


Applies To: **1997-01 CR-V (4WD) – ALL**
**October 30, 2001**

## Noise From the Rear Differential

### SYMPTOM

A screech or whine from the rear differential when making a tight turn at low speed (for example, in a parking lot when 4WD engages).

### PROBABLE CAUSE

The differential fluid is contaminated or broken down, providing insufficient lubrication.

### CORRECTIVE ACTION

Replace the dual pump fluid, and test-drive the vehicle. If necessary, replace the rear differential clutch, replace the oil pump assembly (1997 model only), and add a flow collar.

### PARTS INFORMATION

Flow Collar Kit:

P/N 41431-P6R-000, H/C 6839724

Differential Clutch Set:

P/N 48010-P6R-305, H/C 6627566

Oil Pump Set (1997 model only):

P/N 48100-P1D-305, H/C 6839716

### REQUIRED MATERIALS

Dual Pump Fluid:

P/N 08200-9002, H/C 6512644

Liquid Gasket (Hondabond HT):

P/N 08718-0001, H/C 2963817

### WARRANTY CLAIM INFORMATION

**In warranty:** The normal warranty applies.

OP#	Description	FRT	Template ID
220001	Drain and refill the rear differential, check tire inflation, and test-drive.	0.7	01-079A
220106	Flush the rear differential, and check tires; replace the clutch set and flow collar.	2.8	01-079B
220106	Flush the rear differential, and check tires; replace the clutch set, the flow collar, and the pump (1997 model only).	2.8	01-079C

Failed Part: P/N 48010-P6R-305  
H/C 6627566

Defect Code: 042

Contention Code: B07

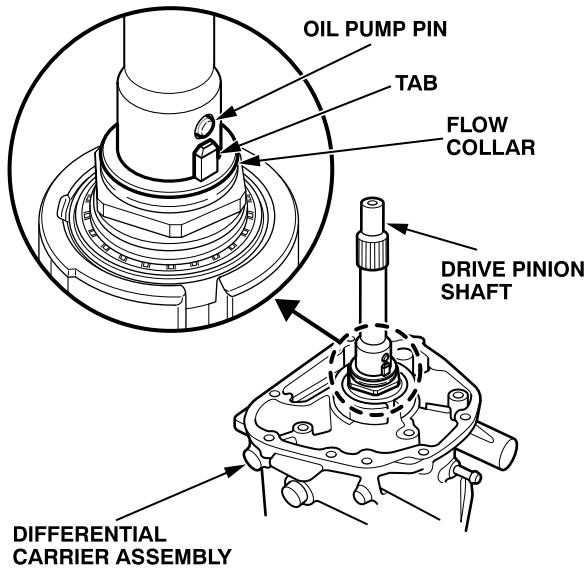
Skill Level: Repair Technician

**Out of warranty:** Any repair performed after warranty expiration may be eligible for goodwill consideration by the District Service Manager or your Zone Office. You must request consideration, and get a decision, before starting work.

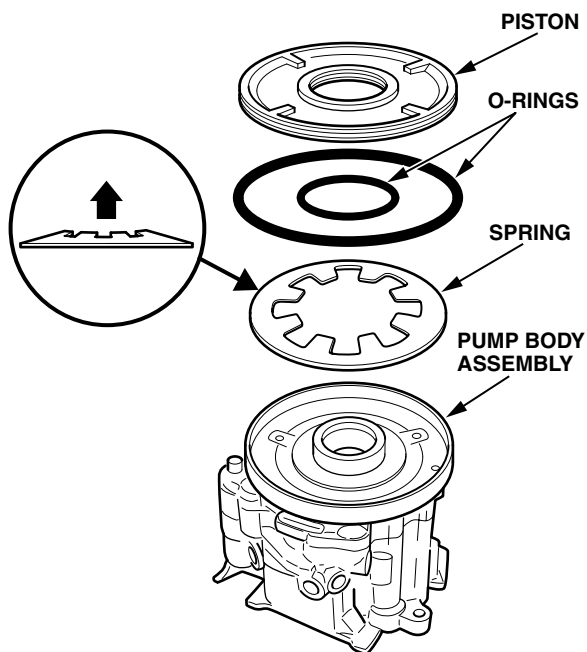
### REPAIR PROCEDURE

1. Drain and refill the rear differential with Dual Pump Fluid.
2. Check the tires for proper inflation (recommended cold inflation front and rear is 26 psi) and any variation in tire size or type.
3. Test-drive the vehicle in a parking lot. Make tight, low-speed turns.
  - If the noise is eliminated, return the vehicle to the customer.
  - If the noise is still present, go to step 4.
4. Remove the rear differential assembly (see page 15-16 of the 1997-01 CR-V Service Manual).
5. Remove the torque control differential case, then remove and discard the 30 mm shim and the clutch assembly (see steps 1 thru 10 on pages 15-20 thru 15-22 of the service manual).

