

## REMOVAL AND INSTALLATION

Primary LOP	Related LOP	Description	Skill Level	Skill Category
02 05 31 08	-	Knuckle, Front Steering AWD/4x4 - Right	2 - Skilled	4
	02000150	Wheel alignment Front end align	-	-
02 05 31 09	-	Knuckle, Front Steering AWD/4x4 - Left	2 - Skilled	4
	02000150	Wheel alignment Front end align	-	-

### Special Tools:

[Click here to launch the form to order any tools you need.](#)

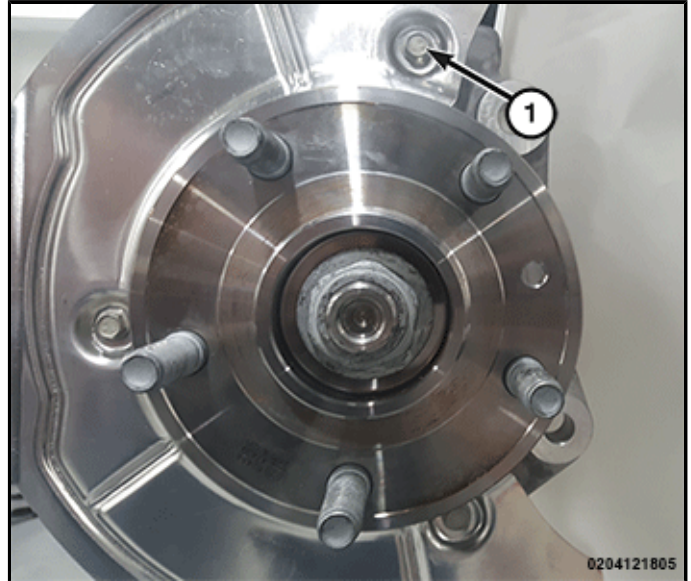
	<p><a href="#">C-4150A - Press, Ball Joint</a>  <b>Originally Shipped In Kit Number(s) 6672, 6745.</b></p>
	<p>Primary Tool Number/Name <a href="#">9360 - Remover, Ball Joint</a>                      Alternate Tool Number/Name <a href="#">1871000700 - Extractor</a>  <b>Originally Shipped In Kit Number(s) 9329, 9515, 9516, 9516-CAN, 9517, 9517-CAN, 9518, 9519, 9540, 9541.</b></p>

## REMOVAL

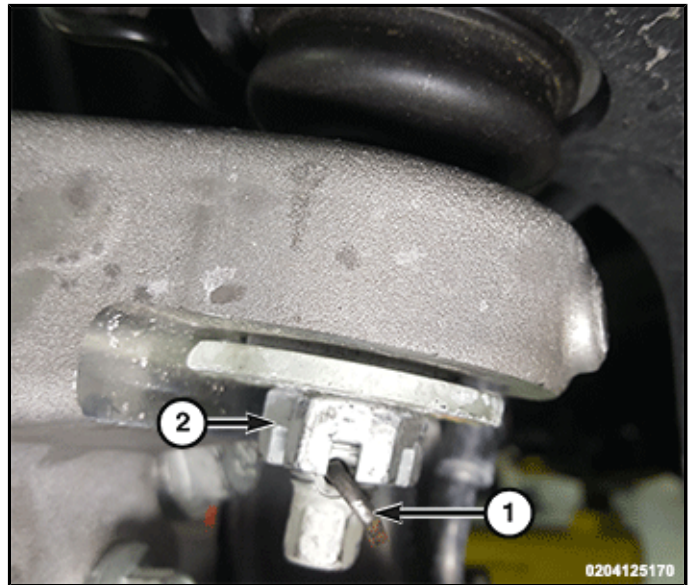
1. Disconnect the drag link from the steering knuckle (**Right side only**)(Refer to 19 - Steering/Linkage, Link and Coil/ DRAG LINK, Steering, Link and Coil/Removal and Installation).
2. Disconnect the tie rod end from the steering knuckle (Refer to 19 - Steering/Linkage, Link and Coil/END, Tie Rod/ Removal and Installation).
3. Remove the brake rotor (Refer to 05 - Brakes, Base/Hydraulic/Mechanical/ROTOR, Brake/Removal and Installation).

4. Remove the three brake rotor splash shield bolts (1) and remove the brake rotor splash shield.

**CAUTION:** If the right front axle shaft is to be removed without removing the Front Axle Disconnect (FAD), the front axle must be placed in the four wheel drive position.



