#### **DRIVE BELT ROUTING**

1988 Jeep Cherokee

1983-88 ENGINE COOLING Jeep Drive Belt Routing

Cherokee, Comanche, Wagoneer, Wrangler, Grand Wagoneer

#### **DESCRIPTION**

Two drive belt systems are used on Jeep vehicles. The conventional V-Belt and the single Serpentine or V-Ribbed belt.

The single (Serpentine or V-Ribbed) drive belt system has been adopted by several manufacturers as a replacement for multiple V-Belt systems previously offered. The Serpentine belt requires a suitable belt tensioner similar to those used to control timing belt tension.

Use of a tensioner allows engine accessories to be mounted rigidly on the engine. The single belt drive system has a predicted life of 100,000 miles before replacement is required.

The belt tensioner has a wide functional range and is capable of maintaining tension during the expected life of the belt. Tensioner cannot compensate for extreme belt lengths. Poor tension control and possible tensioner damage can result from excessive belt length.

#### INSPECTION

Inspect belt for fraying. If fraying has occurred, ensure belt and tensioner are aligned properly. See Fig. 1. If tensioner has reached its limit of travel, belt is excessively stretched and replacement of belt is required. If excessive noise is noticed from tensioner or idler, check for possible bearing failure. Small cracks in the back of the belt are acceptable. Do not apply "Belt Dressing" or any other additive to serpentine belt.

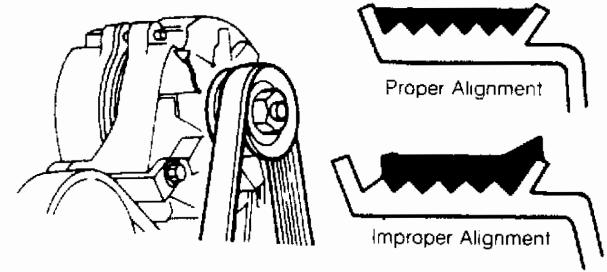


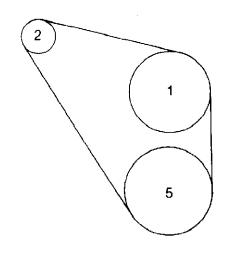
Fig. 1: Serpentine Belt Alignment Courtesy of Ford Motor Co.

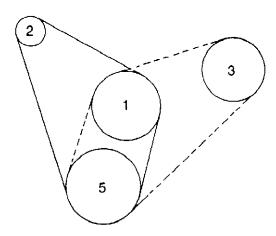
### **CHEROKEE**

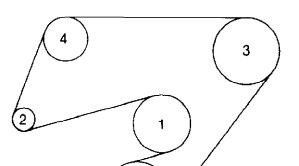
Install belt on crankshaft and belt-driven components as shown. Adjust tensioner. See Figs. 2 and 3.

1983-88

### FOUR-CYLINDER ENGINE DRIVE BELT ARRANGEMENTS







- 1. WATER PUMP
- 2. ALTERNATOR
- 3. POWER STEERING PUMP
- 4. A/C COMPRESSOR
- 5. DRIVE PULLEY

LEGEND FRONT BELT——— REAR BELT —————

Fig. 2: Drive Belt Arrangement: 1983-88 2.5L Cherokee Courtesy of Chrysler Motors

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### SIX-CYLINDER ENGINE DRIVE BELT ARRANGEMENTS

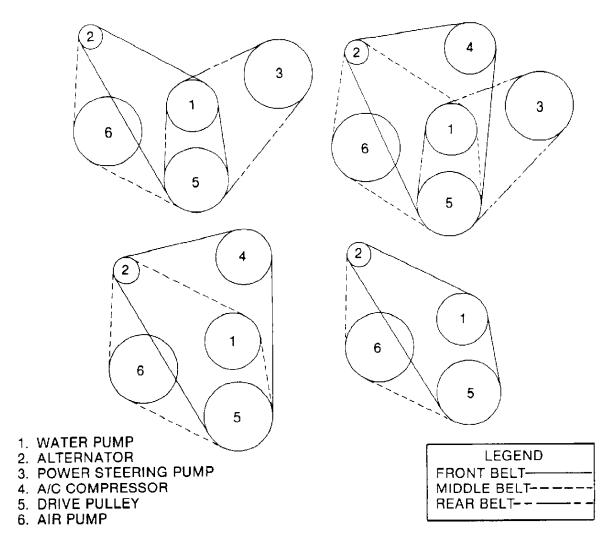
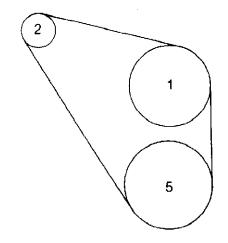


