

Chrysler 845RE; ZF8HP45, ZF8HP55, ZF8HP70 ZIP KIT®

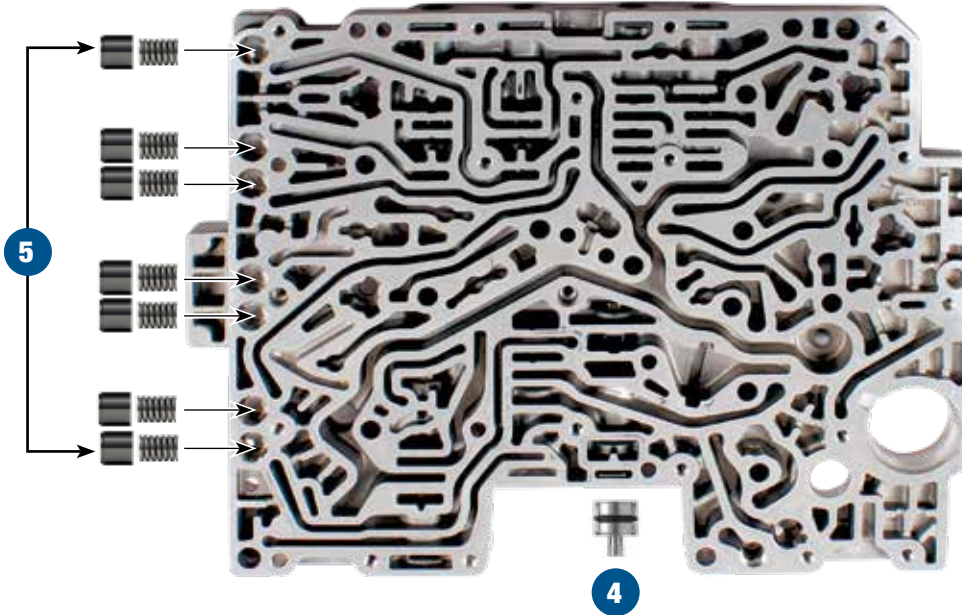
PART NUMBER ZF8-ZIP

QUICK GUIDE

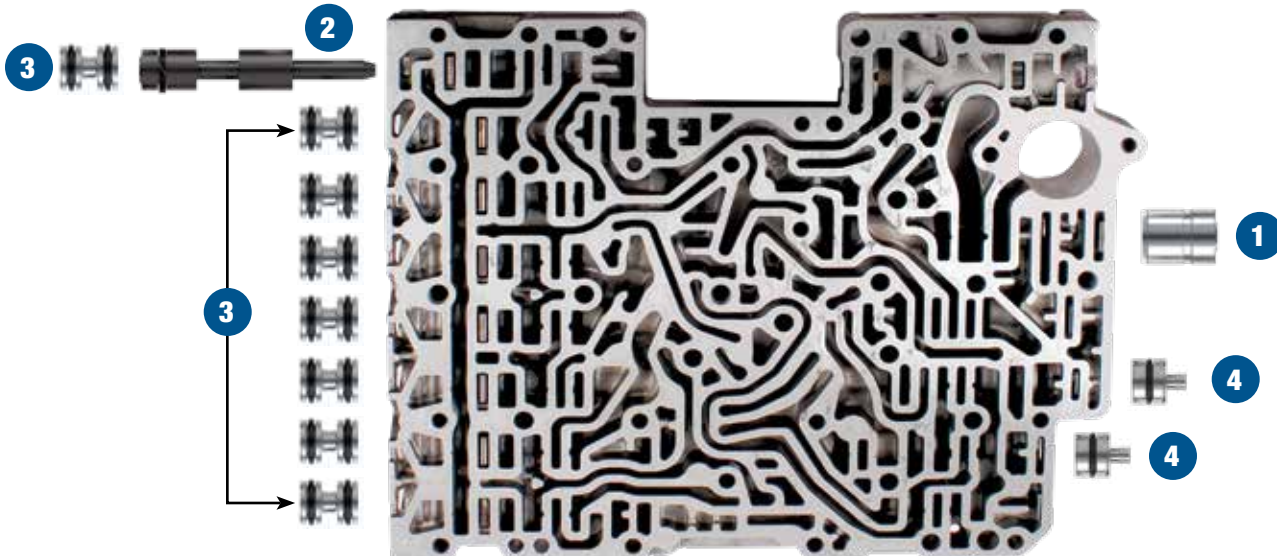
Parts are labeled here in order of installation. See other side of sheet for details on kit contents.

