



November 2009

Dealer Service Instructions for:

Safety Recall J27 Front Wheel Hub Nuts

Models

2009 - 2010 (LX) Chrysler 300, Chrysler 300 SRT8, Dodge Charger and Dodge Charger SRT8

(LC) Dodge Challenger and Dodge Challenger SRT8

NOTE: This recall applies only to the above vehicles built through October 1, 2009 (MDH 100123).

IMPORTANT: Many of the vehicles within the above build period have already been inspected or repaired and, therefore, have been excluded from this recall.

IMPORTANT: Some of the involved vehicles may be in dealer new vehicle inventory. Federal law requires you to complete this recall service on these vehicles before retail delivery. Dealers should also consider this requirement to apply to used vehicle inventory and should perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

Subject

The front wheel hub nut(s) on about 12,600 of the above vehicles may not have been installed when the vehicle was manufactured. This could cause the wheel assembly to separate from the vehicle and cause a crash without warning.

Repair

The front wheel hubs must be inspected for looseness. Vehicles found with loose front hub(s) must have the hub (w/bearing), hub nut, brake caliper, brake caliper guide pins, brake caliper adapter, brake pads, brake shield, and brake rotor replaced.

Alternate Transportation

Dealers should attempt to minimize customer inconvenience by placing the owner in a loaner vehicle if inspection determines that the hub nut and related parts are required and the vehicle must be held overnight.

Parts Information

Due to the small number of involved vehicles expected to require Hub Nut(s) and related parts, no parts will be distributed initially. **Hub Nuts and related parts should be ordered only after inspection determines that repair is required.** *Very few vehicles are expected to require Hub Nut(s) and related parts.*

<u>Part Number</u>	<u>Description</u>
06504007	Nut, Hub
04779199AA	Hub and Bearing
04779253AA	Cap, Wheel Bearing
06502114	Gasket, Brake Hose to Brake Caliper (two required per caliper)
04779200AA	Shield, Brake (right side)
04779201AA	Shield, Brake (left side)
04318080AC	Brake Fluid (DOT 3) (MSQ = 12)
04779196AE	Rotor, Brake (w/single piston caliper/Sales code BR3 or BRD)
04779197AE	Rotor, Brake (w/dual piston caliper/sales code BR5, BR6, or BR8)
05290537AB	Rotor, Brake (w/four piston caliper/sales code BR4)
05142556AA	Caliper, Brake (w/single piston caliper/sales code BR3 or BRD/right side)
05142557AA	Caliper, Brake (w/single piston caliper/sales code BR3 or BRD/left side)

Parts Information (Continued)

- 05137670AA** Caliper, Brake (w/dual piston caliper/sales code BR5, BR6, or BR8/right side)
- 05137671AA** Caliper, Brake (w/dual piston caliper/sales code BR5, BR6, or BR8/left side)
- 05175106AB** Caliper, Brake (w/four piston caliper/sales code BR4/right side)
- 05175107AB** Caliper, Brake (w/four piston caliper/sales code BR4/left side)
- 05174001AA** Pads, Brake (w/single piston caliper/sales code BR3 or BRD)
- 05142558AA** Pads, Brake (w/dual piston caliper/sales code BR5)
- 05142559AA** Pads, Brake (w/dual piston caliper/semi-metallic material/sales code BR6 or BR8)
- 05174311AC** Pads, Brake (w/four piston caliper/sales code BR4)
- 05137608AA** Pins, Brake Caliper (w/single piston caliper or dual piston caliper/sales code BR3, BRD, BR5, BR6, or BR8)
- 05174320AA** Pin Kit, Brake Caliper (w/four piston caliper/sales code BR4)
- 05174321AA** Clip, Brake Pad Spring (w/four piston caliper/sales code BR4)
- 05137613AA** Adapter, Brake Caliper (w/single piston caliper/sales code BR3 or BRD/right or left side)
- 05137668AA** Adapter, Brake Caliper (w/dual piston caliper/sales code BR5, BR6, or BR8/right side)
- 05137669AA** Adapter, Brake Caliper (w/dual piston caliper/sales code BR5, BR6, or BR8/left side)

Special Tools

The following special tools are required to perform this repair:

- 6888 Installer, Bearing Cap
- C4171 Driver Handle
- CH9401* StarSCAN Tool
- CH9404D* StarSCAN Vehicle Cable
- CH9409* StarSCAN Documentation Kit
- CH9410* StarSCAN Ethernet Cable 12 ft.
- CH9412* StarSCAN Software Update Device Kit
- NPN StarSCAN Software Update CD

* Part of CH9400 kit.

