

Automatic Transmissions and Transaxles
Seventh Edition

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James D. Halderman



Chapter 14
In-Vehicle Transmission/
Transaxle Service

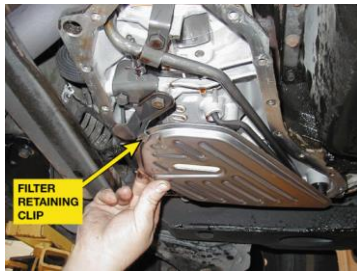
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FIGURE 14-1 Draining the fluid from an automatic transaxle by allowing the fluid to flow into a container after most of the retaining bolts have been removed.



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FIGURE 14-2 Always check that the filter is secured by a clip or other fastener to keep it from dropping out of its position.



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FIGURE 14-3 In this case, the cork-rubber gasket is glued to the pan and is ready to be installed. The retaining bolts need to be tightened in sequence, but be aware that over-tightening will cause a leak. Also, some manufacturers recommend using only an RTV sealer, but never use an RTV sealer and a gasket together.



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FIGURE 14-4 The lines from the fluid exchange machine can often be connected to the cooling lines from underneath the vehicle as on this front-wheel-drive General Motors vehicle.



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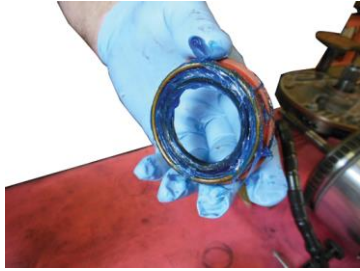
FIGURE 14-5 This seal is being removed using a seal puller.



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FIGURE 14-6 The lip of the seal around the garter spring is packed with assembly lube to help keep the spring from falling out when it is driven into the transmission housing.



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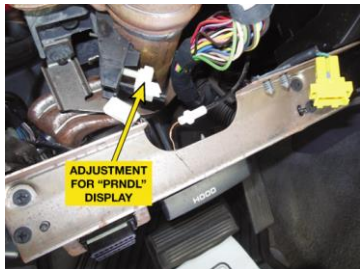
FIGURE 14-7 Using a plug helps prevent fluid loss when the driveshaft is removed.



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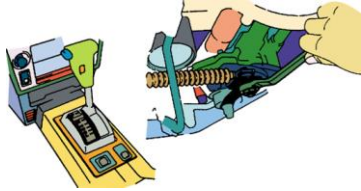
FIGURE 14-8 The position for the pointer (“PRNDL” display) on this Dodge truck is adjustable.



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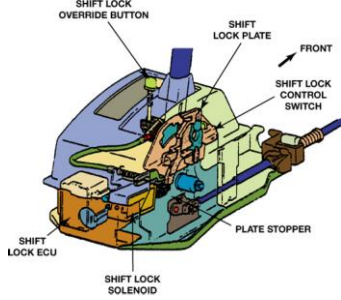
FIGURE 14-9 The manual shift lever is in park. The linkage is being tightened to lock the adjustment in after making sure that the transmission is in park.



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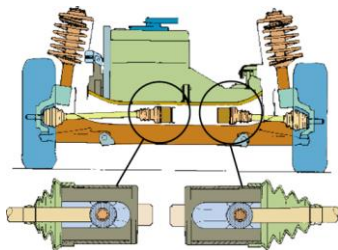
FIGURE 14-10 This shift lock mechanism includes a solenoid that can mechanically hold the shift lock plate. Note the shift lock override button that can be used to release the shift lock.



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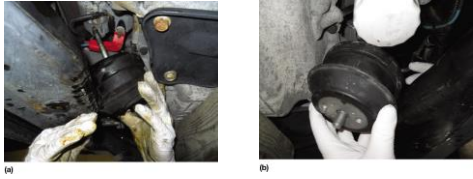
FIGURE 14-11 The enlarged views of the inner CV joints show that the engine and transaxle are misaligned; they should be moved toward the right.



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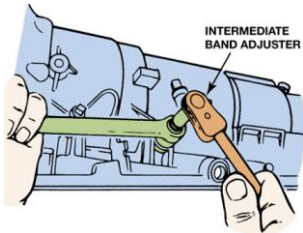
FIGURE 14-12 (a) The old front engine mount contained hydraulic fluid. The oil was leaking from the split in the mount. (b) The new original equipment (OE) mount ready to be installed.



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FIGURE 14-13 Adjusting the intermediate band on a Ford A4LD transmission.



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1 The owner of this Dodge pickup complained that automatic transmission fluid was leaking from the pan gasket.



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2 The transmission fluid leak is found to be from small holes that had rusted through the steel pan.



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3 The retaining bolts being removed from the pan.



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4 The retaining bolts on one side are kept attached and then loosened to allow fluid to drain from one side of the pan.



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5 The pan is then gently lowered and the ATF is caught dripping from the valve body.



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6 The pan is then emptied into an oil drain unit.



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7 The old filter is removed.



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8 The shop purchased a new original equipment filter and a new, improved transmission pan gasket.



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9 The new filter is installed.



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10 The replacement pan is installed and the fasteners tightened to factory specifications. The new pan is galvanized steel compared to painted steel on the original.



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11 The specified ATF is installed.



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12 The level is checked with the engine running and the gear selector in neutral as per the instructions on the dipstick.



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