INSTALLATION DIAGRAM

ZF8HP45 Upper Valve Body



ZF8HP45 Lower Valve Body



In addition to general rebuilding tips and technical information, the technical booklet included in this kit contains vacuum testing and additional repair options for higher mileage units or for repairing specific complaints which are beyond the scope of this kit.

Kit Contents & Installation Steps

Step 1 Replace OE Pressure Regulator Sleeve

Packaging Pocket 1

- Sleeve

Step 2 Replace OE Priming Valve

Place scarf-cut seal into shallow groove on valve. Rolling the seal into a smaller diameter before placing the seal in the groove will help to keep the seal surface below the valve diameter, allowing for easier installation. Lubricate seal with Sonnax slippery stick **O-LUBE**.



NOTE: Due to the design changes on the Sonnax valve, vacuum testing at the two inboard ports is not a valid sealing test. The Sonnax valve requires balance fluid to travel through the valve and push the seal outward to conform to the worn bore.

Packaging Pocket 2

- Valve
- Seal

Step 3 Replace Internal OE End Plugs

Place O-rings into shallow grooves on end plugs. Lubricate with Sonnax slippery stick **O-LUBE**. Roll on bench to size. For installation or removal ease, install with threaded end outboard.

Packaging Pocket 3

- Internal End Plugs (8)
- O-Rings (18) 2 Extra

Step 4 Replace OE End Plugs

Place O-rings into shallow groove on end plugs. Lubricate with Sonnax slippery stick **O-LUBE**. Roll on bench to size. Install end plugs with small stem outboard.

Packaging Pocket 4

- End Plugs (3)
- O-Rings (5) 2 Extra

Step 5 Replace OE Accumulator Pistons

Packaging Pocket 5

- Accumulator Pistons (7)
- Matching Springs (7)

Step 6 Replace OE Solenoid O-Rings

Packaging Pocket 6 For Outboard White & Orange Solenoids

- O-Rings, (8) 1 Extra 13.75 x 2mm thick

Packaging Pocket 7 For Inboard Brown Solenoid

- O-Ring (2) 1 Extra 17 x 1.5mm thick

Packaging Pocket 8 For Inboard Orange Solenoids

- O-Rings, (7) 1 Extra 18 x 2mm thick

Packaging Pocket 9 For Outboard Brown Solenoid

- O-Ring, (2) 1 Extra 17 x 1.5mm thick

Packaging Pocket 10 For Inboard White Solenoids

- O-Rings, (5) 1 Extra 18.25 x 2mm thick

NOTE: The parts listed here may be protected by patent 8,794,108.

3. Installation

Install Zip Kit parts as shown on diagram of separate quick guide sheet included in this Zip Kit.

See identification and locations of replacement OE solenoids (Figures 15 & 16).

Sonnax recommends vacuum testing critical wear areas not covered by this kit to determine whether additional Sonnax parts are required (see pages 4-7).