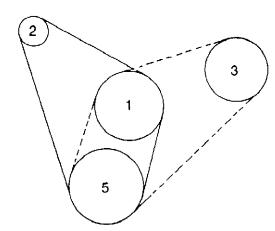
Fig. 3: Drive Belt Arrangement: 1983-86 4.2L Cherokee Courtesy of Chrysler Motors

### WRANGLER

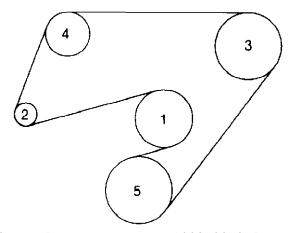
Install belt on crankshaft and belt-driven components as shown. Adjust tensioner. See Figs. 4-10.

# FOUR-CYLINDER ENGINE DRIVE BELT ARRANGEMENTS





- 1. WATER PUMP
- 2. ALTERNATOR
- 3. POWER STEERING PUMP
- 4. A/C COMPRESSOR
- 5. DRIVE PULLEY



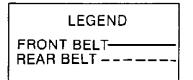


Fig. 4: Drive Belt Arrangement: 1983-88 2.5L Wrangler Courtesy of Chrysler Motors

# SIX-CYLINDER ENGINE DRIVE BELT ARRANGEMENTS

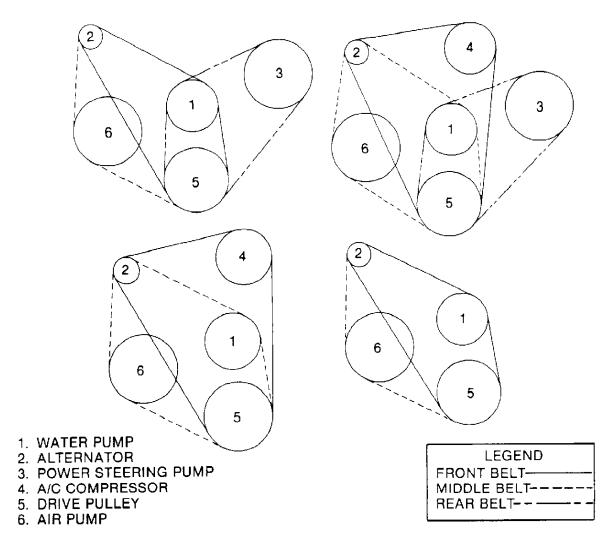


Fig. 5: Drive Belt Arrangement: 1983-86 4.2L Wrangler Courtesy of Chrysler Motors

1989

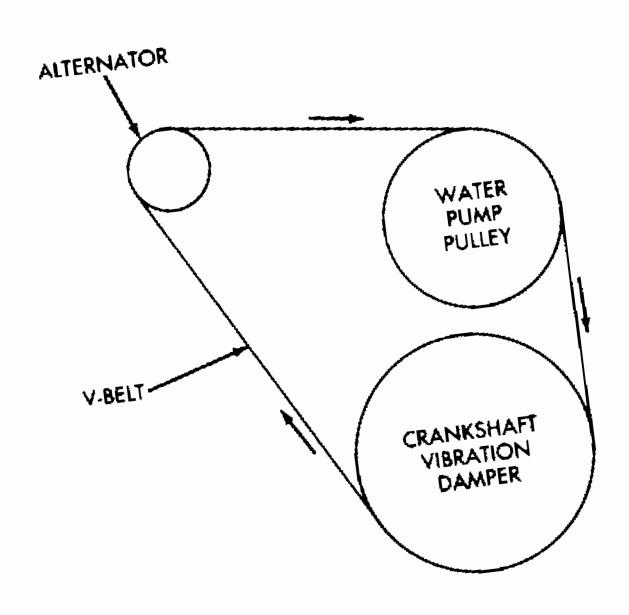


Fig. 6: Alternator Only: 1989 2.5L and 4.2L Wrangler (Except California)
Courtesy of Chrysler Motors

