HONDA ACCORD BAXA/MAXA
HONDA PRELUDE M6HA

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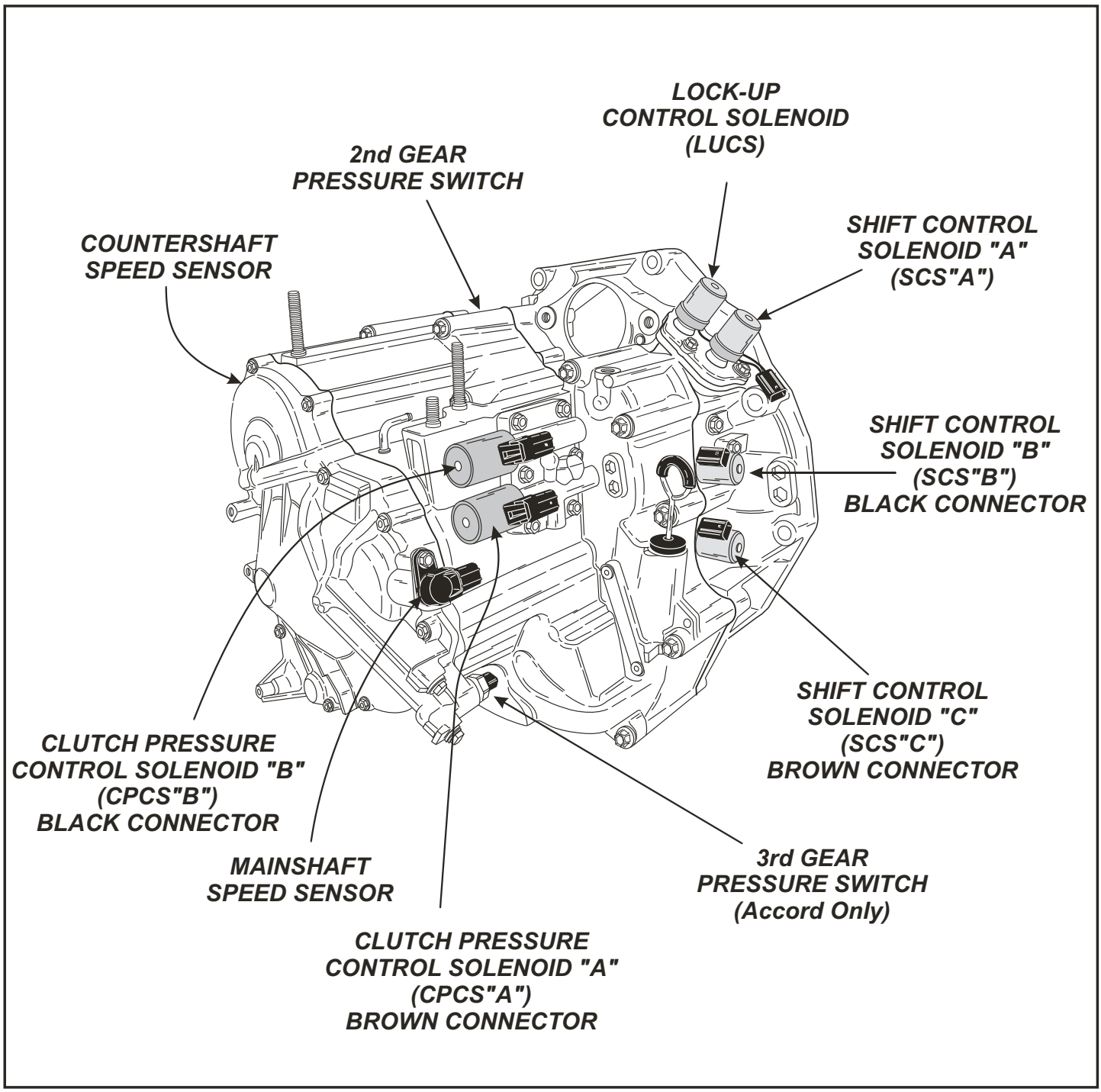
HONDA ACCORD BAXA/MAXA
HONDA PRELUDE M6HA



SOLENOID CONTROL

SHIFT CONTROL

Shifting is done in relation to throttle demand with the TCM/PCM controlling shift feel through A/T Pressure Control Solenoids "A" and "B". Shift timing is controlled by Shift Control Solenoids "A", "B", and "C" during normal upshifts and downshifts as well as grade logic control.
The shift solenoid firing order is ***different*** during a shift than it is when the transmission is in gear as shown in the solenoid "ON/OFF" chart below.

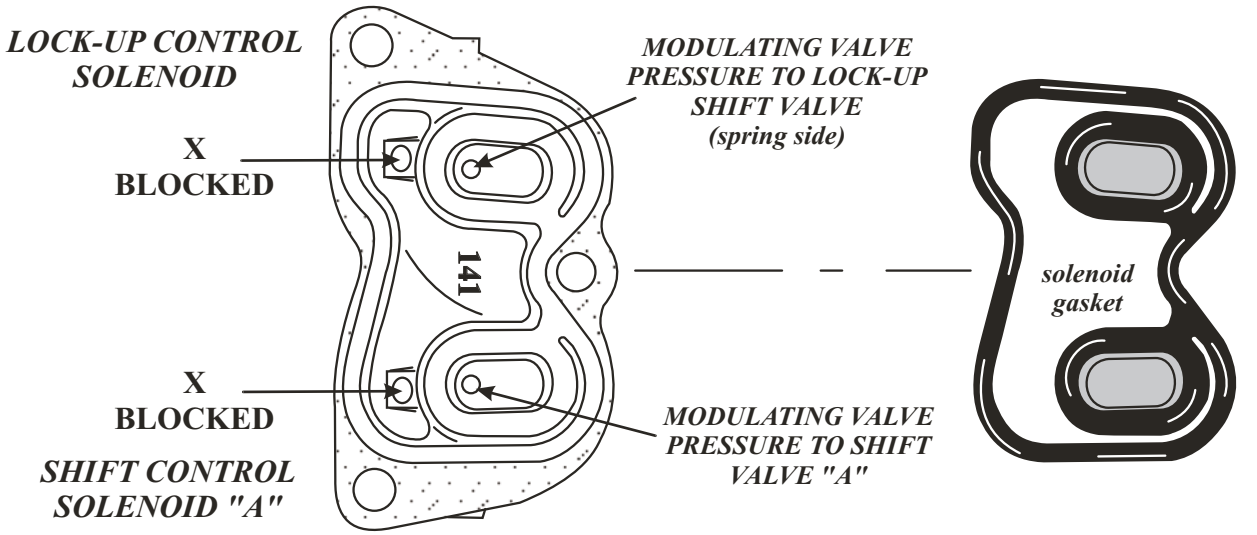
SHIFT LEVER POSITION	GEAR POSITION	SHIFT SOLENOID		
		A	B	C
P	PARK	OFF	ON	OFF
R	SHIFTING FROM PARK OR NEUTRAL TO REVERSE	OFF	ON	ON
	WHILE IN REVERSE	OFF	ON	OFF
	REVERSE INHIBIT	OFF	ON	ON
N	NEUTRAL	OFF	ON	OFF
D4 D3	SHIFTING FROM NEUTRAL	ON	ON	ON
	WHILE IN FIRST	OFF	ON	ON
	SHIFTING BETWEEN FIRST AND SECOND	ON	ON	ON
	WHILE IN SECOND	ON	ON	OFF
	SHIFTING BETWEEN SECOND AND THIRD	ON	OFF	OFF
	WHILE IN THIRD	ON	OFF	ON
	SHIFTING BETWEEN THIRD AND FOURTH	OFF	OFF	ON
	WHILE IN FOURTH	OFF	OFF	OFF
2	SECOND	ON	ON	OFF
1	FIRST	OFF	ON	ON

