

Locking Hubs

WARN SELECTIVE MANUAL TYPE

DESCRIPTION

Locking hubs provide a means of engagement of front wheels on vehicles with front driving axle. When hub is engaged, full power is transmitted to both front wheels. When hubs are disengaged, front wheels are free to turn but axle shafts and differential will remain idle. Engagement is accomplished through action of gears within hub. With hub in engaged position, clutch body and hub body of hub assembly act as one piece to connect axle shaft to wheel hub. All Warn Selective Manual Hubs function similarly, regardless of differing external appearance.

IDENTIFICATION

All Warn Hubs employ BRASS control knobs to engage and disengage locking mechanism. Model number of hub is stamped into recesses of control knob. Model numbers for Warn Selective Manual Hubs are as follows:

- M4, M7, M11, M13,
- M14, M16, M18, M21,
- M22, M23, M47, M49,
- M198, WL2, WL2A

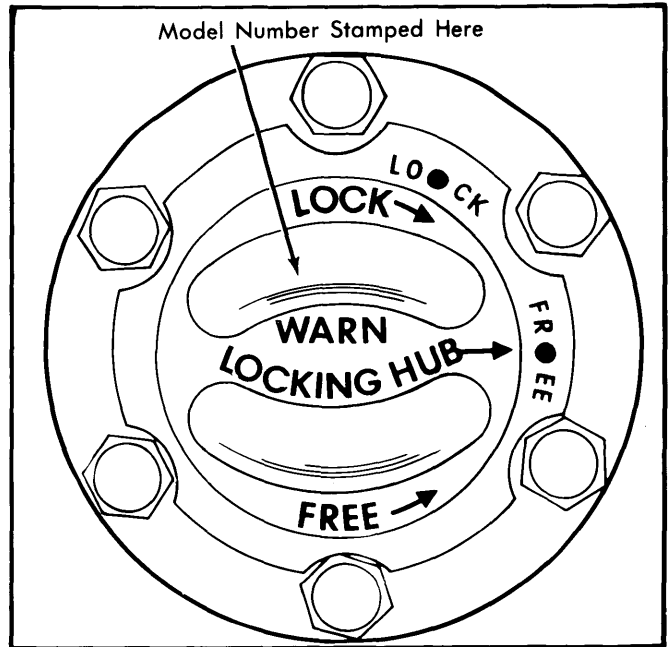


Fig. 1 Front View of Warn Manual Hub Control Knob

REMOVAL & INSTALLATION

NOTE — Hubs are mounted with either Allen head screws or hex head bolts. If mounted with hex head bolts, bend locking tabs back before beginning removal.

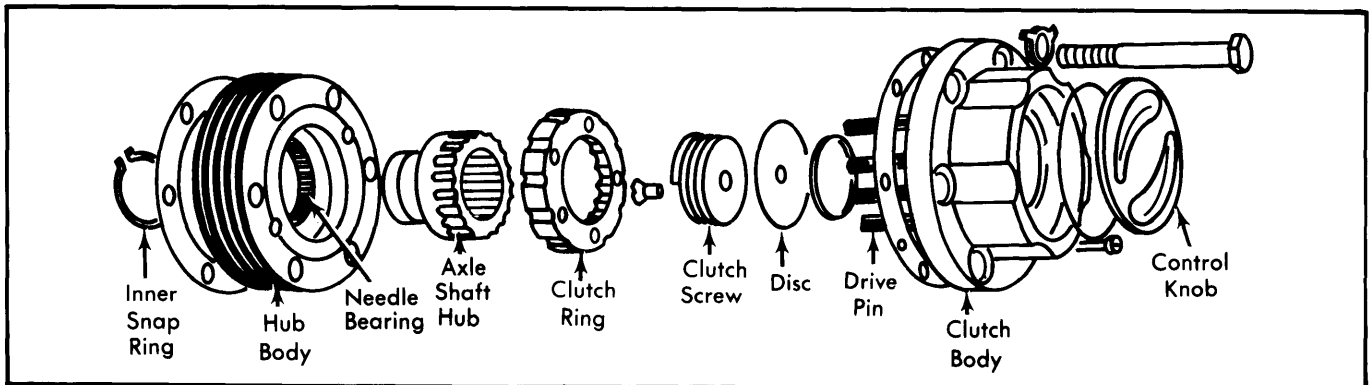


Fig. 2 Exploded View of Hex Bolt Type Manual Hub

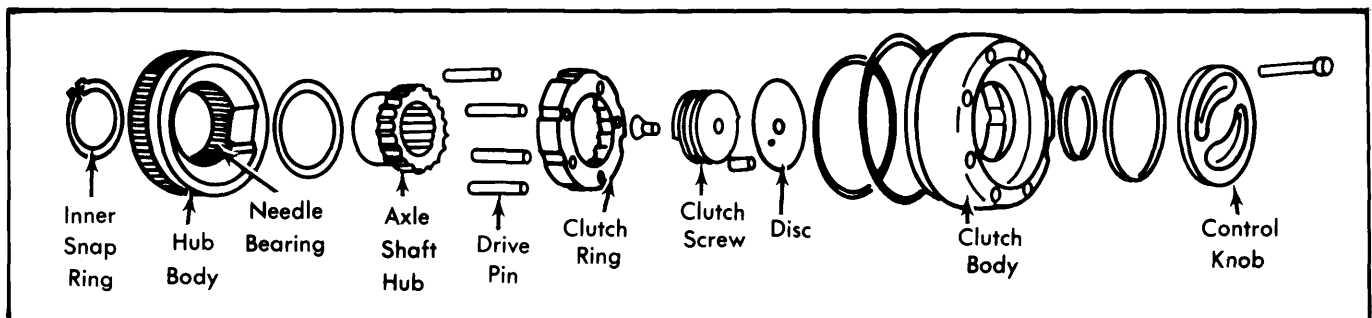


Fig. 3 Exploded View of Allen Bolt Type Manual Hub

WARN SELECTIVE MANUAL TYPE (Cont.)

Remove locking hub mounting screws and lift off clutch body, being careful to keep drive pins in position in body. Remove lock ring holding hub body onto axle shaft and pull hub body from shaft. To install, reverse removal procedure.

OVERHAUL

HUB BODY

Disassembly — Using suitable pliers, remove inner hub body snap ring. Remove axle shaft hub from hub body, noting from which side of body gear teeth extend. Remove needle bearing assembly.

Reassembly — To assemble hub body, reverse disassembly procedure, replacing worn and damaged parts as necessary.

CLUTCH BODY

Disassembly — Remove flat head screw from center of clutch screw, then remove clutch screw and clutch ring. Separate clutch ring from clutch screw and remove drive pins from clutch body. Remove disc from center of body and remove control knob. Remove dowel pin and seals from knob.

NOTE — *Poppet ball and spring located in control knob are not serviced separately. If damaged, entire control knob assembly must be replaced.*

Reassembly — To assemble clutch body, reverse disassembly procedure, using new gaskets and seals and replacing worn or damaged parts as necessary.