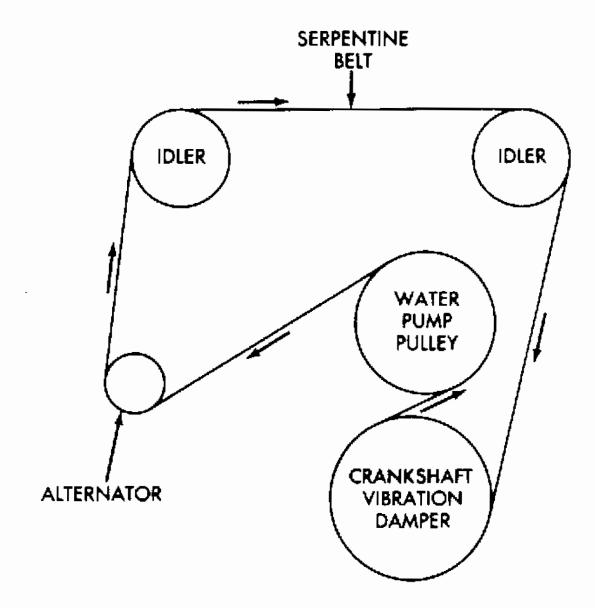
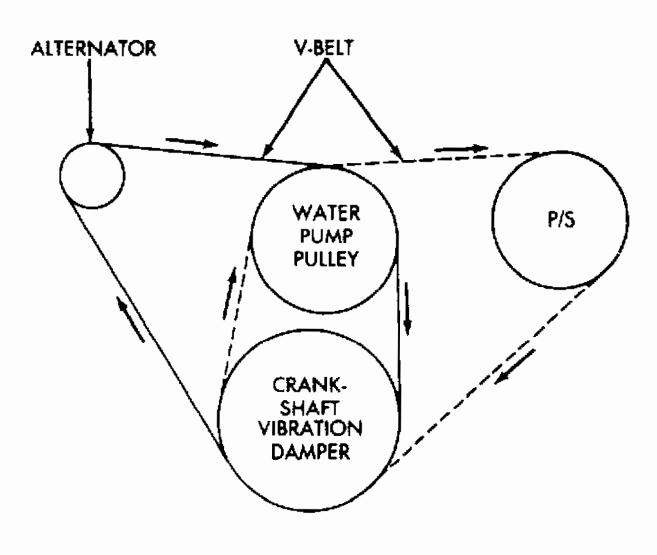


Fig. 7: Alternator Only: 1989 4.2L Wrangler (California) Courtesy of Chrysler Motors



LEGEND
FRONT BELT ——
REAR BELT ———

Fig. 8: Alternator & P/S: 1989 2.5L and 4.2L Wrangler (Except California) Courtesy of Chrysler Motors

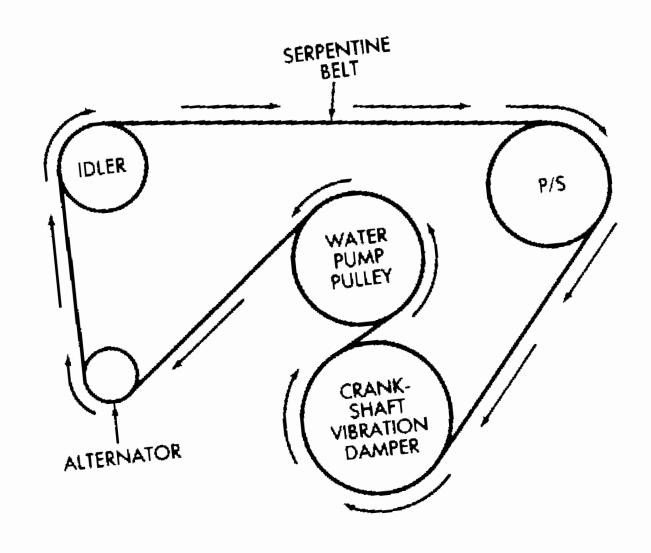


Fig. 9: Alternator & P/S: 1989 4.2L Wrangler (California) Courtesy of Chrysler Motors

