

# Service Bulletin

15-012

May 6, 2015 01425-01942 Version 2

## AWD Light Comes On and Sets DTC C1858-73

#### AFFECTED VEHICLES

Year	Model	Trim	VIN range
2013–14	RDX	ALL with AWD	ALL with AWD

#### **REVISION SUMMARY**

Under PARTS INFORMATION, the AWD Fluid part number was changed.

#### SYMPTOM

The electric differential pressure solenoid (EDPS) has excessive oil pressure, causing the AWD indicator to come on and DTC C-1858-73 (differential fluid pressure deviation high) to set.

#### **POSSIBLE CAUSES**

There is abnormal wear on the EPDS solenoid plunger.

## CORRECTIVE ACTION

Replace the EDPS solenoid in the rear differential.

## PARTS INFORMATION

Part Name	Part Number	Quantity
Solenoid Assembly	48350-R7L-013	1
Bolt (12 point 8 mm x 21 mm)	90113-S10-000	4
Flange Bolt (10 mm x 31 mm)	90164-S3V-A00 4	
Flange Bolt (8 mm x 14 mm)	95701-08014-08	2
Drain Washer (20 mm)	94109-20000	1
Drain Washer (18 mm)	90471-PX4-000	1
O-ring (7.7 mm x 2.3 mm)	91301-PC9-003	1
O-ring (28.4 mm x 2.4 mm)	91306-R7L-003	1
Clip	91540-STK-003	1
Liquid Gasket	08718-0004	1
AWD Fluid	08200-9007A	2

CLIENT INFORMATION: The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Acura automobile dealer.

## WARRANTY CLAIM INFORMATION

The normal warranty applies.

Operation Number	Description	Flat Rate Time	Failed Part Number
2191Y0	Replace the EPDS solenoid.	1.4 hours	48350-R7L-003

Defect Code: 03217 Symptom Code: 03214

Skill Level: Repair Technician

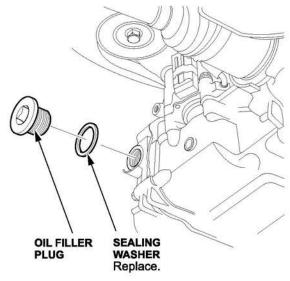
## REPAIR PROCEDURE

**DRAIN PLUG** 

1. Raise the vehicle on a lift and make sure it is securely supported.

2. Put the transmission into Neutral.

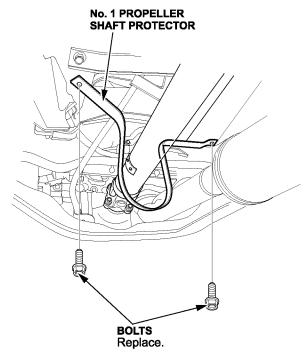
3. Remove the oil filler plug and sealing washer from the rear differential.



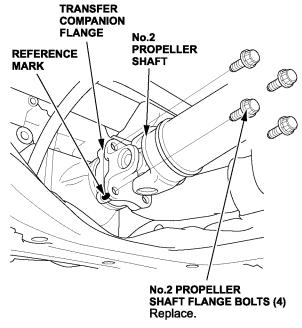
4. Remove the drain plug and sealing washer and drain the rear differential fluid.



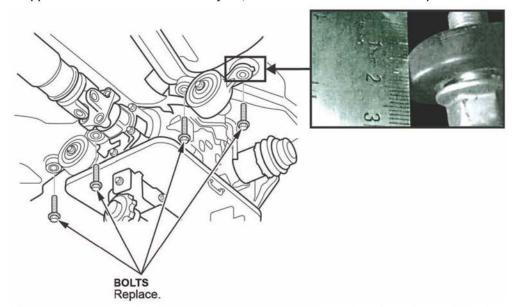
5. Remove the No. 1 propeller shaft protector.



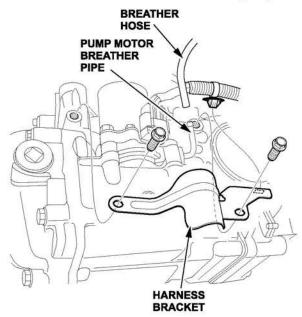
- 6. Disconnect the propeller shaft from the rear differential:
  - Make a reference mark across the No. 2 propeller shaft and the rear differential companion flange.
  - Remove the propeller shaft flange bolts.
  - Separate the propeller shaft from the rear differential.
  - Tie off the propeller shaft with an appropriate size nylon strap.



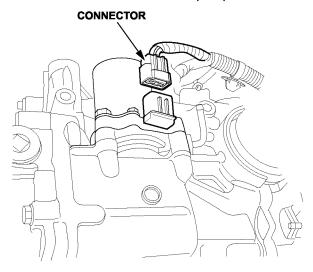
7. Support the rear differential with a jack, then remove the bolts and drop the differential about 10 mm.



