

NO PART OF THIS DOCUMENT MAY BE REPRODUCED WITHOUT PRIOR AGREEMENT AND WRITTEN PERMISSION OF FORD PERFORMANCE PARTS

Please visit www. performanceparts.ford.com for the most current instruction and warranty information.

PLEASE READ ALL OF THE FOLLOWING INSTRUCTIONS CAREFULLY PRIOR TO INSTALLATION. AT ANY TIME YOU DO NOT UNDERSTAND THE INSTRUCTIONS, PLEASE CALL THE FORD PERFORMANCE TECHLINE AT 1-800-367-3788



#### Kit contains:

- 1 M-4138-MA half shaft RH
- 1 M-4139-MA half shaft LH

NOTICE: Suspension fasteners are critical parts that affect the performance of vital components and systems. Failure of these fasteners may result in major service expense. Use the same or equivalent parts if replacement is necessary. Do not use a replacement part of lesser quality or substitute design. Tighten fasteners as specified.

NOTICE: Any fasteners with damage or corrosion must be replaced

#### **INSTALLATION INSTRUCTIONS:**

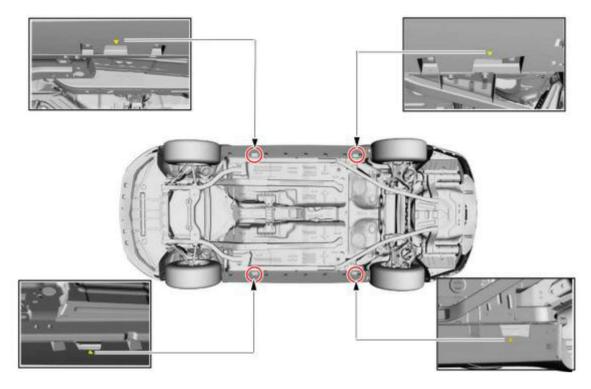
Factory Ford shop manuals are available from Helm Publications, 1-800-782-4356

Techline 1-800-367-3788 Page 1 c

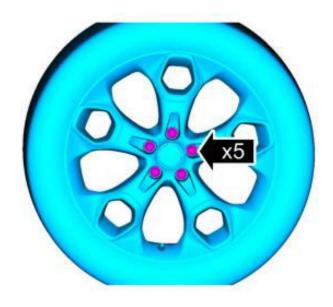


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**STEP 1:** Raise and support vehicle to gain access to underside.



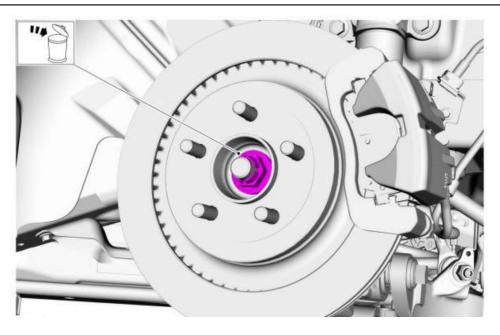
STEP 2: Remove the wheel nuts from both rear wheels.



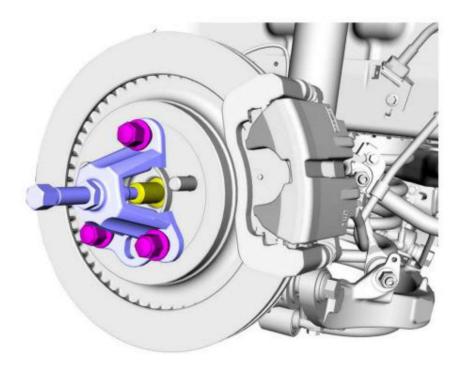
STEP 3: Remove and discard the spindle nut.



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**STEP 4:** Using Special Service Tool: 205-D070 (D93P-1175-B) or equivalent, Press the halfshaft breaking the splines free from the hub.

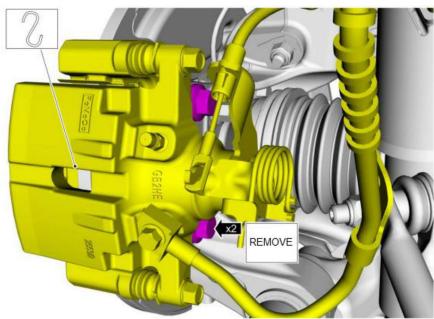




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**STEP 5:** Remove the 2 bolts and position the brake caliper and anchor plate assembly aside. Clean and remove any thread locking compound from the bolts.