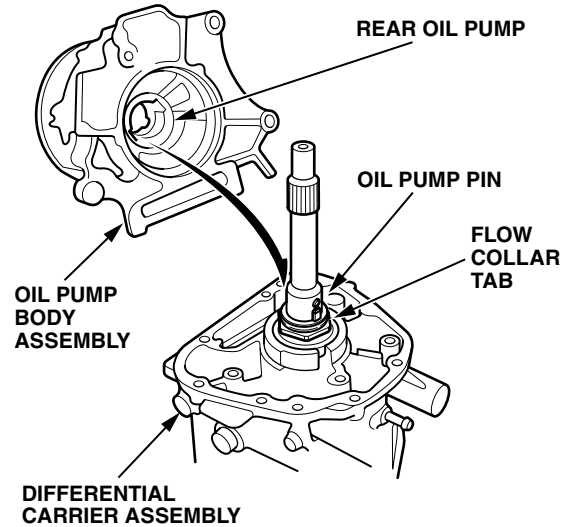
6. Remove the thrust needle bearing, the oil pump driveshaft, and the oil pump body assembly (see steps 11 and 12 on page 15-22 of the service manual).
7. Install the new flow collar over the drive pinion shaft. Make sure the tabs of the flow collar align with the oil pump pin.



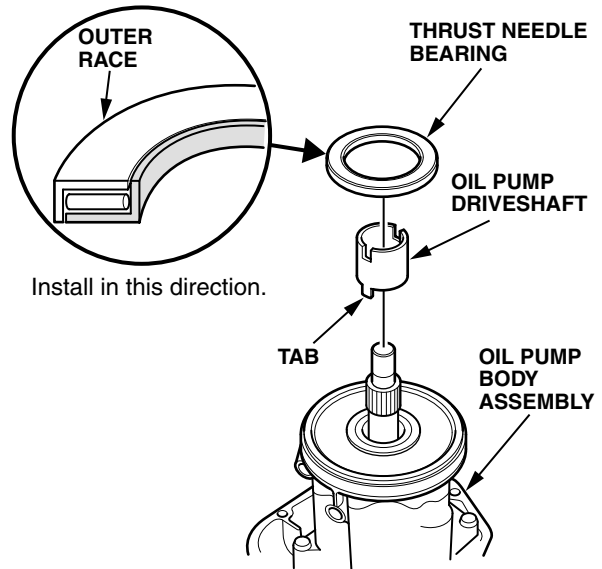
8. *For 1997 models:* Assemble the new oil pump (spring, O-rings, piston, and pump body assembly).



9. Align the rear oil pump grooves with the oil pump pin and the flow collar tabs, then install the oil pump body assembly on the differential carrier.



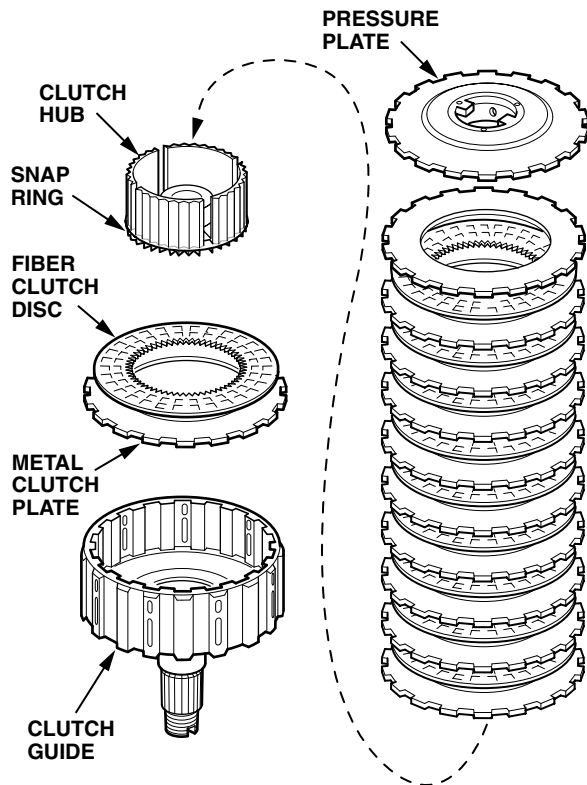
10. Tighten the oil pump body assembly bolts to 12 N·m (8.7 lb-ft).
11. Align the oil pump driveshaft tabs with the grooves of the front oil pump in the oil pump body assembly, then install the oil pump driveshaft.



