

2007-2012 CX-7 - FRONT LOWER CONTROL ARMS - SAFETY RECALL 9716H

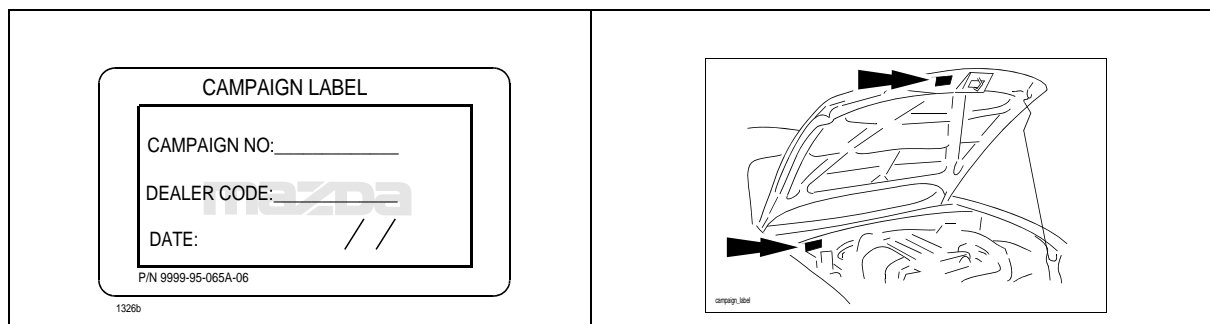
A. VEHICLE INSPECTION PROCEDURE

1. Verify that the vehicle is within the following range:

Model Year	VIN Range		Build Date Range
2007	JM3ER***	70 100057 – 169185	February 14, 2006 through May 31, 2012
2008		80 169188 – 215755	
2009		90 215758 – 238633	
2010		A0 300038 – 353047	
2011		B0 353048 – 410394	
2012		C0 410395 – 425737	

- If the vehicle is within the above range, proceed to Step 2.
 - If the vehicle is not within the above range, return vehicle to the customer or inventory.
2. Perform a Warranty Vehicle Inquiry using your eMDCS System and inspect vehicle for Campaign Labels **Recall 9716H** attached to the vehicle's hood or bulkhead. Refer to eMDCS System - Warranty Vehicle Inquiry Results table below.

NOTE: Be sure to verify Recall number as the vehicle may have multiple Recall labels.



eMDCS System - Warranty Vehicle Inquiry Results:

If eMDCS displays:	Campaign Label is:	Action to perform:
RECALL 9716H OPEN	Present	Contact the Warranty Hotline at (877) 727-6626 option 3 to update vehicle history.
	Not present	Proceed to "B. INSPECTION PROCEDURE".
RECALL 9716H CLOSED	Present	Return vehicle to inventory or customer.
	Not present	Complete a label and apply to vehicle's hood or bulkhead.
RECALL 9716H is not displayed	Does not apply	Recall does not apply to this vehicle. Return vehicle to inventory or customer.

B. INSPECTION PROCEDURE

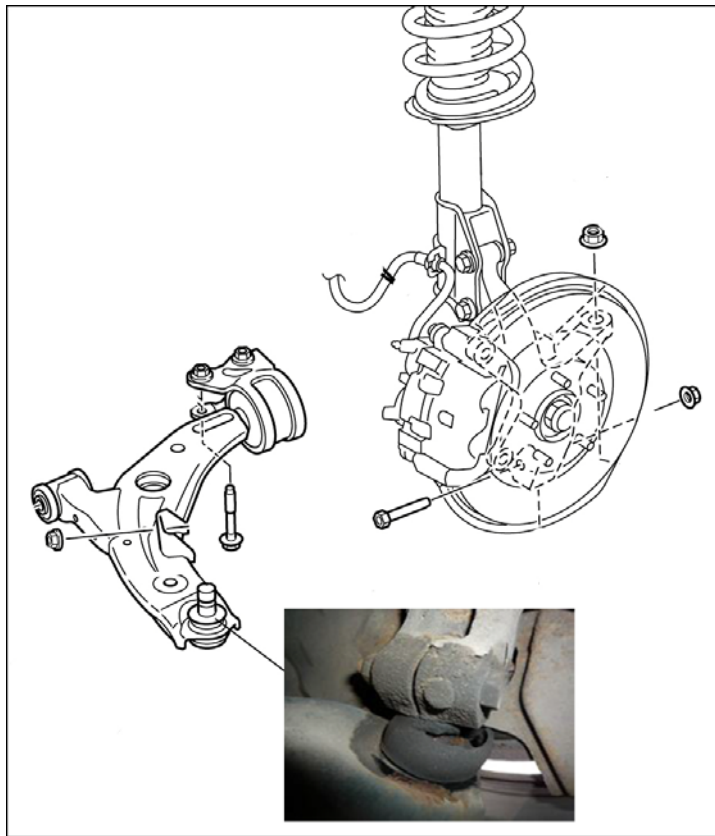
This inspection procedure does not complete the recall repair. When recall kits are available, the recall repair instructions and warranty claim information will be provided.