REVERSE INHIBIT CONTROL

When reverse is selected while the vehicle is moving at a speed greater than 6 mph (10km/h), the PCM/TCM will command Shift Control Solenoid "B" and "C" "ON" which is a 1st gear command which strokes the reverse CPC valve which blocks the reverse servo and 4th clutch circuits preventing reverse engagement.

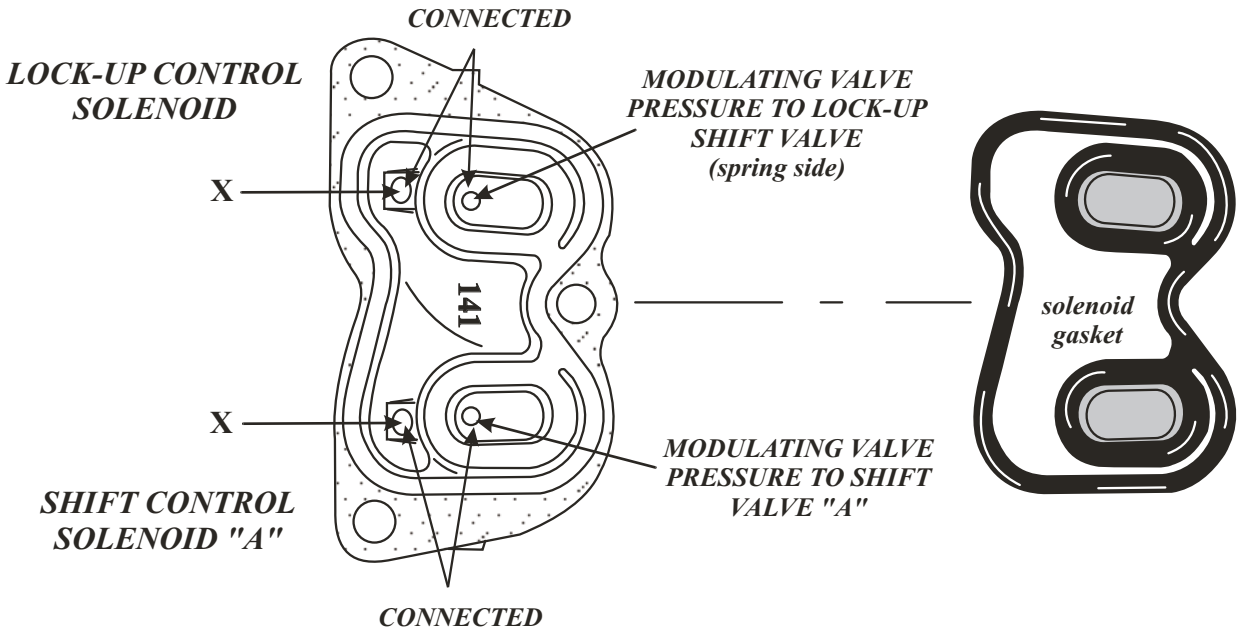
SOLENOID CHECK AND OPERATION

LOCK-UP CONTROL AND SHIFT CONTROL SOLENOID "A" OFF



When the Lock-up control Solenoid is OFF, Modulating Pressure is HIGH, which prevents the Lock-up Shift Valve from stroking.
When Shift Control Solenoid "A" is OFF, Modulating Pressure is HIGH, which strokes Shift Valve "A."

LOCK-UP CONTROL AND SHIFT CONTROL SOLENOID "A" ON



When the Lock-up control Solenoid is ON, Modulating Pressure is EXHAUSTED, which allows the Lock-up Shift Valve to stroke.
When Shift Control Solenoid "A" is ON, Modulating Pressure is EXHAUSTED, which allows Shift Valve "A" to be held to the right by its spring.

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SOLENOID CONTROL

CLUTCH PRESSURE CONTROL

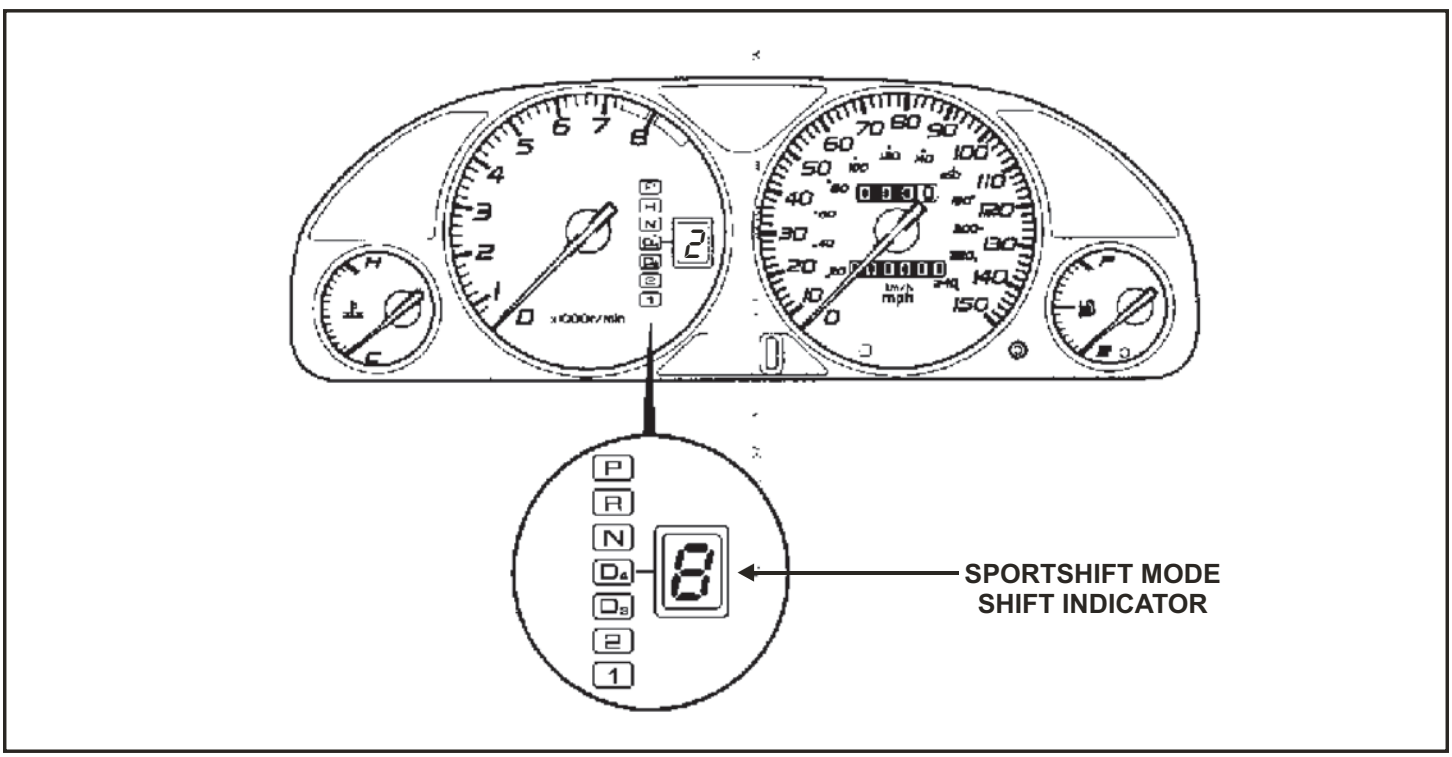
The PCM/TCM regulates the A/T Clutch Pressure Control Solenoids "A" and "B" thereby controlling all clutch apply pressure via the clutch pressure control (CPC) valves as well as lock-up apply pressure.