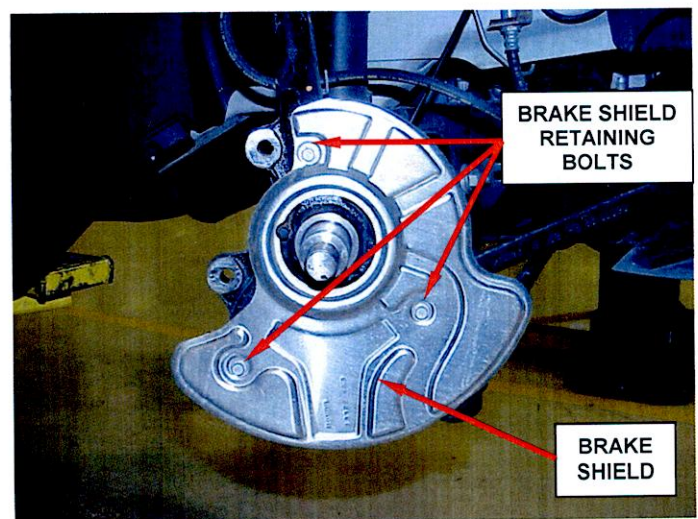
Service Procedure**A. Inspect the Front Wheel Hubs for Looseness**

1. Place vehicle in position to be lifted on the hoist and apply the “Park” brake, but do not pick up the vehicle.
2. Without depressing the brake pedal, start the engine and turn the steering wheel $\frac{1}{4}$ of a turn (90 degrees) to the left and right. Repeat this 4 – 5 times, making sure the vehicle’s wheels are pointing straight ahead when complete.
3. Without depressing the brake pedal, turn off the vehicle.
4. Raise the vehicle on a hoist.
5. Grasp the top and bottom of the tire and check for looseness of the wheel assembly by alternately pulling the top and bottom of the tire (Figure 1):
 - If there **is no looseness** in either front wheel, no further action is required. Lower the vehicle from the hoist and return the vehicle to the customer.
 - If there **is looseness** in one or both front wheels, continue with Section B.

**Figure 1 – Check Front Wheels for Looseness**

Service Procedure (Continued)**B. Replace Front Wheel Hub and Related Components:**

1. Lower the vehicle from the hoist. Then disconnect and isolate the battery negative battery cable.
2. Using a brake pedal holding tool, depress the brake pedal past its first inch of travel and hold it in this position. Holding the pedal in this position will isolate the master cylinder from the hydraulic brake system and will not allow brake fluid to drain out of the brake fluid reservoir while brake lines are open.
3. Raise the vehicle on the hoist.
4. Remove the tire and wheel assembly.
5. Remove and save the hydraulic flex line banjo bolt located on the caliper and discard the two copper washers.
6. **For vehicles equipped with a single and dual piston brake caliper**, remove the two bolts at the steering knuckle that retains the brake caliper adapter to the steering knuckle.
7. **For vehicles equipped with a four piston caliper**, remove the two bolts at the steering knuckle that retains the brake caliper to the steering knuckle.
8. Remove and discard the brake caliper (four piston brake calipers) or brake caliper and brake caliper adapter (single and dual piston brake calipers) as an assembly.
9. Remove and discard the brake rotor.
10. Remove and discard the hub and bearing assembly.
11. Remove and save the three brake shield retaining bolts (Figure 2).
12. Remove and discard the brake shield.
13. Clean the spindle and knuckle area.

**Figure 2 – Brake Shield Retaining Bolts**

Service Procedure (Continued)

14. Install the new brake shield and three retaining bolts. Tighten the bolts to 88 in. lbs. (10 N·m).
15. Install the new hub and bearing onto the spindle.
16. Install the new hub bearing retaining nut. Tighten the nut to 185 ft. lbs. (250 N·m).
17. Using special tool 6888 and C4171, install the wheel bearing cap (Figure 3).

