



## Torque specs, wear limits and set-up numbers for MK9, Webster, and Formula Mazda Transaxles

### Torque Specifications

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

### Wear limits

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

1. Shift fork dog ring groove	.208"
2. 1st/reverse shift fork (thickness)	.155"
3. Dog lug maximum rounding (both gear and dog lugs) 25% of lug height	
4. Rear layshaft bearing maximum axial play	.035"
5. Inner track wear	no pitting
6. Front layshaft bearing journal	no pitting
7. Maximum pinion gear tooth pitting	15% of tooth
8. Differential gears	no pitting
9. Coupling sleeve splines	no step
10. Shift linkage Apex joints (entire shift linkage)	5° max angular slop
11. 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

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