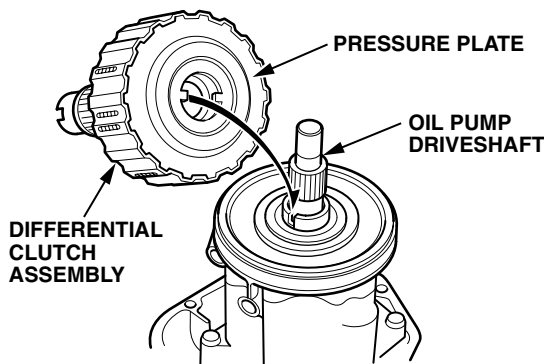
12. Install the thrust needle bearing with the outer race facing up.

13. Apply Dual Pump Fluid to the new clutch plates and discs, then assemble the differential clutch. Note these items:

- Install one metal clutch plate and one fiber clutch disc in the clutch guide, then install the clutch hub with snap ring into the guide.
- Make sure the splines of the clutch hub and fiber clutch disc are lined up below the snap ring.
- Install the remaining metal clutch plates and fiber clutch discs alternately until you install a total of 11 plates and 10 discs, then install the pressure plate.

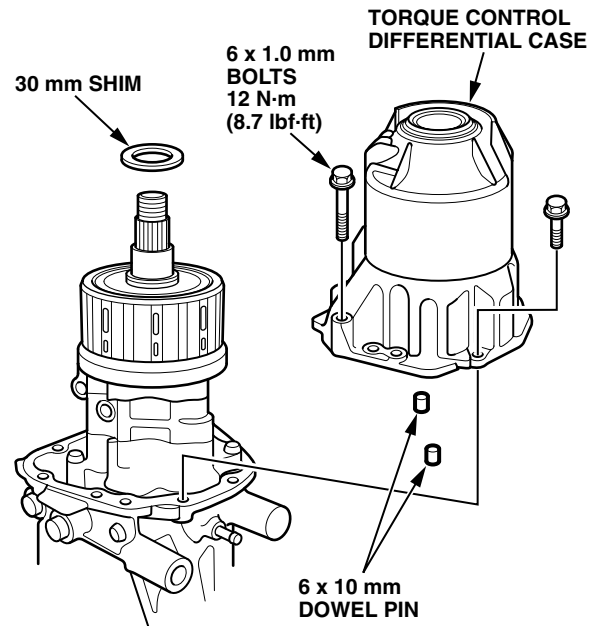


14. Align the pressure plate tabs with the oil pump driveshaft notches, then install the new differential clutch assembly onto the pinion shaft.



15. Remove any dirt and oil from the sealing surfaces of the torque control differential case and the differential housing. Apply Hondabond HT to the sealing surface of the differential housing. Be sure to seal around all the bolt holes to prevent oil leakage.

16. Install the new 30 mm shim, the 6 x 10 mm dowel pins, and the torque control differential case. Torque the eight mounting bolts in a crisscross pattern in several steps up to the specified torque.



17. Reinstall the companion flange and remaining parts (see steps 11 thru 15 on pages 15-24 and 15-25 of the 1997-01 CR-V Service Manual), then reinstall the rear differential.

18. Fill the rear differential with Dual Pump Fluid.

19. Start the engine, and let it warm up until the radiator fan comes on.

20. With the vehicle on a hoist, circulate the fluid through the rear differential pump/clutch assembly.

- A/T models: Apply the parking brake, shift the transmission into D4, and let the vehicle idle for 10 minutes.
- M/T models: Shift the transmission into 1st gear and engage the clutch. Slowly apply the parking brake until just before the engine stalls. Let the engine run this way for 10 minutes.

21. Turn off the engine. Drain the rear differential, and refill it with Dual Pump Fluid.

22. Test-drive the vehicle in a parking lot. Make tight, low-speed turns, and check that the noise is gone to verify the repair.