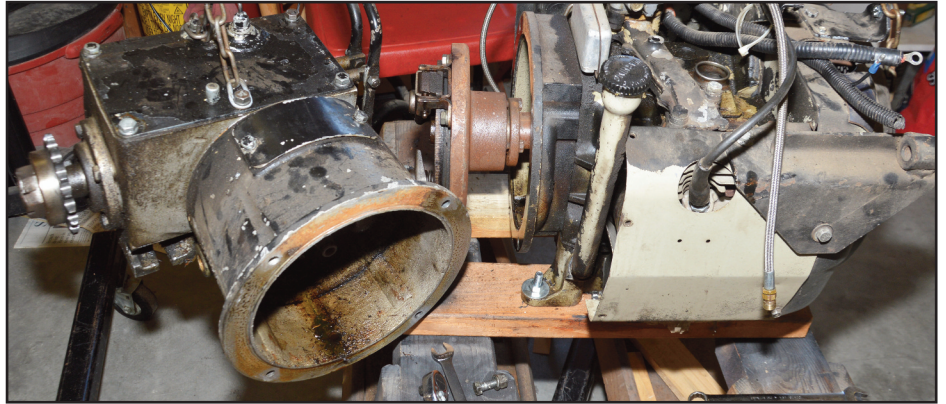


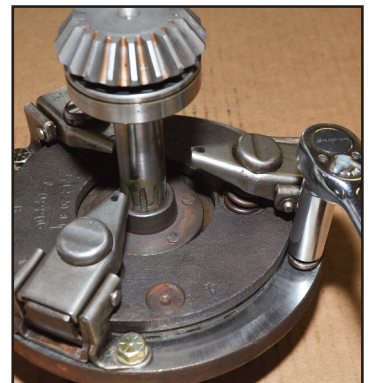
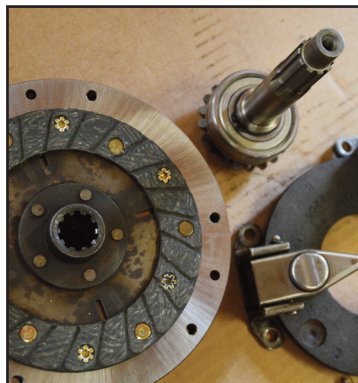
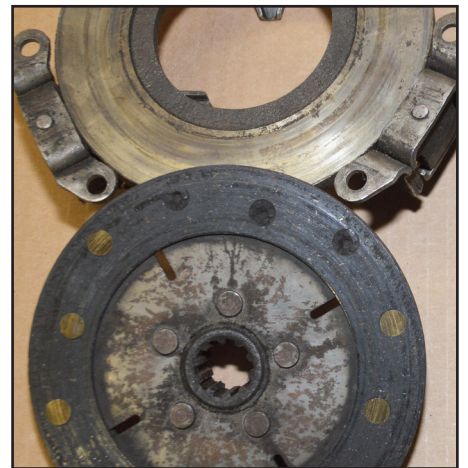
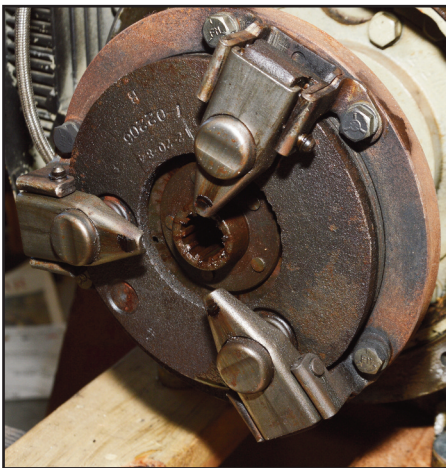
B48G CLUTCH OVERHAUL

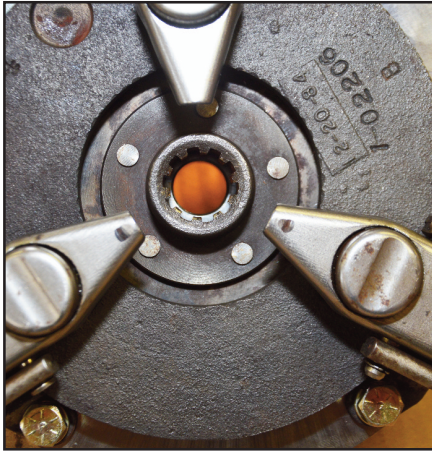
BY WAYNE PARSONS

The day came when there was no more denying that the motorcar clutch needed overhauling. As the group started off, getting the car into gear necessitated some awful grinding. Making the first up shift required more gnashing of metal teeth. Within a short distance the clutch wouldn't release or make enough friction to pull the car—as if the chain had dropped. The car was on the bar for the rest of the day.