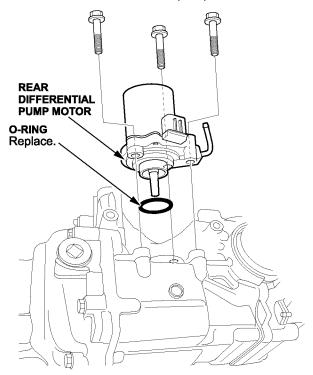
8. Disconnect the breather hose from the pump motor breather pipe, then remove the harness bracket.



9. Disconnect the rear differential pump motor connector.



10. Remove the rear differential pump motor and the O-ring.



11. Remove the connector cover.

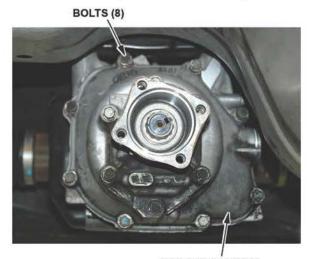
CONNECTOR COVER



12. Disconnect the EPDS connector, then remove the solenoid connector.



13. Remove the bolts, then remove the torque control differential assembly.

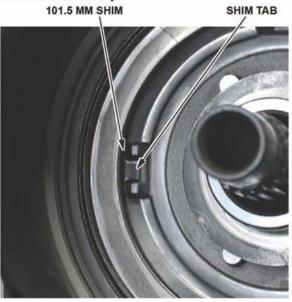


TORQUE CONTROL DIFFERENTIAL ASSEMBLY

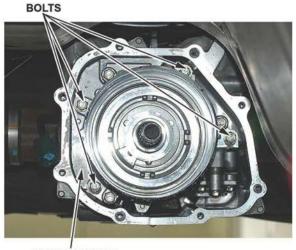
14. Remove the three shims from the pump housing assembly and note the order from which they were removed.

NOTE: Make sure the large 101.5 mm shim fits into the tabs on reassembly.





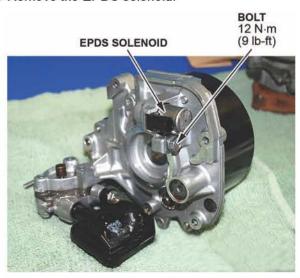
15. Remove the four bolts from the pump housing assembly and remove the housing.



PUMP HOUSING ASSEMBLY

NOTE: If the shims are removed or fall out while doing the repair, note the orientation of the shims and reinstall in the order shown.

#### 16. Remove the EPDS solenoid.



- 17. Install the new EPDS solenoid and torque the bolts to 12 N·m (9 lb-ft).
- 18. Replace the O-ring with a new one.



- 19. Install the pump housing and torque the bolts to 12 N·m (9 lb-ft).
- 20. Install the shims in the order of removal and make sure the tabs are in place.
- 21. Remove the old gasket, dirt, and oil from the mating surface.
- 22. Apply liquid gasket evenly to the entire sealing surface and install the component within 5 minutes of applying it.
  NOTE: Allow the liquid gasket to cure 30 minutes after assembly before filling the differential with the recommended fluid.
- 23. Install the torque control differential assembly and torque the bolts to 12 N·m (9 lb-ft).
- 24. Install the solenoid connector and the EPDS connector.
- 25. Install the connector cover.
- 26. Install the rear differential pump motor with a new O-ring and torque the bolts to 12 N·m (9 lb-ft).
- 27. Connect the rear differential pump motor connector.
- 28. Install the harness bracket and the heater hose to the pipe.
- 29. Install the new mounting bolts and torque them to 54 N·m (40 lb-ft).

- 30. Install the propeller shaft:
  - Attach the propeller shaft to the rear differential companion flange by aligning the reference mark you made in step 6.
  - Install the new bolts and torque them to 32 N·m (24 lb-ft).
- 31. Install the propeller shaft protector and torque the bolts to 22 N·m (16 lb-ft).
- 32. Clean the drain plug and install it with a new sealing washer, then torque it to 47 N·m (35 lb-ft).
- 33. Refill the differential to the proper level.
- 34. Install the oil filler plug with a new sealing washer and torque the plug to 47 N·m 35 lb-ft).
- 35. Connect the HDS to the DLC.
- 36. Turn the ignition to ON.
- 37. Make sure the HDS communicates with the vehicle. If it does not communicate, go to the DLC circuit troubleshooting.
- 38. Select REAL TIME AWD SYSTEM, ADJUSTMENT, and AIR BLEEDING.

NOTE: See the HDS Help menu for specific instructions. END