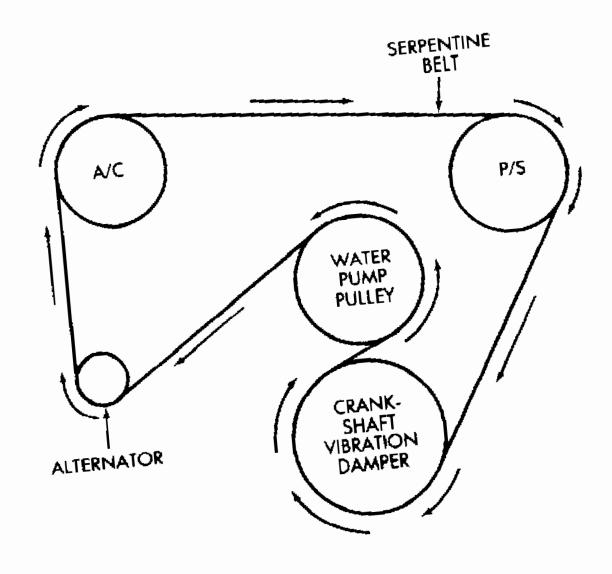


Fig. 10: Alternator, A/C & P/S: 1989 4.2L Wrangler Courtesy of Chrysler Motors

### COMANCHE AND WAGONEER

Install belt on crankshaft and belt-driven components as shown. Adjust tensioner. See Figs. 11-18.

# FOUR-CYLINDER ENGINE DRIVE BELT ARRANGEMENTS

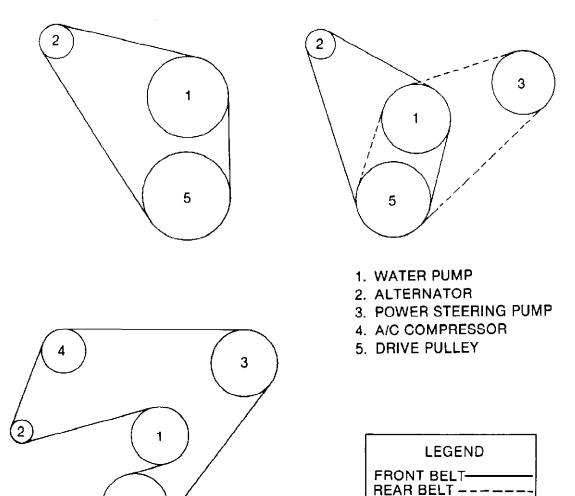


Fig. 11: Drive Belt Arrangement: 1983-88 2.5L Comanche & Wagoneer Courtesy of Chrysler Motors

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### SIX-CYLINDER ENGINE DRIVE BELT ARRANGEMENTS

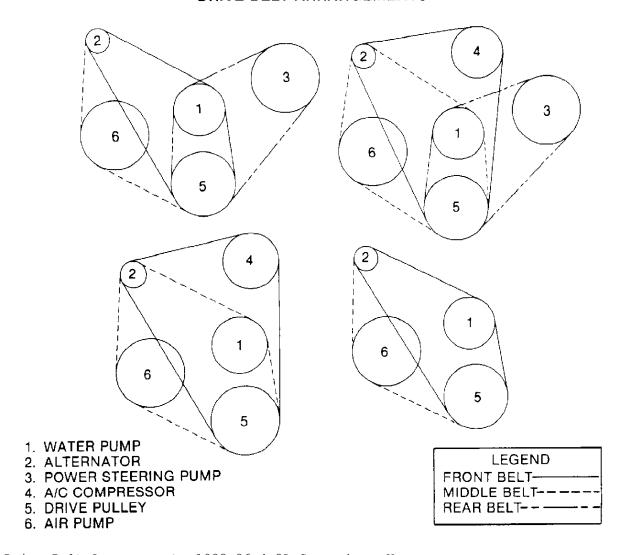


Fig. 12: Drive Belt Arrangement: 1983-86 4.2L Comanche & Wagoneer Courtesy of Chrysler Motors

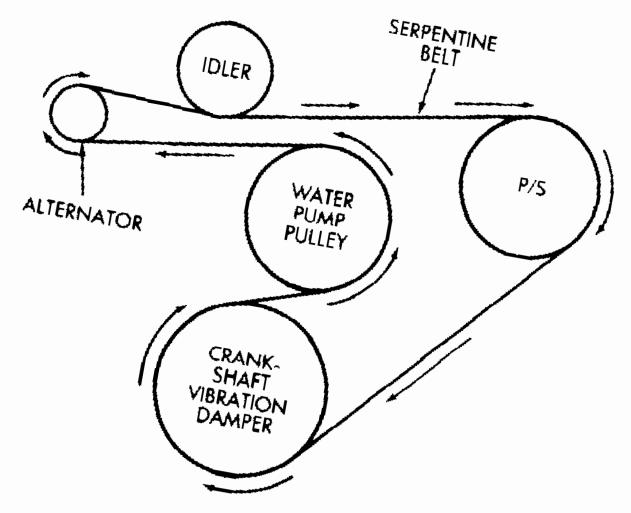


Fig. 13: Alternator & P/S: 1987-89 2.5L Comanche & Wagoneer Courtesy of Chrysler Motors