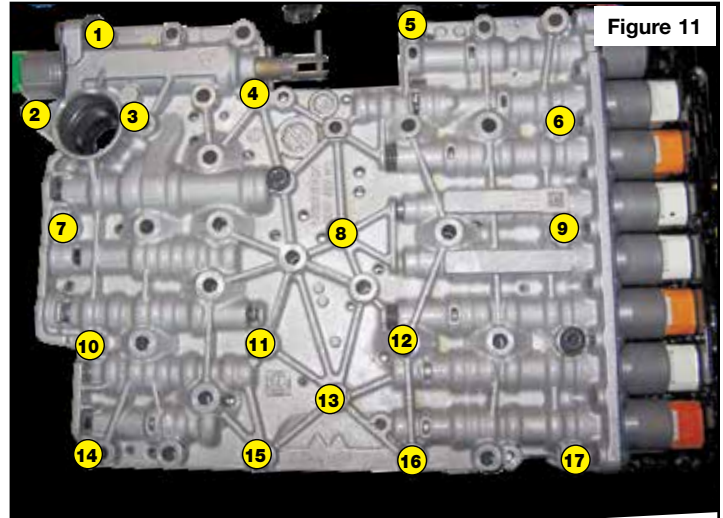


Figure 11

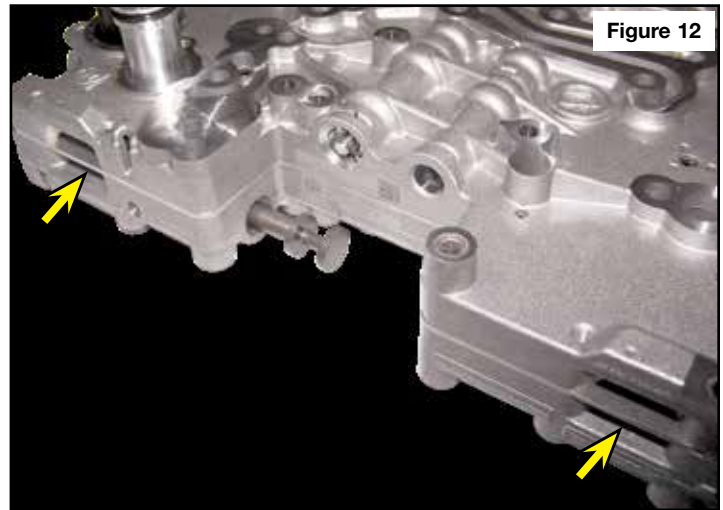


Figure 12

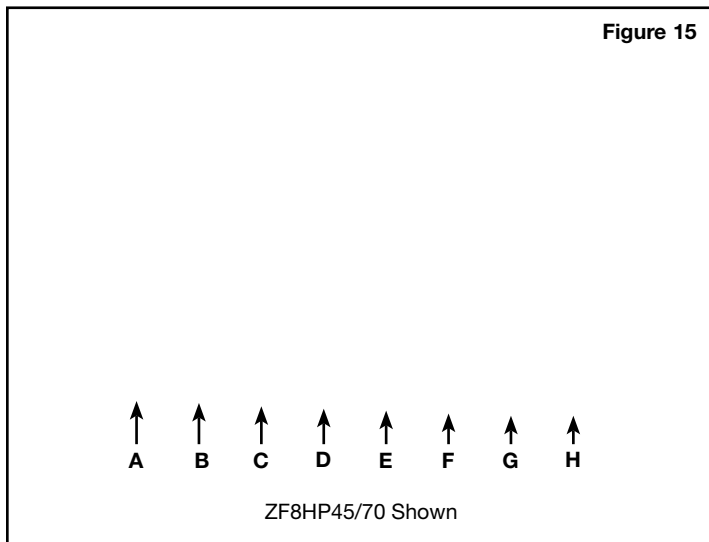


Figure 15

Solenoid Identification & Location Chart Figure 16

Solenoid I.D.	A	B	C	D	E	F	G	H
ZF	MV-1	EDS-7 LP	EDS-2 TCC	EDS-5 C	EDS-4 E	EDS-3 B	EDS-6 D	EDS-1 A
Chrysler	SOL Park	SOL LPS	SOL TCC	SOL C	SOL E	SOL B	SOL D	SOL A

Valve Body Separator Plate Application Chart Figure 14

OE Valve Body Code	Number Stamped on Original Plate	Order Sonnax Part Number	Valve Body Generation
A048/B048	1087-327-175	35740-048	ZF8HP45 & ZF8HP70
A054/B054	1087-327-189	35740-054	
A071/B071	1068-327-162		