SEQUENTIAL SPORTSHIFT MODE (PRELUDE ONLY)

When in the D4 position, while sliding the shift lever to the Sequential Sportshift Mode position, the driver can use the shift lever to upshift and downshift similar to the operation of a manual transmission.
Pushing the shift lever towards the **"+"** indicator results in an upshift to the next higher gear.
Pushing the shift lever towards the **"-"** indicator results in a downshift to the next lower gear.
The number of the selected gear is displayed in the shift indicator next to the D4 indicator as seen below. The transmission does not automatically shift, it remains in the selected gear position.

The transmission ***will*** upshift or downshift automatically under the following conditions:

1. Downshift from 4th to 3rd when more power is required such as when climbing a hill.
2. Provide engine braking when on a steep incline.
3. Downshift to 1st gear when the vehicle comes to a stop.
4. Under proper conditions, the PCM/TCM will allow a downshift to avoid engine overreving.
5. A coast downshift will occur to a lower gear when vehicle speed drops low enough to require the downshift signal at which time the shift indicator will flash several times to indicate a lower gear position.



DIAGNOSTIC TROUBLE CODE DEFINITION CHART

*DTC	D4 LAMP	MIL LAMP	SYMPTOM	POSSIBLE CAUSE
P0715 (15)	FLASHES	ON	·Erratic Shifting	·Faulty Mainshaft Speed Sensor or Circuit
P0720 (9)	FLASHES	ON	·Erratic Shifting ·No 4th Gear ·No Lock-up ·No Speedometer ***(Accord Only)***	·Faulty Countershaft Speed Sensor or Circuit
P0725 (11)	OFF	OFF	·No Lock-up ***(Prelude Only)***	·Loss of Engine RPM Signal ·Faulty Distributor/Ignition Coil ·Wire or Connection ·Faulty Ignition Coil
P0730 (41)	OFF	ON	·Failure to shift through the gears ·Skipped Shifts	·Mechanically Bad Shift Solenoids ·Mechanically Bad A/T Pressure ·Control Solenoids ·Low Clutch Pressure ·Internal Component Slipping
P0740 (40)	OFF	ON	·Lock-up Clutch Does Not Apply ·Lock-up Clutch Does Not Disengage	·Mechanically Bad Lock-up ·Control Solenoid ·Mechanically Bad A/T Pressure ·Control Solenoids ·Lock-up Shift, Control or Timing Valve Problems ·Faulty Torque Converter ·Faulty Speed Sensor
P0753 (7)	FLASHES	ON	·Does Not Shift, Stuck in 4th Gear ·Fails to Shift to 4th Gear ·Erratic Shifting	·Electrically Bad Shift Solenoid 'A' ·Shift Solenoid "A" Circuit Fault
P0758 (8)	FLASHES	ON	·3rd Gear Starts ·Fails to Shift to 1st or 2nd Gear ·Erratic Shifting	·Electrically Bad Shift Solenoid 'B' ·Shift Solenoid "B" Circuit Fault
P0763 (22)	FLASHES	ON	·Late Shift From N to D or N to R ·Excessive Shock or Flare on 1-2, 2-3 or 3-4 Shift ·Excessive Shock or Flare on 2-1, 3-2 or 4-3 Shift	·Electrically Bad Shift Solenoid 'C' ·Shift Solenoid "C" Circuit Fault ·Faulty 2nd Clutch Pressure Switch ·Faulty 3rd Clutch Pressure Switch ***(Accord Only)***
P0780 (45)	FLASHES	ON	·Incorrect Gear Ratio ·Mechanical Problem in Hydraulic System	·Mechanical Fault with Shift Solenoid A, B or C ·Mechanical Fault with A/T Pressure Control Solenoid A or B ·Internal Hydraulic Leak

DTC's in parentheses is the code the D4 Lamp will flash when the 2 pin Service Connector is jumped (Prelude Only), or a Scan Tool capable of displaying flash codes is connected to the 16 pin DLC