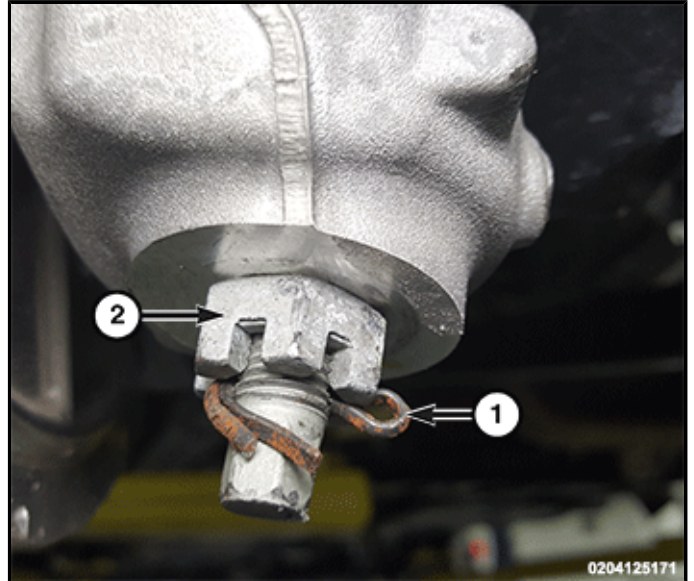
5. Remove the hub and bearing (Refer to 02 - Front Suspension/Front/HUB AND BEARING/Removal and Installation).
6. Remove the front axle shaft (Refer to 03 - Differential and Driveline/Front Axle/SHAFT, Axle/Removal and Installation).
7. Remove the upper ball joint cotter pin (1) and nut (2).



- Remove the lower ball joint cotter pin (1) and nut (2).

**NOTE:** Support the steering knuckle so that it does not fall during ball joint separation.

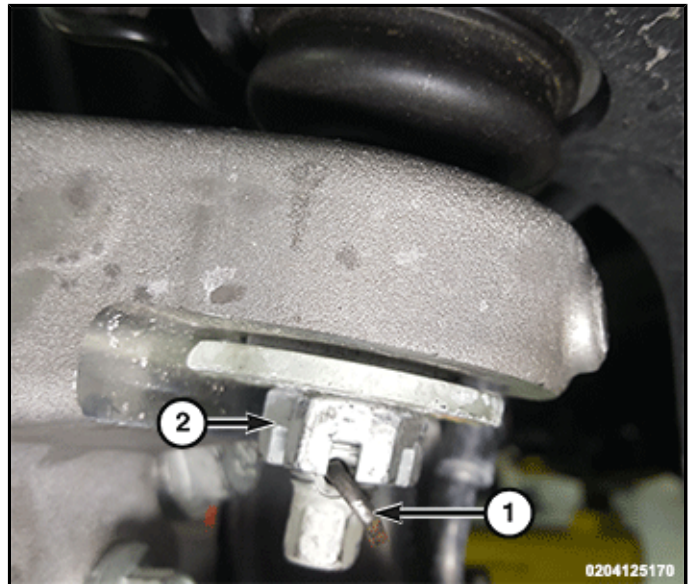
- Separate the lower ball joint from the knuckle using special tool [C-4150A](#) puller.



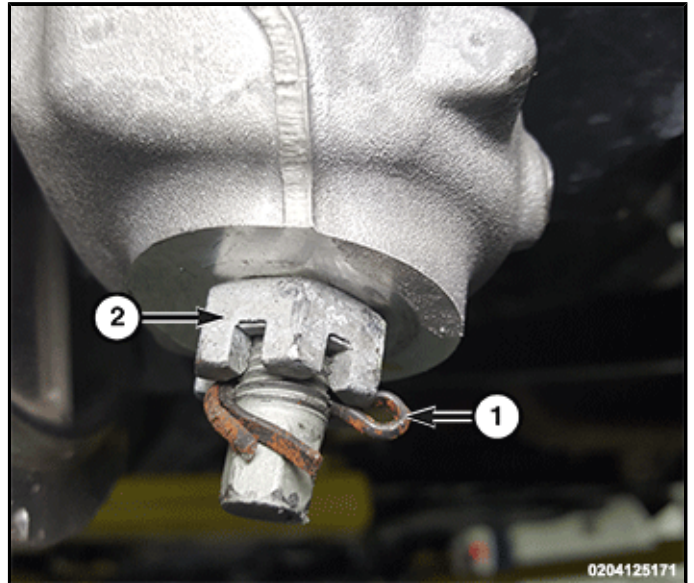
- Separate the upper ball joint from the knuckle using special tool [9360](#) separator.
- Remove the steering knuckle.