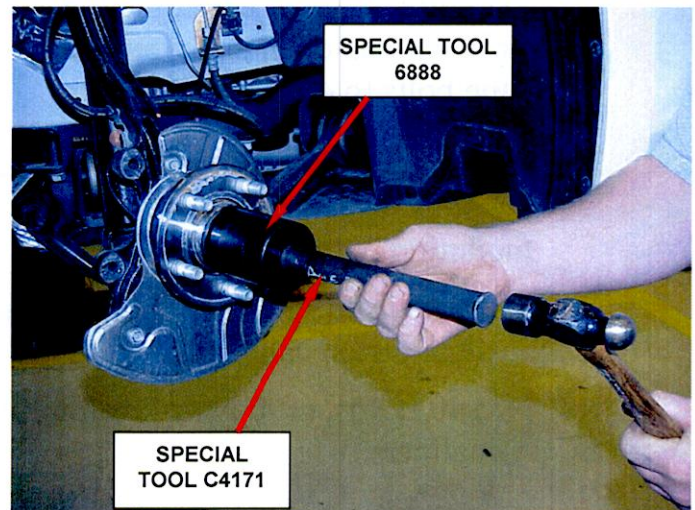


Figure 3 – Wheel Bearing Cap Installation

18. Clean the new rotor with brake cleaner and then install the new brake rotor onto the wheel hub.
19. **For vehicles equipped with a single or dual piston caliper**, perform the following procedure:
 - a. Mount the brake caliper adapter in a vise (Figure 4).
 - b. Install the brake caliper pin boots onto the brake caliper adapter (Figure 4).
 - c. Install the brake anti-rattle clips onto the brake caliper adapter.
 - d. Lubricate and install the brake caliper pins into the caliper adapter.

NOTE: Using a small pick tool, carefully lift the brake caliper pin boot slightly to release any trapped air.

- e. Remove the protective film from the back of the brake pads to expose the glue.
- f. Install the brake pads into the brake caliper adapter.
- g. Install the brake caliper onto the brake caliper adapter

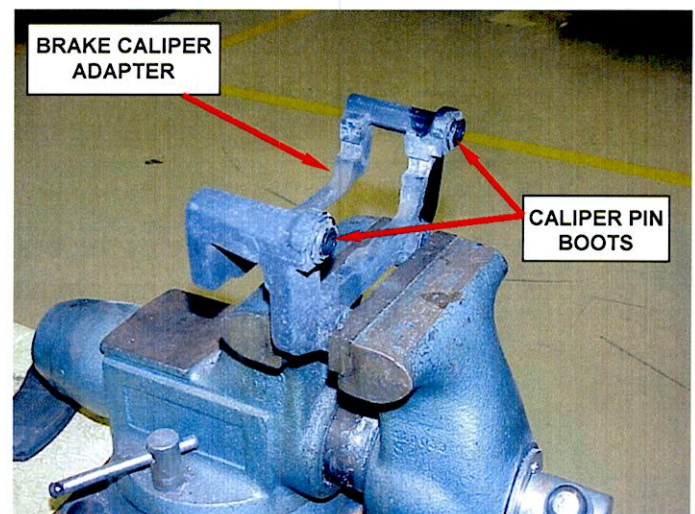
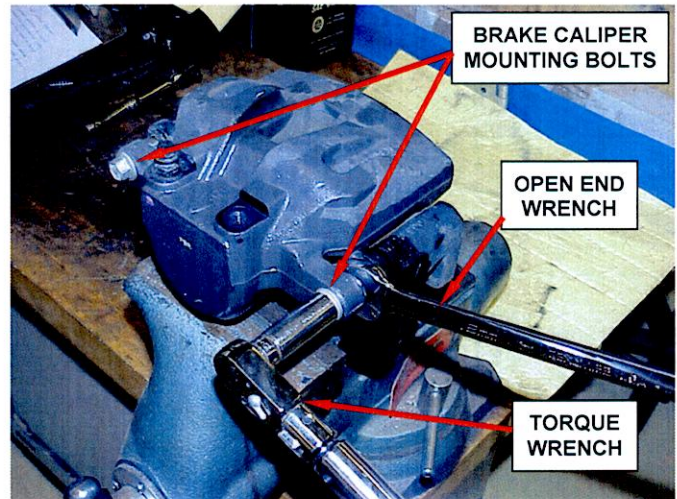


Figure 4 – Brake Caliper Adapter

Service Procedure (Continued)

- h. Install the brake caliper mounting bolts (Figure 5). While holding the caliper pin with an open end wrench, tighten the bolts to 44 ft. lbs. (60 N·m).
20. Install the brake caliper assembly onto the steering knuckle. Tighten the mounting bolts to:
- 70 ft. lbs. (95 N·m) for single and dual piston calipers.
 - 140 ft. lbs. (190 N·m) for four piston calipers.