TROUBLESHOOTING GUIDE

	NOTES
A	Flush transmission cooler
B	Set idle rpm in gear to specified idle speed. If still no good, adjust the engine mounts
C	Check ATF level and check ATF cooler lines for leakage and loose connections. If necessary, flush ATF cooler lines.
D	Check the D4 indicator light indication, and check for loose connectors. Inspect the O-ring, and the shift control solenoid valve seizure.
E	Check the D4 indicator light indication, and check for loose connectors. Inspect the A/T clutch pressure control solenoid valve body gasket and ATF feed pipes for wear and damage. If the A/T clutch pressure control solenoid valve is stuck, inspect the CPC valves.
F	Check the D4 indicator light indication, and check for loose connectors. Inspect the A/T gear position switch. If the A/T gear position switch is faulty, replace it. If the A/T gear position switch is out of adjustment, adjust it and the shift cable.
G	Check the D4 indicator light indication, and check for loose connectors. Check that the outlet is not clogged inside of the connector.
H	Check for a loose shift cable on the shift lever and the transmission control shaft.
I	Improper alignment of ATF pump and torque converter housing may cause ATF pump seizure. The symptoms are mostly and rpm-related ticking noise or a high pitched squeak.
J	Measure line pressure.
K	Check for a missing shift fork bolt is on the shift fork shaft.
L	If the ATF strainer is clogged with particles of steel or aluminum, inspect the ATF pump. If the ATF pump is OK, and no cause for the contamination is found, replace the torque converter.
M	If the 4th clutch feed pipe guide in the right side cover is scored by the mainshaft, inspect the ball bearing for excessive movement in the transmission housing. If the ball bearing is OK, replace the right side cover as it is dented. The O-ring under the guide is probably worn.
N	Replace the mainshaft if the bushings for the 3rd and 4th clutch feed pipes are loose or damaged. If the 4th clutch feed pipe is damaged or out of round, replace it. If the 3rd clutch feed pipe is damaged or out of round, replace the right side cover.
O	Inspect the differential pinion shaft for wear under the pinion gears. If the differential pinion shaft is worn, overhaul the differential assembly, replace the ATF strainer, thoroughly clean the transmission, and flush torque converter, cooler, and lines.
P	Inspect the secondary shaft and 1st/2nd clutch assembly for wear and damage.
Q	Inspect the reverse selector gear teeth chamfers, and inspect engagement teeth chamfers of the countershaft 4th gear and reverse gear. Replace the reverse gears and the reverse selector if they are worn or damaged. If the transmission makes clicking, grinding, or whirring noises, also replace the mainshaft 4th gear, reverse idler gear, and countershaft 4th gear.
R	Be careful not to damage the torque converter housing when replacing the main ball bearing. You may also damage the ATF pump when you torque down the main valve body. This will result in ATF pump seizure if not detected. Use the proper tools.
S	Install the main seal flush with the torque converter housing. If you push it into the torque converter housing until it bottoms out, it will block the fluid return passage and result in damage.
T	Inspect the clutch piston, clutch piston check valve, and O-rings. Check the spring retainer for wear and damage. Inspect the clutch end plate-to-top disc clearance. If the clearance is out of tolerance, inspect the clutch discs and plates for wear and damage. If the discs and plates are worn and damaged, replace them as a set. If they are OK, adjust the clearance with the clutch end plate.
U	Inspect the contact area of the countershaft and secondary shaft with the bearings. Check the ATF guide plates for damage and wear. Inspect the 1st clutch feed pipe for damage and out of round. If the 1st clutch feed pipe is damaged or out of round, replace it. Replace the secondary shaft if the bushing for the 1st clutch feed pipe is damaged or out of round.
V	Check the parking brake pawl spring installation and the parking brake lever spring installation. If installation is incorrect, install the springs correctly. Make sure the parking brake stop is not installed upside down. Check the distance between the parking brake pawl and the parking brake roller pin. If the distance is out of tolerance, adjust it.

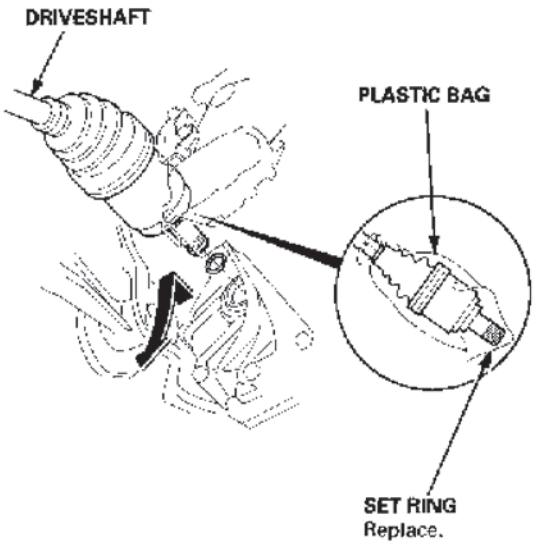
TRANSMISSION REMOVAL

22. Pry the right driveshaft out of the differential and the left driveshaft out of the intermediate shaft.

23. Pull on the inboard joint to remove the right driveshaft from the differential and to remove the left driveshaft from the intermediate shaft.

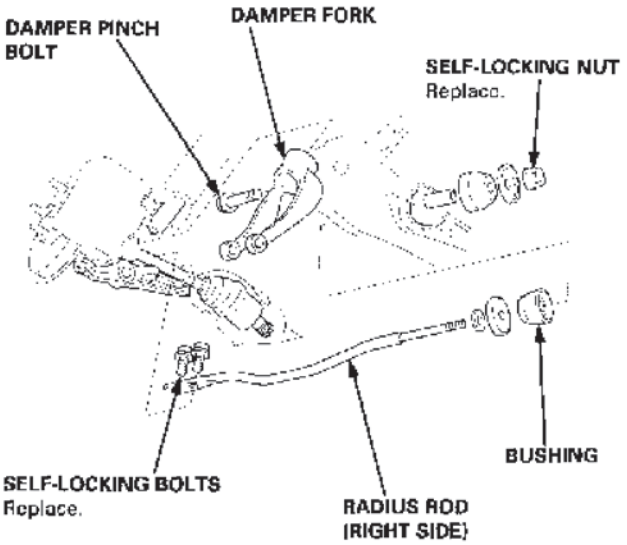
24. Tie plastic bags over the driveshaft ends.

    NOTE: Coat all precision finished surfaces with clean engine oil.