NOTE: Do not allow the brake caliper and anchor plate assembly to hang from the brake hose or damage to the hose may occur.



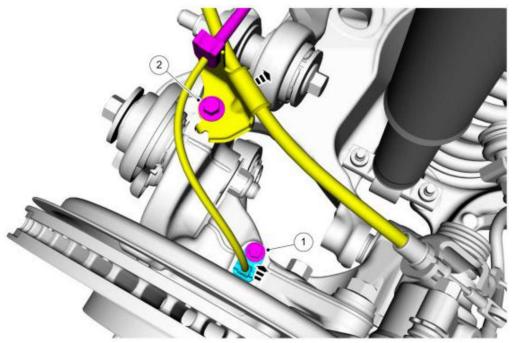
STEP 6: Remove the brake disc.



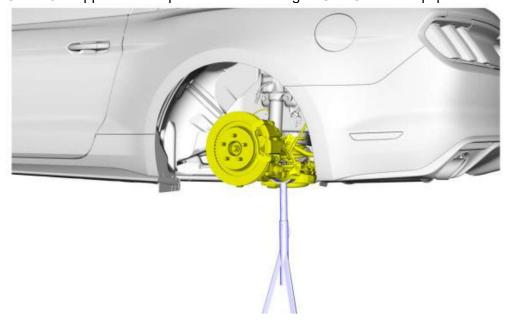


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**STEP 7:** Remove the wheel speed sensor bolt (1) and position aside the wheel speed sensor. Remove the parking brake cable bracket bolt (2) and position the parking brake cable bracket aside.



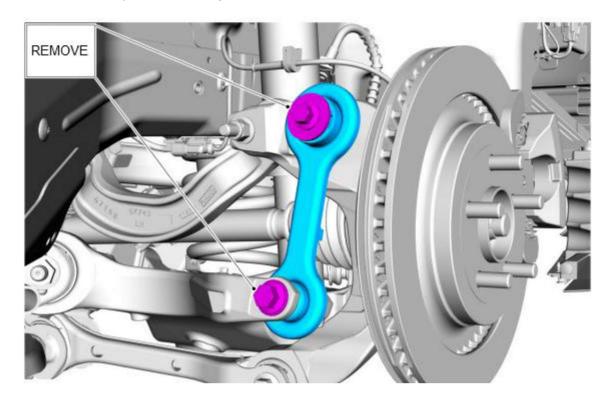
STEP 8: Support the suspension at curb height. Use General Equipment: Vehicle/Axle Stands





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**STEP 9:** Remove the 2 lower arm vertical link bolts and remove the lower arm vertical link. Clean and remove any thread locking compound from the bolts.



**STEP 10:** Remove the wheel knuckle-to-upper arm bolt and nut (1).Remove the wheel knuckle-to-toe link bolt and nut (2). Remove the wheel knuckle-to-lower arm bolt (3). Remove the knuckle / hub

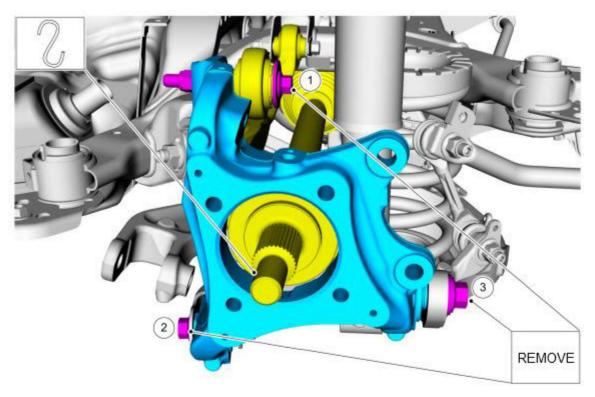


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assembly. A light tap from a dead blow hammer may be required to assist the halfshaft removal from the hub. Clean and remove any thread locking compound from the bolts

NOTE: Support the halfshaft when removing the knuckle / hub assembly.

NOTE: Hub is removed from the image for clarity.



#### **Rear Halfshaft Notes:**

NOTICE: Never pick up or hold the halfshaft by only the inner or outer Constant Velocity (CV) joint. Damage to the CV joint will occur.

