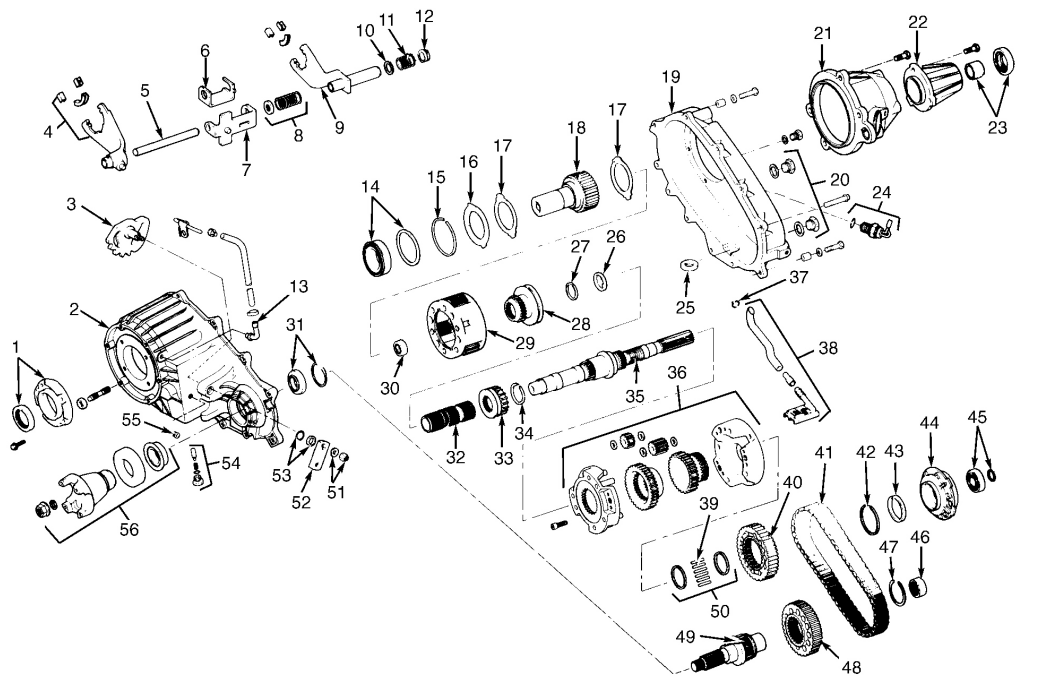


OVERHAUL

TRANSFER CASE DISASSEMBLY

1. Remove drain and fill plugs. See **Fig. 1** . Remove front companion flange, washer and seal. Place transfer case in 4L position. Remove extension housing oil seal. See **EXTENSION HOUSING OIL SEAL & BUSHING** under REMOVAL & INSTALLATION. Remove rear output bearing retaining ring. Remove speedometer adapter. Remove rear retainer bolts and rear retainer. Tap retainer with plastic mallet and slide retainer off case and output shaft. DO NOT damage mating surfaces. Remove retaining ring and slide oil pump off output shaft.

NOTE: Do not disassemble oil pump, replace as a complete assembly only.



- | | | | |
|------------------------------------|----------------------------------|--------------------------------------------------|-------------------------------------------------------|
| 1. Front Bearing Retainer & Seal | 16. Low Range Gear Retainer | 31. Front Output Shaft Front Bearing & Snap Ring | 44. Oil Pump |
| 2. Front Case | 17. Low Range Gear Thrust Washer | 32. Intermediate Clutch Shaft | 45. Rear Bearing & Snap Ring |
| 3. Shift Sector | 18. Input Gear | 33. Shift Sleeve | 46. Front Output Shaft Rear Bearing |
| 4. Low Range Fork & Inserts | 19. Rear Case | 34. Snap Ring | 47. Snap Ring |
| 5. Shift Rail | 20. Drain & Fill Plugs | 35. Mainshaft | 48. Driven Sprocket |
| 6. Shift Bracket | 21. Rear Bearing Retainer | 36. Differential Assembly | 49. Front Output Shaft |
| 7. Slider Bracket | 22. Extension Housing | 37. Oil Pick-Up Tube "O" Ring | 50. Mainshaft Bearing Spacers |
| 8. Bushing & Spring | 23. Bushing & Oil Seal | 38. Oil Pick-Up Tube & Screen | 51. Shift Lever Washer & Nut |
| 9. Mode Fork & Inserts | 24. Vacuum Switch (If Equipped) | 39. Mainshaft Bearing Rollers | 52. Shift Lever |
| 10. Bushing | 25. Magnet | 40. Drive Sprocket | 53. Sector "O" Ring & Seal |
| 11. Fork Spring | 26. Thrust Ring | 41. Drive Chain | 54. Detent Pin, Spring & Plug |
| 12. Bushing | 27. Snap Ring | 42. Snap Ring | 55. Seal Plug |
| 13. Vent Tube | 28. Shift Sleeve | 43. Oil Pump Seal | 56. Companion Flange, Nut, Seal, Washer & Oil Slinger |
| 14. Input Gear Bearing & Snap Ring | 29. Low Range Gear | | |
| 15. Low Range Gear Snap Ring | 30. Pilot Bushing | | |