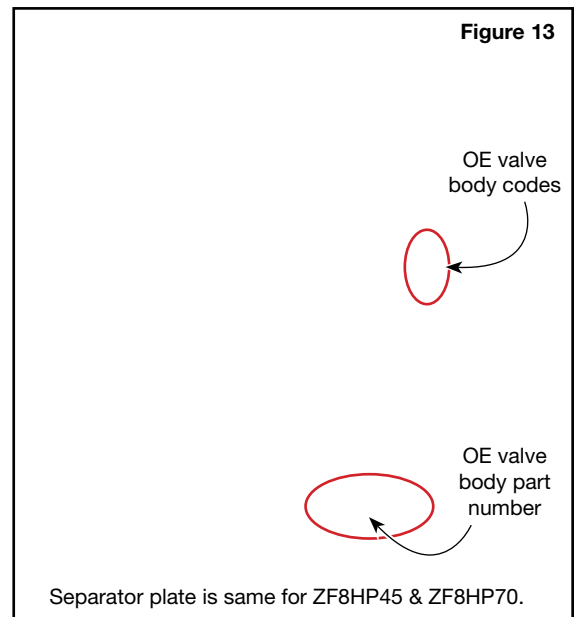


Figure 13

Critical Wear Areas & Vacuum Test Locations



Drop-In Zip Valve™
Parts Available

NOTE: OE valves are shown in rest position and should be tested in rest position unless otherwise indicated. Test locations are pointed to with an arrow. Springs are not shown for visual clarity. Low vacuum reading indicates wear and Sonnax parts are noted for replacement.

Upper Valve Body • ZF8HP45 Shown



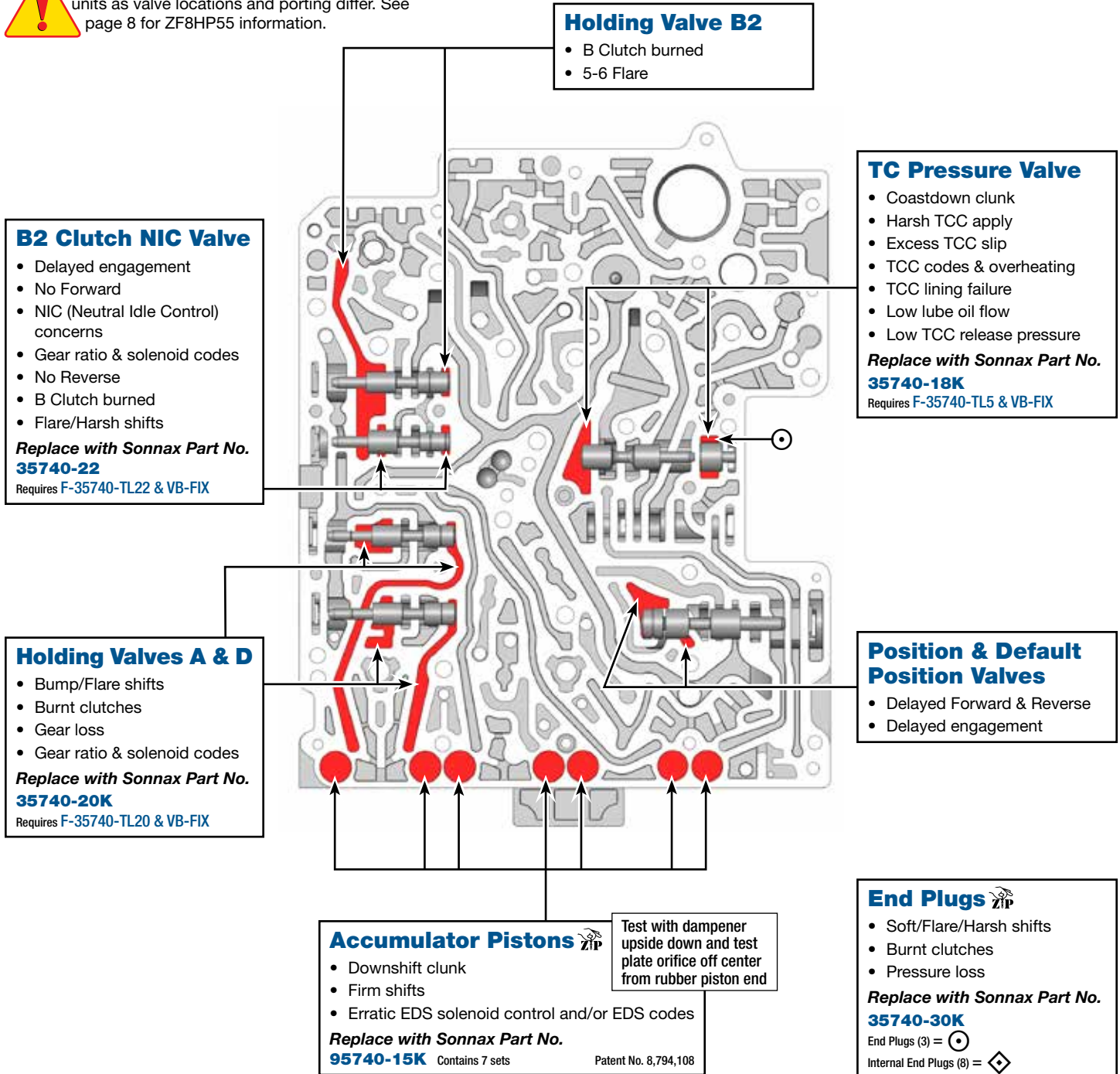
NOTE: Critical wear areas and vacuum test locations shown for **ZF8HP45** and **ZF8HP70** only.