## INSTALLATION

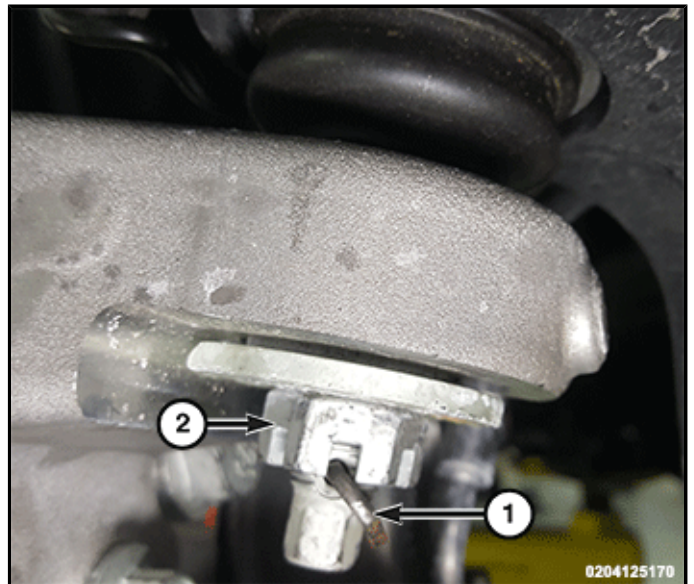
- If removed, install the alignment adjustment sleeve.
- Position the steering knuckle over the upper and lower ball joint studs.
- Install the upper ball joint nut (2), do not torque at this time.



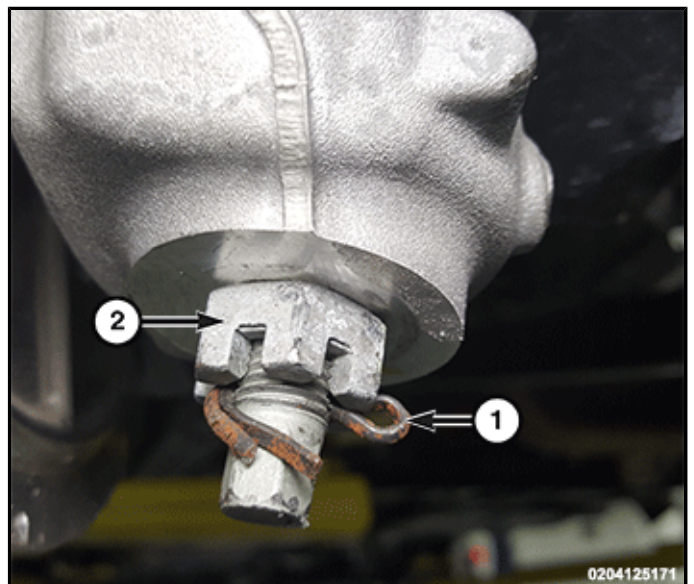
4. Install the lower ball joint nut (2) and apply the lower ball joint nut **initial torque** (Torque Specifications).



5. Tighten the upper ball joint nut (2) to the proper (Torque Specifications) then install the cotter pin (1).



6. Tighter the lower ball joint nut (2) to the proper **final torque** (Torque Specifications) then install the cotter pin (1).



7. Install the front axle shaft (Refer to 03 - Differential and Driveline/Front Axle/SHAFT, Axle/Removal and Installation).
8. Install the front hub and bearing (Refer to 02 - Front Suspension/Front/HUB AND BEARING/Removal and Installation).
9. Align the brake rotor splash shield to the steering knuckle.
10. Install the three brake rotor splash shield bolts and tighten to the proper (Torque Specifications).
11. Install the brake rotor (Refer to 05 - Brakes, Base/Hydraulic/Mechanical/ROTOR, Brake/Removal and Installation).
12. Connect the drag link to the steering knuckle (**Right side only**)(Refer to 19 - Steering/Linkage, Link and Coil/DRAG LINK, Steering, Link and Coil/Removal and Installation).
13. Connect the tie rod end to the steering knuckle (Refer to 19 - Steering/Linkage, Link and Coil/END, Tie Rod/Removal and Installation).