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Fig. 2: Exploded View Of NV242 Transfer Case
Courtesy of DAIMLERCHRYSLER CORP.

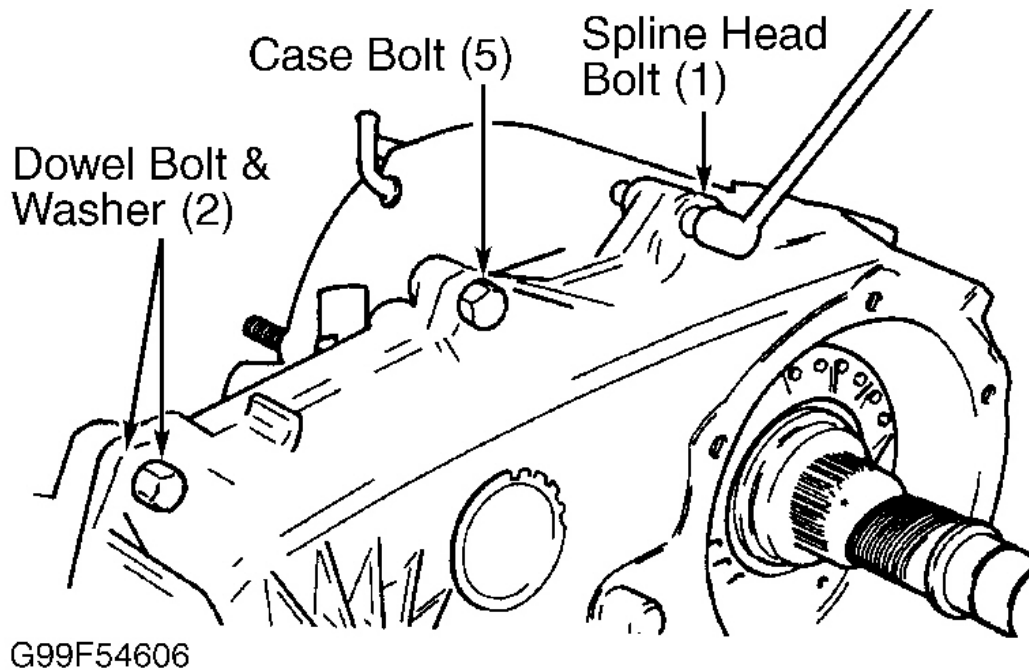
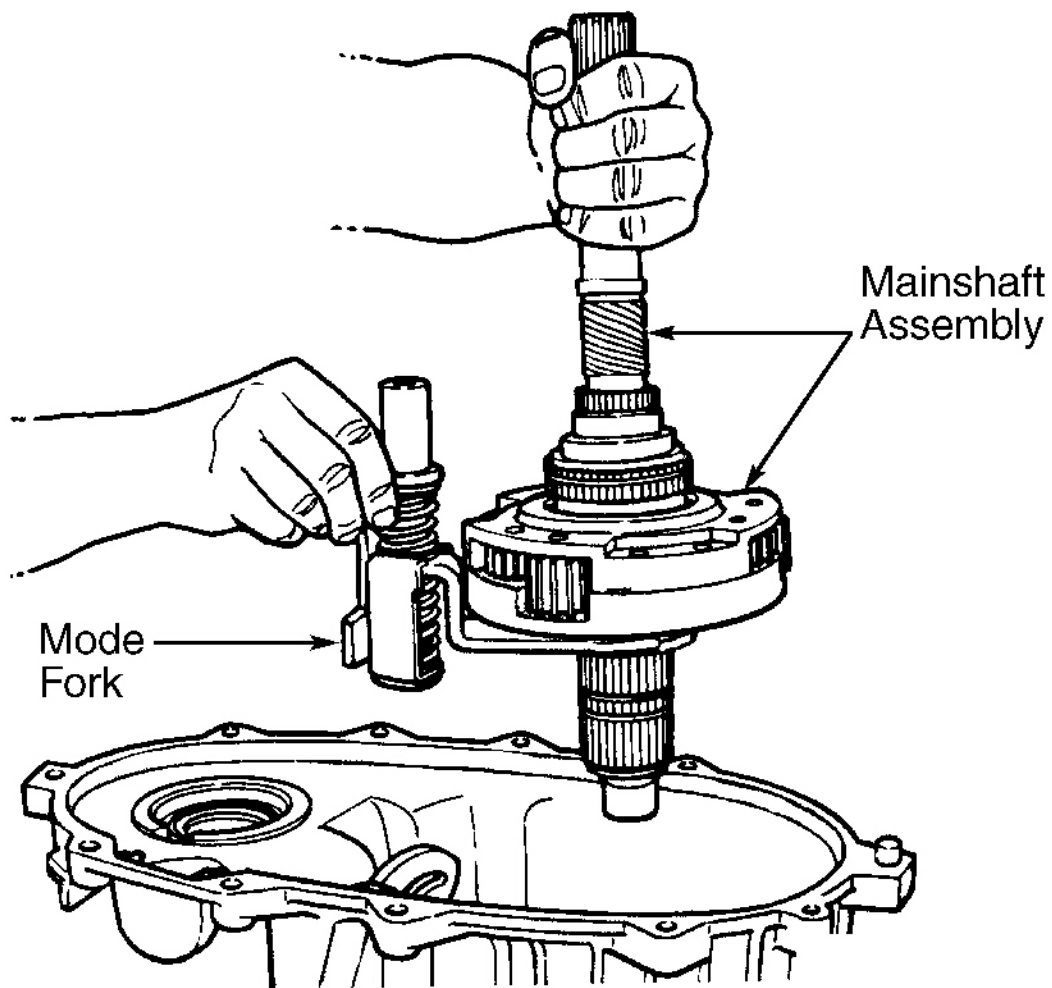


