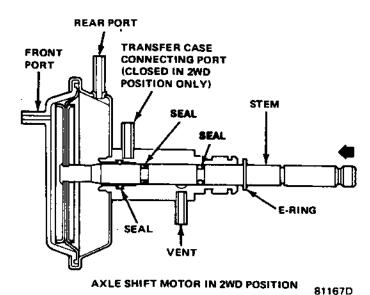
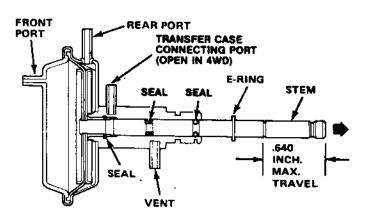


Fig. 2F-4 Select Drive Vacuum Control System





AXLE SHIFT MOTOR IN 4WD POSITION

81167E

Fig. 2F-5 Axio Shift Motor

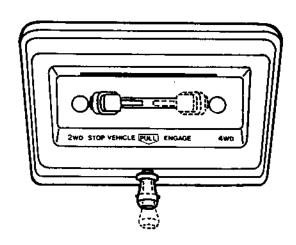
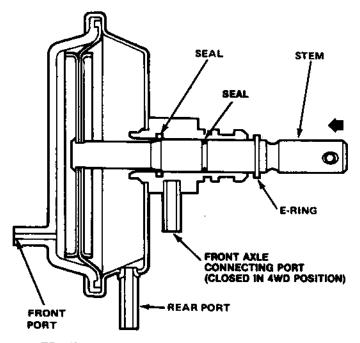
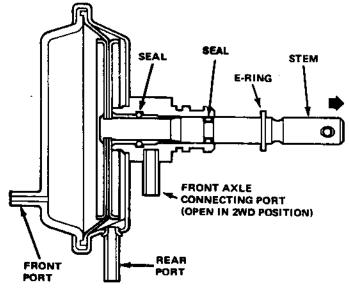


Fig. 2F-7 Made Selector Assembly



TRANSFER CASE SHIFT MOTOR IN 4WD POSITION 81167G



TRANSFER CASE SHIFT MOTOR IN 2WD POSITION 81167F

Fig. 2F-6 Transfer Case Shift Motor

LUBRICATION—EAGLE

Front Axie and Shift Housing

The lubricant capacities of the Select Drive System Front Axle are as follows:

- Axle Housing—2.5 pints U.S. (1.2 liters)
- Shift Housing—5 ounces U.S. (0.12 liters)

Recommended axle lubricant is SAE 85W-90 and correct fill level is to the bottom edge of the fill plug hole. For trailer towing applications, recommended lubricant is SAE 80W-140.

SERVICE DIAGNOSIS-EAGLE SELECT DRIVE

When diagnosing Select Drive System Malfunctions, refer to the shift motor function tests and service diagnosis charts provided in this chapter. The charts provide the procedures necessary to diagnose both mechanical and vacuum control system component malfunctions.

Transfer Case Shift Motor Function Test

- (1) Disconnect vacuum harness from transfer case shift motor.
- (2) Connect Vacuum Pump J-23738 to shift motor front port. Refer to figure 5 for shift motor port location.

- (3) Apply 15 inches of vacuum to shift motor and rotate rear propeller shaft to fully engage transfer case in four-wheel drive mode.
- (4) Shift motor should maintain vacuum applied to front port for minimum of 30 seconds. If shift motor does not maintain vacuum, replace motor. If motor does maintain vacuum, proceed to next step.
- (5) Disconnect vacuum pump from shift motor front port. Connect pump to shift motor rear port, plug front axle connecting port, and apply 15 inches of vacuum to motor.
- (6) Shift automatic transmission into Park. Shift manual transmission into first gear.

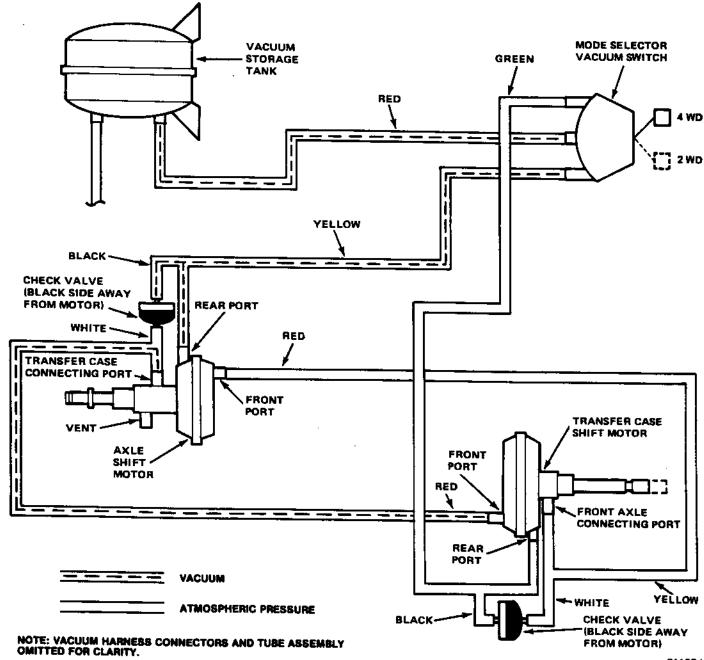


Fig. 2F-8 Four-Wheel Drive Mode Vacuum Diagram

81167 H

- (7) Shift motor should maintain vacuum applied to rear port for minimum of 30 seconds. If shift motor does not maintain vacuum, replace motor. If motor does maintain vacuum, proceed to next step.
- (8) Remove cap from shift motor axle connecting port and check for vacuum at port. If there is no vacuum at port, rotate rear propeller shaft as necessary to ensure complete transfer case engagement.

