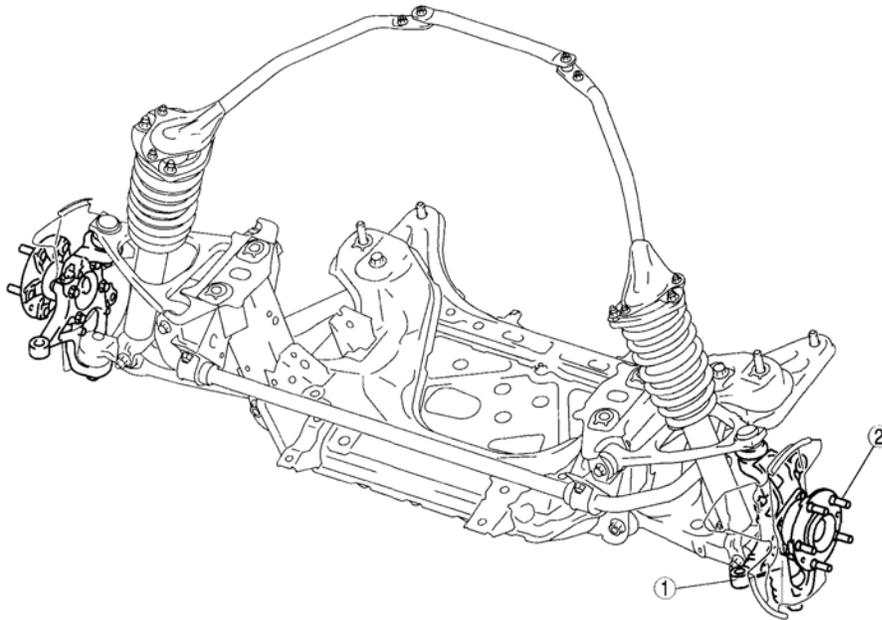


2008 DRIVELINE/AXLES

Front Axle - MX-5 Miata

FRONT AXLE LOCATION INDEX



E5U311ZW5003

1 Wheel hub, steering knuckle

2 Wheel hub bolt

Fig. 1: Identifying Front Axle Assembly
Courtesy of MAZDA MOTORS CORP.

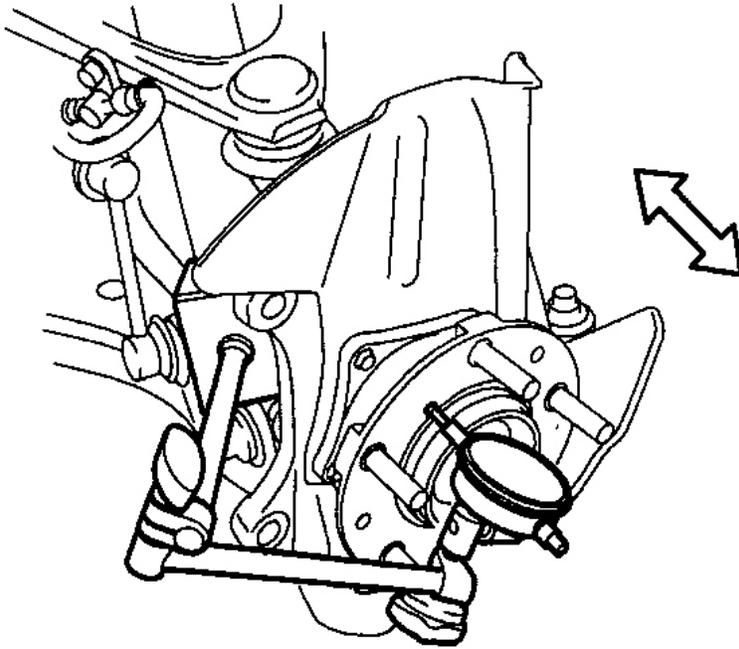
WHEEL HUB, STEERING KNUCKLE INSPECTION

WHEEL BEARING LOOSENESS INSPECTION

1. Install the magnetic vane and dial gauge as shown in **Fig. 2** , and inspect the wheel bearing for axial looseness.
 - If it exceeds the maximum specification, replace the wheel hub component.