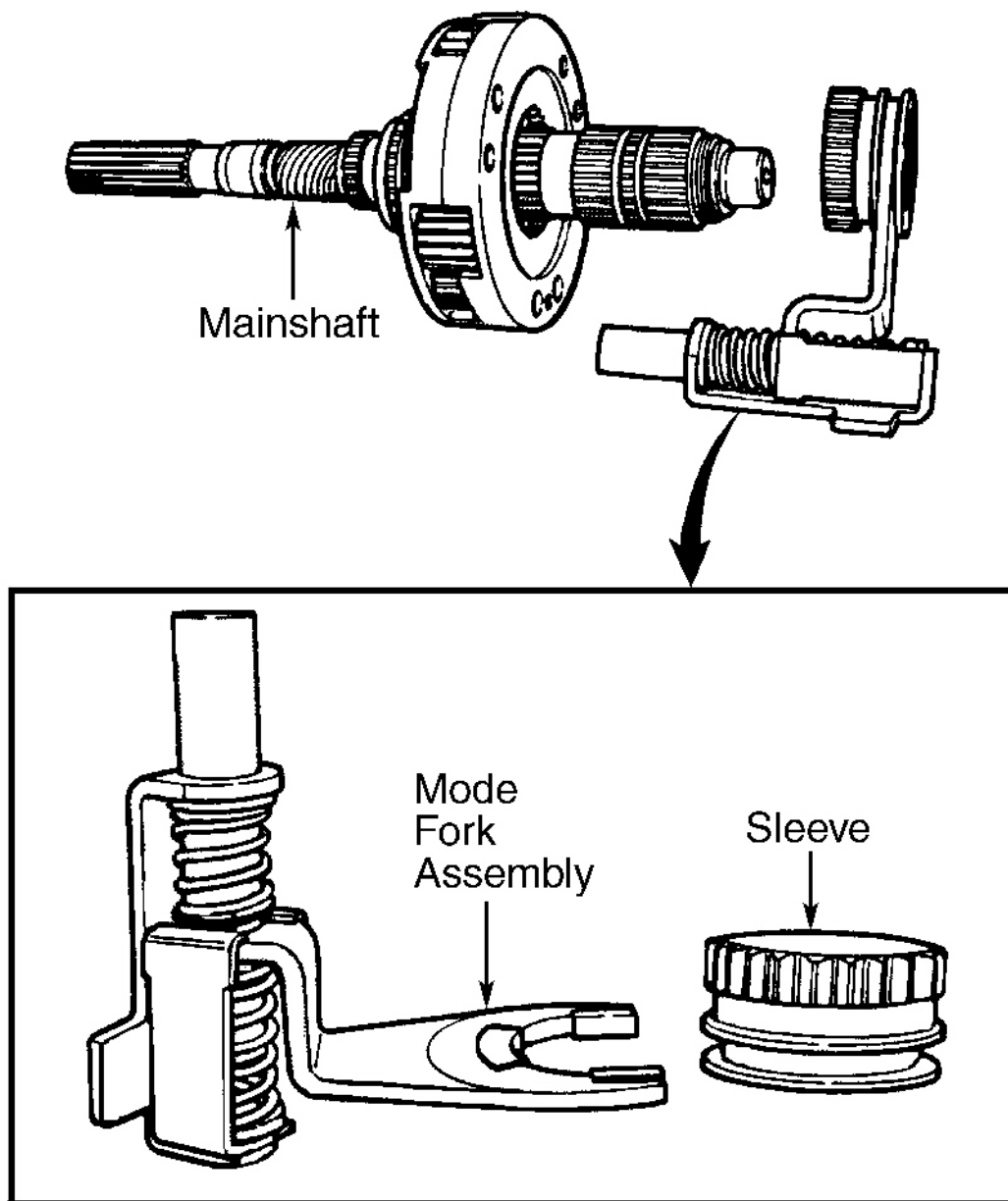
Fig. 3: Identifying Spline & Dowel Bolt Locations
 Courtesy of DAIMLERCHRYSLER CORP.

