

**1. Steering System**

**A: SPECIFICATIONS**

|  |  |                                |  |                |
|--|--|--------------------------------|--|----------------|
| Whole system                             | Minimum turning radius                   | m (ft)                         | 5.1 (16.7)   |                |
|  | Steering angle (Inside-Outside)          |                                | 37.4°±1.5° — 32.5°±1.5°                              |                |
|  | Steering wheel diameter                  | mm (in)                        | 385 (15.16)  |                |
|  | Overall gear ratio (Turns, lock to lock) |                                | 16.5 (3.2)   |                |
| Gearbox                                  | Type                                     |                                | Rack and pinion, Integral                            |                |
|  | Backlash                                 |                                | 0 (Automatically adjustable)                         |                |
|  | Valve (Power steering system)            |                                | Rotary valve   |                |
| Pump<br>(Power steering system)          | Type                                     |                                | Vane pump  |                |
|  | Oil tank                                 |                                | Installed on pump                                    |                |
|  | Output                                   | cm <sup>3</sup> (cu in)/rev.   | 7.2 (0.439)  |                |
|  | Relief pressure                          | kPa (kg/cm <sup>2</sup> , psi) | 7,355 (75, 1,067)                                    |                |
|  | Hydraulic fluid control                  |                                | Dropping in response to increased engine revolutions |                |
|  | Hydraulic fluid                          | ℓ (US qt, Imp qt)              | 1,000 rpm: 7 (7.4, 6.2)<br>3,000 rpm: 5 (5.3, 4.4)   |                |
|  | Range of revolution                      | rpm                            | 500 — 7,500  |                |
|  | Revolving direction                      |                                | Clockwise  |                |
| Working fluid<br>(Power steering system) | Name                                     |                                | ATF DEXRON II, IIE or III                            |                |
|  | Capacity                                 | Oil tank                       | ℓ (US qt, Imp qt)                                    | 0.3 (0.3, 0.3) |
|  |  | Total                          | ℓ (US qt, Imp qt)                                    | 0.7 (0.7, 0.6) |

**B: SERVICE DATA**

|  |  |                                |  |  |
|--|--|--------------------------------|--|--|
| Steering wheel                                   | Free play  | mm (in)                        | 17 (0.67)  |  |
| Turning angle                                    | Inner tire & wheel                                   |                                | 37.4°±1.5°   |  |
|  | Outer tire & wheel                                   |                                | 32.5°±1.5°   |  |
| Steering shaft                                   | Clearance between steering wheel and column cover    | mm (in)                        | 3.0 (0.118)  |  |
| Steering gearbox<br>(Power steering system)      | Sliding resistance                                   | N (kg, lb)                     | 304 (31.0, 68.4) or less   |  |
|  | Rack shaft play in radial direction                  | Right-turn steering            | mm (in)  | 0.15 (0.0059) or less  |
|  |  | Left-turn steering             | mm (in)  | Horizontal movement: 0.15 (0.0059) or less<br>Vertical movement: 0.15 (0.0059) or less |
|  | Input shaft play                                     | In radial direction            | mm (in)  | 0.18 (0.0071) or less  |
|  |  | In axial direction             | mm (in)  | 0.1 (0.004) or less  |
|  | Turning resistance                                   | N (kg, lb)                     | Within 30 mm (1.18 in) from rack center in straight ahead position: Less than 11.18 (1.14, 2.51)<br>Maximum allowable value: 12.7 (1.3, 2.9) |  |
| Oil pump<br>(Power steering system)              | Pulley shaft   | Radial play                    | mm (in)  | 0.4 (0.016) or less  |
|  |  | Axial play                     | mm (in)  | 0.9 (0.035) or less  |
|  | Pulley   | Ditch deflection               | mm (in)  | 1.0 (0.039) or less  |
|  |  | Resistance to rotation         | N (kg, lb)   | 9.22 (0.94, 2.07) or less  |
|  | Regular pressure                                     | kPa (kg/cm <sup>2</sup> , psi) | 981 (10, 142) or less  |  |
|  | Relief pressure                                      | kPa (kg/cm <sup>2</sup> , psi) | 7,355 (75, 1,067)  |  |
| Steering wheel effort<br>(Power steering system) | At standstill with engine idling on a concrete road  | N (kg, lb)                     | 31.4 (3.2, 7.1) or less  |  |
|  | At standstill with engine stalled on a concrete road | N (kg, lb)                     | 147 (15, 33) or less   |  |

**C: RECOMMENDED POWER STEERING FLUID**

| Recommended power steering fluid | Manufacturer |
|----------------------------------|--------------|
| ATF DEXRON IIE or III            | B.P.         |
|                                  | CALTEX       |
|                                  | CASTROL      |
|                                  | MOBIL        |
|                                  | SHELL        |
|                                  | TEXACO       |