Maximum front wheel bearing play

0.05 mm {0.002 in}



BHJ0311W002

Fig. 2: Inspect Wheel Bearing For Axial Looseness
Courtesy of MAZDA MOTORS CORP.

FRONT WHEEL HUB BOLT REPLACEMENT

1. Remove the brake caliper component and disc plate.
2. Remove the wheel hub bolt using the SST as shown in **Fig. 3**.

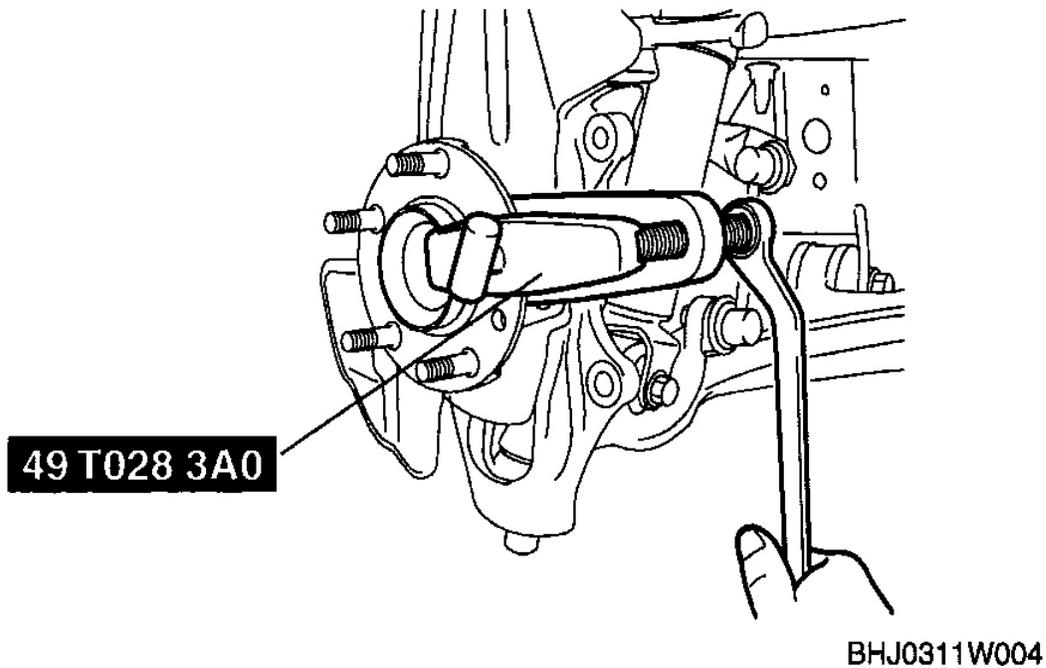
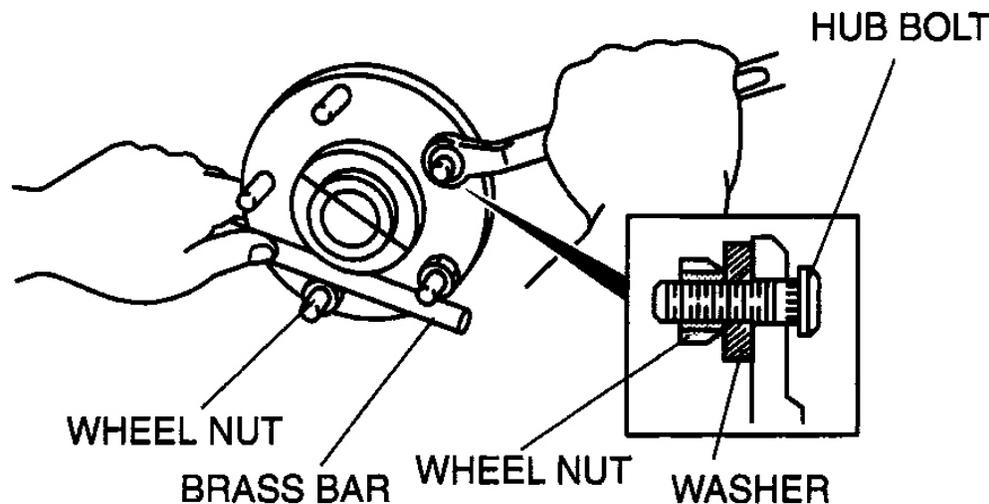