2. Remove "O" ring and seal from oil pump. Remove front-to-rear case bolts. Note position of bolts for reassembly reference. See **Fig. 2** and **Fig. 3** . Black bolts at each end of case go through case dowels and require a washer. Separate case halves. Remove oil pickup tube and screen from rear case.
3. Place range lever in 4L position. Remove yoke nut and yoke. Remove seal washer from front output shaft. Remove range lever attaching nut and washer. Move lever to Neutral and remove lever. Remove drive sprocket snap ring. Remove drive sprocket and drive chain.
4. Remove front output shaft. Remove shift detent plug, spring and plunger. Remove plug from low range fork lock pin access hole. Move shift sector until lock pin is aligned with hole. Remove lock pin with No. 1 screw extractor.
5. Remove shift rail from fork assembly. Remove mode fork and mainshaft as an assembly. See **Fig. 4** . Record mode sleeve position. Remove mode shift sleeve and mode fork assembly. Remove sleeve from fork. See **Fig. 5** . Remove intermediate clutch shaft snap ring from mainshaft.
6. Remove clutch shaft thrust ring. Remove intermediate clutch shaft. Remove differential retaining snap ring. Remove differential assembly. Remove differential needle bearings and thrust washers from mainshaft. Remove low range fork and hub.
7. Remove shift sector. Remove shift sector bushing and "O" ring. Remove front bearing retainer. Remove input gear snap ring. Using a press, remove input and low range gear assembly from input gear bearing. Remove low range gear snap ring.
8. Remove input gear retainer, thrust washers and input gear. Remove "O" rings from front bearing retainer, rear retainer, oil pump and case halves.



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Fig. 4: Removing Mode Fork & Mainshaft Assembly
Courtesy of DAIMLERCHRYSLER CORP.



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Fig. 5: Removing Mode Fork & Sleeve From Mainshaft
 Courtesy of DAIMLERCHRYSLER CORP.

Removal & Installation (Differential Assembly)

1. Mark differential halves for reassembly purposes. Separate differential halves. Remove planetary gear and thrust washers. See **Fig. 6** . Note mainshaft gear and sprocket gear position. Remove gears.
2. Lubricate differential components using ATF. Install drive sprocket gear in differential bottom case. Assemble differential planet gears and thrust washers. Ensure thrust washers are installed at top and bottom of each planet gear. Install mainshaft gear.

- Using scribe marks made on disassembly, assemble differential case halves. While holding case halves together, invert differential. Install and tighten case bolts to specification. See **TORQUE SPECIFICATIONS**.

