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Case Number: S2508000051

Release Date: June 2025

Symptom/Vehicle Issue: Malfunction Indicator Lamp (MIL) on, Wheel End Disconnect (WED)
Diagnostic Trouble Codes (DTCs)

Customer Complaint/Technician Observation: The owner complains of vehicle hesitation with a MIL lamp on. The technician found one or more of the following DTCs.

C10FA-00-LEFT FRONT WHEEL HUB DISCONNECT ACTUATOR PERFORMANCE
C10FB-00-RIGHT FRONT WHEEL HUB DISCONNECT ACTUATOR PERFORMANCE
C10F9-00-RIGHT FRONT WHEEL HUB DISCONNECT ACTUATOR POSITION SENSOR CIRCUIT
C10F8-00-LEFT FRONT WHEEL HUB DISCONNECT ACTUATOR POSITION SENSOR CIRCUIT
C0087-00-WHEEL HUB DISCONNECT SYSTEM PERFORMANCE
C06A1-00-LEFT FRONT WHEEL HUB DISCONNECT ACTUATOR CONTROL
C06A2-00-RIGHT FRONT WHEEL HUB DISCONNECT ACTUATOR CONTROL
C06A3-00-LEFT FRONT WHEEL HUB DISCONNECT ACTUATOR POSITION SENSOR
C06A4-00-RIGHT FRONT WHEEL HUB DISCONNECT ACTUATOR POSITION SENSOR
C10FC-00-WHEEL HUB DISCONNECT OVERRIDE
C10FD-00-WHEEL HUB DISCONNECT MISSING CALIBRATION

Repair Procedure:

1. Identify and document faults using wiTECH
2. Ensure the following modules are at the most current software level available prior to any further service procedures BPCM, MCPA, MCPB, EVCU, IDCM.
3. If C10FD (WED Missing calibration) is only fault active:
Put vehicle in the air, center LT & RT wheels in lash zone, run learn procedure.
Wait 2 minutes for WED to cool down before running a 2nd attempt. Proceed to next step
4. **If step 2 fails or any of following system fault codes are stored/active:**
Possible codes: **C10FA, C10FB, C0087, C06A1, C06A2, C06A3 C06A4, C10F8, C10F9, C10FC, C10FD.**
Verify wiring system is functioning properly. Unlock & disconnect harness connector from the WED.
Use small pick tool to push down and pull out the gray locking tab on top of connector. See Pg 3 for view.
Set ignition to ready mode. Use DVOM to verify 5V supply to position sensor input circuit.
Set ignition to off. Check continuity of sensor ground and sensor feedback circuits.
Use light tester to load both (-) & (+) solenoid power circuits. Light should shine brightly.

Pg 1

This document does not authorize warranty repairs. This communication documents a record of past experiences. STAR Online does not provide any conclusions about what is wrong with the vehicle. Rather, it captures all previous cases known that appear to be similar or related to the vehicle symptom / condition. You are the expert, and you are responsible for deciding on the appropriate course of action.

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Verify harness routing: Check for pinched, loose, or broken wires that may cause intermittent open or short circuits. Replace jumper harness if defective. Trace electrical circuits back to EVCU2 as needed.

- If wiring for the EVCU2 does check OK, use scan tool to manually disengage and engage both wheel end disconnects. Verify WED status: 2WD (LT & RT) Disengaged = PASS
4WD (LT & RT) Engaged = PASS
Disengaging, Indetermined, Engaging = FAIL
- If STEP 4 is successful, DTCs C10FA-00 and C10FB-00 faults are not hardware related. Fault is caused by intermittent condition when trying to disengage. The MIL will not set with next key on or sleep cycle. Clear fault code(S). Return vehicle to customer. **Explain software improvement is pending release by the 3rd quarter 2025.**
- If STEP 4 Fails this indicates the WED is not able to fully engage or disengage manually. Suspect system hardware at fault is cause. Remove front corner module. Remove WED from knuckle. **Caution dog ring will be loose.**

Slide the loose dog ring onto the half shaft spline with QAR code and part number facing the half shaft until dog ring contacts the vertical face on the OCVJ. If dog ring slides easily over the entire spline length, replace the WED. If dog ring binds or seizes before contacting the vertical face, replace both the half shaft and the WED. Follow recommended service procedure to install new WED and half-shaft. Manually align & shift dog ring onto the wheel hub spline before installing half-shaft. Rerun the learn procedure to verify all faults are cleared.



Dog ring slides easily over the entire length of spline and is able to contact vertical face on OCVJ



Dog ring binds, gets stuck when sliding over spline or is not able to contact the vertical surface on OCVJ.