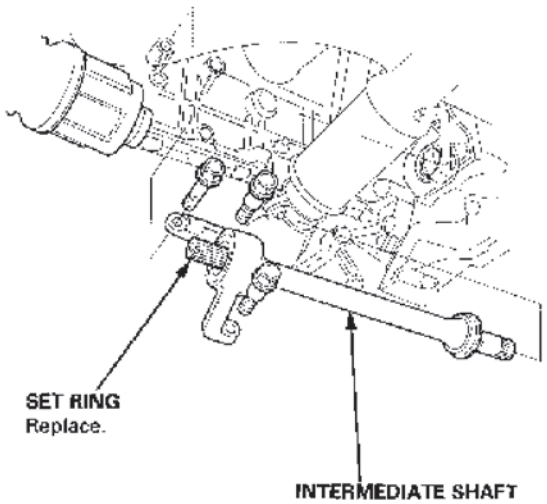


25. Remove the right damper pinch bolt, then separate the damper fork and damper.

26. Remove the self-locking bolt and self-locking nut, then remove the right radius rod.



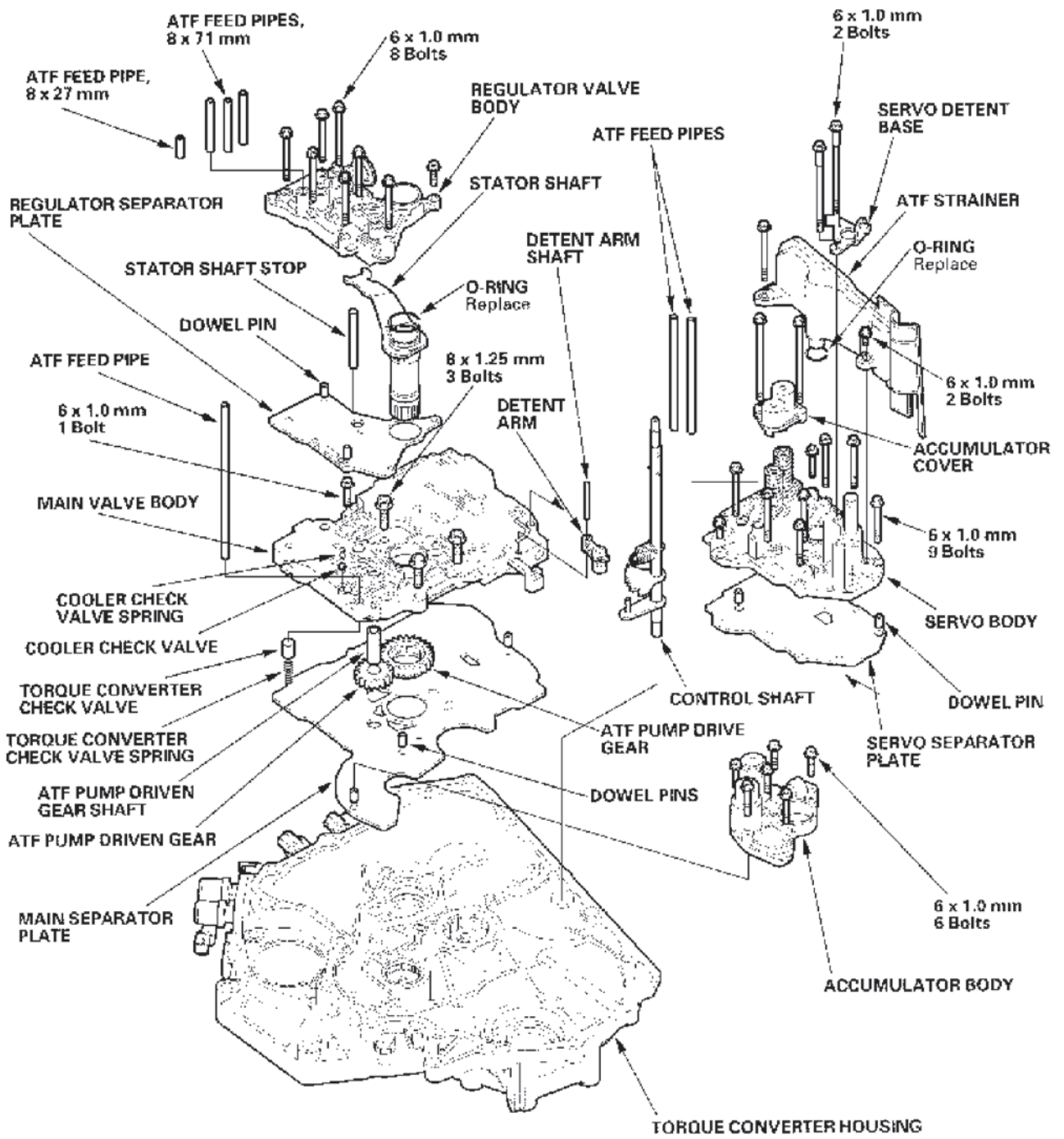
27. Remove the intermediate shaft.