NOTE: Do not use this information for ZF8HP55 units as valve locations and porting differ. See page 8 for ZF8HP55 information.



For specific vacuum test information, refer to individual part instructions included in kits and available at www.sonnax.com.



Lower Valve Body • ZF8HP45 Shown



NOTE: Critical wear areas and vacuum test locations shown for **ZF8HP45** and **ZF8HP70** only.



NOTE: Do not use this information for ZF8HP55 units as valve locations and porting differ. See page 8 for ZF8HP55 information.

Main PR Sleeve

- Harsh shifts
- Erratic/High line pressure
- Restricted converter/lube flow

Replace with Sonnax Part No. 35740-03

TC Switch Valve

- No lockup • No TCC release
- Engine stall • TCC codes
- Excess TCC slip
- Premature TCC apply
- Soft/Harsh TCC apply

Replace with Sonnax Part No. 35740-05
Requires F-35740-TL5 & VB-FIX

TCC Valve

- Converter shudder & TCC slip • TCC codes
- Overheated converter • Poor fuel economy

Replace with Sonnax Part No. 35740-13K
Requires F-35740-TL13 & VB-FIX

Clutch Valve B1

- Slip on take off
- Gear ratio errors
- B Clutch burned

Holding Valves B1, C & E

- Bump/Flare shifts
- Burnt clutches
- Gear loss
- Gear ratio & solenoid codes

Replace with Sonnax Part No. 35740-20K
Requires F-35740-TL20 & VB-FIX

Clutch Valve D

- Gear ratio errors 4-8th Gears
- Slips in Reverse
- D Clutch burned

Clutch Valve A

- Slip in Drive or Reverse
- Gear ratio codes
- A Clutch burned

End Plugs

- Soft/Flare/Harsh shifts
- Burnt clutches
- Pressure loss

Replace with Sonnax Part No. 35740-30K
End Plugs (3) =
Internal End Plugs (8) =

Main PR Valve

- Harsh/Soft shifts
- Erratic/High line pressure
- Burnt clutches
- Restricted converter/lube flow
- Broken parts due to excessive line pressure

Replace with Sonnax Part No. 35740-01K
Requires F-35740-TL & VB-FIX

Park Pawl Release Valve

- Park will not release
- Park position errors

NOTE: These 2 locations suitable for vacuum testing OE valve & 35740-21K ONLY.
NOT suitable location to check 35740-37K.

Remove spring when testing. Center valve spool in opening.

Priming Valve

- Delayed engagement • Wrong gear starts
- Gear loss • Flare/Harsh/Neutral shifts
- Gear ratio & solenoid codes