**Figure 5 – Brake Caliper Mounting Bolts**

21. **For vehicle equipped with a four piston brake caliper**, perform the following procedure:
- a. Remove the protective film from the back of the brake pads to expose the glue.
 - b. Slide the new inboard and outboard brake pads into the opening in the disc brake caliper.
 - c. From the inboard side of the brake caliper, slide the upper brake pad support pin through the inboard half caliper pin hole, the upper holes in both brake pads, and into the hole in the outboard side of the brake caliper.
 - d. Install the upper end of the brake pad spring clip under the upper brake pad support pin.
 - e. Press on the lower end of the spring clip until it touches the brake rotor.
 - f. From the inboard side of the brake caliper, slide the lower brake pad support pin through the inboard half caliper pin hole, the lower holes in both brake pads, and into the hole in the outboard side of the brake caliper.
 - g. Release the spring clip allowing it to engage the lower support pin.
 - h. From the inboard side of the brake caliper, seat the upper and lower support pins into the caliper using a pin punch and hammer.

NOTE: The support pins must be driven into the brake caliper until the support pin retaining rings are locked into place.

- i. Once the support pins are fully installed into the brake caliper, inspect the assembled caliper to make sure the spring clip is centered in the opening of the brake caliper, correctly engaging the upper and lower support pins, and is resting against both brake pads.

Service Procedure (Continued)

22. Using new copper washers and the original banjo bolt, install the brake caliper hydraulic flex line to the brake caliper. Tighten the banjo bolt to:
 - 31 ft. lbs. (42 N·m) on single or dual piston calipers.
 - 20 ft. lbs. (28 N·m) on four piston calipers.
23. Remove the brake pedal holding tool from the vehicle.
24. Fill the brake fluid reservoir with clean brake fluid.
25. Bleed the new brake caliper(s). Tighten the bleed screw after bleeding to:
 - 101 in. lbs. (11.5 N·m) on single or dual piston calipers.
 - 75 in. lbs. (8.5 N·m) on four piston calipers.
26. Install the wheel and tire assembly. Tighten the lug nuts to:
 - 107 ft. lbs. (145 N·m) for aluminum wheels.
 - 140 ft. lbs. (190 N·m) for steel wheels.
27. Connect the negative battery cable.
28. **For Vehicles equipped with the “Auto-Up” front window feature**, calibrate the door module using the following procedure:
 - a. Turn the ignition to the “**Run**” position.
 - b. Regardless of current window position, move the driver side front window upward until the window stalls in the full up position. Allow the window motor to stall for at least 2 seconds before releasing the window switch.
 - c. Move the driver side front window downward until the window stalls in the full down position. Allow the window motor to stall for at least 2 seconds before releasing the window switch.
 - d. Move the driver side front window upward until the window stalls in the full up position. Allow the window motor to stall for at least 2 second before releasing the window switch.
 - e. Repeat steps 4a. through 4d. to calibrate the module for the passenger side front window.
 - f. Verify the windows are properly calibrated by operating the “Auto-Up” feature on the windows. Repeat this procedure if the calibration failed.

Service Procedure (Continued)

29. For Vehicles equipped with Electronic Stability Program (ESP), calibrate the Steering Angle Sensor (SAS) using the following procedure:

CAUTION: If the vehicle is equipped with Electronic Stability Program (ESP), once the battery is reconnected, the Steering Angle Sensor (SAS) within the Antilock Brake Module (ABM) needs to be calibrated. The SAS requires calibration (initialization) using the StarSCAN scan tool. If the SAS is not calibrated following battery reconnection, the ESP/BAS indicator lamp will flash continuously with no Diagnostic Trouble Codes (DTC's).

