

Automatic Transmissions and Transaxles
Seventh Edition

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James D. Halderman



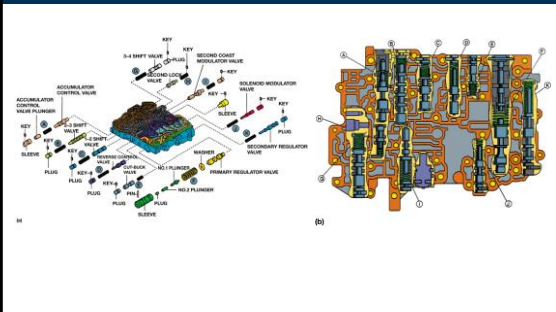
Chapter 16
Valve Body Service

ALWAYS LEARNING

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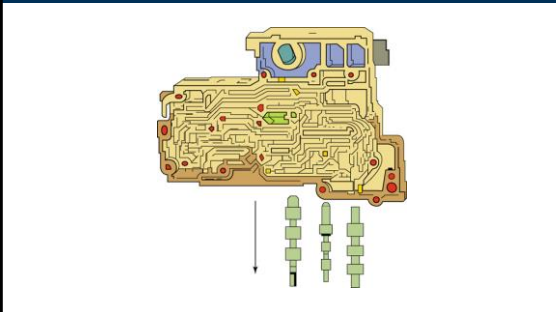
FIGURE 16-1 (a) An exploded and (b) cutaway view of the valve body from a four-speed transaxle. Note the various valve groups and how they are retained in their bore.



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FIGURE 16-2 If the valve body is moved to a vertical position, steel valves should slide freely from the bore. Be prepared to catch the valves when making this check.



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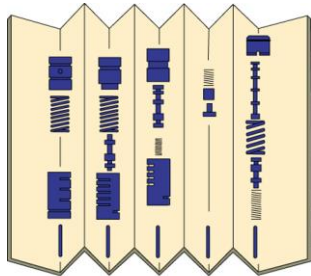
FIGURE 16-3 A valve body being washed and air dried in a parts washer. It will be cleaned again when the two major parts are separated.



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FIGURE 16-4 A sheet of stiff paper has been folded to create this simple valve holder. Note that a valve group can be placed in order and be labeled.

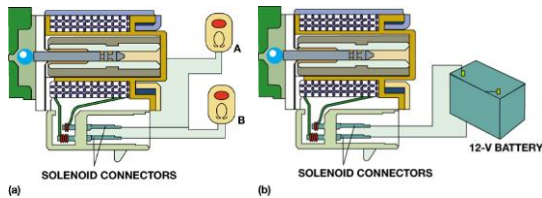


FOLDED CARDBOARD VALVE HOLDER

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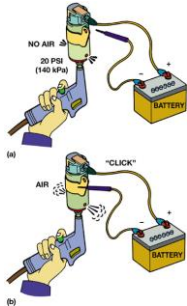
FIGURE 16-5 (a) Ohmmeter A is checking for a grounded solenoid coil; the reading should be infinite. Ohmmeter B is measuring the coil resistance; it should be within the specifications for this solenoid. (b) Connecting a solenoid to a 12-V battery should cause it to operate. Make sure the battery is connected using the correct polarity in case the solenoid has an internal diode.



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FIGURE 16-6 Air should not be able to flow through this solenoid if it is not activated. If it is connected to a 12-V battery, it should make a “click,” and air should be able to flow through it.



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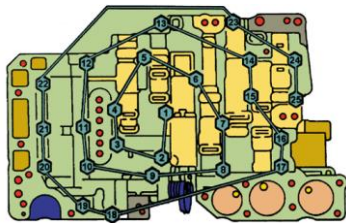
FIGURE 16-7 Using assembly lube is a great way to keep check balls in place during the reassembly of the valve body.



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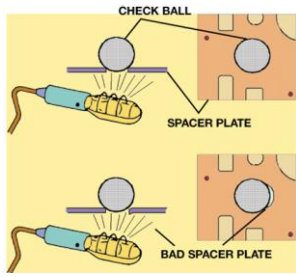
FIGURE 16-8 The valve body bolts should be tightened in order, starting from the center and working in an outward spiral.



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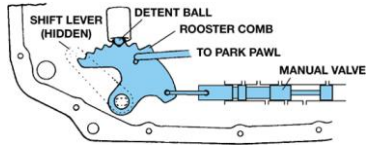
FIGURE 16-9 A check ball should seal off light from coming through the spacer plate. A problem is indicated if light shines through an opening alongside of the check ball.



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FIGURE 16-10 The manual valve is moved by the shift lever and held in position by the detent lever (cam).



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