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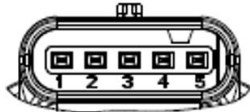
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USCAR P IN	1	2	3	4	5
FUNCTION	SOL (-)	SENS +5V	SENS OUT	SENS GND	SOL (+)



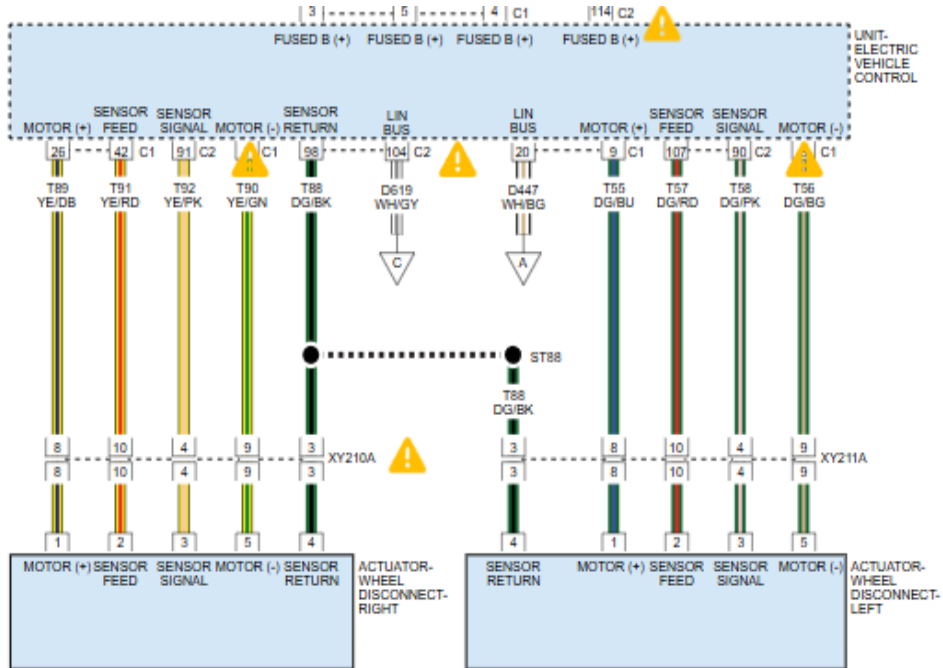
METAL CONNECTOR PINOUT
SCALE 3:1

CONTROL LOGIC	
COMMAND	CURRENT POLARITY
CONNECT	POSITIVE
DISCONNECT	NEGATIVE

STLA LARGE WED Pinout (KM, LB, EJ)



Use pick tool to push down and pull out on gray locking tab.

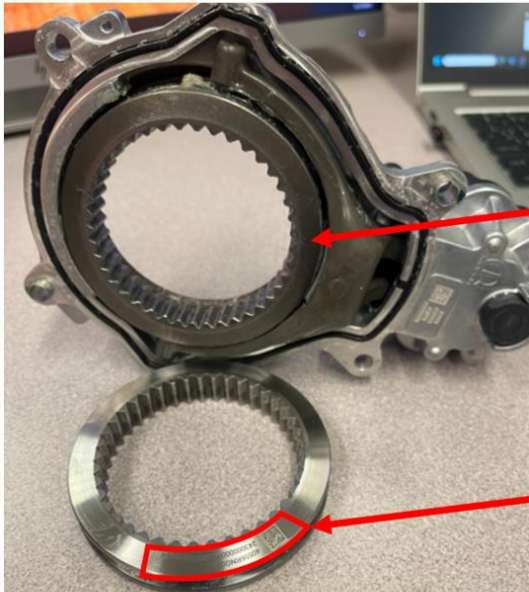


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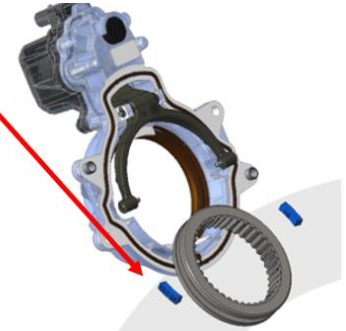
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Do not reinstall Dog Ring if missing one or both shift pads

Barcode and Part Numbers NOT visible from this side when ring is installed

Barcode and Part Numbers



Make sure both shift pads are inserted onto the fork pins, before attempting to reinstall a loose dog ring.
With dog ring bar code facing away from you, slide the dog ring onto the shift pads with fork extended in 4x4 position,
Secure the dog ring by pushing on the ring to shift the fork into 4x2 position

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