
2006
TECHNICAL SEMINAR
WE ENCOURAGE
PROFESSIONALISM
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CERTIFIED
THROUGH TECHNICIAN
CERTIFICATION
ATRA
AUTOMATIC TRANSMISSION
REBUILDERS ASSOCIATION

The

Automatic Transmission Rebuilders Association

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Dennis Madden
Chief Executive Officer

Welcome to the 2006 ATRA Technical Seminar!

Lance Wiggins and the ATRA Technical staff have really worked hard to get you the most up-to-date and relevant technical information that you can put to work right away… and again, in full color!

For those of you who have attended past ATRA seminars you'll be delighted to know this seminar material is just what you expected from ATRA, or even more. If you've never attended an ATRA seminar before you're in for a treat.

This seminar, along with everything else at ATRA is a group effort, with a lot of people working in the background to make this seminar a success. I am honored to be part of such a worthy organization and to work with such great people.

ATRA is changing all the time. Not only with the way we distribute technical material, but in almost every area where we serve our members, and the industry at large.

On behalf of the ATRA staff, and the ATRA Chapters that work so hard to bring you this seminar, welcome.

Sincerely,

Dennis Madden,

ATRA, CEO

Lance Wiggins
Technical Director

ATRA is proud to be celebrating another year serving the automatic transmission repair industry. Many changes have taken place over the last year and it's because of those changes that technical training has become an integral part of today's transmission repair industry.

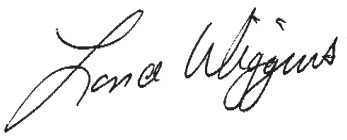
To that end, ATRA is pleased to present its 2006 Technical Seminar. Packed with countless hours of research and development, writing, editing, photography and layout, this year's seminar will stand out as one of the most demanding and useful technical training programs ever developed for this industry.

Once again, this year's technical manual has been produced in full color. With over 325 pages of up-to-the-minute technical information, the 2006 Technical Seminar Manual will remain a valuable resource long after the seminar is just a memory.

We're confident that you'll find this year's seminar presentation and technical manual both informative and profitable. In fact, we're so sure you'll be satisfied with what you learn in this program, we guarantee it!

This past year ATRA lost one of our own, Jim Lambos pasted away in December of 2005 from a vehicle accident. As a reminder of his countless hours speant helping our members, we have deticated this 2006 Technical Seminar Manual to him and his family.

On behalf of the entire ATRA staff, the international board of directors, and all of the ATRA members worldwide, we'd like to thank you for helping to make every day memorable.



Lance Wiggins
ATRA Technical Director

ATRA Technical Team (continued)

Jim Lambos
Technical Advisor

Steve Garrett
Technical Advisor, Seminar Speaker, Service Engineer

Randall Schroeder
Senior Technician and Seminar Speaker

Weldon Barnett
Technical Advisor

David Skora
Senior Technician, Seminar Speaker

Mike VanDyke
Technical Advisor and Seminar Speaker

Mike Brown
Technical Advisor

Larry Frash
Technical Editor
Seminar Speaker, Design Artist

Pete Huscher
Technical Advisor

Reese Blalock
Spanish Technical Advisor

Bill Brayton
Technical Advisor

In Memory Of Jim Lambos

Jim Lambos had been promoted to the rank of Master Sergeant, and he had received several awards and decorations for meritorious service.

IN MEMORY OF JIM LAMBOS

by Paul Morton

James J. "Jim" Lambos joined the technical staff of ATRA in April of this year, following a distinguished 25-year career with the U.S. Air Force. While in the Air Force, Jim held a number of increasingly responsible positions related to the repair and maintenance of vehicles. Not surprisingly, one of his specialties was the repair and rebuilding of transmissions. In fact, this skill was put to good use while he was stationed at the remote outpost of Shemya, Alaska, where Jim's ability to rebuild transmissions saved the Air Force thousands of dollars in unneeded shipping costs. At the time of his retirement, Jim had been promoted to the rank of Master Sergeant, and he had received several awards and decorations for meritorious service.

In 1985, Jim married the former Ronda McIntire, and together they had two sons; Jimmy, 14, and Zane, 10.

Following his retirement, Jim walked into the ATRA IBO and spoke with ATRA's Technical Director, Lance Wiggins. Though Lance will recall his relationship with Jim in his own words, he realized that Jim was someone he wanted on the ATRA Technical team. From the beginning, Jim began to make a contribution. In fact, his first technical article appears in this issue, with a forward written by Technical Editor Larry Frash.

On the evening of December 7, 2005, Jim was driving his GTO in nearby Ventura, when he was involved in an accident and killed. His contribution and his loss may best be described by Lance Wiggins, in his own words:

I try to learn from my mistakes, and the knowledge and opinions of others. It helps me grow into the person I want to become. Jim Lambos is one person who helped me in many different ways, in a short period of time. Jim came to the office about eight months ago, looking for a job after many years in the Air Force. His traits and qualities were clear and obvious; you don't find many people like that, just walking in off the street for an interview.

Jim's military background definitely influenced my decision to hire him, and what a good decision that was. He was a complete team player; always asking for more work and never complaining about a thing. For those of you who talked to Jim on the Technical Help line, you know how he always went out of his way to fix your problems.

I can tell you two things about Jim's character that sums it up for me. One, he was a Chicago Bears fan, and two, he was a Cubs fan. And if you support those two teams, you have to be special as well as brave! If I could, I would thank Jim for the time he spent with us, for his loyalty and sense of team play, and for being the person he was. I know I speak for the entire ATRA family, of which he will always be a part, the Tech Department, and for me as well … we will miss you. Rest in peace, my friend.

In Memory of Jim Lambos:

Husband

Father

Friend

Airman

ATRA Tech

Thank you for allowing the ATRA Family to know you. Rest in Peace my Friend

ATRA Staff

It's difficult enough getting the seminar book researched, written, pictured, edited, and printed let alone getting it out to the seminar attendees. This is where the ATRA Staff comes in.

Chief Executive Officer:	Dennis Madden
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GEARS Magazine:	Frank Pasley
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	Paul Morton
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Without the ATRA team, it would be very hard to accomplish the task at hand. Please enjoy the seminar.

Lance Wiggins
ATRA Technical Director

Honda
Table Of Contents

Honda/Acura

Factory Warranty Extensions

Warranty extended on transmissions and torque converters to 7 years or 100,000 miles. whichever comes first.

Honda
1999-2001 Odyssey - ALL
2000-2001 Accord - ALL
2000-2001 Prelude - ALL

Acura
1999-2002 3.2TL - ALL

2003 3.2TL (except Type S):
From VIN 19UUA5...3A000001 thru 19UUA5...3A019556

2003 3.2TL Type S:
From VIN 19UUA5...3A000001 thru 19UUA5...3A019061

2001-2002 3.2CL - ALL

2003 3.2CL (all models):
From VIN 19UYA42...3A000001 thru 19UYA42...3A005203

Diagnostics

First Approach

Road Test and Lift Inspection

Get a description of the symptoms from the customer. Ask when the symptoms occur (cold, first startup in the morning, after the vehicle is driven for a while and warmed up, etc).

1. Road test vehicle and note any symptoms and when they occur (cold, hot, long drive, etc.)

2. Note any howling or gear whine noises.

3. Put vehicle up on a lift. Check axles and seals and note if there are signs of leakage and/or excessive radial axle movement.

4. Drain fluid through a paint strainer into a clean container.
   Dark or black fluid indicate possible clutch failure.

5. Note the amount and type of metal debris on the drain plug magnet Fine black metal is normal. Shiny, flaky metal particles are a red flag for hard parts failure.

Note: New solenoids are expensive and can be ruined if they are installed and run on a contaminated unit. It is recommended that you carefully check for signs of contamination or internal failure before replacing solenoids.

Beware of vehicles that have had a “miracle service”, or have been flushed and had the fluid changed before they came to your shop. Evidence of contamination and internal failure may have been temporarily removed.

Diagnostics

Scan Tool

Scan Tool Functions

DATA LIST: Order and number of PID's displayed can be customized
LED's can be selected to inicate 4 ON/OFF PID's

BAR GRAPH can be selected to indicate 4 PID's

LINE GRAPH can be selected to graph two PID's

SNAPSHOT: Records data from -12.6 seconds to+12.6 seconds with 0.2 second resolution. Trigger point can be changed to give more time before or after trigger. Can be set to trigger when any DTC sets, or trigger manually.

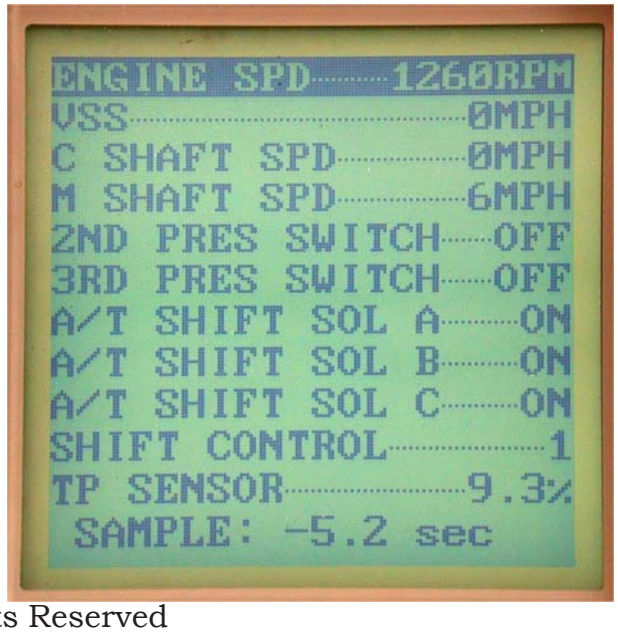
FREEZE DATA: A single frame of engine PID's that are stored when a DTC is set.

DTC/DATA CLEAR: Clears codes and freeze data.

TCM/PCM RESET: Resets PCM adaptive memory, fuel trim, and transaxle adaptive memory.

LOCKUP SOL TEST: Cycles lockup solenoid on and off for 15 seconds (engine must be off).

SHIFT SOL TEST: Cycles Shift Solenoid A, B, or C on and off for 15 seconds (engine off).



Diagnostics

Scan Tool (continued)

Scan Tool functions

Note: You can change the type of data on some PIDs in the SETUP/UNIT CONVERSION menu

ENGINE SPEED	**RPM**
VSS	km/h, MPH (selectable)
C SHAFT SPD	MPH
M SHAFT SPD	MPH
2ND PRES SWITCH	ON/OFF
3RD PRES SWITCH	ON/OFF
A/T 1 SWITCH	ON/OFF
A/T 2 SWITCH	ON/OFF
A/T D3 SWITCH	ON/OFF
A/T D4 SWITCH	ON/OFF
PNP SWITCH	ON/OFF
A/T R SWITCH	ON/OFF
SCS	OPEN/CLOSED
A/C CLUTCH	ON/OFF
BRAKE SWITCH	ON/OFF
CRUISE CONTROL	ON/OFF
A/T SHIFT SOL A	ON/OFF
A/T SHIFT SOL B	ON/OFF
A/T SHIFT SOL C	ON/OFF
D4 INDICATOR	ON/OFF
A/T LOCKUP SOL A	ON/OFF
SHIFT LOCK SOL	ON/OFF
ECT SENSOR	DEGREESC or F, or VOLTS (selectable)
TP SENSOR ANGLE	DEGREES, %, or VOLTS (selectable)
SHIFT CONTROL	0-4
LINEAR SOL A COM	AMPS
LINEAR SOL A ACT	AMPS
LINEAR SOL B COM	AMPS
LINEAR SOL B ACT	AMPS
SOL SUPPLY	VOLTS (PCM terminal D5)
MAP SENSOR	kPa, VOLTS, mmHg, inHg (selectable)

Advanced Diagnostics

Information

Factory service manual information on Honda/Acura transaxle performance DTCs can be vague, making them difficult to diagnose or verify repair. Here are the DTC definitions and conditions the PCM is looking for to set these codes:

P0730:
Problem in Shift Control System
Conditions for setting DTC:

- Engine coolant temperature: between 158°F (70°C) and 212°F (100°C)
- Engine speed: 500 rpm or higher
- Vehicle speed: 10 mph (17 km/h) or higher
- Selector in D3 or D4 position
- No other sensor or transmission solenoid DTC's active
- Actual gear ratio (calculated with mainshaft and countershaft speed) is less than 80% or more than 125% of the commanded gear for 12 seconds
- Single drive cycle, MIL ON

P0740:
Problem in Lockup Control System
Conditions for setting DTC:

- Engine coolant temperature: between 158°F (70°C) and 212°F (100°C) for 4 cylinder applications between 167°F (75°C) and 212°F (100°C) for V6 applications
- Vehicle speed: between 49 mph (79 km/h) and 73 mph (117 km/h)
- Selector in D4 position 4th gear
- No other sensor or transmission solenoid DTC's active
- Torque converter clutch is commanded to Full Apply
- The mainshaft speed is 95% - 98% of engine speed or less for 20 seconds or longer
- Single drive cycle, MIL on

Advanced Diagnostics

Information (continued)

P0780:
Mechanical Problem in Hydraulic Control System for Shift Solenoid A and Clutch Pressure
Control Solenoids A and B, or Problem in Hydraulic Control System
Conditions for Setting DTC:

- ATF temperature: -13°F (-25°C) or above
- No other sensor or transmission solenoid DTCs active
- One of the following conditions is present:
- A 1-2 shift is commanded and the actual gear is 1st
- A3-4 shift is commanded and the actual gear is 3rd
- A 3-4 shift is commanded and the actual event is a 3-2 shift
- 4th gear is commanded and the actual gear is 2nd
- The condition is present for 20 seconds when ATF temperature is below 32°F (0°C)
- The condition is present for at least 13 seconds when the ATF temperature is above 32°F (0°C)
- Single drive cycle, MIL on, D4 light flashes

P1750
Mechanical Problem in Hydraulic Control System for Clutch Pressure Control Solenoids A and
B, or Problem in Hydraulic Control System
Conditions for Setting DTC:

- Engine Coolant Temperature: 50°F (10°C) or higher
- Vehicle Speed: 2 mph (3 km/h) or higher
- Throttle Position: 6.3% or higher
- Throttle variation: 5.2 degrees / 0.2 seconds or less
- ATF temperature: 32°F (0°C) or higher
- No other sensor or transmission DTC's active
- One of the following conditions is present:
- A 1-2, 2-3, or 3-4 upshift is commanded, and a sudden increase in engine speed is detected
- Single drive cycle, MIL on, D4 light flashes

Advanced Diagnostics

Information (continued)

P1751:
Mechanical Problem in Hydraulic Control System for Shift Solenoid B and A/T Clutch Pressure Control Solenoids A and B, or Problem in Hydraulic Control System
Conditions for Setting DTC:
ATF temperature: -13°F (-25°C) or above
No other sensor or transmission solenoid DTCs active
A 2-3 upshift is commanded and the actual gear is 2nd
The condition is present for 20 seconds when ATF temperature is below 32°F (0°C)
The condition is present for at least 13 seconds when the ATF temperature is above 32°F (0°C)
Single drive cycle, MIL on, D4 light flashes

P0740

Problem in the Lockup Control System

P0740:
Problem in Lockup Control System
P0740 is set when the PCM/TCM sees excessive TCC slip or no TCC apply by comparing engine speed and mainshaft speed when full TCC apply is commanded. It can be difficult to diagnose and verify repair of P0740 because TCC slip parameters are not displayed in scan data, and there is no easy way to accurately monitor TCC slip.
There are several possible causes for P0740. In this section we will outline how the TCC is controlled, the common failures, and what needs to be addressed to successfully repair and prevent P0740.

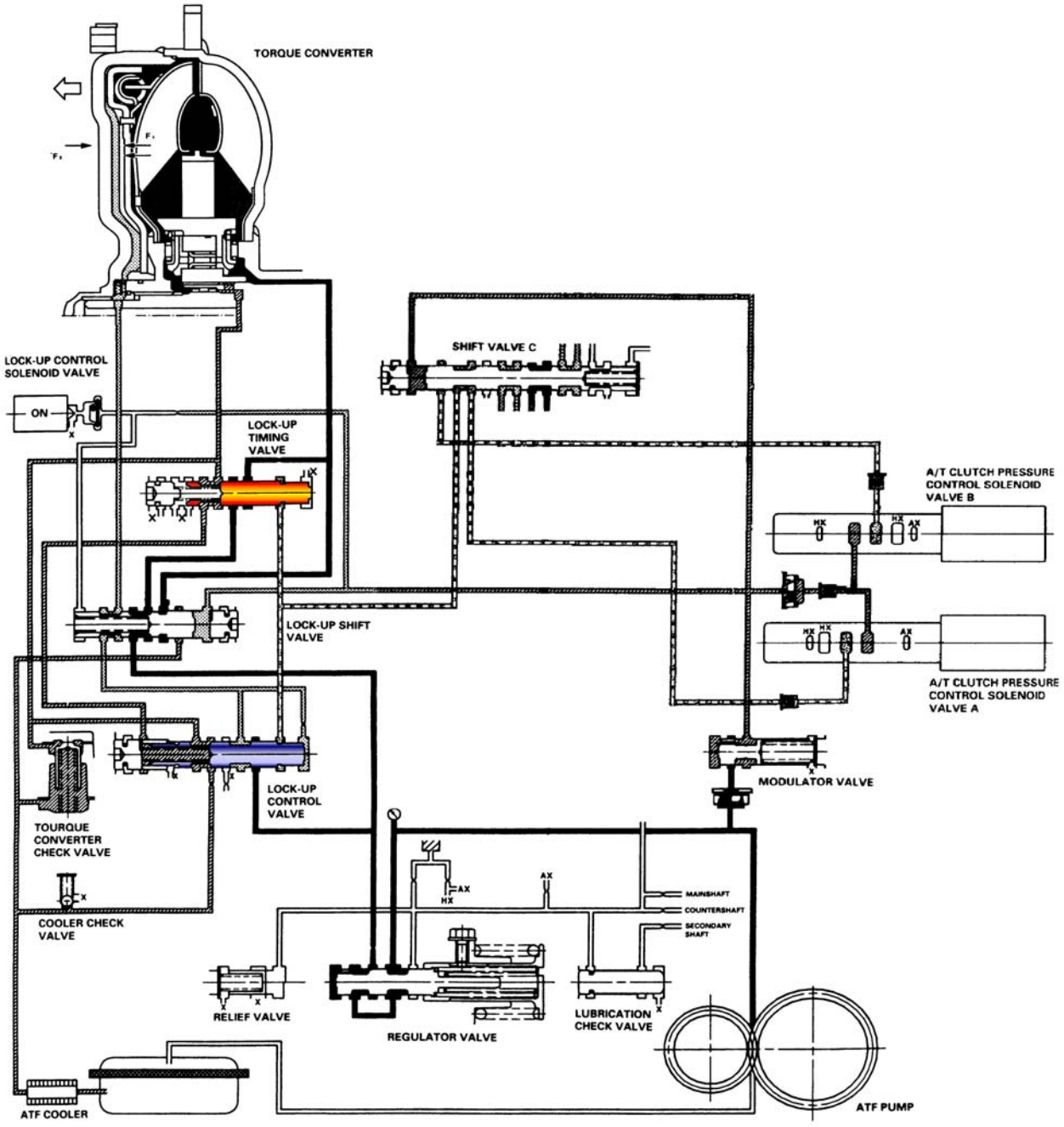
Common Causes for P0740:
1. TCC lining failure
2. Filter clogging from clutch or other internal failure
3. Sticky valves / solenoids
4. Valve body wear / leaking end plugs
5. Valve body misassembly
6. Worn Pump; excessive gear side clearance
7. Damaged, deteriorated, or wrong torque converter hub o-ring
8. Low fluid level

Converter Hub O-Ring (32mm x 1.9mm)
Honda Part Number:
91302-P7A-003

P0740

Problems in the Lockup Control System (continued)

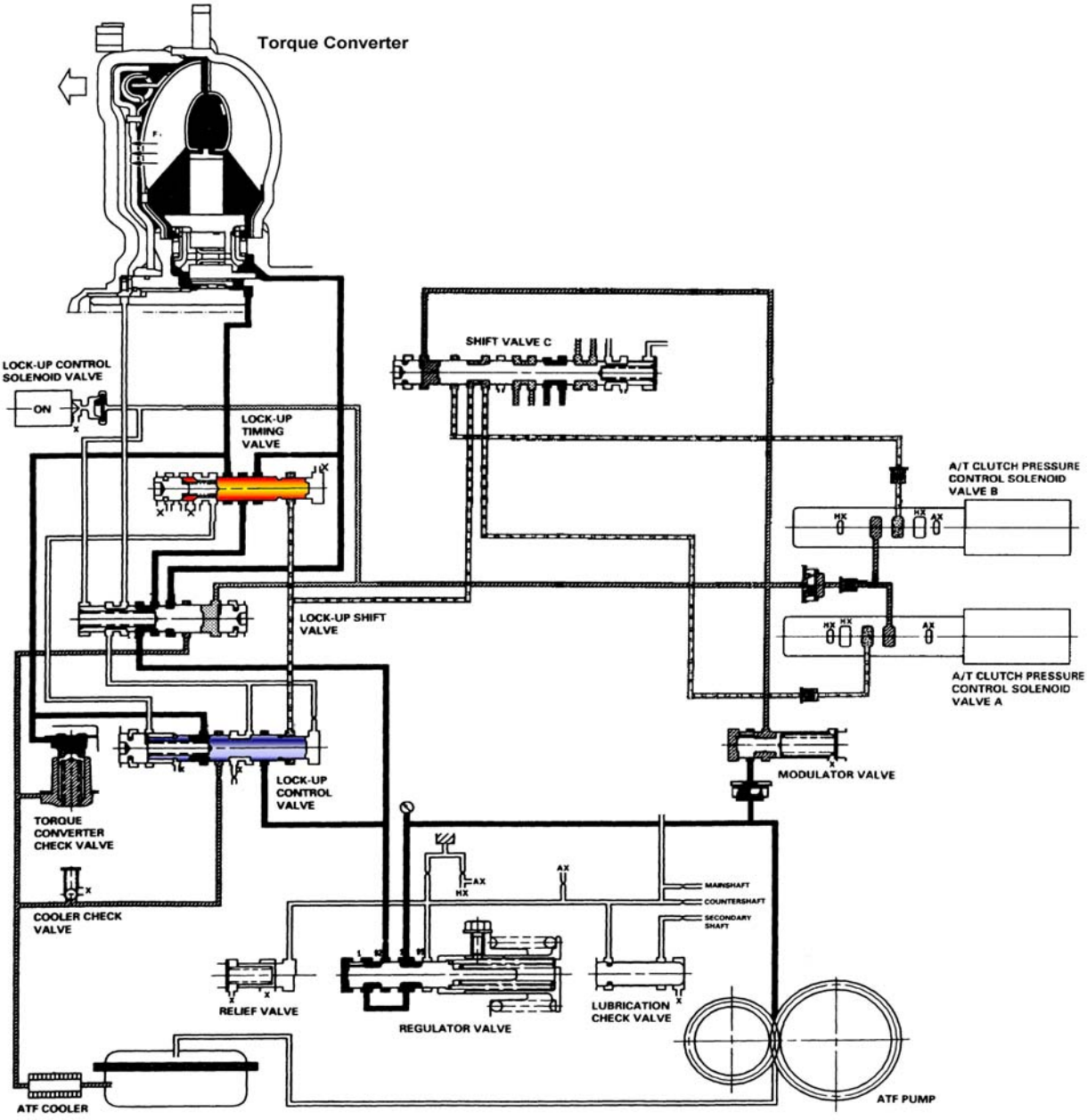
TCC Control: Partial Lockup Oil Circuit Diagram



P0740

Problems in the Lockup Control System (continued)

