

1965-72 CHRYSLER CORP. NON-INTEGRAL POWER STEERING

Dodge (1965-72)

DESCRIPTION

Non-Integral power assist system, used with standard steering gear, consists of a pump, hydraulic hoses, a control valve, and a linkage mounted power cylinder. Power cylinder is mounted between front axle assembly and a tie rod. Control valve is mounted to a drag link between pitman arm and steering knuckle arm. Movement of the pitman arm actuates the spool valve within control valve, thus causing uneven pressure on the two sides of the piston within the power cylinder. This pressure provides power assist when turning vehicle.

LUBRICATION

Check fluid level in power steering pump every oil change. Steering fluid must be at normal operating temperature. If necessary, add power steering fluid, to bring fluid to proper level in pump reservoir.

REMOVAL & INSTALLATION

CONTROL VALVE

Removal — Disconnect pressure and return hoses at control valve, and mark for reassembly reference. Cap hose ends and valve connections to prevent entry of foreign matter. Disconnect ball stud ends at pitman arm and steering knuckle arm, and remove assembly from vehicle.

Installation — Connect control valve sliding sleeve end at pitman arm, and install nut and cotter pin. Connect drag link

end to steering knuckle arm, and install nut and cotter pin. Connect pressure and return lines to control valve, in same order as during removal, and bleed system. See *POWER STEERING PUMPS* in this Section.

POWER CYLINDER

Removal & Installation — Disconnect pressure and return lines at power cylinder, and cap ends to prevent entry of foreign matter. Remove cylinder attaching hardware at tie rod and axle assembly, and remove cylinder from vehicle. To install, reverse removal procedure, and bleed system. See *POWER STEERING PUMPS* in this Section.

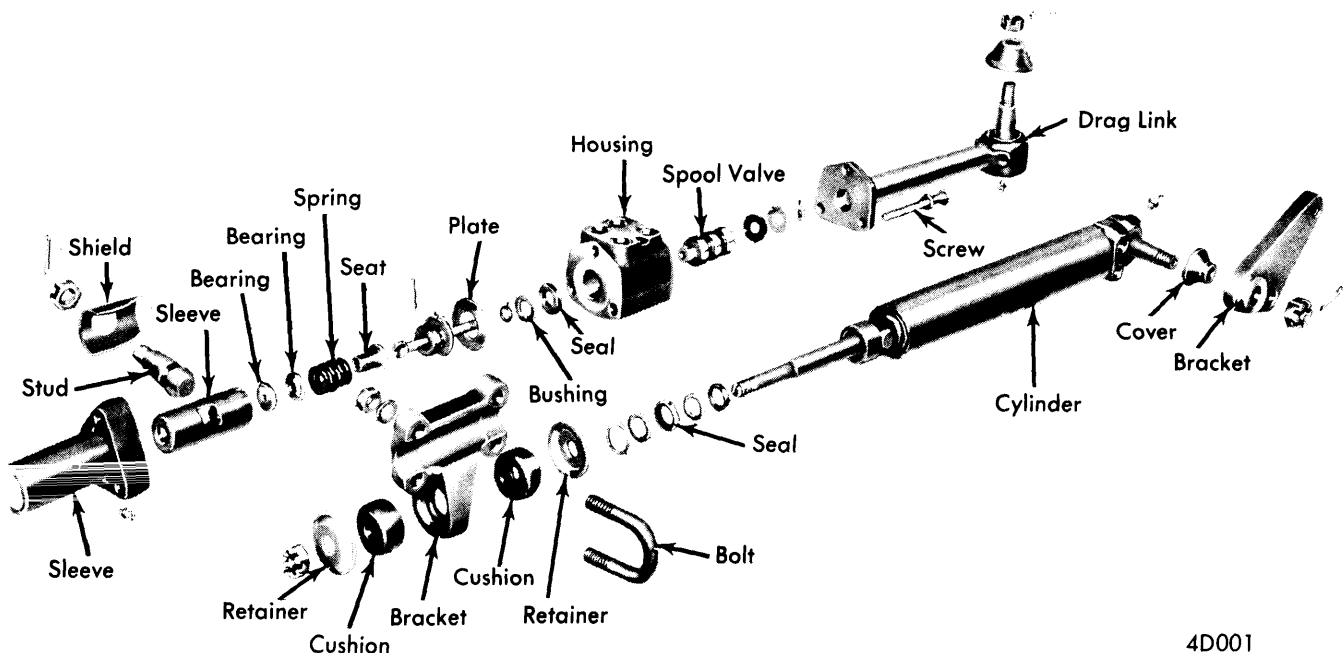
OVERHAUL

CONTROL VALVE

Disassembly — 1) Remove three drag link-to-valve housing attaching bolts. Loosen and remove spool rod jam nut. Slide valve housing, spool valve, and seals off actuating rod as an assembly. *NOTE* — Spool valve ends are same diameter on D100 & D200 only.

2) Remove ball stud nut, dust shield, and sleeve grease fitting. Remove large and small flat washers, then push lock pin out of spool valve actuator rod retainer. Remove retainer, actuator rod, spring seat, spring pressure plate, ball stud, and inner sleeve. Shake second pressure plate out of inner sleeve.

Reassembly — 1) Lubricate inner sleeve, stud, pressure plate, spring, and guide with Lubriplate prior to assembly. Install inner pressure plate in inner sleeve, then install inner sleeve, stud, pressure plate, spring, and spring seat in control valve housing. Install actuator rod and retainer. Tighten retainer in sleeve, then back off one slot to prevent stud from binding. Install actuator rod lock pin, and small and large washers.



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POWER CYLINDER & CONTROL VALVE ASSEMBLY

Power Cylinders

1965-72 CHRYSLER CORP. NON-INTEGRAL POWER STEERING (Cont.)

2) Install new seals on spool valve, then install valve into housing. Install housing and valve assembly over actuating rod. **NOTE** — On D300 models, small diameter end of spool valve must face drag link. Install actuator rod jam nut, and tighten until snug. Back off nut just enough to permit side movement without end play. Install drag link end onto housing, and install attaching bolts.

POWER CYLINDER

NOTE — Overhaul of power cylinder is limited to the replacement of seals only.

Disassembly — Loosen clamp on vertical ball stud. Position a wrench on flats of piston rod and remove vertical ball stud. Remove cylinder snap ring, then remove washer, seal, back-up washer, and "V" block seal. Remove scraper washer if inside diameter is more than .0035" larger than piston rod diameter.

Reassembly — Position "V" block side of seal over piston rod and into adapter. Install seal back-up washer, seal (with lip side away from washer), and second washer. Install snap ring. Position ball stud in socket, and install stud clamp.