1. Safely raise the vehicle on a lift.

NOTE: Set the IG key position to any position other than LOCK to prevent the steering from locking.

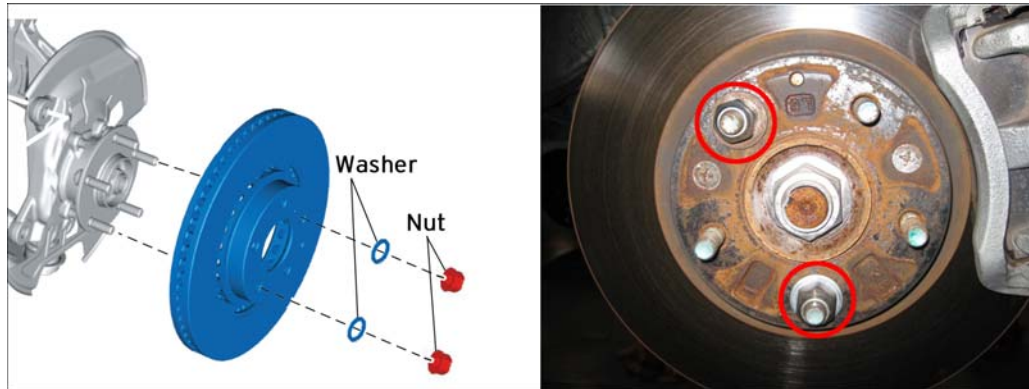
2. Inspect both front lower control arm ball joint dust covers (both sides).
 - If any damage is found (cracking and/or damage), replace both front lower control arms. Refer to **C. REPAIR PROCEDURE.**
 - If no damage is found on both dust covers, continue with Step 3 below.

Example of a damaged front lower control arm dust cover is shown below:



3. Slowly turn the steering wheel from right lock position to left lock position several times to neutralize the ball joint.
4. Remove the front wheels (both-sides).
5. Lock the steering by turning the key to the LOCK position to prevent steering rotation.

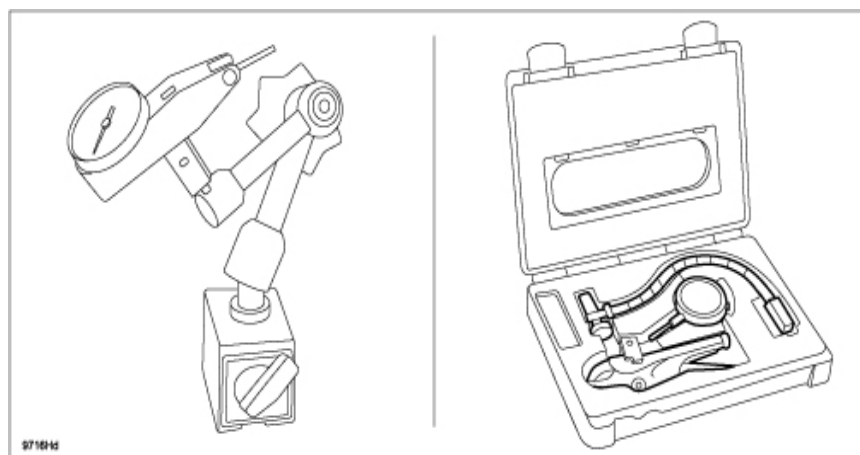
6. Secure the brake rotor to the hub using 2 lug nuts and washers as shown below:



7. Support the front cross member from the bottom using a jack.



8. Obtain one of the following tools to measure the lower control arm play.

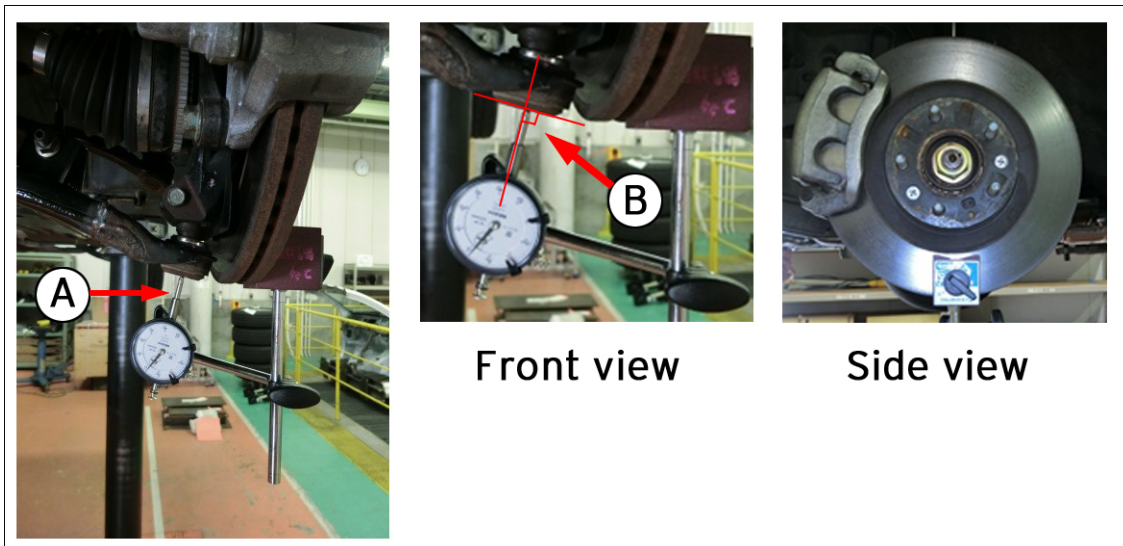


9. Fix a magnetic base or locking pliers to the brake rotor (to set the dial gauge).



10. Place the sensing tip of the dial gauge on the bottom of front lower arm ball joint (A) as shown below:

NOTE: Place the sensing tip of the dial gauge at a right angle to the ball joint base (B) as shown below:



11. Press down/release on the front lower arm with a pry bar or metal bar at least three times to prepare for the lower ball joint measurement.

NOTE: To avoid damaging the vehicle body, be sure to apply adequate protection (such as a shop rag) along the contact surface.



12. Adjust the needle of the dial gauge to 0 mm {0 in.}.
13. Press down on the front lower arm with a pry bar or metal bar
14. Measure the play of the ball joint with the dial gauge.

NOTE: Acceptable amount of play: 2.0 mm {0.079, 5/64 in.} or less.



NOTE: If dial gauge scale does NOT return to 0 mm {0 in.} when release the pry bar, it is NOT being measured correctly. Re-start the inspection procedure step 9.

- If both ball joints inspection **PASS the inspection**, inform the customer that they will still need to bring their vehicle back to replace the front lower arms once they receive another notification from Mazda informing them that the repair parts are available.
- If one or both ball joint(s) inspection **FAIL the inspection**, replace both front lower arms and spacers. Proceed to **C. REPAIR PROCEDURE**.