TRANSMISSION DISASSEMBLY

VALVE BODY

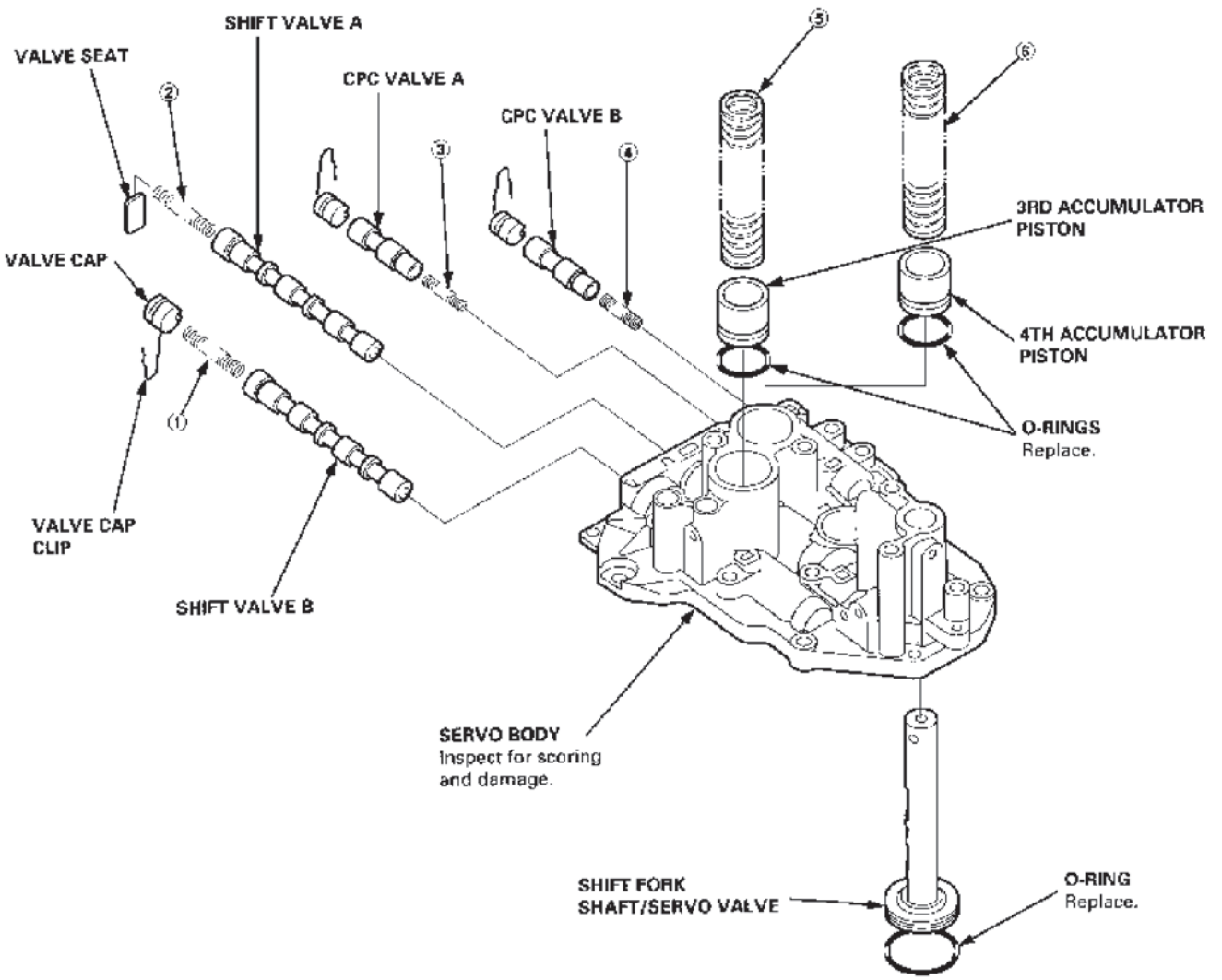
ACCORD BAXA



VALVE BODY DISASSEMBLY, INSPECTION & REASSEMBLY

ACCORD BAXA & PRELUDE M6HA

SERVO VALVE BODY

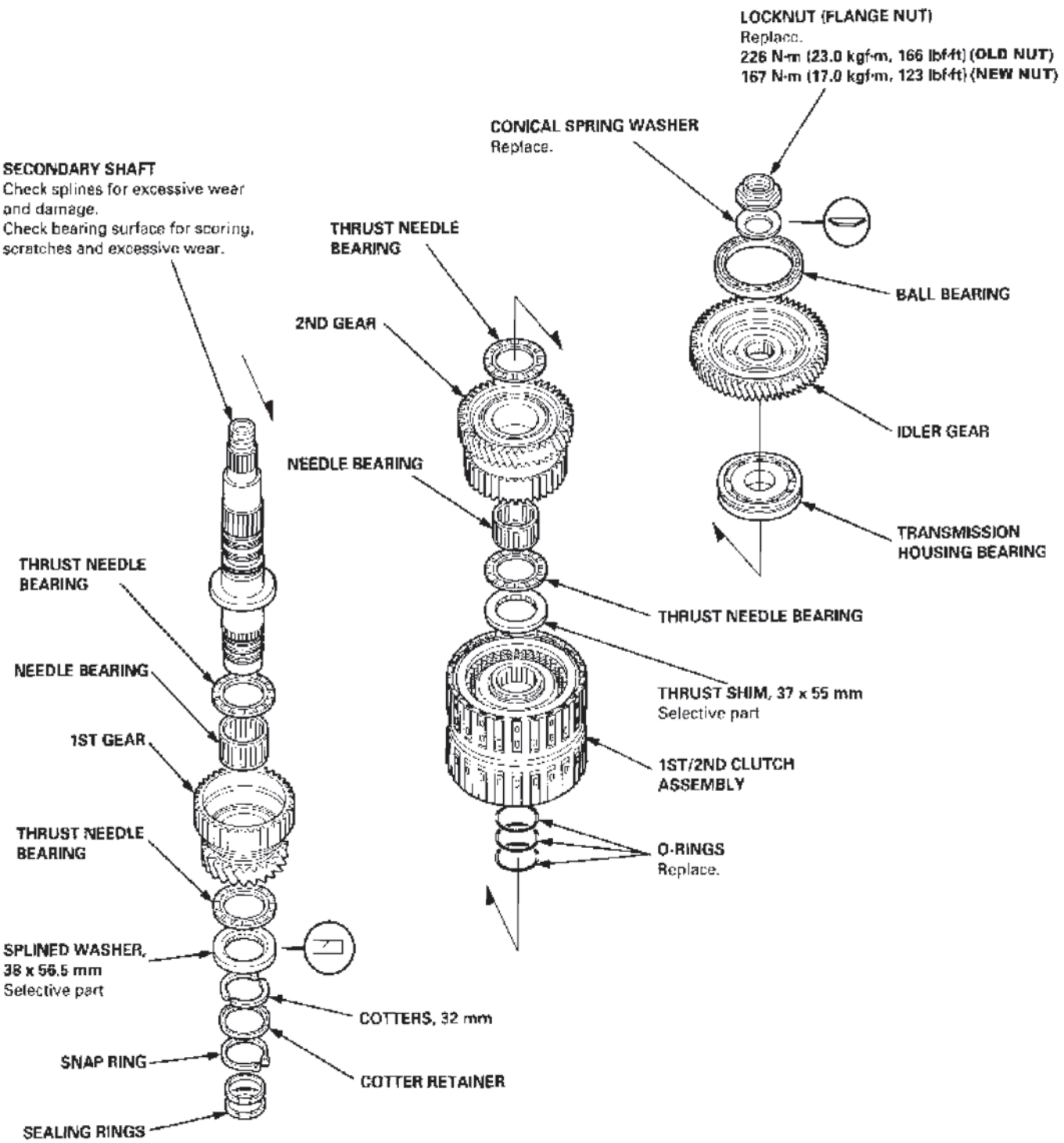


No.	Spring	Standard (New) mm (in.)			
		Wire Diameter	O.D.	Free Length	No. of Coils
①	Shift Valve B Spring	0.8 (0.031)	7.1 (0.280)	40.4 (1.591)	16.9
②	Shift Valve A Spring	0.8 (0.031)	7.1 (0.280)	40.4 (1.591)	16.9
③	CPC Valve A Spring	0.7 (0.028)	6.1 (0.240)	17.8 (0.701)	7.9
④	CPC Valve B Spring	0.7 (0.028)	6.1 (0.240)	17.8 (0.701)	7.9
⑤	3rd Accumulator Spring **(ACCORD)**	3.8 (0.150)	19.6 (0.772)	59.8 (2.354)	7.8
⑥	3rd Accumulator Spring **(PRELUDE)**	3.5 (0.138)	19.6 (0.772)	61.7 (2.429)	9.6
⑦	4th Accumulator Spring **(ACCORD)**	3.8 (0.150)	19.6 (0.772)	59.8 (2.354)	7.8
⑧	4th Accumulator Spring **(PRELUDE)**	3.5 (0.138)	19.6 (0.772)	61.7 (2.429)	9.6