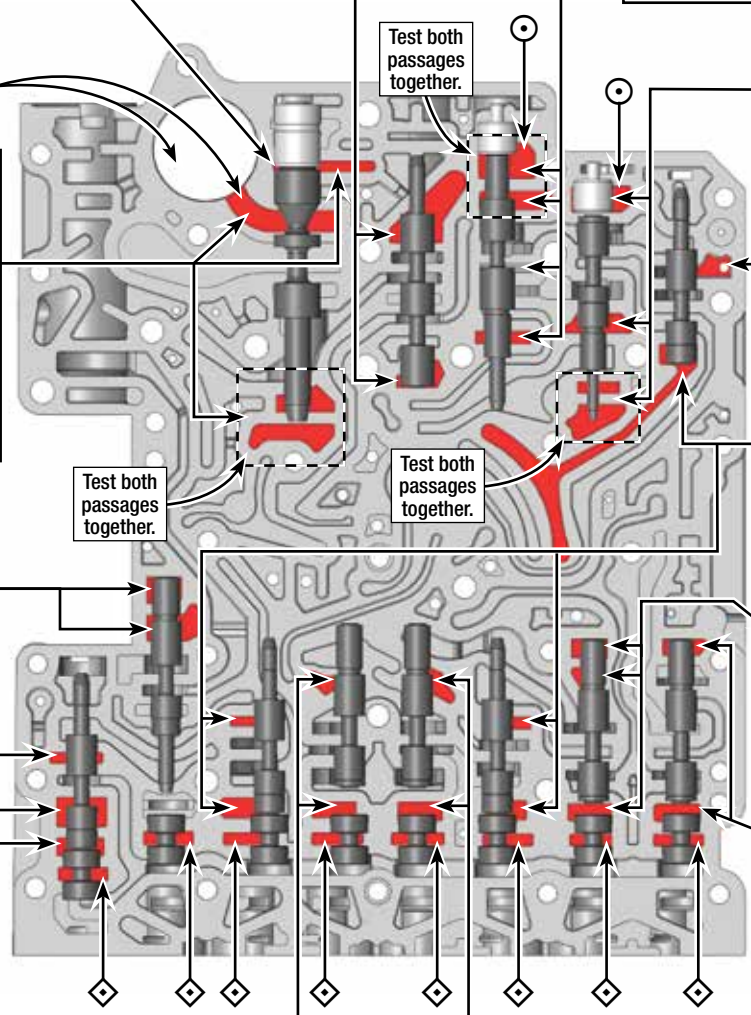
Replace with Sonnax Part No. 35740-37K Priming Valve & Seal Kit or 35740-21K Oversized Priming Valve Requires F-35740-TL20 & VB-FIX