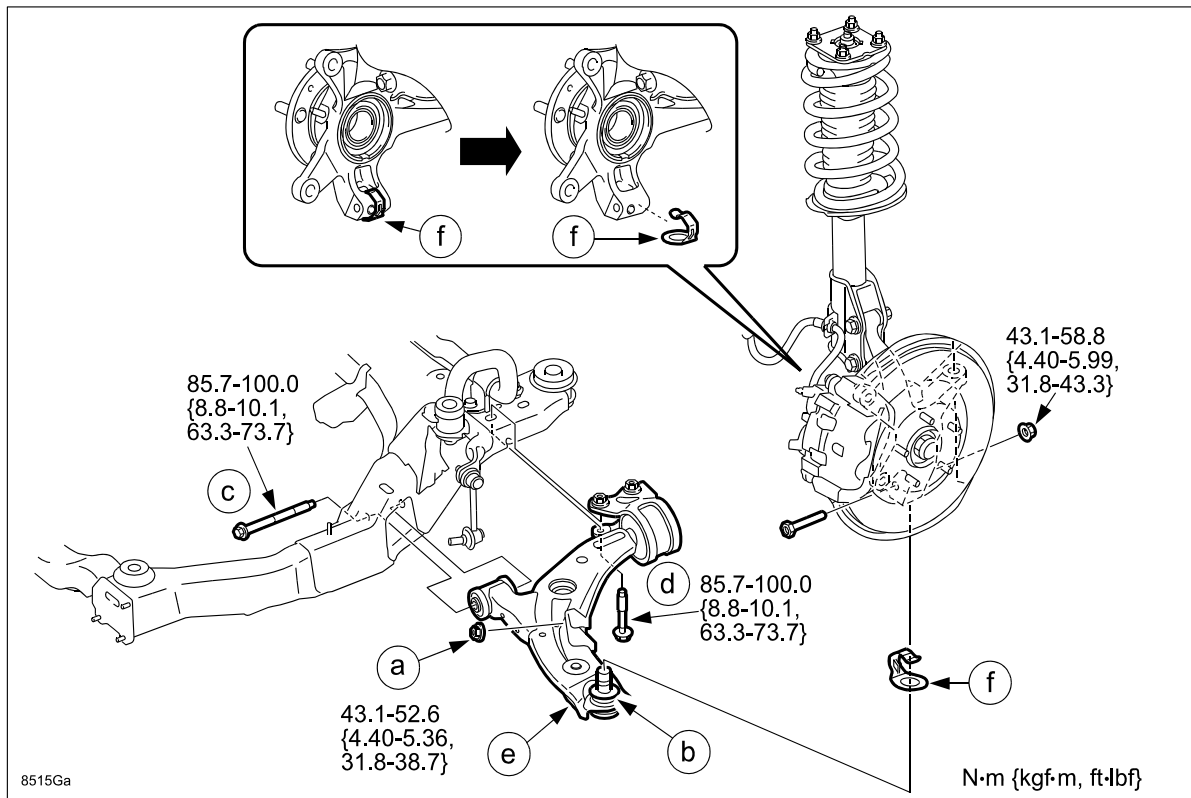
C. REPAIR PROCEDURE

Removal:

1. Safely raise the vehicle on a lift.
2. Remove both front wheels.
3. Remove the front lower arm in the order indicated below (a - e):

NOTE: It is NOT necessary to disconnect the ABS wheel-speed sensors and tie-rod end ball joints.

CAUTION: Use a suitable fork tool (as shown below) to separate the lower ball joint. NEVER USE A HAMMER OR MALLET.



- a. Disconnect the stabilizer control link (lower arm side).
- b. Remove the lower arm ball joint attaching nuts.
- c. Remove the attaching bolt between the lower arm and body (front side).
- d. Remove the attaching bolt between lower arm and body (back side).
- e. Remove the lower arm.

Installation:

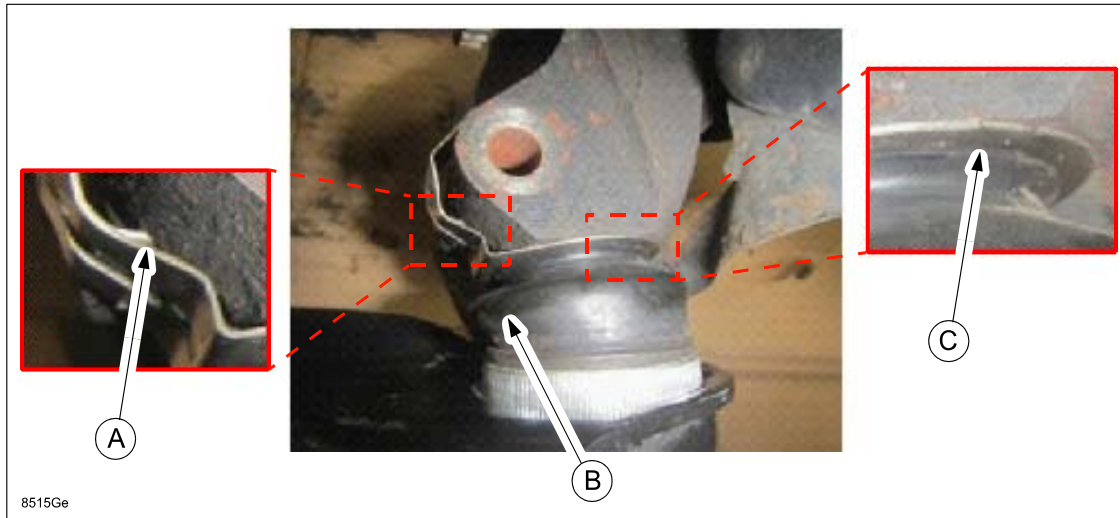
1. Install the new lower arm in the reverse order of removal.