DISASSEMBLY, INSPECTION & REASSEMBLY

ACCORD BAXA & PRELUDE M6HA

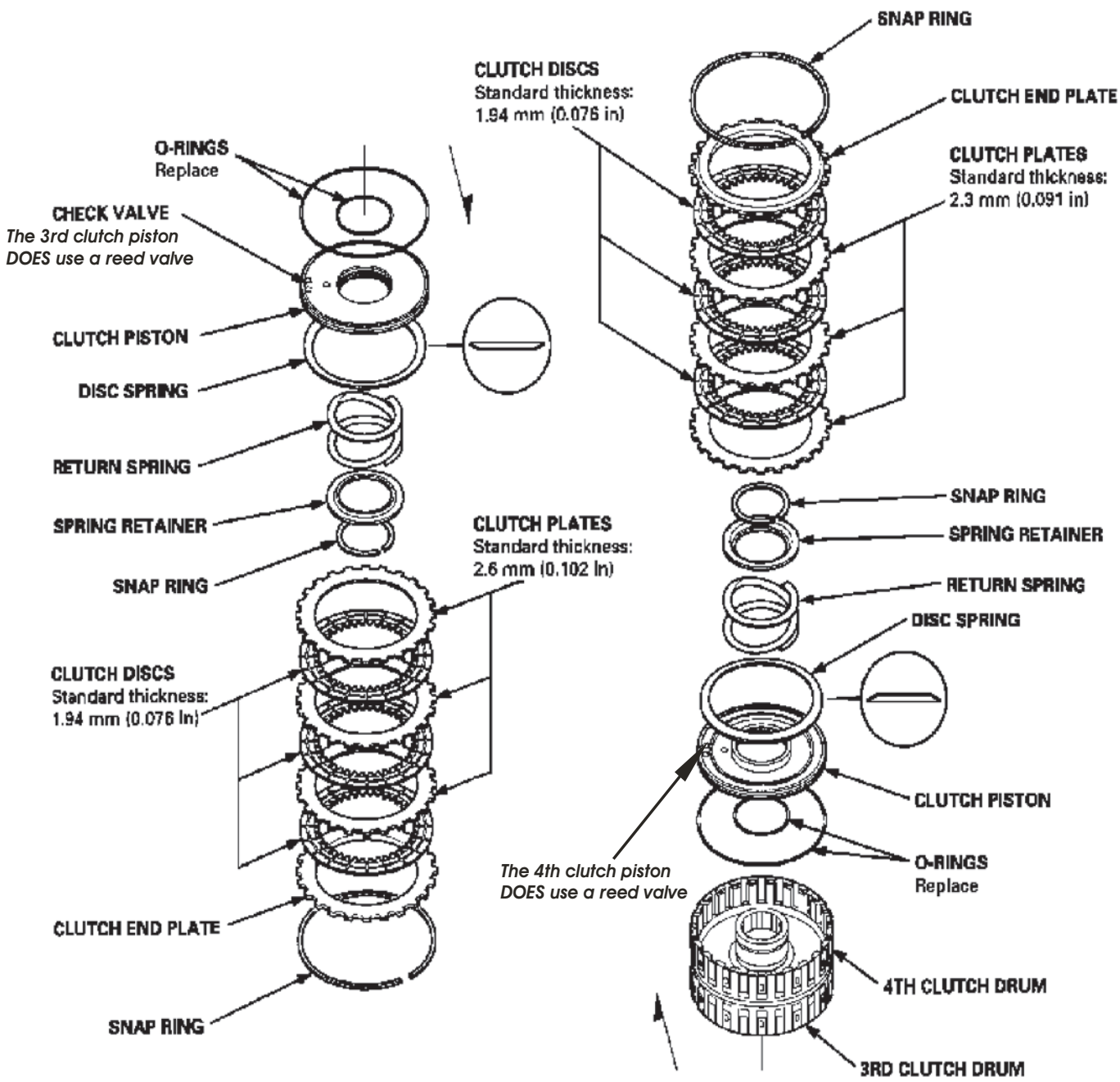
SECONDARY SHAFT



DISASSEMBLY, INSPECTION & REASSEMBLY

ACCORD BAXA & PRELUDE M6HA

3RD/4TH CLUTCH ASSEMBLIES



DISASSEMBLY, INSPECTION & REASSEMBLY

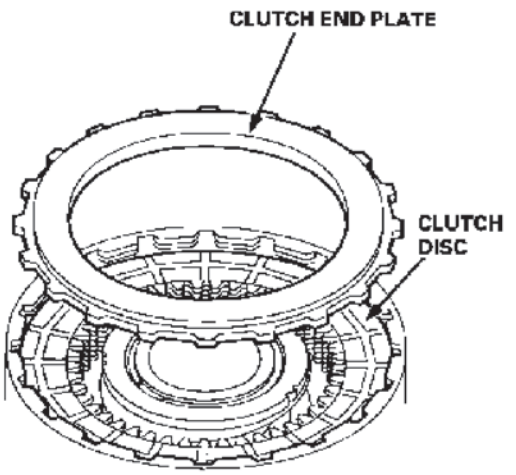
ACCORD BAXA & PRELUDE M6HA

CLUTCH DRUM ASSEMBLIES

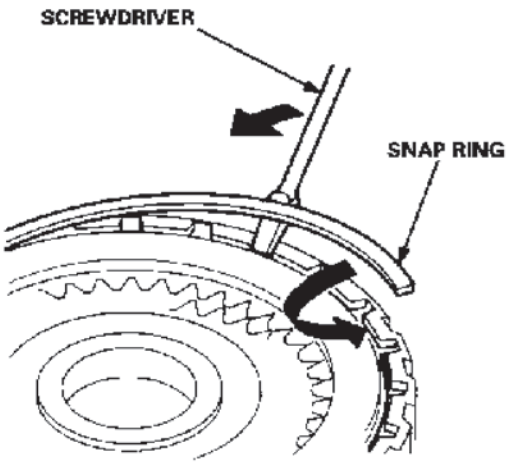
6. Soak the clutch discs thoroughly in ATF for a minimum of 30 minutes.

7. Starting with a clutch plate, alternately install the clutch plates and discs. Install the clutch end plate with the flat side toward the disc.

   NOTE: Before installing the plates and discs, make sure the inside of the clutch drum is free of dirt and other foreign matter.



16. Install the snap ring.

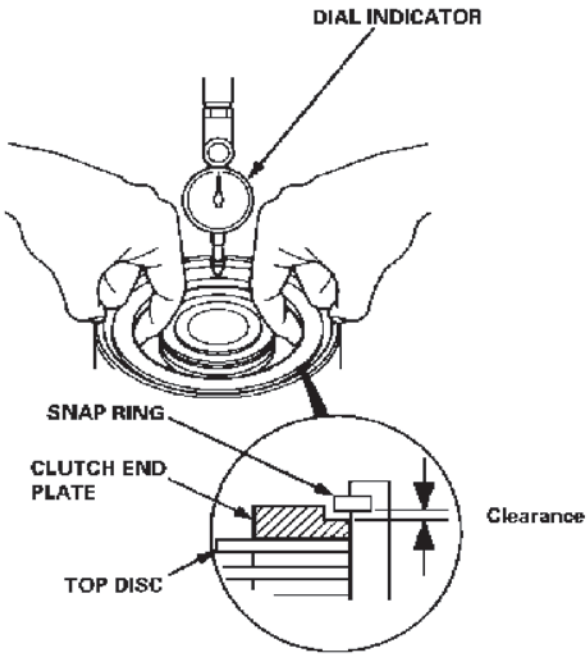


17. Measure the clearance between the clutch end plate and top disc with a dial indicator. Zero the dial indicator with the clutch end plate lowered, and lift it up to the snap ring. The distance that the clutch end plate moves is the clearance between the clutch end plate and top disc.

    NOTE: Measure at three locations.

Clutch End Plate-to-Top Disc Clearance:

CLUTCH	SERVICE LIMIT
1st	1.15 - 1.35 mm (0.045 - 0.053 in.)
2nd (Prelude)	1.0 - 1.2 mm (0.039 - 0.047 in.)
2nd (Accord)	0.7 - 0.9 mm (0.028 - 0.035 in.)
3rd	0.6 - 0.8 mm (0.024 - 0.031 in.)
4th	0.4 - 0.6 mm (0.016 - 0.024 in.)



18. If the clearance is not within the service limits, select a new clutch end plate from the following table.

    NOTE: If the thickest clutch end plate is installed, but the clearance is still over the standard, replace the clutch discs and clutch plates.

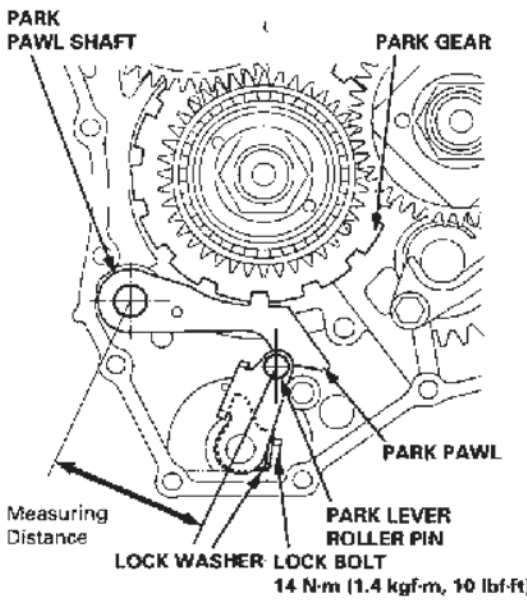
DISASSEMBLY, INSPECTION & REASSEMBLY

ACCORD BAXA & PRELUDE M6HA

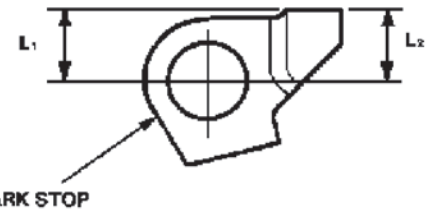
PARK MECHANISM

1. Set the park lever in the [P] position.
2. Measure the distance between the park pawl shaft and the park lever roller pin as shown.