Fig. 3: Removing Wheel Hub Bolt Using SST
Courtesy of MAZDA MOTORS CORP.

3. Place a new wheel hub bolt in the wheel hub.
4. Install the wheel hub bolt by placing a proper sized washer on the hub, and tightening the nut as shown in **Fig. 4**.



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Fig. 4: Installing Wheel Hub Bolt By Placing Proper Sized Washer On Hub & Tightening Nut
Courtesy of MAZDA MOTORS CORP.

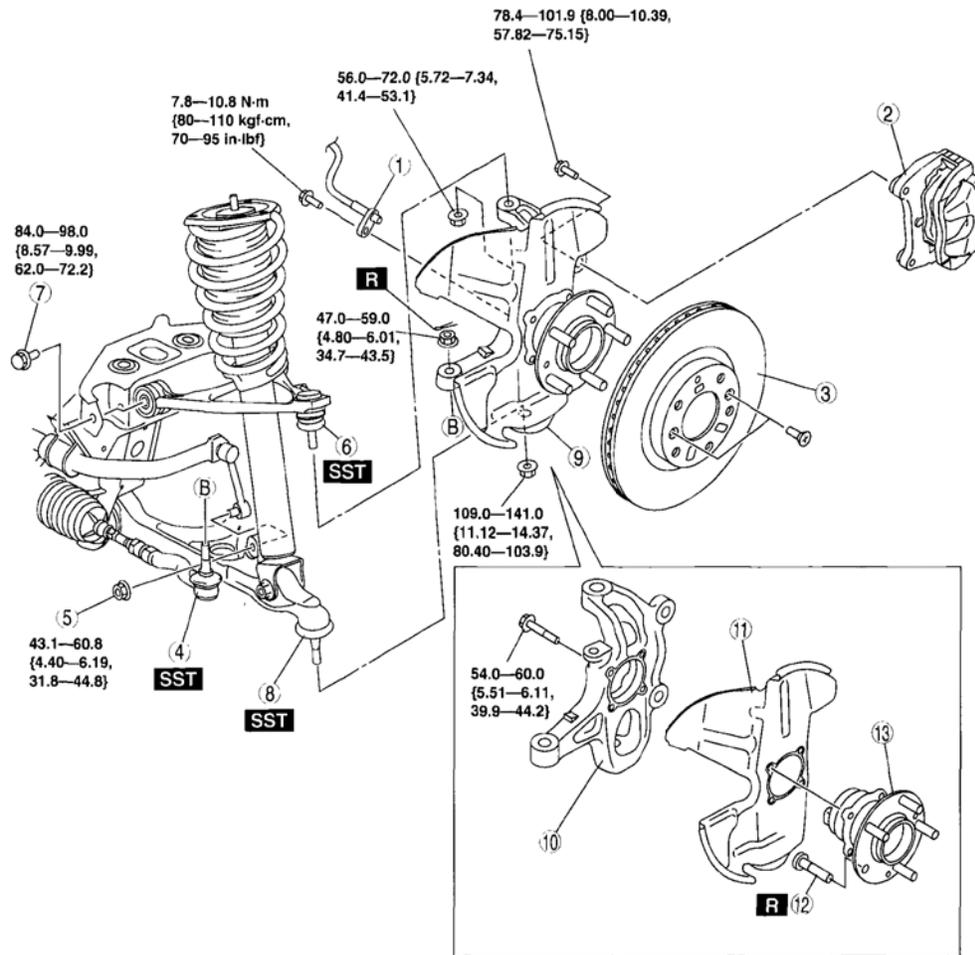
WHEEL HUB, STEERING KNUCKLE REMOVAL/INSTALLATION