TCC Control: Full Lockup Oil Circuit Diagram

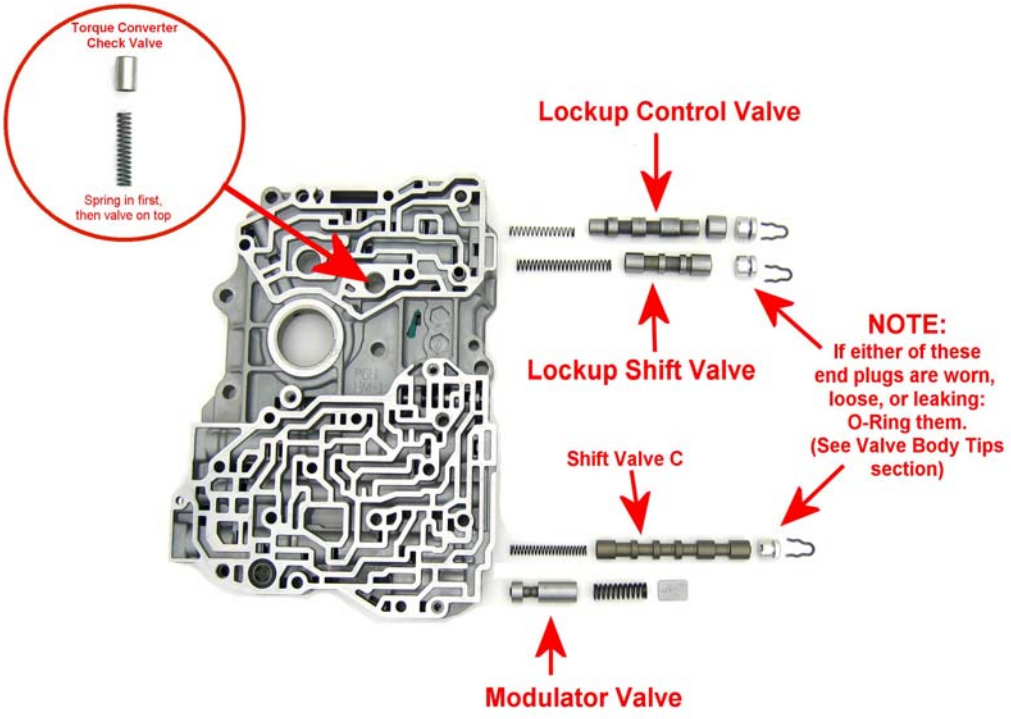


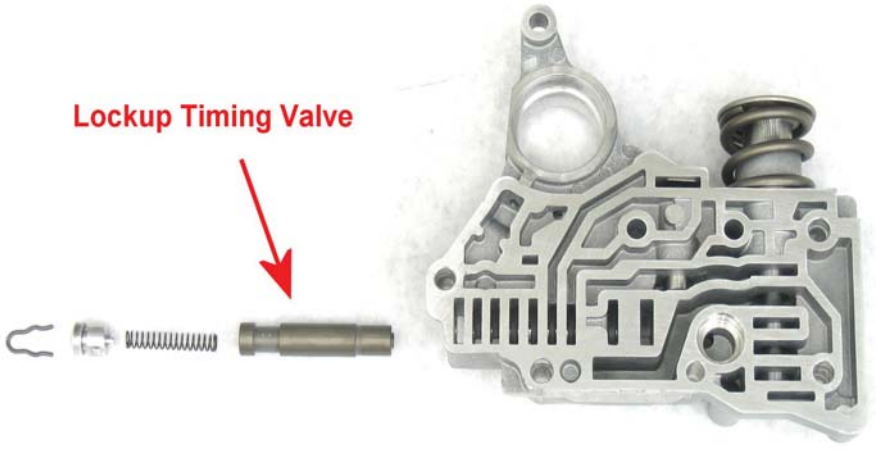
P0740

Problems in the Lockup Control System (continued)

Listed are the critical valves that affect lock-up control and close attention should be paid to these valves during overhaul.

Valve Body and TCC Related Valves





Collision Damage

Common Concerns/Problems

Common Transmission Problems Caused by Collision Damage

Honda/Acura automatic transmissions have all of their solenoids located externally. This makes them vulnerable to being damaged when the vehicle is involved in a collision and surrounding body parts are crushed in on the transaxle.

1. Poor shift quality, flares, bindups, neutralizing, delayed and or harsh engagements, P0715, P0730, P0740, P0780, P1750, P1751: check for bent/damaged solenoids

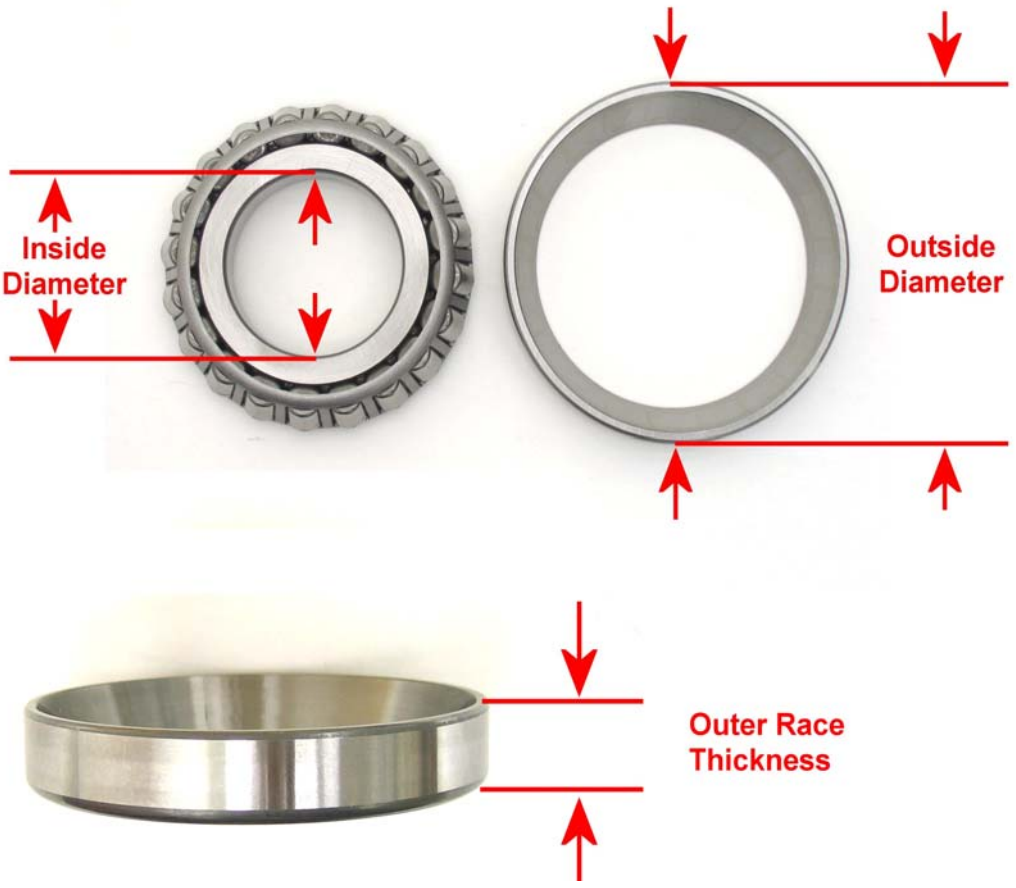
2. Damaged wire harnesses, improperly repaired wiring.

3. Grounds left loose, dirty, damaged, painted over, or left off.

3. Kinked cooler lines

Carrier Bearings

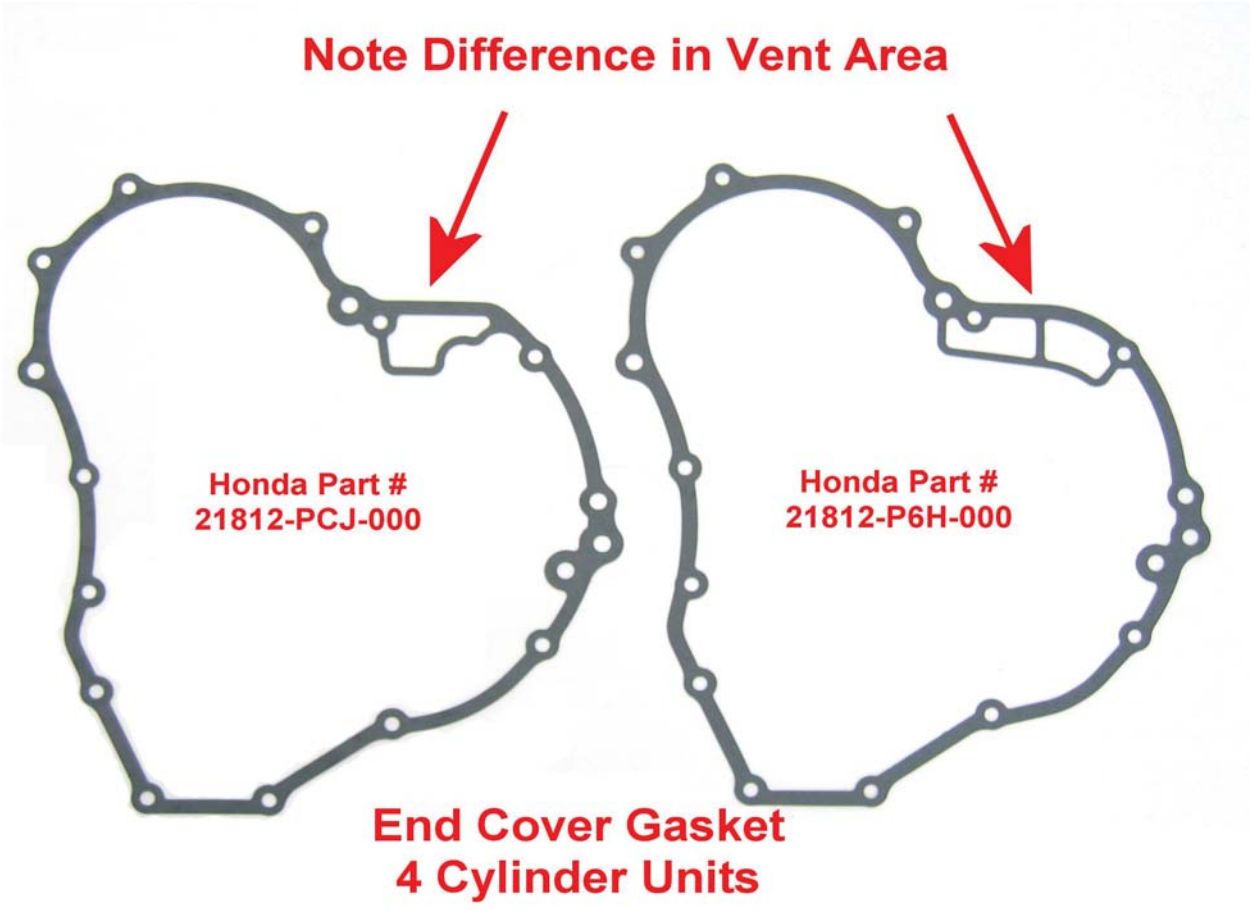
Identifications and Part Numbers



Part Number	Inside Diameter	Outside Diameter	Outer Race Thickness
91121-P7T-305	1.772" (45mm)	3.150" (80mm)	0.549" (13.95mm)
91124-PGH-305	1.772" (45mm)	3.189" (81mm)	0.490" (12.45mm)
91122-P7V-J02	1.574" (40mm)	3.189" (81mm)	0.490" (12.45mm)
91121-P6H-013	1.574" (40mm)	3.150" (80mm)	0.539" (13.70mm)
91122-P6H-013	1.574" (40mm)	2.922" (76.25mm)	0.510" (12.95mm)
91121-P7V-J02	1.574" (40mm)	3.150" (80mm)	0.549" (13.95mm)