NOTE: When installing the new lower arm, work with another technician to make the installation easier.

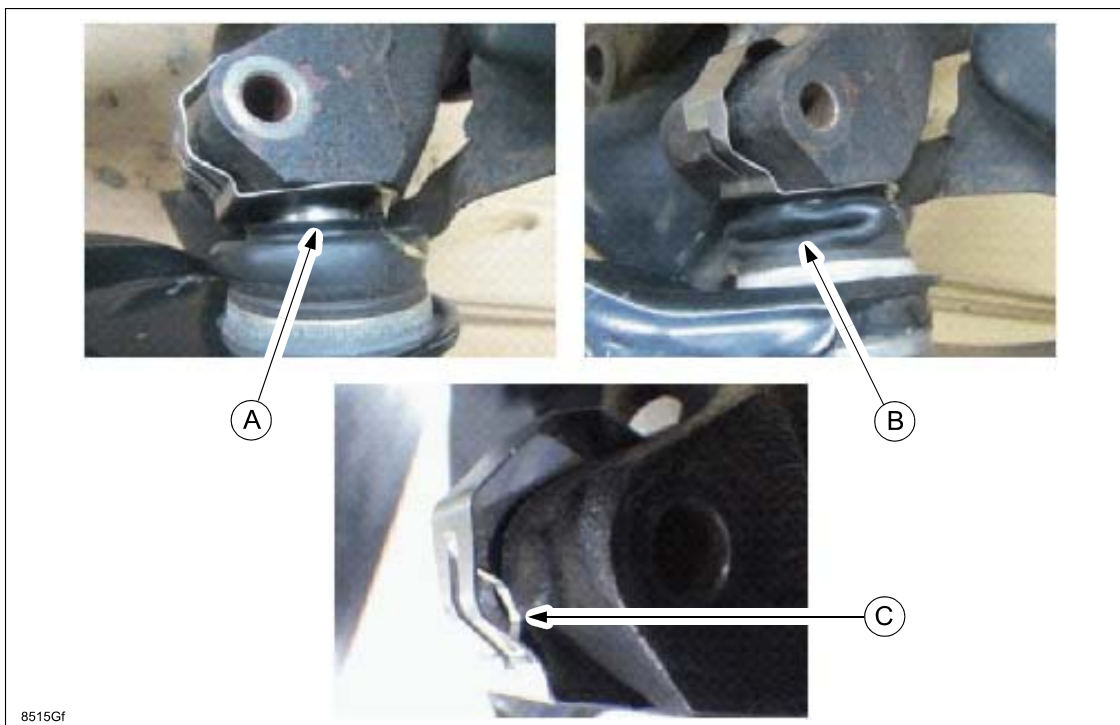
CAUTION: Before installing the new lower arm, be sure to install the ball joint cover (f) and ball joint boot to the steering knuckle as shown below.