- CAUTION:**
- Performing the following procedures without first removing the ABS wheel-speed sensor may possibly cause an open circuit in the wiring harness if it is pulled by mistake. Before performing the following procedures, disconnect the ABS wheel-speed sensor harness connector (axle side) and fix it to an appropriate place where the sensor will not be pulled by mistake while servicing the vehicle.

1. Remove in the order indicated in **Fig. 5**.
2. Install in the reverse order of removal.
3. After installation, inspect front wheel alignment. (See **FRONT WHEEL ALIGNMENT**.)

2008 Mazda MX-5 Miata Grand Touring

2008 DRIVELINE/AXLES Front Axle - MX-5 Miata



N·m {kgf·m, ft·lb}

ESU311ZW5001

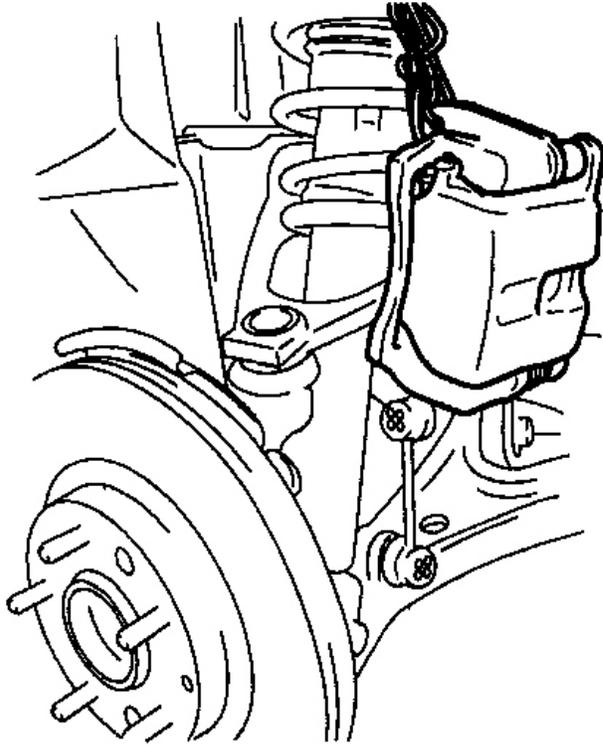
1	ABS wheel-speed sensor
2	Brake caliper component
3	Disc plate
4	Tie-rod end
5	Stabilizer control link nut (lower)
6	Front upper arm ball joint
7	Front upper arm bolt

8	Front lower arm ball joint
9	Steering knuckle component
10	Steering knuckle
11	Dust cover
12	Wheel hub bolt
13	Wheel hub component

Fig. 5: Identifying Wheel Hub, Steering Knuckle Components (With Torque Specifications)
Courtesy of MAZDA MOTORS CORP.