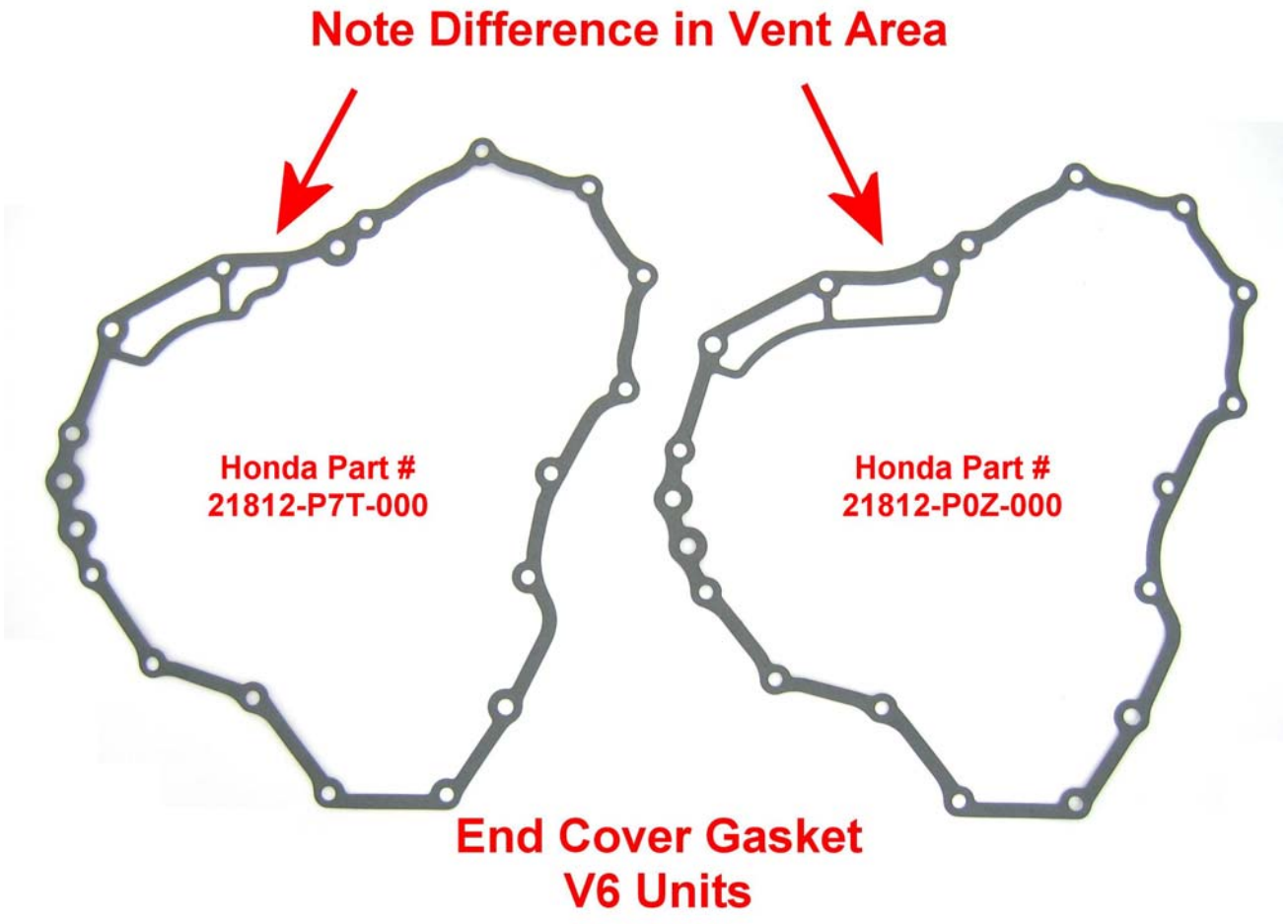
Venting Fluid

End Cover Gasket Mismatch



Venting Fluid

End Cover Gasket Mismatch (continued)



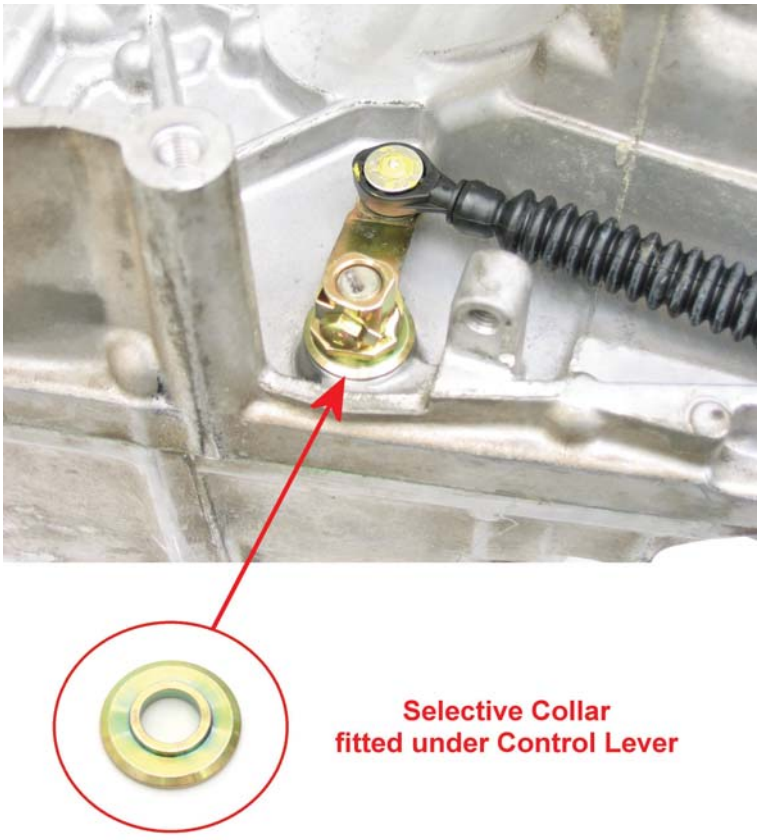
1998 BAXA, B6VA

Control Shaft Collar

Some 1998 year model 4 cylinder Accords and 2.3CLs had a problem with the transaxle side cover casting. A selective collar was fitted behind the control lever on the control shaft to repair the affected vehicles.

It is important to note the installation of this collar whenever the transaxle is removed or transaxle service work is performed and make sure the collar is reinstalled correctly.

If you are replacing the transaxle side cover, or the selective collar has been lost, use the following page to identify the side cover and/or order the correct selective collar.



1998 BAXA, B6VA

Control Shaft Collar (continued)

Identifying the Side Cover

Affected 1998 side covers can be identified by the casting date code on the side cover. The date code can be cast in any position (upside down, sideways, etc.) so look carefully at the numbers to determine which way is up. The affected casting date codes are 10/19 thru 11/18. These will require the installation of the selective control shaft collar.

If the side cover is replaced with a used part, you want to inspect the replacement side cover to determine if it requires the installation of a control shaft collar. Also check for casting roughness at the ridge shown below.

1998 BAXA, B6VA

Control Shaft Collar (continued)

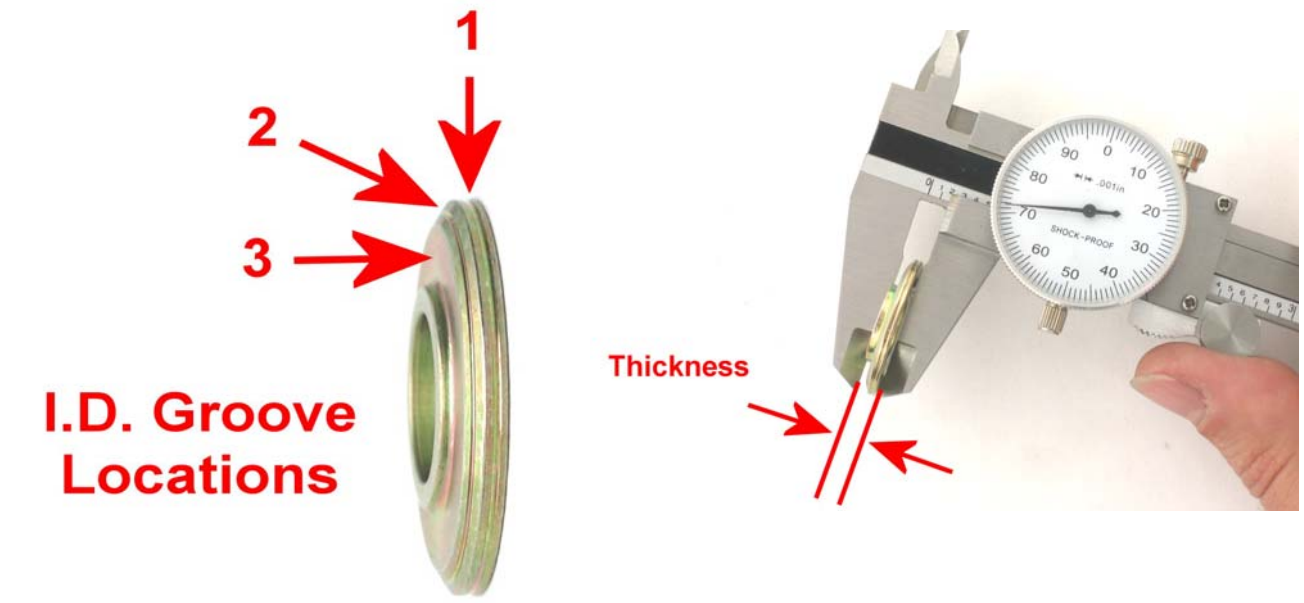
Selecting the Correct Collar

Install collar “B” behind the control lever, then check the clearance between the collar lip and control lever using a feeler gauge. The desired clearance is 0.004” to 0.018”. If the clearance is not correct, select a thicker or thinner collar from the chart on the following page.

1998 BAXA, B6VA

Control Shaft Collar (continued)

Identifying the Collars



Part Number	Designation	ID Groove Locations	Thickness
90401-PAX-305	"A"	1	0.172” (4.37 mm)
90402-PAX-305	"B"	None	0.161” (4.09 mm)
90403-PAX-305	"C"	2	0.149” (3.79 mm)
90404-PAX-305	"D"	1 and 2	0.137” (3.48 mm)
90401-PAX-305A *	"AA"	3	Not available at this time

* Note: this is a controlled part and will have to be ordered through the Controlled Parts Ordering (CPO) system and a VIN will be required to order.

5 Speed V6 Units

Oil Jet Kit

An oil jet kit was added to certain 5 speed V6 applications to address a problem with insufficient cooling and lubrication of 2nd gear.

Oil Jet Kit Part Numbers:

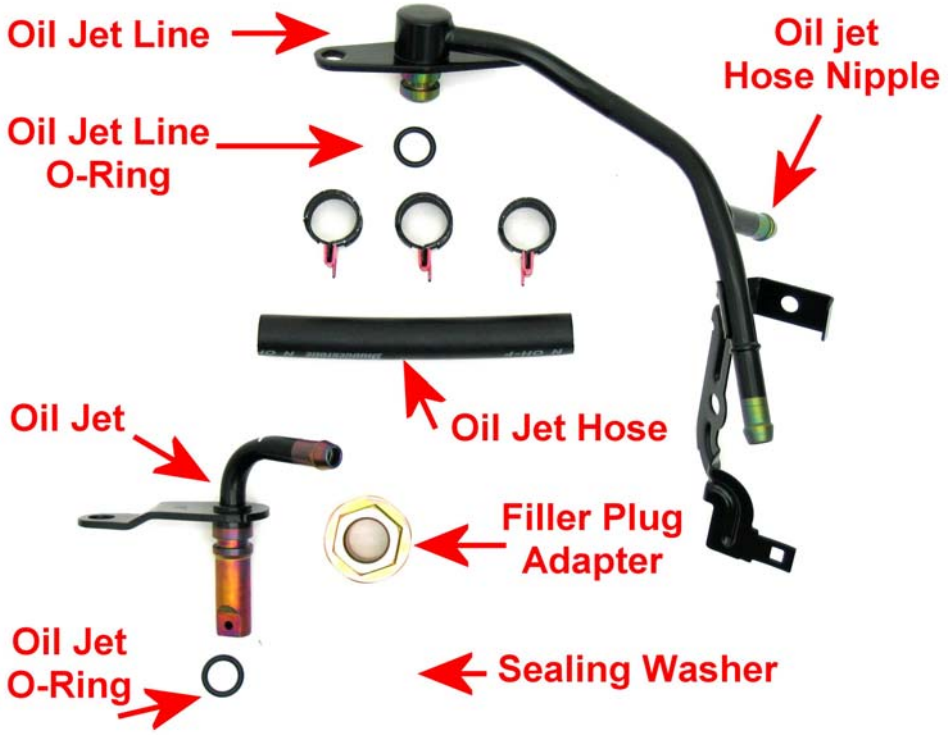
Honda

Accord:	**P/N 06250-RDG-315**
Odyssey and Pilot:	**P/N 06250-PGH-305**

Acura

3.2CL and 3.2TL:	**P/N 06250-P7W-305**
2004 TL:	**P/N 06250-RDG-315**
MDX:	**P/N 06250-PGH-305**

Note: Honda/Acura remanufactured units have been modified internally to eliminate the need for the external oil jet kit.