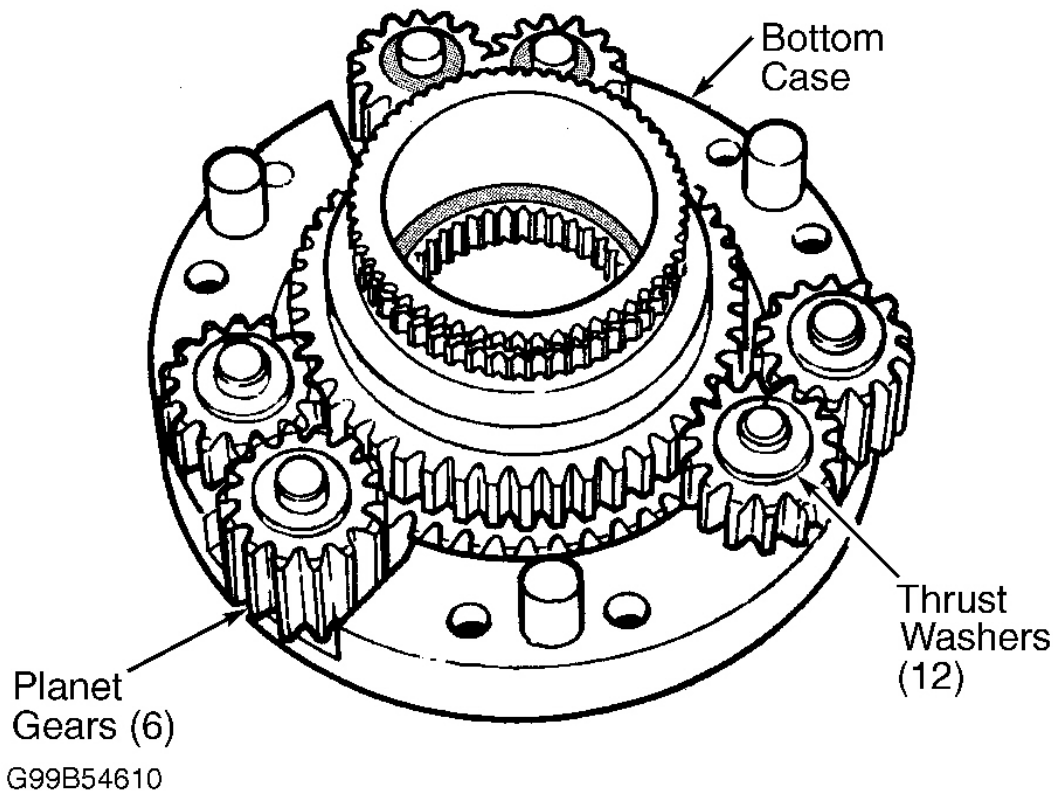


Fig. 6: Removing Differential Planetary Gears & Thrust Washers
Courtesy of DAIMLERCHRYSLER CORP.

CLEANING & INSPECTION

- Clean all parts with solvent and dry with compressed air. Replace all oil seals, "O" rings and snap rings. Check all parts for wear or damage and replace as necessary. Apply Mopar(R) Dexron-III ATF to all parts before installing.
- Inspect low range annulus gear inside front case. If gear is worn or damaged, replace case and gear as an assembly. Replace oil pump as an assembly if any part is damaged or worn.

TRANSFER CASE REASSEMBLY

NOTE: When installing bearings, ensure bearing bores are aligned with oil feed holes.