BRAKE CALIPER COMPONENT REMOVAL NOTE

1. Suspend the brake caliper component using a cable or equivalent.



E5U311ZW5002

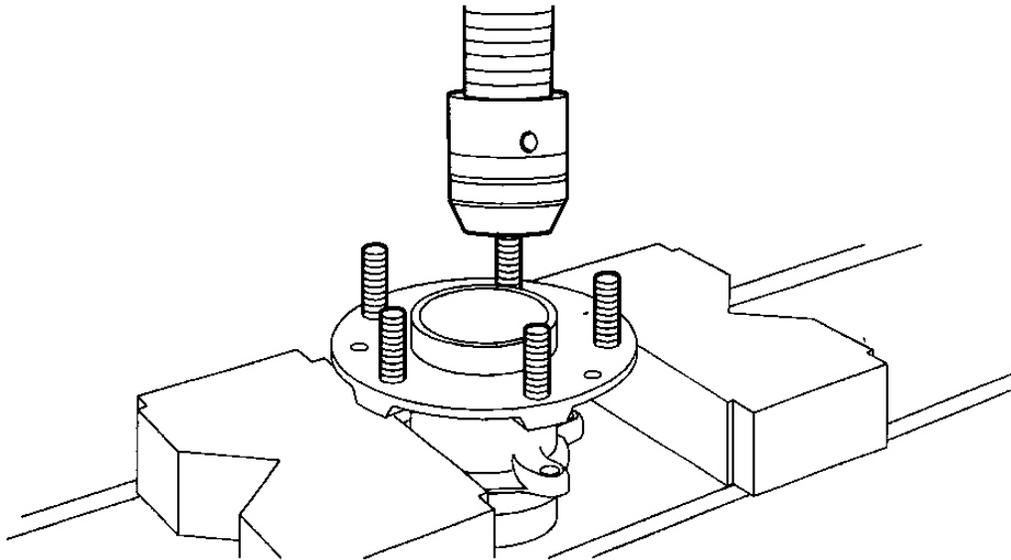
Fig. 6: Suspending Brake Caliper
Courtesy of MAZDA MOTORS CORP.

WHEEL HUB BOLT REMOVAL NOTE

NOTE:

- Remove the wheel hub bolt only if there is an abnormality.

1. Remove the wheel hub bolts from the wheel hub using a press.

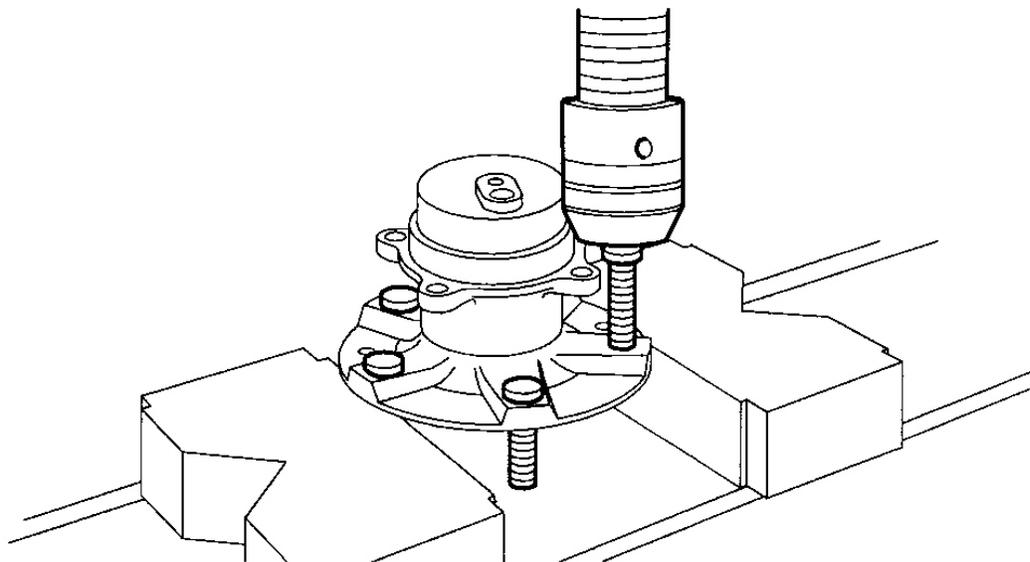


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Fig. 7: Removing Wheel Hub Bolts From Wheel Hub Using Press
Courtesy of MAZDA MOTORS CORP.

WHEEL HUB BOLT INSTALLATION NOTE

1. Press in new wheel hub bolts into the wheel hub using a press.



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Fig. 8: Pressing New Wheel Hub Bolts Into Wheel Hub Using Press
Courtesy of MAZDA MOTORS CORP.