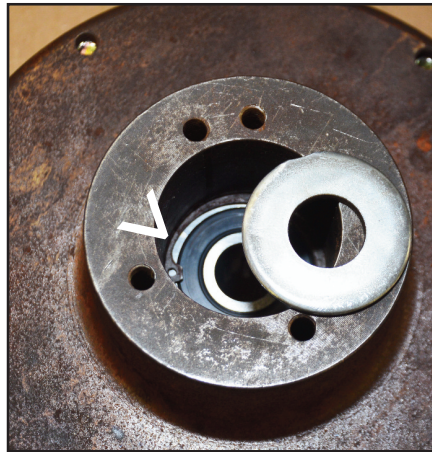


Before starting, take some pictures for reference. Lift out the motor and transmission as one unit. *Center below left:* The driven plate, between the pressure plate and flywheel, is covered with oil. Oil has leaked out of the transmission and along the bevel pinion. The driven plate material can't get a grip now because of wear and the oil. *Below center:* With the clutch removed the back of the motor is exposed. Check for leaks and clean the area. Leave the bushing assembly on the crankshaft. *Center right:* The worn pressure plate (top) and driven plate. *Below left:* The clutch is back from the shop with newly machined surfaces and new friction material. A new 6303-2RS bearing will be pressed into the flywheel center and a new throwout bearing used. *Below right:* Use the bevel pinion to line up the driven plate while inserting and tightening down the pressure plate bolts.

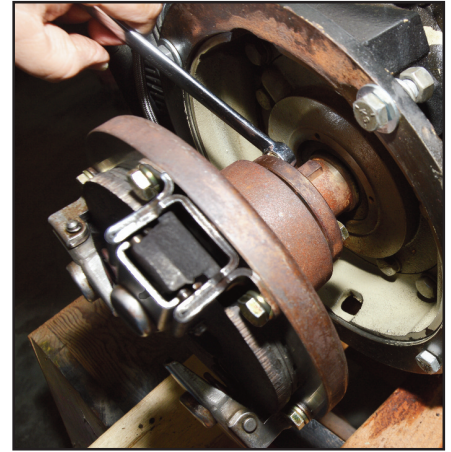




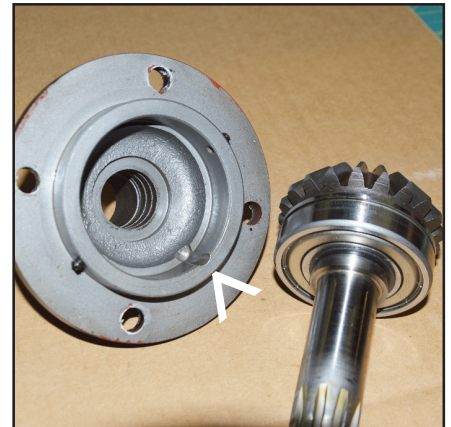
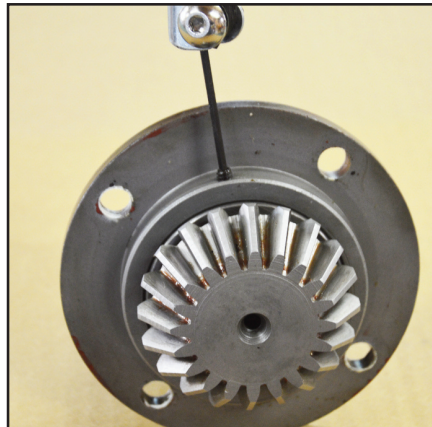
After removing the bevel pinion, the center of the driven plate lines up perfectly with the bearing. This is important for mating back up the transmission with the motor.



Note the retaining ring that determines the bearing position. The retaining ring is also the stop for the wrought washer against which the bushing assembly tightens down.



Three bolts hold the clutch on the bushing assembly. Tighten down snugly while remembering that the wrought washer is pushing against the retaining ring.



The bevel pinion wiggled indicating that the 6206-RSNR bearing on the shaft was worn. The pinion carrier assembly is easily removed from the bell housing by sliding the clutch release yoke left and right to loosen the four bolts. To release the bevel pinion, unscrew the two socket hex head cone point set screws. A local transmission shop pulled the bearing and pressed a new one on. Note the weep hole at the inside bottom of the pinion carrier. Oil that gets past the bearing is meant to drain back into the transmission sump. To reduce oil escaping out the weep hole, don't over fill the transmission and use straight 140 weight gear oil.

However, over time, oil will get past the bearing seal, travel out the pinion carrier assembly, and contaminate the clutch. The solution is a new pinion carrier with a rubber seal. Ed Lee in Chesapeake City, MD, makes a custom pinion carrier (below left) that has room for a nitrile rubber (NBR) type ADL seal (23 x 40 x 06). The original bevel pinion gets machined down slightly (next to the retaining ring) to make room for, and mate up with, the NBR seal.