CORRECT:

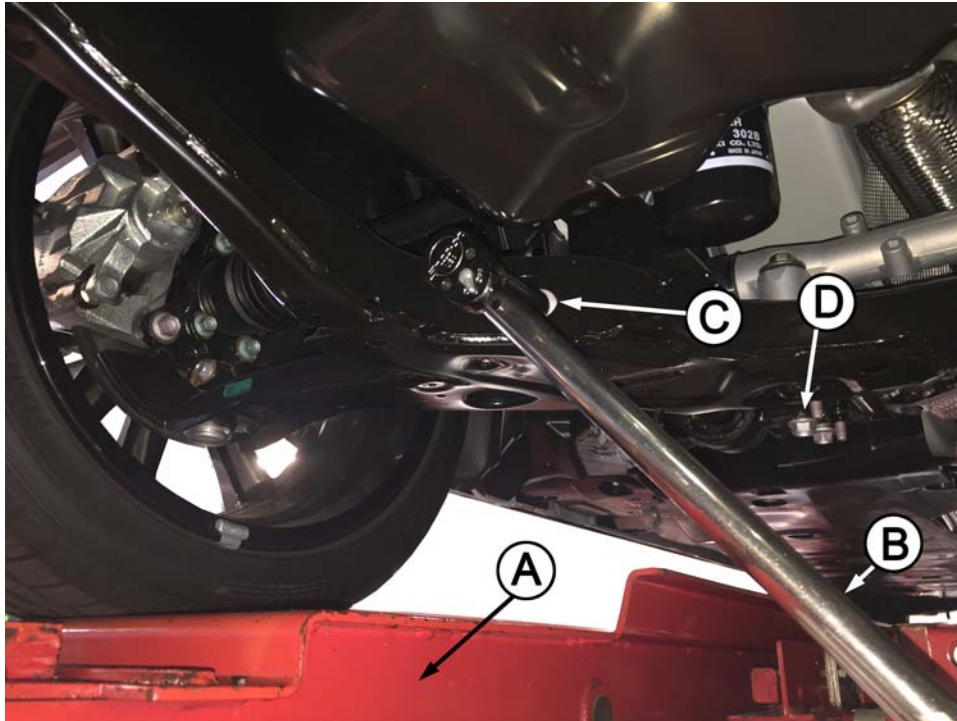
- The protrusion of the cover (A) is engaged in the notch of the knuckle.
- The boot (B) is NOT caved in.
- The cover (C) is in close contact with the boot all the way around.

**INCORRECT:**

- The cover (A) is NOT in close contact with the boot.
- The boot (B) is caved in.
- The protrusion of the cover (C) and the notch of the knuckle are misaligned.



2. Check the tightening torque of the front brake hose banjo bolt:
Tightening Torque: 21.6-29.4 Nm {2.21-2.99 kgf-m, 16.0-21.6 ft-lbf}.
3. Temporarily tighten bolt (c) to **27 Nm {2.8 kgf-m, 20 ft-lbf}**.
CAUTION: The suspension needs to be under the full weight of the vehicle before bolt (c) is fully torqued.
4. Re-install the front tires.
5. Raise the vehicle using a wheel alignment lift rack (A) or lower the vehicle to the ground (to load the suspension). Use a torque wrench (B) to tighten the bolts (C) and (D) to:
Tightening Torque: 85.7-100 Nm {8.8-10.1 kgf-m, 63.3 - 73.7 ft-lbf}.



6. Repeat the Removal and Installation steps for the opposite side suspension.
7. Inspect the front wheel alignment and adjust the front toe.
NOTE: It is NOT necessary to perform camber and caster adjustments.

D. CAMPAIGN LABEL INSTALLATION

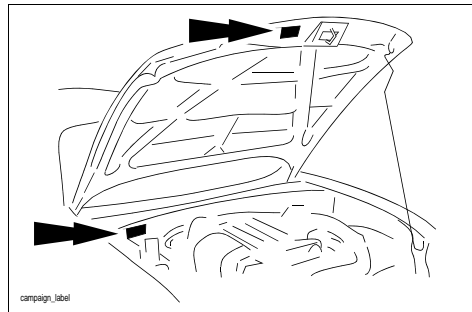
1. Fill out a blue "Campaign Label" (9999-95-065A-06) with Campaign No: "9716H", your dealer code, today's date.

CAMPAIGN LABEL	
CAMPAIGN NO:	_____
DEALER CODE:	_____
DATE:	__ / __ / __

P/N 9999-95-065A-06

1326b

2. Affix it to the hood or bulkhead as shown:



3. Return the vehicle to customer.