NOTE: The transfer case must be completely engaged before the shift motor stem will extend fully and open the axle interconnecting port.

- (9) If vacuum is now present at shift motor axle connecting port after fully engaging transfer case, refer to service diagnosis charts.
- (10) If vacuum is still not present at shift motor axle connecting port, slide boot away from shift motor stem and measure distance stem has extended. Stem should extend distance of 5/8-inch as measured from edge of shift motor housing to E-ring on stem (fig. 2F-6).
- (a) If shift motor stem does not extend specified distance, refer to service diagnosis charts.
- (b) If shift motor stem does extend specified distance but vacuum is still not present at axle connecting port, replace motor.

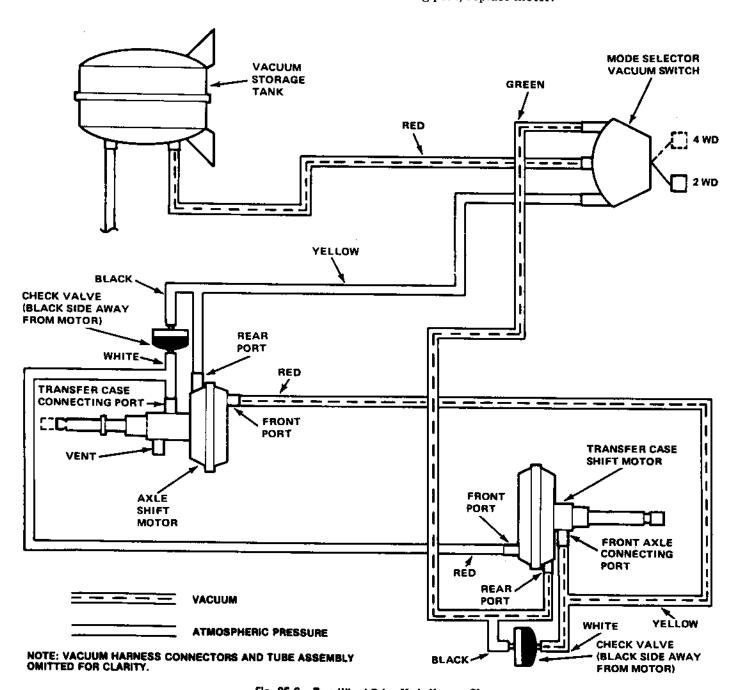
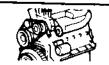


Fig. 2F-9 Two-Wheel Drive Mode Vacuum Diagram



SEE

I.S.

NOTES

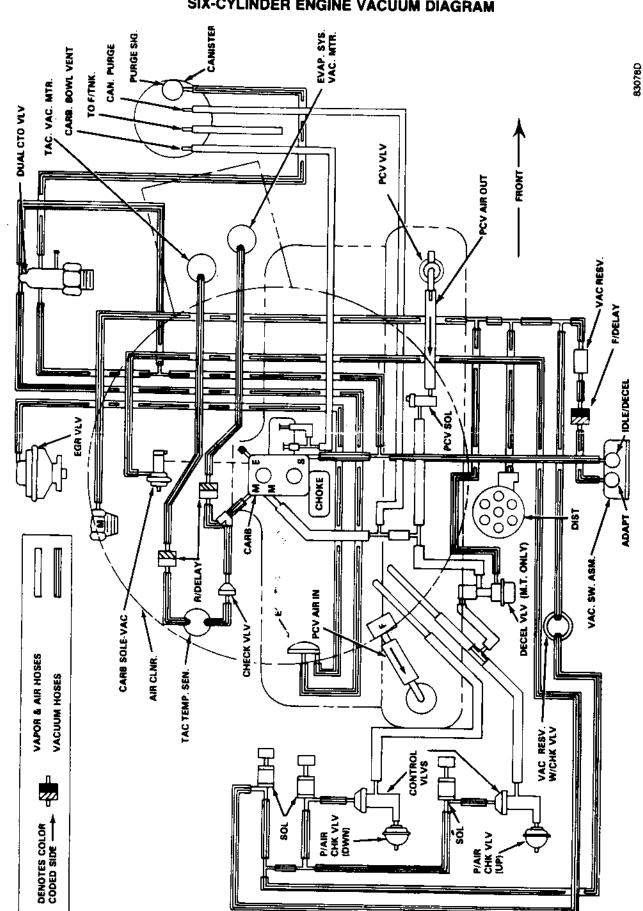
ENGINES





FEEDBACK SYSTEMS

SIX-CYLINDER ENGINE VACUUM DIAGRAM



B-304