Clutch Valve C

- Slip on take off
- Gear ratio codes
- C Clutch burned

Clutch Valve E

- Slip on 1-2
- Gear ratio codes
- E Clutch burned



OE Exploded View

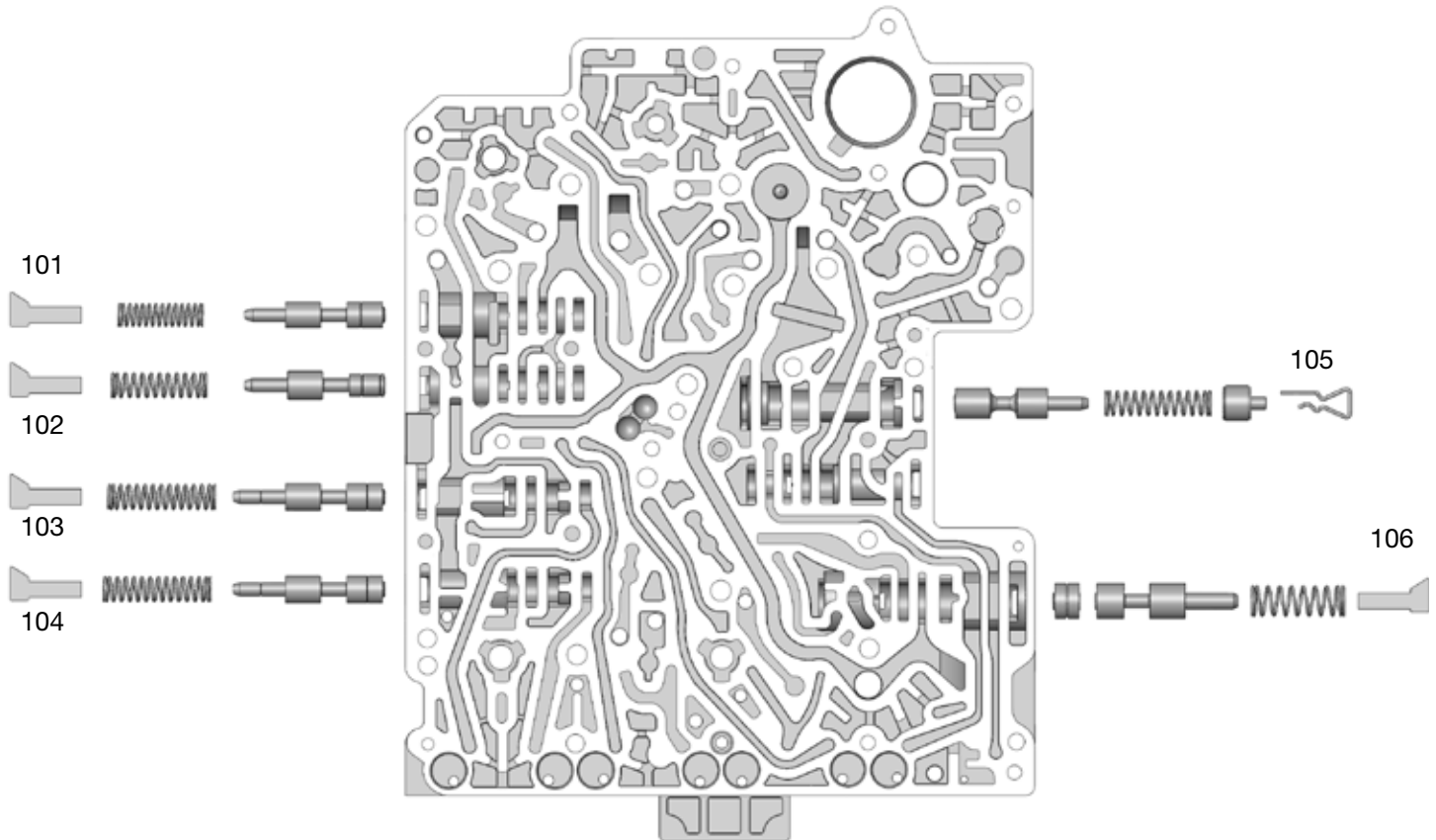
Upper Valve Body • ZF8HP45 Shown



NOTE: Valve lineup locations shown for **ZF8HP45** and **ZF8HP70** only.



NOTE: Do not use this information for ZF8HP55 units as valve locations and porting differ. See page 8 for ZF8HP55 information.



Upper Valve Body Descriptions			
I.D. No.	Description	ZF Valve Name	Chrysler Valve Name
101	Holding Valve B2	HV-B2	HV-B2
102	Clutch Valve B2 - B Clutch NIC (Neutral Idle Control)	KV-B2	CV-B2
103	Holding Valve A	HV-A	HV-A
104	Holding Valve D	HV-D	HV-D
105	Torque Converter Pressure Valve	WD-V	TC-V
106	Position Valve (Outboard) Default Position Valve (Inboard)	Pos-V, PosD-V	Pos-V, PosD-V

OE Exploded View

Lower Valve Body • ZF8HP45 Shown



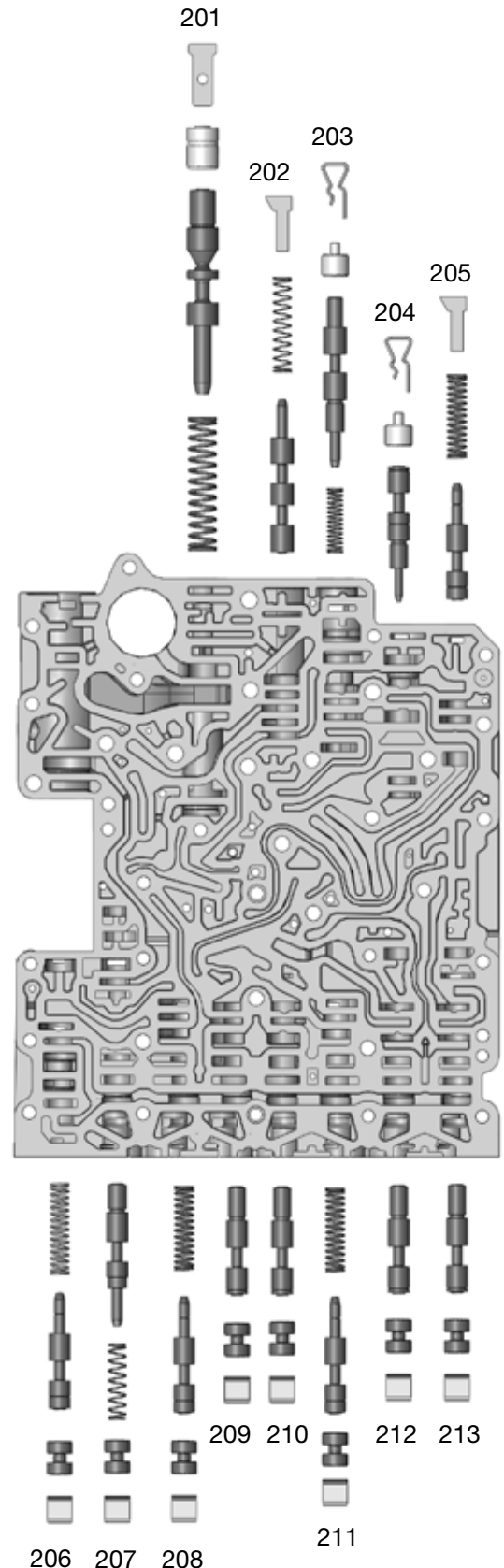
NOTE: Valve lineup locations shown for **ZF8HP45** and **ZF8HP70** only.