NOTICE: Never use a hammer to remove or install the halfshafts. Damage to the CV joint may occur.

NOTICE: Never use the halfshaft assembly as a lever to position other components. Damage to the halfshaft or CV joint may occur.

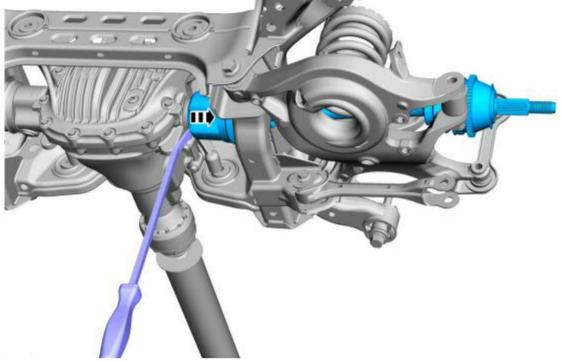
NOTICE: Do not allow the boots to contact sharp edges or hot exhaust components. Damage to the halfshaft boots will occur.

NOTICE: Do not drop assembled halfshafts. The impact may cut the boots from the inside without evidence of external damag

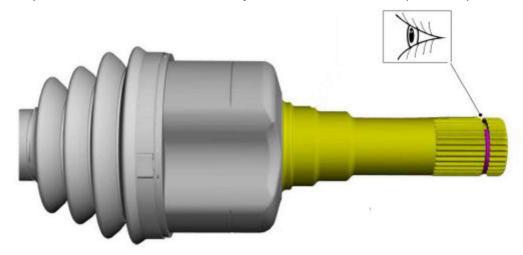


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**STEP 11:** Be sure to clean area around halfshaft of any dirt and debris prior to removal of the halfshaft to prevent any debris from contaminating parts. Then, using a pry bar, remove the halfshaft. Inspect the old inner spline for the retainer clips. (If not on spline, locate within differential)



STEP 12: Inspect the new halfshafts and verify the halfshaft retainer clips are in place.

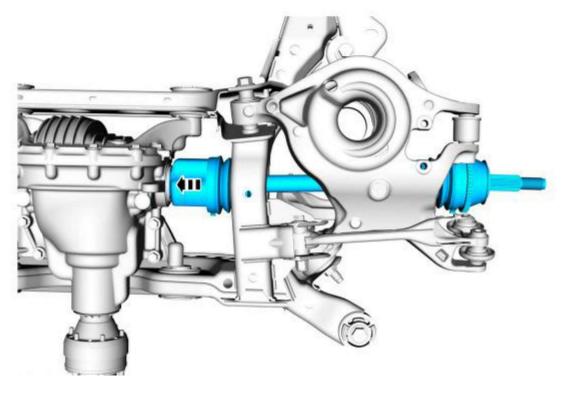


STEP 13: Install the halfshaft until the halfshaft circlip is fully seated.



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NOTE: After insertion, pull the halfshaft inner end to make sure the circlip is locked. When seated correctly, the halfshaft retainer circlip can be felt as it snaps into the differential side gear groove.



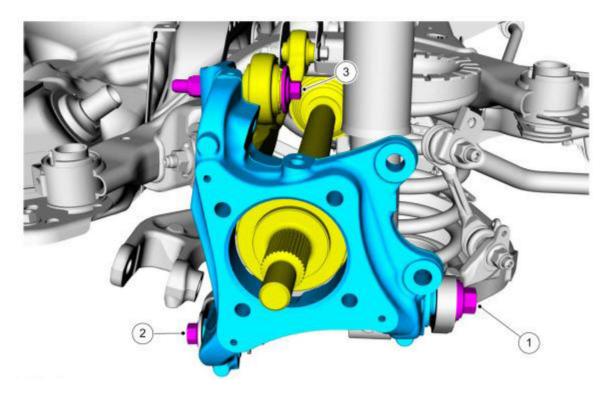
NOTICE: Tighten the following suspension bushing fasteners with the suspension loaded or with the weight of the vehicle resting on the wheels and tires, otherwise incorrect clamp load and bushing damage may occur.