- a. Position the front wheels straight ahead and center the steering wheel.
 - b. Connect the StarSCAN scan tool to the vehicle data link connector.
 - c. Turn on the StarSCAN and place the ignition in the “**RUN**” position.
 - d. Starting at the “**HOME**” screen, select “**ECU View**”.
 - e. Select “**ABS Anti Lock Brakes**”.
 - f. Select “**Misc. Functions**”.
 - g. Select “**Initialize ECU**”.
 - h. Follow the StarSCAN on-screen instruction to complete the drive test.
30. For Vehicles equipped with Electronic Stability Program (ESP), check and clear all Diagnostic Trouble Codes (DTC's) using the following procedure:
- a. Starting at the “**Home**” screen, select “**System View**”.
 - b. Select “**All DTC's**”.
 - c. Select “**Clear All Stored DTC's**” and follow the StarSCAN on-screen instructions.
 - d. Disconnect and remove the StarSCAN from the vehicle.

Completion Reporting and Reimbursement

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims submitted will be used by Chrysler to record recall service completions and provide dealer payments.

Use one of the following labor operation numbers and time allowances:

	Labor Operation Number	Time Allowance
Inspect front wheel hubs for looseness	02-J2-71-81	0.2 hours
Inspect front wheel hubs for looseness and replace wheel hub, bearing and related brake parts (right <u>or</u> left side)	02-J2-71-82	0.7 hours
Inspect front wheel hubs for looseness and replace wheel hub, bearing and related brake parts (right <u>and</u> left side)	02-J2-71-83	1.1 hours

Related Operation:

Equipped with the “Auto Up” front window feature, calibrate door modules	02-J2-71-50	0.1 hours
Equipped with Electronic Stability Program (ESP), calibrate Steering Angle Sensor (SAS)	02-J2-71-51	0.2 hours

Add the cost of the recall parts package plus applicable dealer allowance to your claim.

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

Dealer Notification

To view this notification on DealerCONNECT, select “Global Recall System” on the Service tab, then click on the description of this notification.

Owner Notification and Service Scheduling

All involved vehicle owners known to Chrysler are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

Enclosed with each owner letter is an Owner Notification postcard to allow owners to update our records if applicable.

Vehicle Lists, Global Recall System, VIP and Dealer Follow Up

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an updated VIN list of their incomplete vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the “**Service**” tab and then click on “**Global Recall System.**” Your dealer's VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

Dealers must perform this repair on all unsold vehicles before retail delivery. Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.

Additional Information

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

Customer Services Field Operations
Chrysler Group LLC



SAFETY RECALL J27 – FRONT WHEEL HUB NUTS

Dear: (Name)

This notice is sent to you in accordance with the requirements of the National Traffic and Motor Vehicle Safety Act.

Chrysler has decided that a defect, which relates to motor vehicle safety, exists in some **2009 and 2010 model year Chrysler 300, Chrysler 300 SRT8, Dodge Charger, Dodge Charger SRT8, Dodge Challenger and Dodge Challenger SRT8 vehicles.**

The problem is... **The front wheel hub nut(s) on your vehicle (VIN: xxxxxxxxxxxxxxxxxxxx) may not have been installed when the vehicle was manufactured. This could cause the wheel assembly to separate from the vehicle and cause a crash without warning.**

What your dealer will do... **Chrysler will repair your vehicle free of charge (parts and labor).** To do this, your dealer will inspect the front wheel hubs. The inspection will take about ½ hour to complete. If the inspection determines that the wheel hub and related parts require replacement, an additional hour will be required. However, additional time may be necessary depending on service schedules.

What you must do to ensure your safety... Simply **contact your dealer** right away to schedule a service appointment. **Remember to bring this letter with you to your dealer.**

If you need help... If you have questions or concerns which your dealer is unable to resolve, please contact Chrysler at 1-800-853-1403.

Please help us update our records by filling out the attached prepaid postcard, if any of the conditions listed on the card apply to you or your vehicle. You may also update this information on the web at www.dodge.com/ownersreg or www.chrysler.com/ownersreg

If you have already experienced this condition and have paid to have it repaired, you may send your original receipts and/or other adequate proof of payment to the following address for reimbursement: Chrysler Recall Customer Assistance, P.O. Box 21-8007, Auburn Hills, MI 48321-8007, Attention: Reimbursement.

If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave., S.E., Washington, DC 20590, or call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY 1-800-424-9153), or go to <http://www.safercar.gov>.

We're sorry for any inconvenience, but we are sincerely concerned about your safety. Thank you for your attention to this important matter.

Customer Services Field Operations
Chrysler Group LLC
Notification Code J27

Note to lessors receiving this recall: Federal regulation requires that you forward this recall notice to the lessee within 10 days.