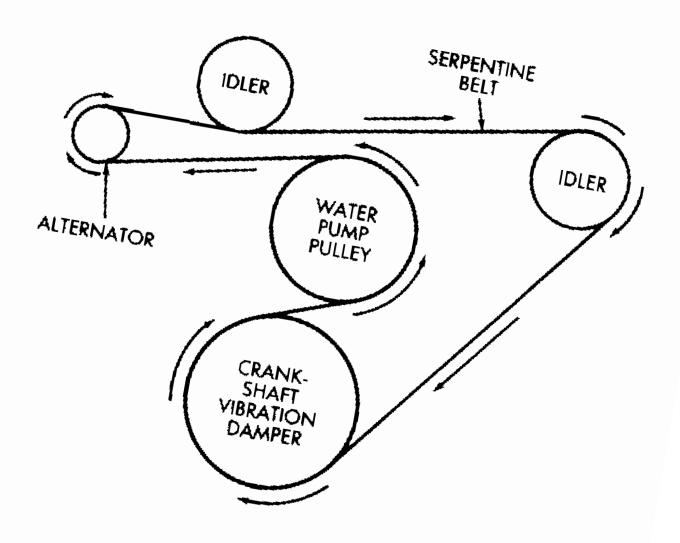


Fig. 14: Alternator Only: 1987-89 2.5L Comanche & Wagoneer Courtesy of Chrysler Motors

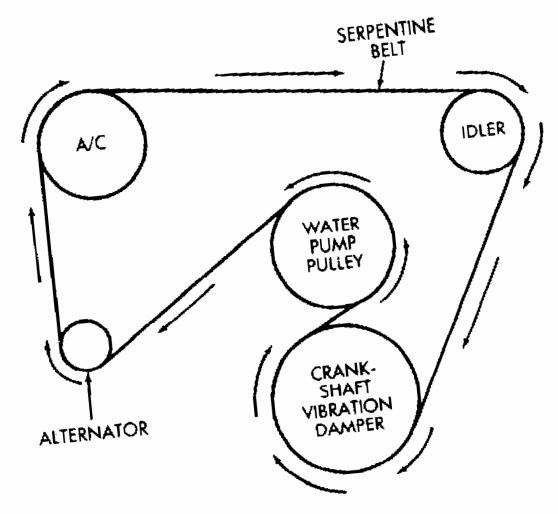


Fig. 15: Alternator & A/C: 1987-89 2.5L Comanche & Wagoneer Courtesy of Chrysler Motors

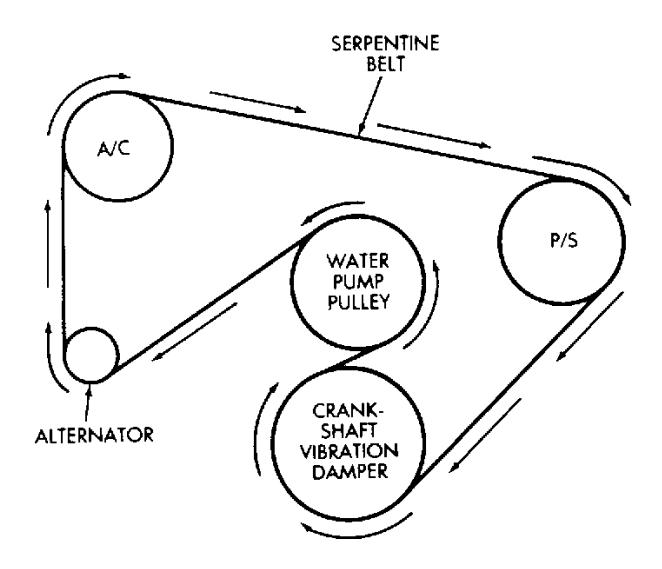


Fig. 16: Alternator, A/C & P/S: 1987-89 2.5L Comanche & Wagoneer Courtesy of Chrysler Motors