**STEP 14:** Place a small amount of anti-seize onto the outer halfshaft splines. Position the wheel knuckle / hub assembly, guide the halfshaft into the hub and install the wheel knuckle-to-lower arm bolt (1) with



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BLUE thread locking compound. Torque to: 203 lb.ft (275 Nm). Install the wheel knuckle-to-toe link bolt and nut (2) with BLUE thread locking compound. Torque to: 129 lb.ft (175 Nm). Install the wheel knuckle-to-upper arm bolt and nut (3) with BLUE thread locking compound. Torque to: 76 lb.ft (103 Nm).

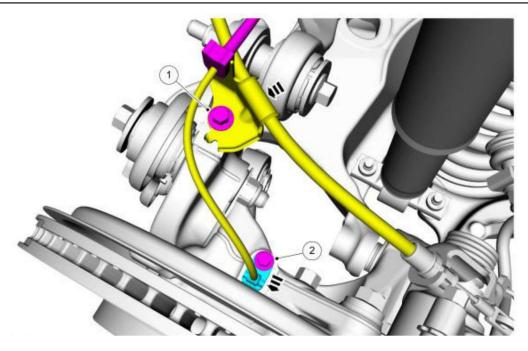


NOTE: Hub is removed from the image for clarity.

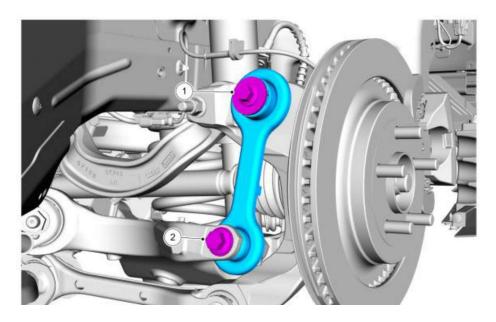
**STEP 15:** Position the parking brake cable bracket and install the parking brake cable bracket bolt with BLUE thread locking compound. Torque to: 21 lb.ft (28 Nm). Position the wheel speed sensor and install the wheel speed sensor bolt with BLUE thread locking compound. Torque to: 80 lb.in (9 Nm)



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**STEP 16:** Position the lower arm vertical link and install the 2 lower arm vertical link bolts with BLUE thread locking compound. Tighten the lower arm vertical link upper bolt. Torque to: 76 lb.ft (103 Nm) Tighten the lower arm vertical link lower bolt. Torque to: 129 lb.ft (175 Nm)



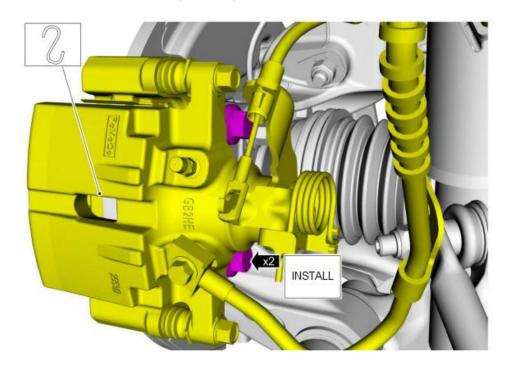
STEP 17: Install the rear rotors onto the rear hubs.



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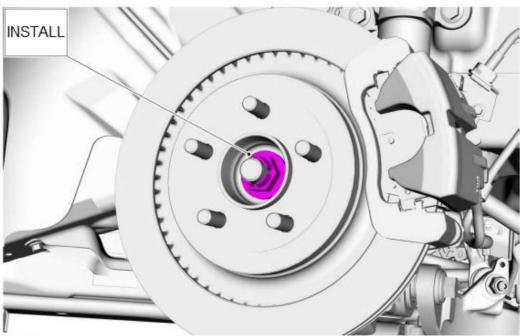
**STEP 18:** Install the brake caliper and anchor plate assembly using 2 bolts with BLUE thread locking compound. Torque to: 129 lb.ft (175 Nm)



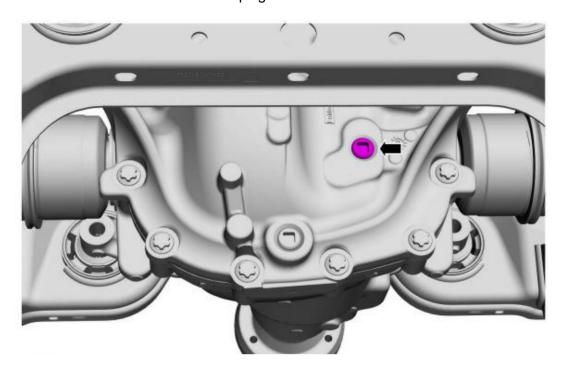


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**STEP 19:** Install the new spindle nuts with Blue thread locking compound. Torque Stage 1: 98 lb.ft (133 Nm). Torque Stage 2: 45°