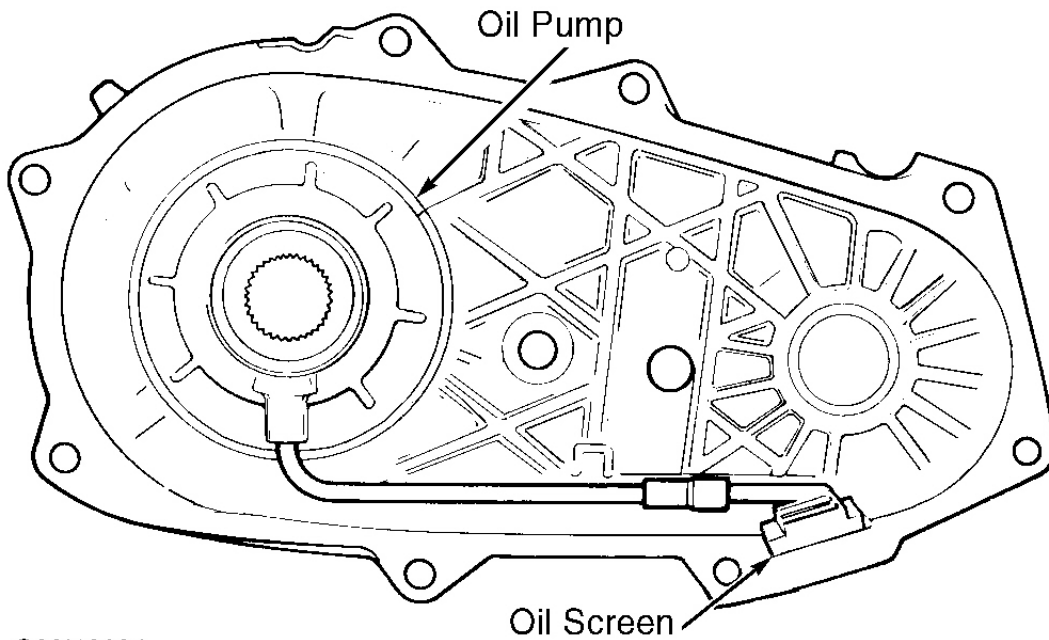
- Install front output shaft front bearing, snap ring and oil seal. Install snap ring on input gear bearing. Using a wooden block and press, install input gear until snap ring is against case.
- Install input gear pilot bearing. Install NEW front bearing retainer seal. Install NEW rear output shaft

bearing. Install NEW seal in oil pump feed housing and NEW oil pickup tube "O" ring.

3. Assemble low range gear, input gear thrust washers, input gear and retainer. Install low range gear snap ring. Ensure snap ring is seated properly in groove.

**NOTE: Ensure proper size press tool is used to install input gear shaft.
Incorrect size tool can damage case and thrust washers and will move
pilot bearing too far into gear bore.**

4. Start input gear shaft through bearing in front case. Using a press, install input gear shaft through bearing. Ensure adapter is positioned properly before pressing shaft.
5. Install input gear snap ring. Apply 1/8" bead of silicone sealant to front bearing retainer mating surface. Install front bearing retainer on front case. Install sector shaft "O" ring and bushing. Install shift sector.
6. Install detent pin, spring and plug. Install low range fork pads. Assemble low range fork and hub. Ensure low range fork pin is engaged in shift sector slot. Install bearing rollers on mainshaft. Install bearing spacer on mainshaft. Install differential. Install differential snap ring. Install intermediate clutch shaft, thrust washer and snap ring.
7. Install mode shift sleeve in mode fork. Install mode fork assembly on mainshaft. Ensure mode shift sleeve splines engage with differential splines. Install mode fork and mainshaft assembly in case. If necessary, rotate mainshaft slightly to engage mainshaft with low range components.
8. Install mode fork pin into shift sector slot. Install shift rail. Ensure shift rail is seated in shift forks. Rotate shift sector so lock pin can be installed. Install lock pin so tapered end is in fork and rail. Install plug in lock pin access hole.
9. Install detent plunger, spring and plug. Install front output shaft. Install drive chain and sprocket. Ensure splines and teeth are engaged. Install drive sprocket snap ring.
10. Install oil pick-up tube in oil pump. Install oil screen and connector hose to pickup tube. Install pickup tube and oil pump assembly in rear case. Ensure screen is properly positioned. See **Fig. 7** .
11. Install magnet in front case. Apply 1/8" bead of silicone sealant to front case mating surface. Assemble case halves together and tighten bolts to specification. See **TORQUE SPECIFICATIONS** . Ensure mainshaft splines are engaged with oil pump inner gear and a washer is used on bolts at dowel locations.
12. Install rear bearing in retainer. Install rear bearing retainer ring ensuring it is fully seated in groove. Apply an 1/8" bead of silicone sealer and install retainer to case. Install rear bearing retaining ring and spacer on output shaft. Install extension housing. Lubricate front yoke and install front yoke on shaft. Install NEW seal washer and NEW nut on yoke. Install vacuum switch and drain plug. Fill transfer case with appropriate fluid to proper level. See **LUBRICATION** .



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Fig. 7: Identifying Oil Pump Screen Position
Courtesy of CHRYSLER CORP.