5 Speed V6 Units

Oil Jet Kit (continued)

Affected Vehicles:
2003 Accord V6 2 door and 4 door: ALL
2004 Accord V6 2-Door:
From VIN 1HGCM82..4A000001 thru 1HGCM82..4A007538

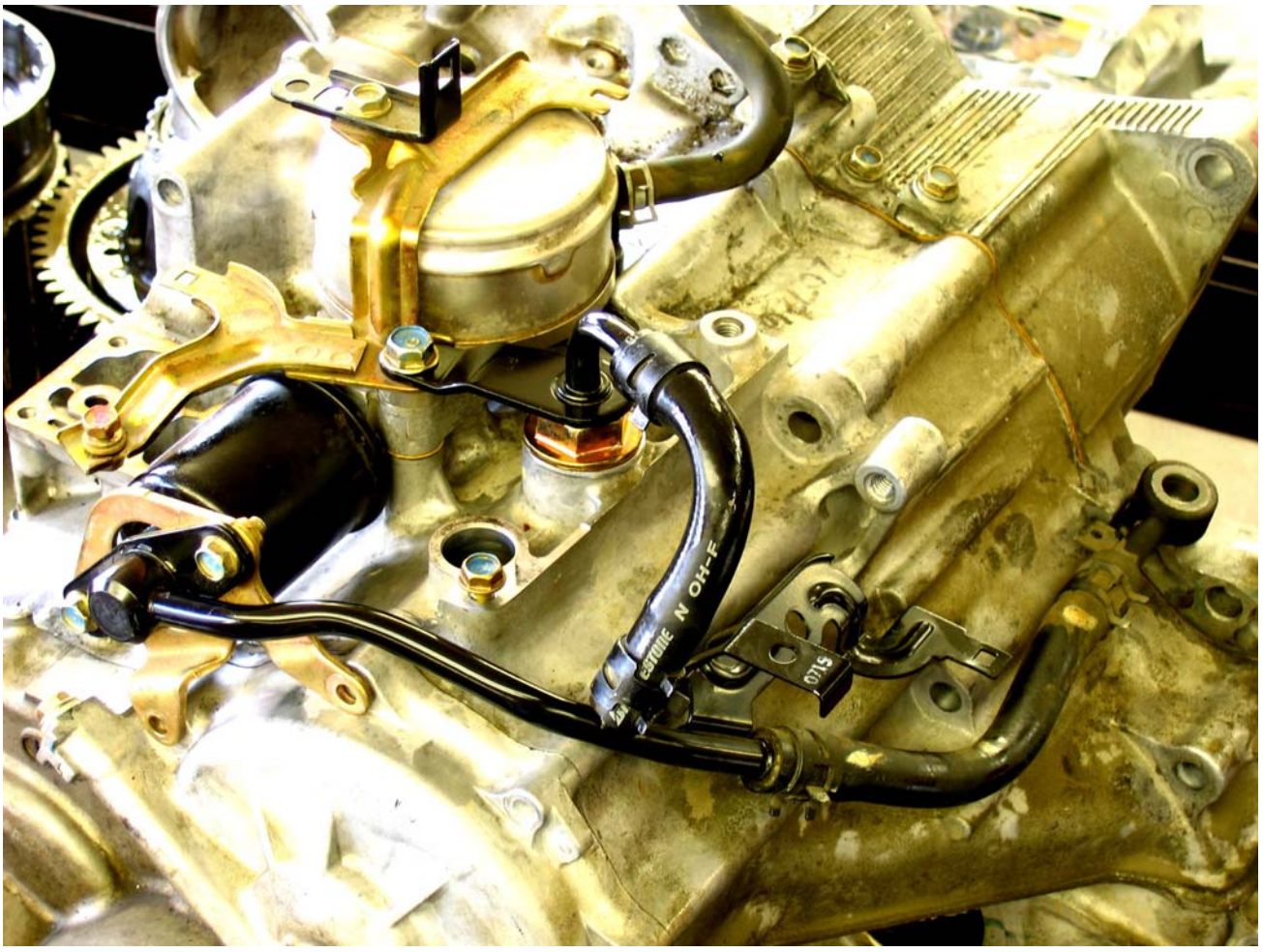
2004 Accord V6 4-Door
From VIN 1HGCM66..4A000001 thru 1HGCM66..4A030387
VIN 1HGCM66..4A032783
VIN 1HGCM66..4A036643
VIN 1HGCM66..4A039356
VIN 1HGCM66..4A040381

2002-2003 Odyssey: All
2004 Odyssey:
From VIN 5FNRL18..4B000001 thru VIN 5FNRL18..4B051620

2003 Pilot: ALL
2004 Pilot:
From VIN 2HKYF18..4H500001 thru VIN 2HKYF18..4H546877
2001-2003 3.2CL (including Type S): All
2000-2003 3.2TL (including Type S): All
2001-2002 MDX: All
2004 TL:
From VIN 19UUA66..4A000001 thru VIN 19UUA66..4A014224

5 Speed V6 Units

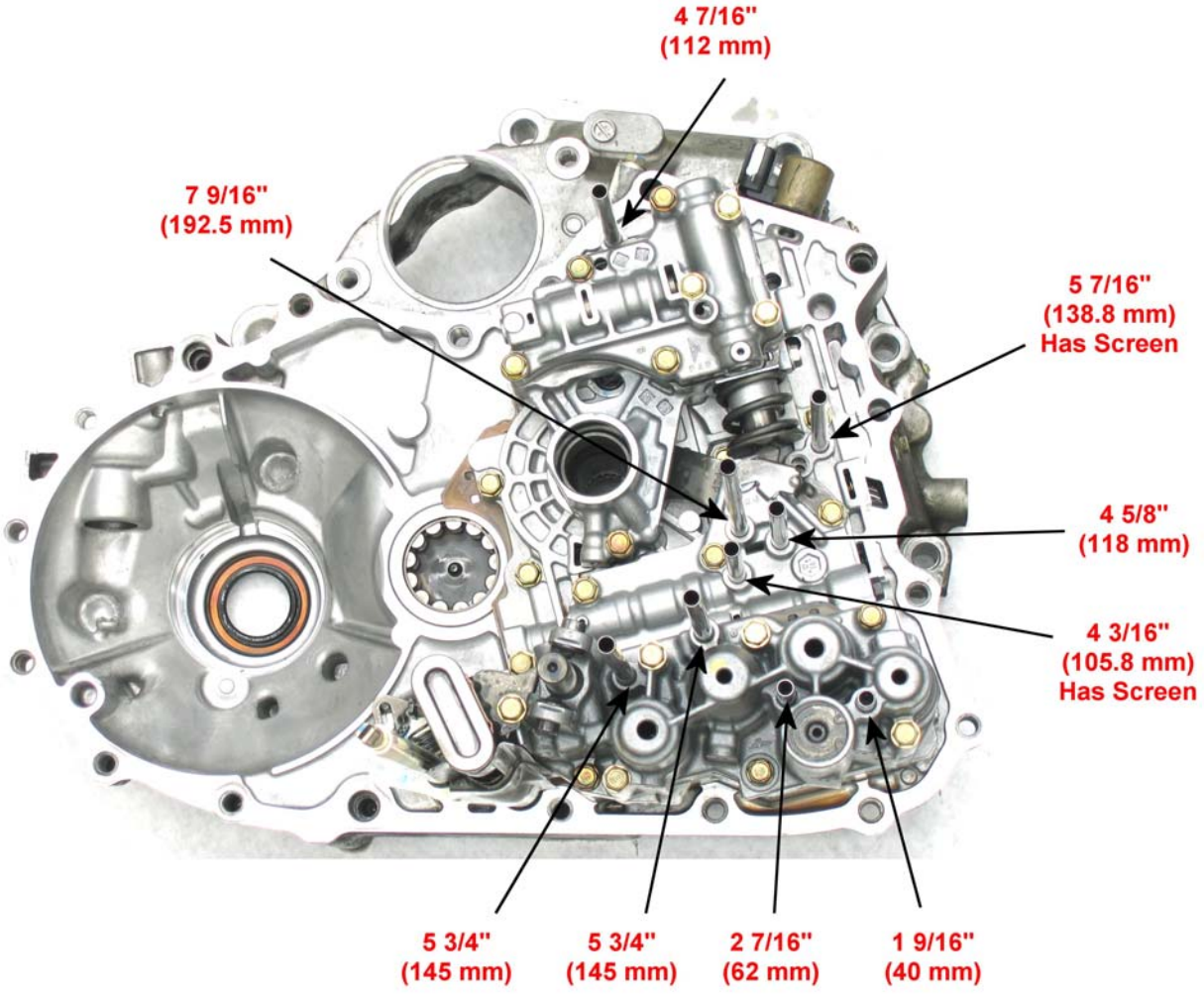
Oil Jet Kit (continued)



BMXA

Feed Pipe Locations

Use the following diagram to identify the p[ipes and their correct locations.

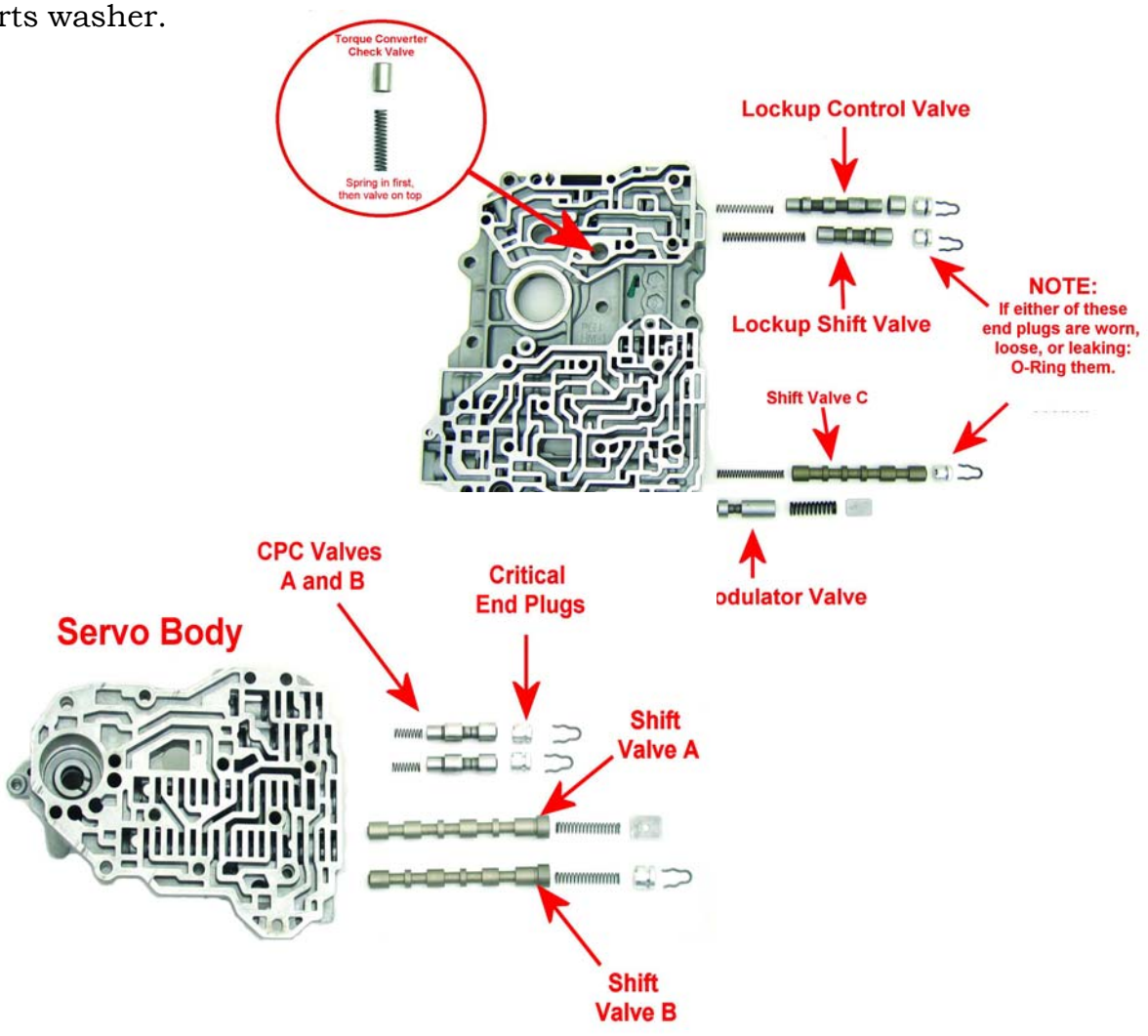


Valve Body

Rebuild Tips

Emphasize "CLEAN!". VB has to be clean, especially after a bearing / hard parts failure.