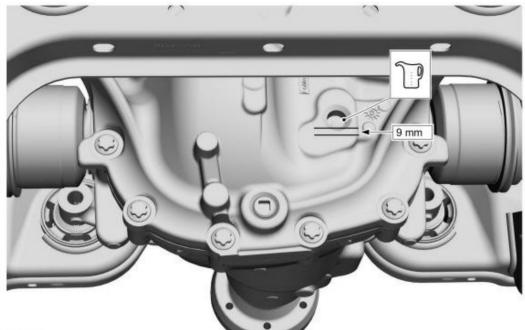
STEP 20: Remove the differential fluid fill plug.



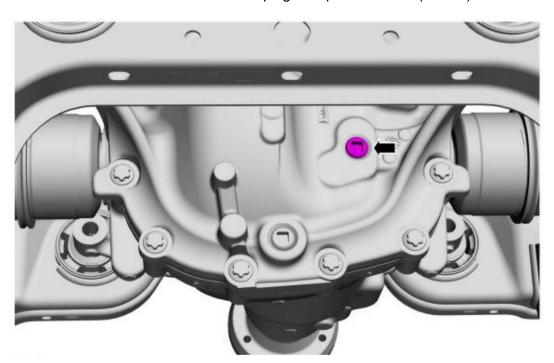


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**STEP 21:** Check and top off the differential with clean differential gear lubricant. The differential gear lubricant level should be within 9mm (0.354 in.) from the fluid level fill plug opening. Recommended fluid: Motorcraft® SAE 75W-85 Premium Synthetic Hypoid Gear Lubricant / XY-75W85-QL



STEP 22: Install the differential fluid fill plug. Torque to: 25 lb.ft (34 Nm)





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WARNING: When a wheel is installed, always remove any corrosion, dirt or foreign material present on the mounting surface of the wheel and the mounting surface of the wheel hub, brake drum or brake disc. Make sure that any fasteners that attach the rotor to the hub are secured so they do not interfere with the mounting surfaces of the wheel. Failure to follow these instructions when installing wheels may result in the wheel nuts loosening and the wheel coming off while the vehicle is in motion, which could result in loss of control,leading to serious injury or death to vehicle occupant(s).

NOTE: Make sure to apply a thin coat of anti-seize lubricant only to the interface between the wheel pilot bore and the hub pilot. Do not allow the anti-seize to make contact with the wheel-to-brake disc/drum mounting surface, wheel studs, wheel nuts, brake pads or brake disc friction surfaces or damage to components may occur.

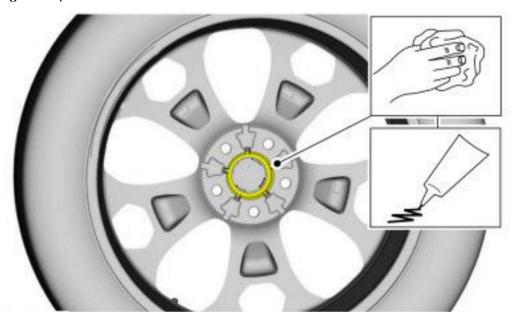
WARNING: Retighten wheel nuts within 160 km (100 mi) after a wheel is reinstalled. Wheels can loosen after initial tightening. Failure to follow this instruction may result in serious injury to vehicle occupant(s).

NOTE: Failure to tighten the wheel nuts in a star/cross pattern can result in high brake disc runout, which accelerates the development of brake roughness, shudder and vibration.

NOTE: The wheel nut torque specification is for clean, dry wheel stud and wheel nut threads.

NOTE: Final tightening to be performed with vehicle resting on tires.

**STEP 23:** Clean the mounting surface of the wheel. Apply the substance from the specified tube. Material: High Temperature Nickel Anti-Seize Lubricant / XL-2





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**STEP 24:** Position the wheel and install the wheel nuts. Tighten the wheel nuts in a star pattern. Torque to: 148 lb.ft (200 Nm)

