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Torque Specs, Wear Limits and Setup Numbers

For MK9, Webster, and Formula Mazda

- Rear cover nuts (1/4"-28) 4 ft-lb
- .Bearing carrier and sideplate nuts (8mmx1.25) 10-12 ft-lb
- .Main pinion shaft nut (7/8"-20) 115 ft-lb
- 4Main pinion shaft nut (7/8"-20, Formula Mazda) 135 ft-lb
- .Layshaft nut (both 7/8"-20 and 7/8"-14) 115 ft-lb
- .Drawbolt ½ turn loose
- .Shift fork nuts (self locking with Red Loctite) 35 ft-lb
- Detent spring caps (F. Mazda & model 300, with pipe sealant) 4 ft-lb
- Main pinion bearing retainer bolts (with red Loctite) 38 ft-lb
- Main pinion bearing ring-nut (with red Loctite) 180 ft-lb
- Ring gear bolts, (7/16"-20) steel diff (with red Loctite) 75 ft-lb
- Ring gear bolts, (7/16"-20) aluminum diff (with red Loctite) 70 ft-lb
- .Fill plugs, tapered pipe (with pipe sealant) 20 ft-lb

Wear limits

(normally the component is replaced when it reaches this limit)

- Shift fork dog ring groove .208"
- 1st/reverse shift fork (thickness) .155"
- Dog lug maximum rounding (both gear and dog lugs) 25% of lug height
- Rear layshaft bearing maximum axial play .035"
- Inner track wear no pitting
- Front layshaft bearing journal no pitting
- Maximum pinion gear tooth pitting 15% of tooth
- . Differential gears no pitting
- Coupling sleeve splines no step
- Shift linkage Apex joints (entire shift linkage) 5° max angular slop
- Main pinion bearing no play Note: the main pinion bearing must be compressed by the hub stack and the pinion nut tight for this check.

Set-up numbers

- Ring and Pinion backlash as marked on R&P
- Differential preload (Hewland says "snug"), or if measuring .010"-.012"