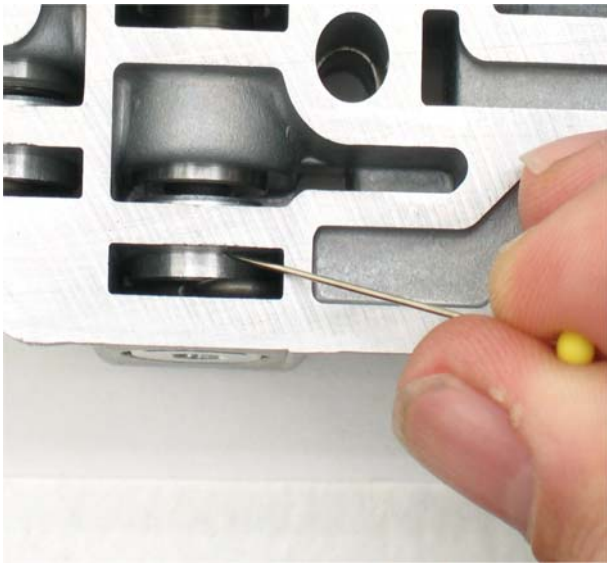
1. Remove and clean all valves, make sure they are free in their bores
2. Air check CPC valves
3. Check end plugs
4. Center springs
5. Flush cooler thoroughly
6. Install inline filter
7. Scrub sump, drums, and geartrain parts with brush and solvent, then wash in parts washer.



Valve Body (continued)

O-Ring End Plugs

Install the end plug and scribe two lines with a sharp pin (one line on each side of the partition closest to the valve/spring)

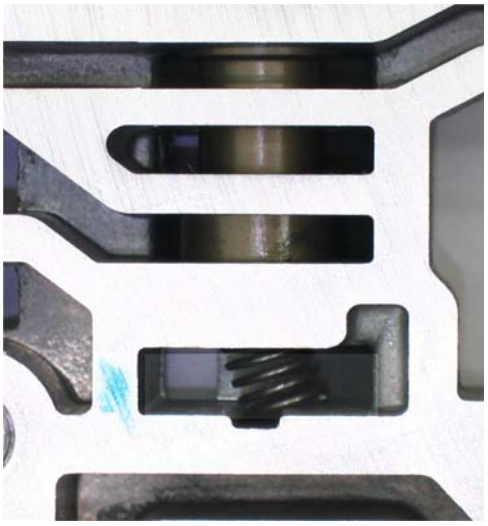


Use these lines as a guide for cutting the o-ring groove. The groove should be offset toward the valve/spring to help compensate for flexing of the retainer clip and movement under pressure.

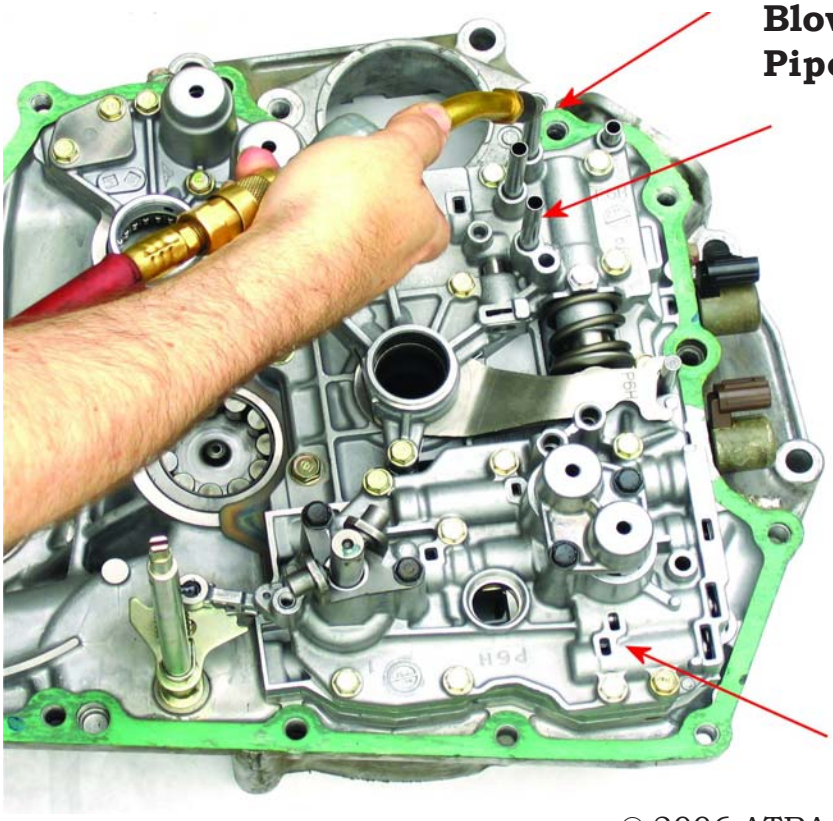
Valve Body (continued)

Checking CPC Valves and Center Springs

Center Springs



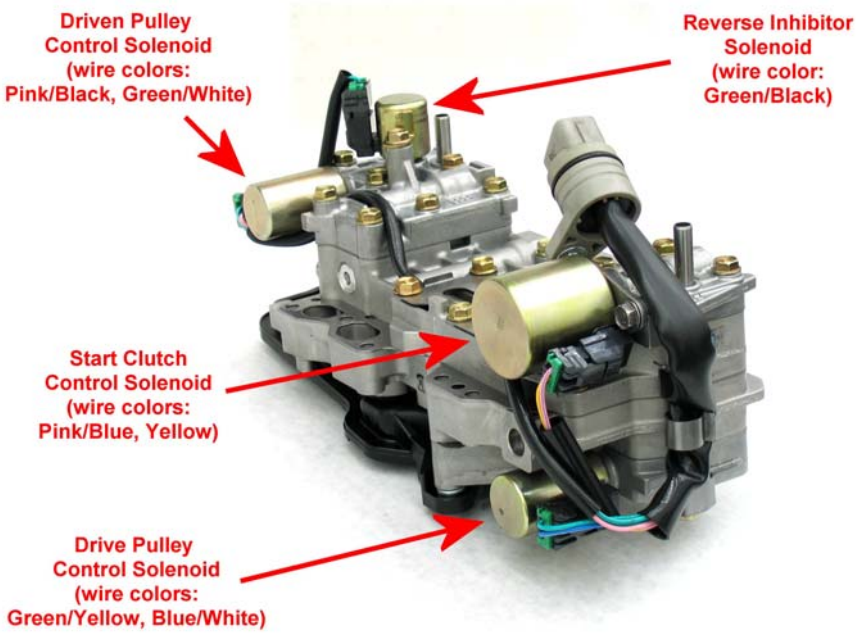
Checking CPC Valves



SZCA

Civic Hybrid CVT

Valve Body

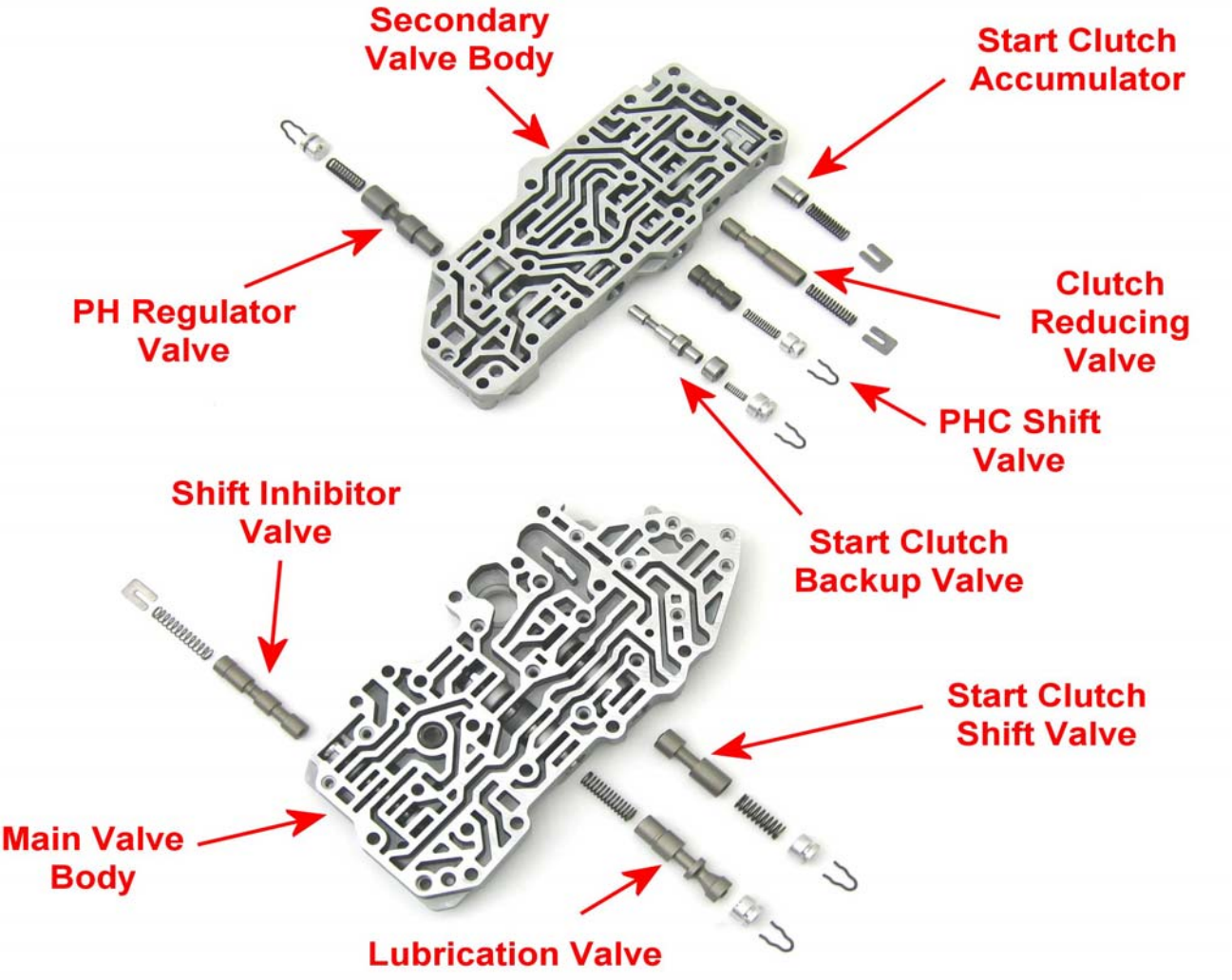


Solenoid	Measure Between	Resistance Specification
Drive Pulley Control Solenoid	Terminals 3 and 7	3.8 - 6.8 ohms
Driven Pulley Control Solenoid	Termnals 2 and 6	3.8 - 6.8 ohms
Start Clutch Control Solenoid	Terminals 4 and 8	3.8 - 6.8 ohms
Reverse Inhibitor Solenoid	Terminal 5 and the valve body	11.7 - 21.0 ohms

