm (34 lb-ft).
 - To install, tighten aluminum cover bolts to 32 Nm (24 lb-ft).



Installation

1. **NOTICE:** Make sure the machined surfaces on both the axle housing and the differential housing cover are clean and free of oil before installing the new silicone sealant. The inside of the axle housing must be covered when cleaning the machined surface to prevent contamination.

Apply a continuous bead of the specified diameter from the specified cartridge.



2. To install, reverse the removal procedure.
3. **NOTE:** Service refill capacities are determined by filling the axle to a level of 5mm below the bottom of the fill hole with the axle at ride height.

Remove the axle plug and fill the axle with 1.89-2.01L (4-4.25 pt) of axle lubricant and a additional 4.0 oz of friction modifier additive, vehicles with a differential cooler then use a scan tool to operate the oil cooler pump and add a additional 1.10L (2 pt) of axle lubricant and a additional 2 oz of friction modifier and install the filler plug.

- Tighten the plug to 30 Nm (22 lb-ft).
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