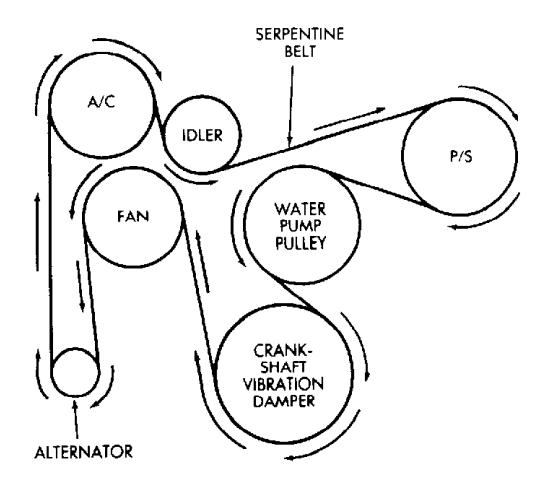


Fig. 17: Alternator, A/C & P/S: 1987-89 4.0L Comanche & Wagoneer Courtesy of Chrysler Motors

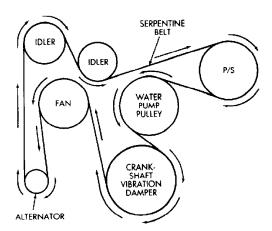


Fig. 18: Alternator & P/S: 1987-89 4.0L Comanche & Wagoneer Courtesy of Chrysler Motors

### **GRAND WAGONEER**

Install belt on crankshaft and belt-driven components as shown. Adjust tensioner. See Figs. 19-24.

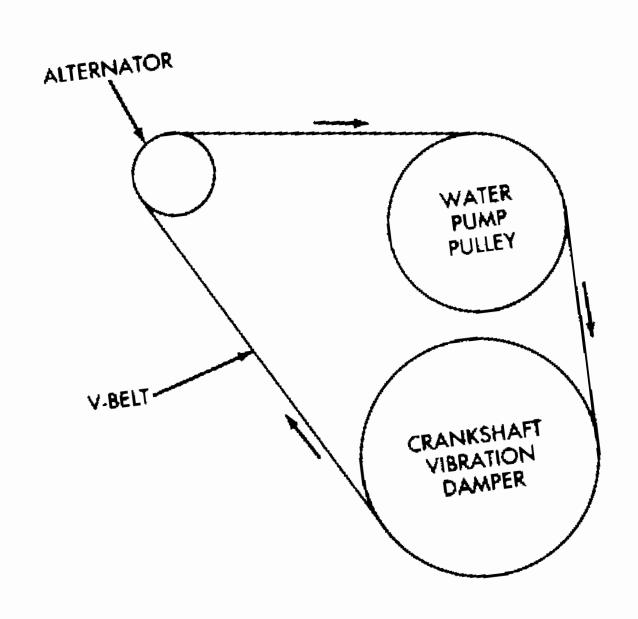
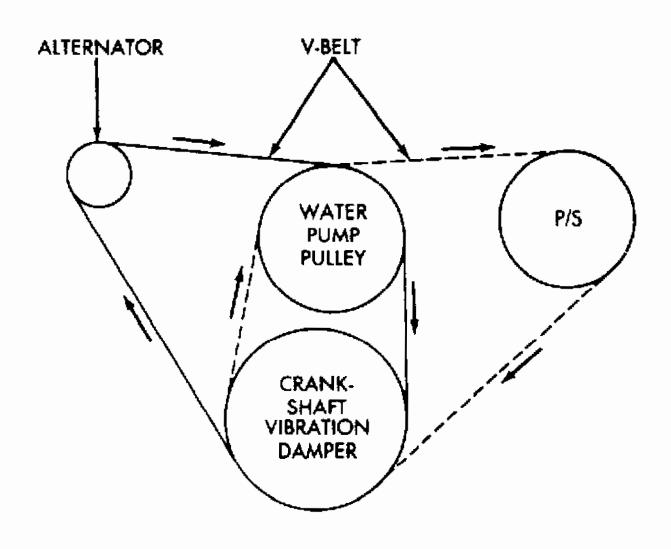