SZCA

Civic Hybrid CVT

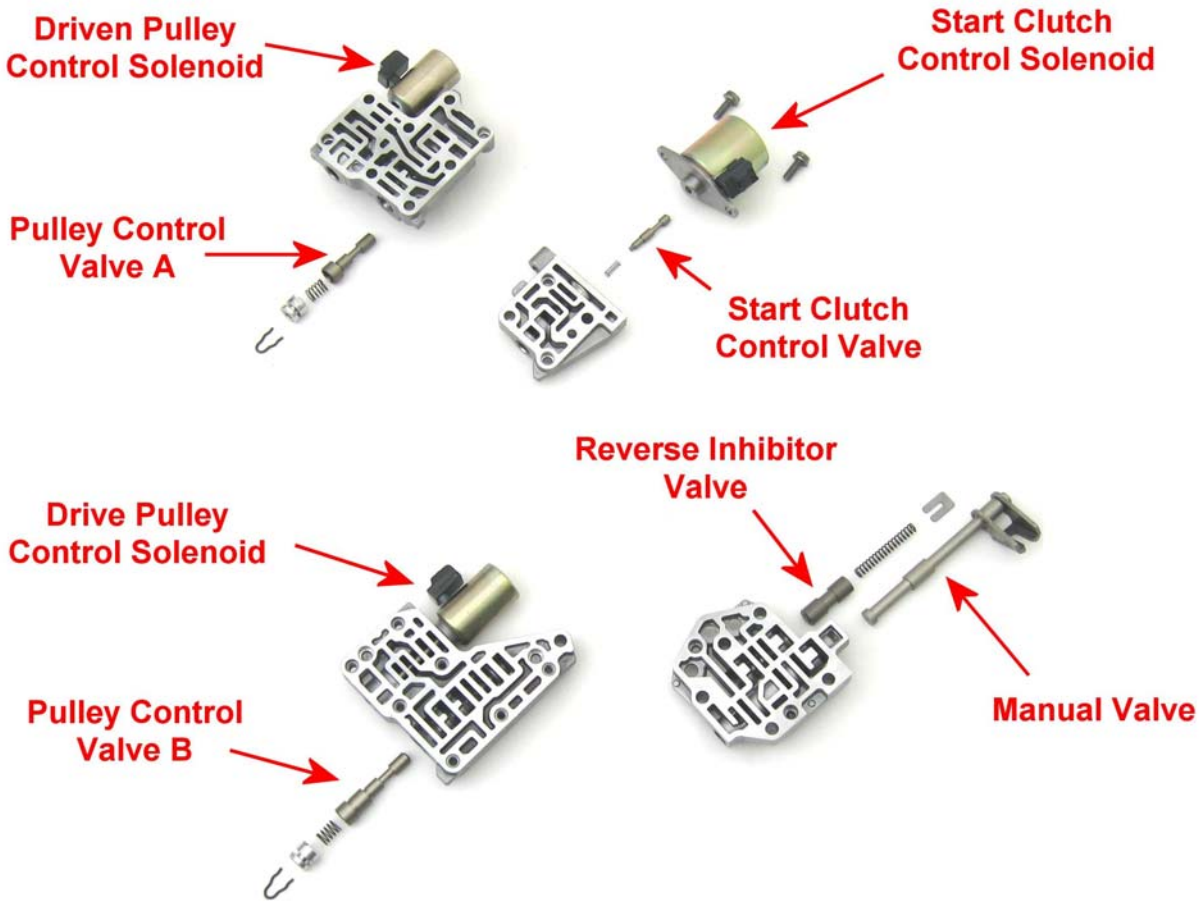
Valve Body (continued)



SZCA

Civic Hybrid CVT

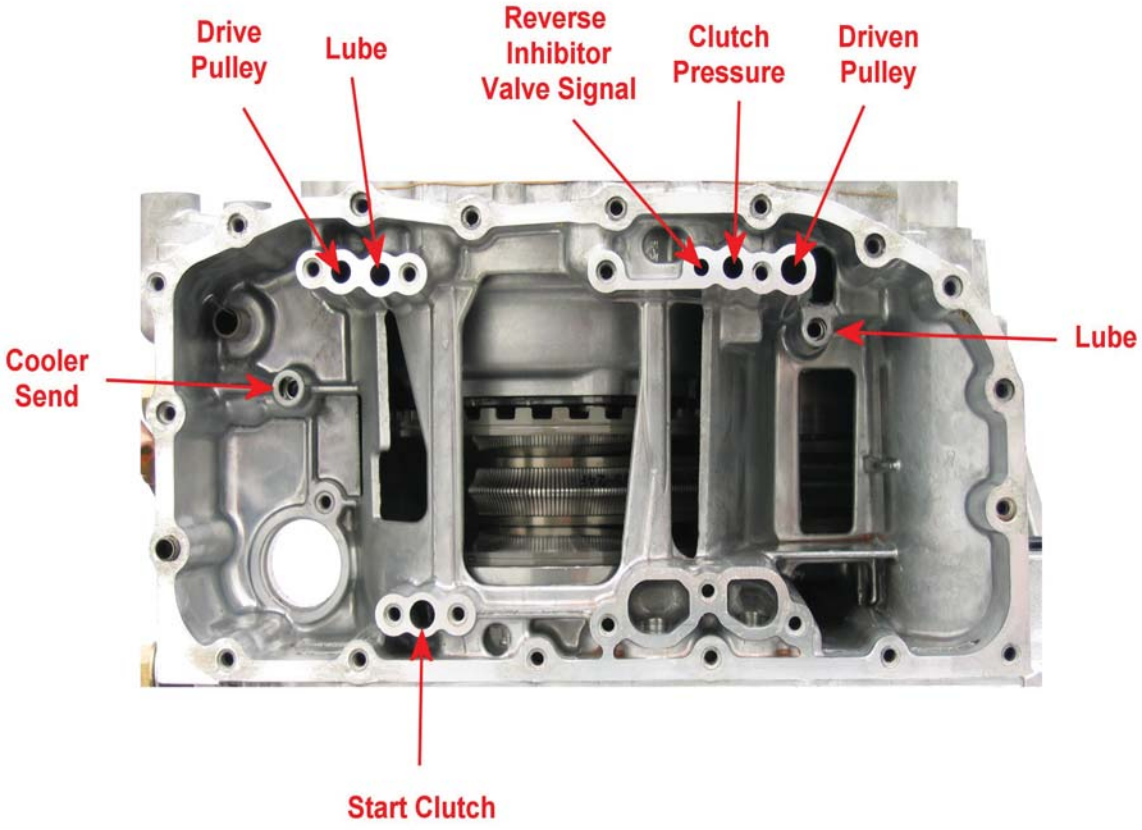
Valve Body (continued)



SZCA

Civic Hybrid CVT

Air Testing



Delayed Upshifts After Cold Start

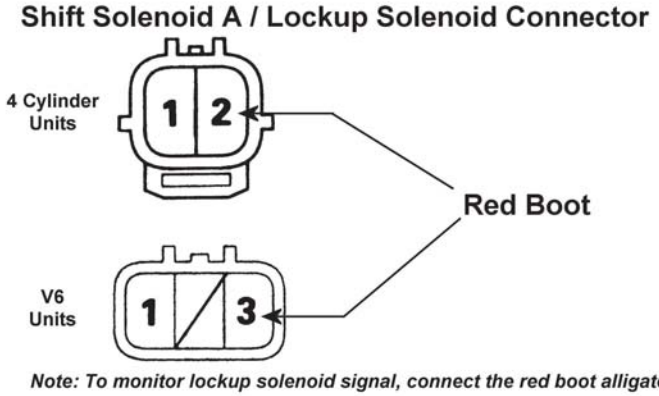
Affected Vehicles:
1998 and newer Accord
1996 and newer Civic
1997 and newer CR-V
1999 and newer Odyssey19‘97 and newer 3.0CL
1999 and newer 3.2TL
2001 and newer 3.2CL
2001 and newer MDX

Cause:
It is normal to have delayed 1-2 and 2-3 upshifts immediately after a cold engine startup. The PCM is programmed to shift at higher engine RPM when the engine is cold in order to help warm up the catalytic converter and reduce exhaust emissions.

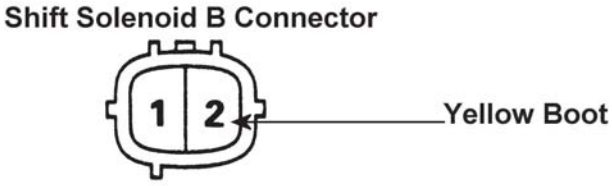
Signal Monitor Hookup

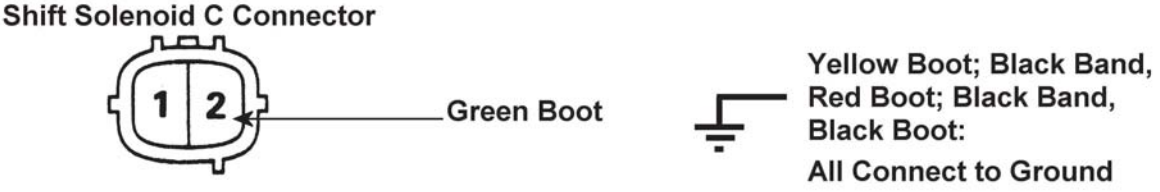
4 Speed Units

Terminal Identification and Signal Monitor Connections:



Note: To monitor lockup solenoid signal, connect the red boot alligator clip to terminal 1



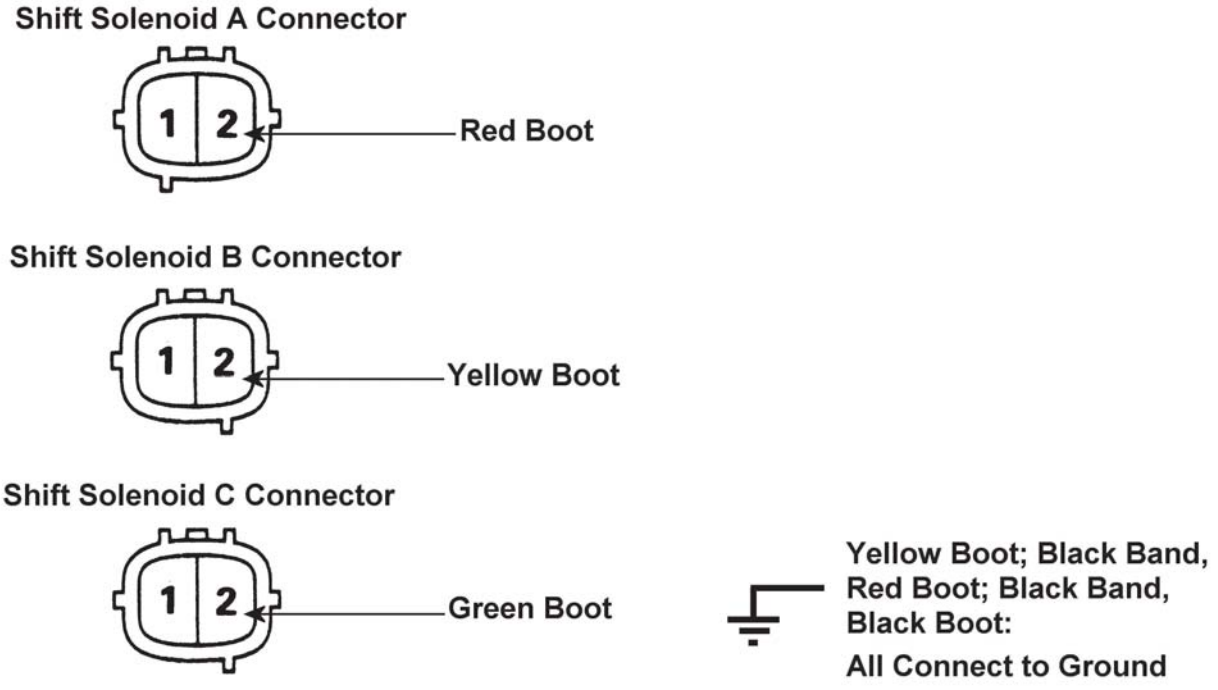


Transmission Shift Pattern			
1st Gear	●	○	○
Shifting 1-2	○	○	○
2nd Gear	○	○	●
Shifting 2-3	○	●	●
3rd Gear	○	●	○
Shifting 3-4	●	●	○
4th Gear	●	●	●