   STANDARD: 69.5 – 70.5 mm (2.74 – 2.78 in)



3. If the measurement is out of tolerance, select and install the appropriate park stop from the table below.

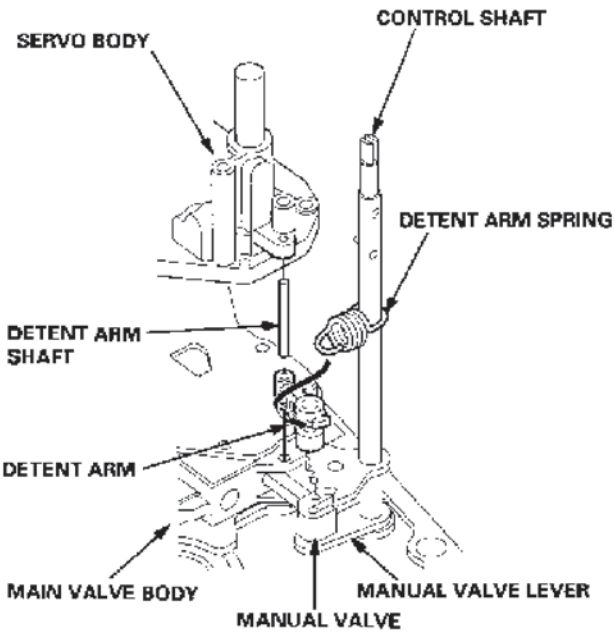


PARK STOP

Mark	Part Number	L_1	L_2
1	24537 – PA9 – 003	11.00 mm (0.433 in)	11.00 mm (0.433 in)
2	24538 – PA9 – 003	10.80 mm (0.425 in)	10.65 mm (0.419 in)
3	24539 – PA9 – 003	10.60 mm (0.417 in)	10.30 mm (0.406 in)

After replacing the park stop, make sure the distance is within tolerance.

4. Install the cooler check valve and spring on the main valve body, then install the two dowel pins and the regulator separator plate.
5. Install the stator shaft and stator shaft stop.
6. Install the regulator valve body (eight bolts).
7. Install the two dowel pins and the servo separator plate on the main valve body.
8. Install the control shaft in the torque converter housing, then align the manual valve lever of the control shaft to the manual valve guide.
9. Install the detent arm and arm shaft in the main valve body, then hook the detent arm spring to the detent arm.



10. Install the servo body and valve cap clip cover ('97 model) (nine bolts).
11. Install the accumulator cover (two bolts).
12. Install the ATF strainer (one bolt).
13. Install the servo detent base (two bolts).
14. Install the accumulator body (six bolts).
15. Install the two ATF feed pipes in the servo body, four pipes in the regulator valve body, and one pipe in the main valve body.

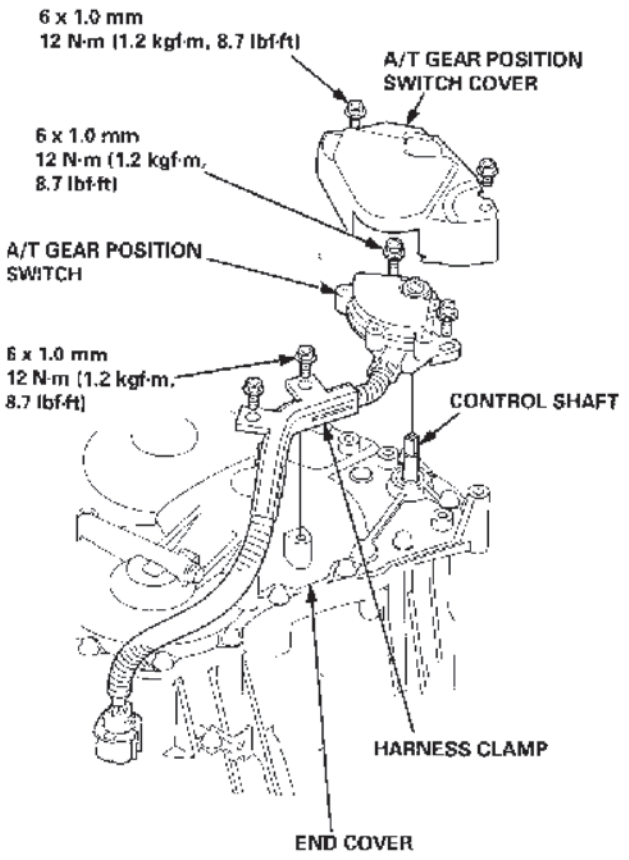
TRANSMISSION REASSEMBLY

ACCORD BAXA & PRELUDE M6HA

56. Install the A/T gear position switch on the control shaft, then secure it with the bolts.

    NOTE: Take care not to move the A/T gear position switch when tightening the bolts.

57. Install the A/T gear position switch cover, and secure the harness clamp on the end cover with the bolts.



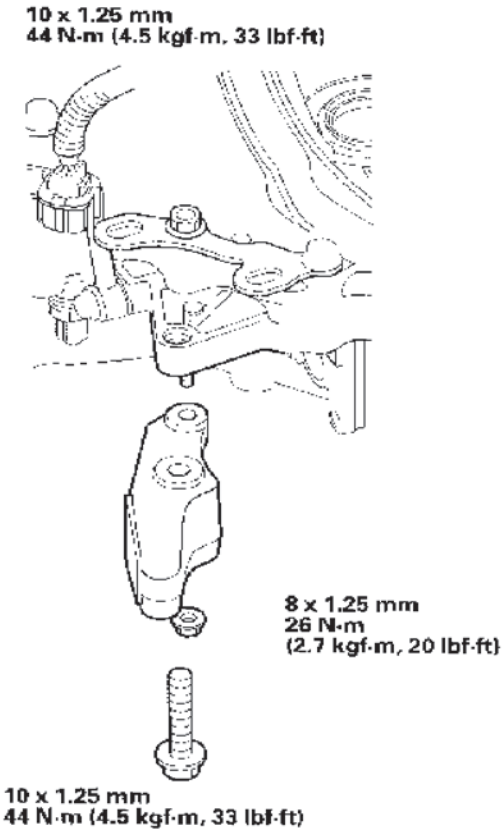
58. Install the ATF cooler lines with new sealing washers.

    TORQUE: 28 N·m (2.9 kgf·m, 21 lbf·ft)

59. Install the ATF dipstick.

For 2001 and later models:

60. Install the rear stiffener, then tighten the 10 x 1.25 mm bolt to the specified torque.



61. Secure the nut by your hand until it contacts the stiffener, then tighten it to the specified torque. If you can not tighten the nut to the stiffener surface by hand, replace the nut and the special bolt.