Fig. 19: Alternator Only: 4.2L Grand Wagoneer Courtesy of Chrysler Motors



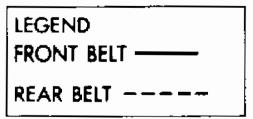


Fig. 20: Alternator, P/S: 4.2L Grand Wagoneer Courtesy of Chrysler Motors

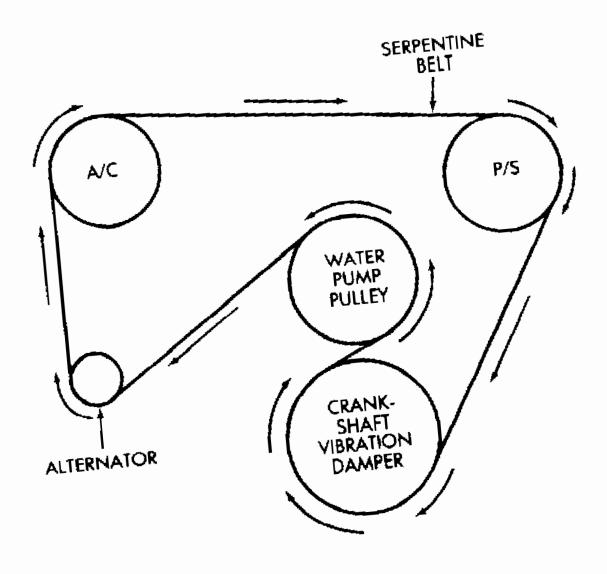
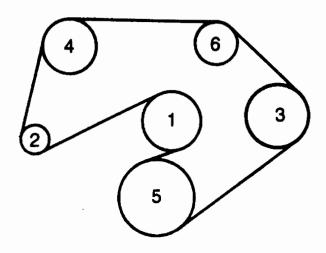
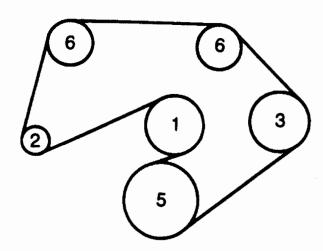


Fig. 21: Alternator W/Serpentine Belt: 4.2L Grand Wagoneer (California) Courtesy of Chrysler Motors



SIX-CYLINDER ENGINE WITH SERPENTINE DRIVE, ALTERNATOR, AIR CONDITIONING AND POWER STEERING



SIX-CYLINDER ENGINE WITH SERPENTINE DRIVE, ALTERNATOR AND POWER STEERING (CALIFORNIA ONLY)

- 1. Water Pump
- 2. Alternator
- 3. Power Steering Pump
- 4. A/C Compressor
- 5. Drive Pulley
- 6. Idler Pulley

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Fig. 22: Alternator, A/C, P/S W/Serpentine Belt: 4.2L Grand Wagoneer Courtesy of Chrysler Motors

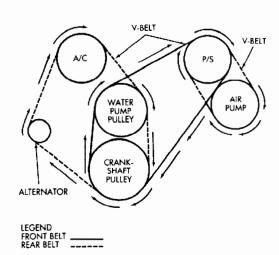
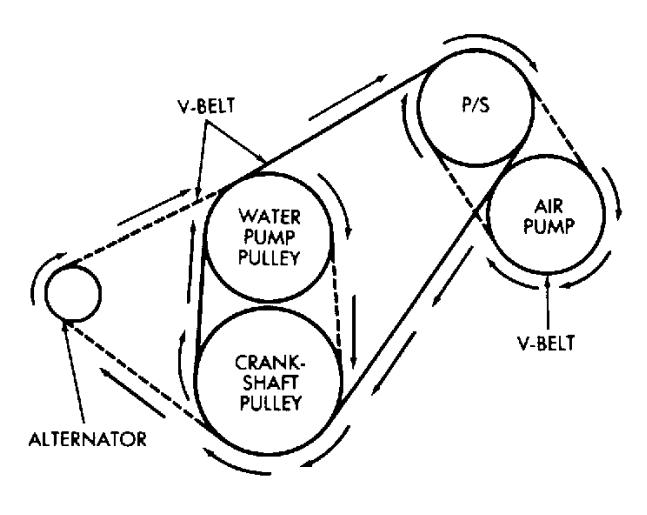


Fig. 23: Alternator, A/C, Air Pump & P/S: 5.9L Grand Wagoneer Courtesy of Chrysler Motors



FRONT BELT \_\_\_\_\_\_REAR BELT \_\_\_\_\_

Fig. 24: Alternator, Air Pump & P/S: 5.9L Grand Wagoneer Courtesy of Chrysler Motors

#### BELT TENSION TABLE

Application	New Belt (1)	Used Belt (1)
All Engines	. 180-200 (82 - 90)	140-160 (63-72)
(1) - Tension in Lbs. (Kg)	Using Strand Tension Gauge	