Signal Monitor Hookup

5 Speed V6 Units

Terminal Identification and Signal Monitor Connections:

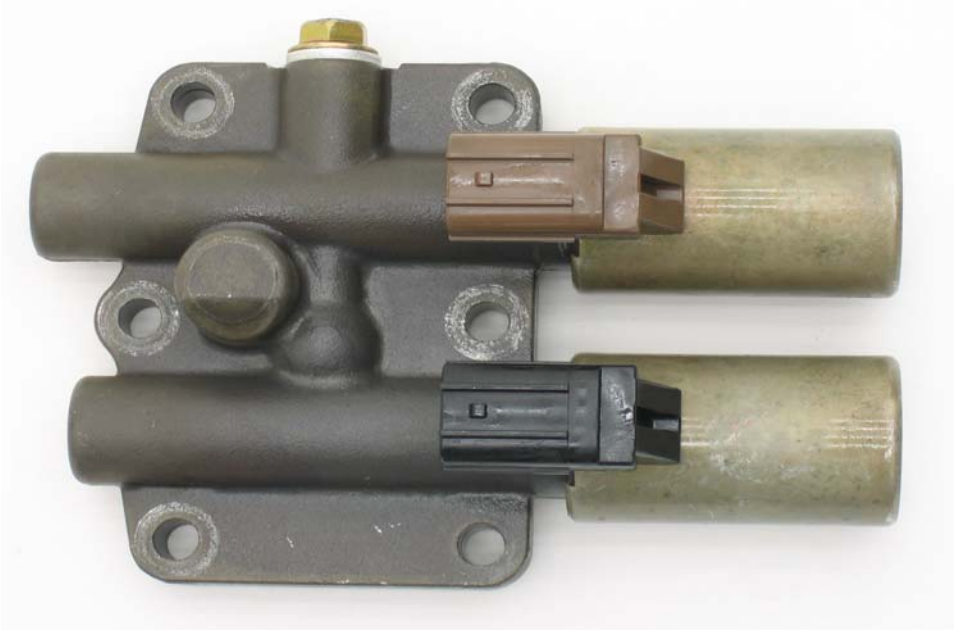


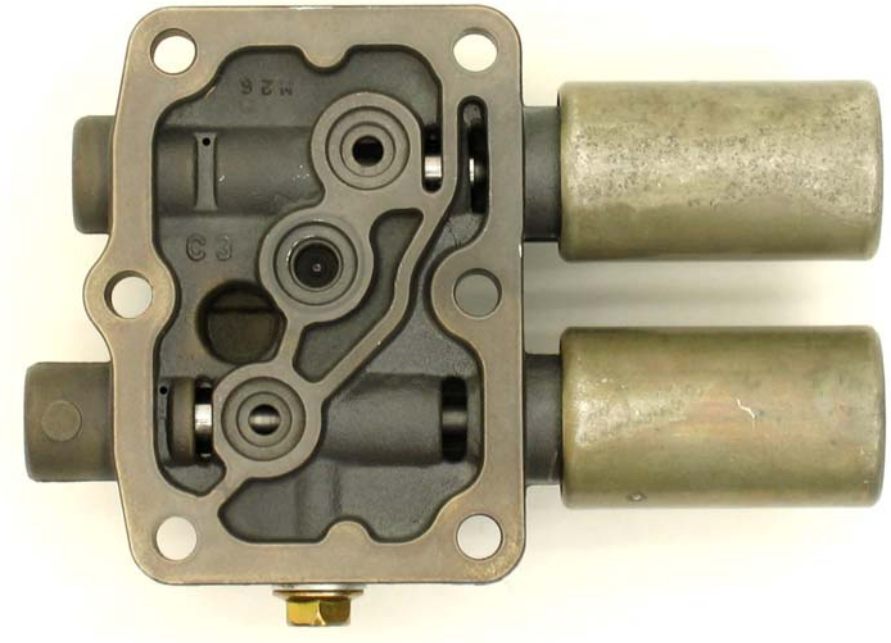
This is the pattern you should see with your signal monitor:

Transmission Shift Pattern			
1st Gear	○	○	○
Shifting 1-2	○	○	○
2nd Gear	○	○	●
Shifting 2-3	●	○	●
3rd Gear	●	○	○
Shifting 3-4	●	●	○
4th Gear	●	●	●
Shifting 4-5	○	●	●
5th Gear	○	●	○

Solenoid and Pressure Switch Guide

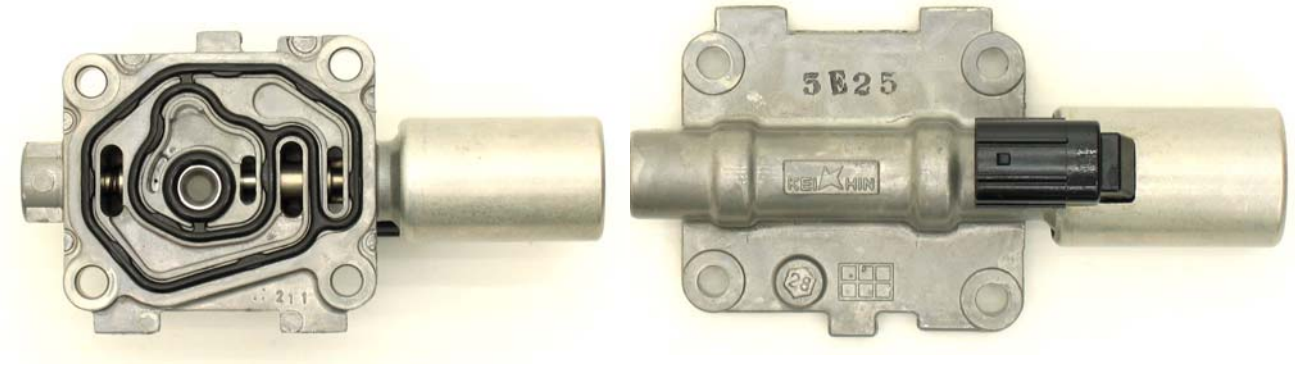
Honda Part Number: 28250-P6H-024
Linear Solenoids
Note: 4 speed units and 5 speed V6 units; Accord, Odyssey, Prelude, TL, CL, MDX: CPC A and B Solenoids



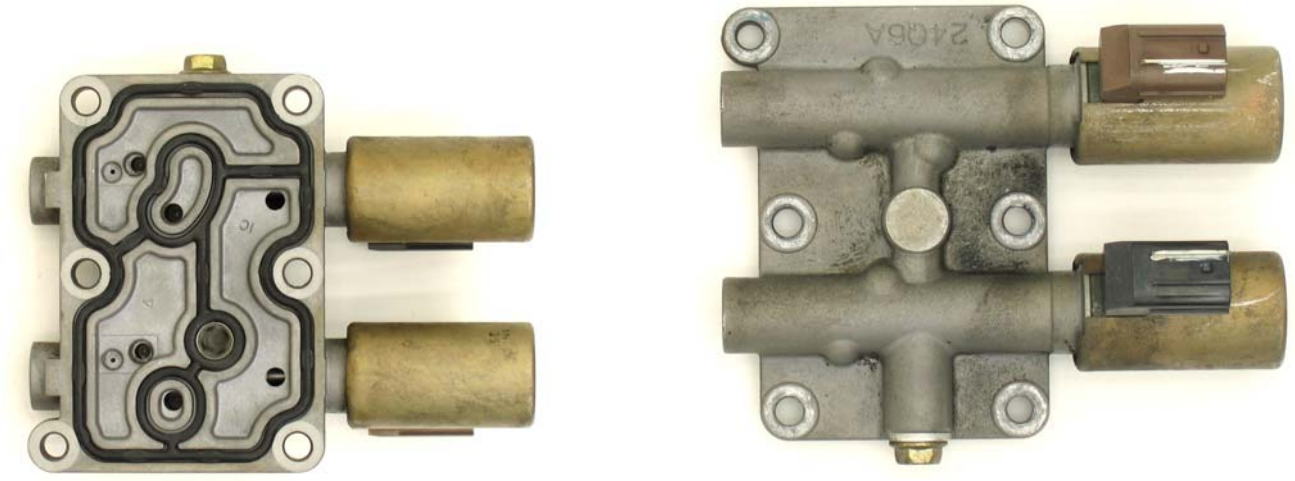


Solenoid and Pressure Switch Guide (continued)

Honda Part Number: 28250-P7W-003
Linear Solenoid
Note: 5 speed V6 units Lockup pressure control



Honda Part Number: 28250-PLX-305
Linear Solenoids



Solenoid and Pressure Switch Guide (continued)

Honda Part Number: 28250-P4R-315
Linear Solenoid
Note: Civic (thru 2000), CRV (thru 2001)

Honda Part Number: 28500-P6H-003
Brown Connector

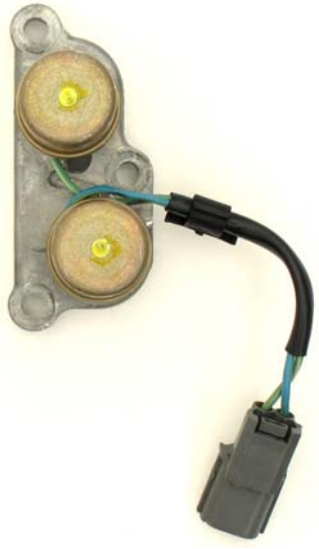
Solenoid and Pressure Switch Guide (continued)

Honda Part Number: 28400-P6H-003
Black Connector

Honda Part Number: 28300-P24-J01
Lockup Solenoids
Notes: Civic (thru 2000), CRV (thru 2001)

Solenoid and Pressure Switch Guide (continued)

Honda Part Number 28200-P4R-003
Shift Solenoids
Notes: Civic (thru 2000), CRV (thru 2001)

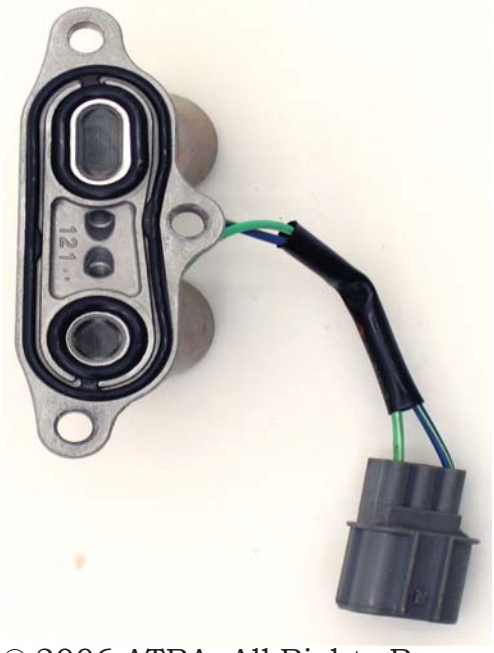


Honda Part Number: 28200-PLX-003
Shift Solenoids
Note: BMXA Shift Solenoid A and B assembly

Solenoid and Pressure Switch Guide (continued)

Honda Part Number: 28300-PX4-003
Lockup / Shift Solenoid A assembly
Notes: 4 cyl. 4 speed units; Accord, 2.3CL

Honda Part Number: 28200-P0Z-003
Lockup / Shift Solenoid A assembly
(V6 4 speed unit)



Solenoid and Pressure Switch Guide (continued)

Honda Part Number: 28600-P6H-003
2nd clutch pressure switch: (Green Connector)

Honda Part Number: 28600-P7Z-003
3rd clutch pressure switch (black connector)