NOTE: Do not use this information for ZF8HP55 units as valve locations and porting differ. See page 8 for ZF8HP55 information.

Lower Valve Body Descriptions

I.D. No.	Description	ZF Valve Name	Chrysler Valve Name
201	Main Pressure Regulator Valve and Sleeve	SYS-DR-V	LP-V (Inboard) RED-V (Outboard)
202	Torque Converter Switch Valve	SV-WD	SV-TC
203	Torque Converter Clutch Valve	WK-V	TCC-V
204	Clutch Valve B1	KV-B1	CV-B1
205	Holding Valve B1	HV-B1	HV-B1
206	Priming Valve	DR-RED-V	PR-V
207	Park Pawl Release Valve	PS-V	Park-V
208	Holding Valve C	HV-C	HV-C
209	Clutch Valve C	KV-C	CV-C
210	Clutch Valve E	KV-E	CV-E
211	Holding Valve E	HV-E	HV-E
212	Clutch Valve D	KV-D	CV-D
213	Clutch Valve A	KV-A	CV-A



OE Exploded View • ZF8HP55 Shown

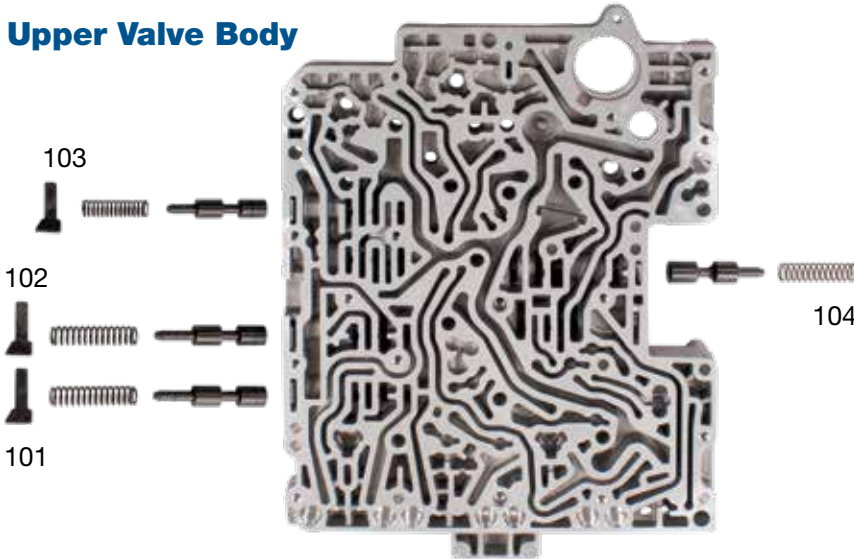


NOTE: Valve lineup locations shown for **ZF8HP55** only.



NOTE: Do not use this information for ZF8HP45 and ZF8HP70 units as valve locations and porting differ. See pages 4 – 7 for this information.

Upper Valve Body



Upper Valve Body Descriptions

I.D. No.	Description	ZF Valve Name
101	Holding Valve D	HV-D
102	Holding Valve A	HV-A
103	Holding Valve B2	HV-B2
104	TC Pressure Valve	WD-V

Lower Valve Body Descriptions

I.D. No.	Description	ZF Valve Name
201	Manual Valve	
202	Pressure Regulator Valve	SYS-DR-V
203	TC Switch Valve	SV-WD
204	TC Clutch Valve	WK-V
205	Clutch Valve B1	KV-B1
206	Holding Valve B1	HV-B1
207	Priming Valve	DR-RED-V
208	Holding Valve C	HV-C
209	Clutch Valve C	KV-C
210	Clutch Valve E	KV-E
211	Holding Valve E	HV-E
212	Stationary Aluminum Valve	SV-1
213	Clutch Valve D	KV-D
214	Clutch Valve A	KV-A

Lower Valve Body

