



THE MODEL T FORD

ITS REPAIR, SERVICE, & RESTORATION

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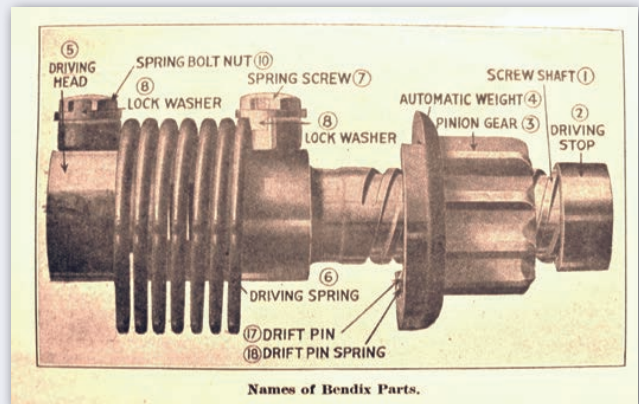
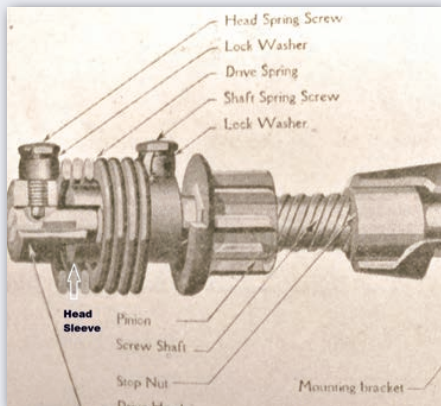
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Starter Bendix Care and Repair

The Bendix (named after the inventor, Vincent Bendix, who founded the Bendix Corporation and patented the famous automobile starter drive in 1910) relies on a bevel weighted gear and helix spring to be spun by the starter motor, engaging the flywheel ring gear and starting the engine. As the engine gains speed over the electric starter, the Bendix allows the bevel gear to disengage and spin away from the flywheel ring gear automatically.

A few features of the Bendix may be repaired in the home garage if they are worn or damaged.

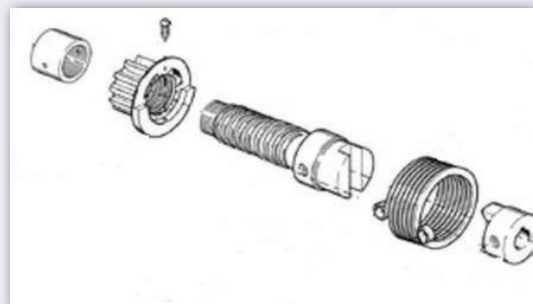


The Bendix head sleeve is often fractured or split, as shown in the photo below, and you can fit a new sleeve.

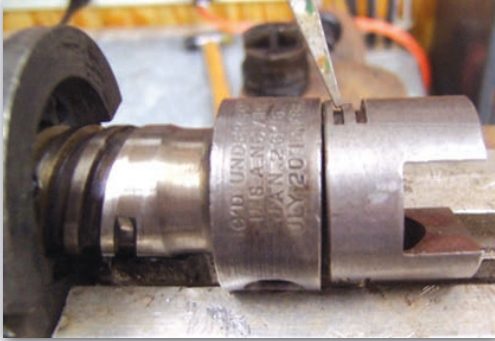


When starting the car, be sure to always fully retard the spark lever, as a kickback can result in the Bendix spring or its parts being broken, or worse yet, a bent starter shaft. Also take care when installing the Bendix's unique spring keeper hex bolts and the special double lock tab washers. Always use new double lock tab washers under the bolts when removing and replacing the Bendix drive assembly.

The fixed tab is placed in the spring loop and the flat tab is bent up around the edge of the hex bolt after the bolt is securely tightened.



Pry away the old sleeve and clean the end of the Bendix shaft at the groove, then slip on the new sleeve. The sleeve has two slits. The center portion between the slits is carefully folded down with a tool into the shaft groove. Some early shafts use a forward groove, so fold down the slit there. The sleeve will be secure but still allow the sleeve to spin. Don't clamp the slit portion too much; turn the sleeve with your fingers and it should rotate without binding.



If the drive gear needs to be replaced, the stop nut at the end of the screw shaft must be removed. It is right-hand threaded onto the screw shaft and locked by the two tiny holes on the outside of the stop nut which are crimped on the inside of the shaft. Use a small punch and clear the upset crimp on drive shaft inside the stop nut and unscrew to remove.



A longer bolt threaded into the shaft provides leverage for a pipe or other tool to turn the shaft counter-clockwise while the stop nut is held fast in the soft jaws of a vice.



Position the new gear on the shaft, replace the stop nut, and then stake to re-upset the side of the drive shaft into the stop nut holes to lock the nut.



Finally, confirm that the small drift pin and spring in the drive gear edge contacts the threaded shaft. This little, but important, pin and spring provides the resistance needed to keep the drive gear from accidentally drifting into the ring gear while the engine is running.



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