

SUBJECT: Sleeve slipping in Gear and Ratchet Wheel Assembly, Part No. 116986, in the 2500 Series Phonographs.

It has been reported from the field that trouble had been encountered with some of the Model 2500 Series Phonographs of the sleeve in the above subject gear slipping while the carrier and selector crank arm were driven in a clockwise or search direction. If this condition exists, it will be noted that as the crank arm contacts the selector latch pin the changer motor would continue to run but the crank arm will not advance far enough to actuate the carriage switch. At this point the sleeve in the gear would slip, resulting in no selection. A small Roll Pin, Part No. 73782-32, is used to pin the sleeve and bushing to the gear. The large Roll Pins, Part No. 73782-66, are used as a safety stop on the drill bit to assure proper depth of the hole to be drilled. It is suggested that the following procedure be used as a correction:

- 1. Select an even number selection on the phonograph.
- 2. Stop the mechanism with the service switch just as the record lift arm reaches its maximum travel.
- 3. Disconnect the turntable actuating cable from the Record Clamp Assembly Lever, Part No. 59688.
- 4. Push record clamp lever assembly forward.
- 5. Place a cloth under the ratchet wheel assembly to catch the drillings.
- 6. Remove the spring from the Strap and Spring Assembly, Part No. 59626, mounted between the hub and ratchet wheel of the gear.
- 7. Use a #40 drill bit to drill a hole in the hub of this gear and ratchet wheel in between the strap from which the spring was removed in Item 6.
- 8. First measure the length of the small roll pin at the beginning of the chamfer or taper of the drill. Then slip the large roll pins over the drill from the opposite end until they meet the small roll pin, then insert the balance of the drill bit into the chuck of the drill. The end result, the large roll pins on the drill will act as a stop, this will govern the depth of the hole to be drilled in the hub of this gear.

- 9. CAUTION: Do not drill completely through the gear into the selector shaft. The depth of the hole should be the length of the small roll pin minus O", plus 1/64", not measured from the tip of the drill but from the beginning of the chamfer or bevel of the drill at the starting end. Drive the small roll pin into the hub of the gear. This roll pin must be flush with the hub of the gear so it will not interfere with the Strap of the Friction Drive, Part No. 59626.
- 10. Brush out all drill shavings with a small brush on to cloth, magnetize a screw driver on one of the speaker magnets to pick up any stray drill shavings. Remove cloth carefully - do not spill any of the drill shavings.
- 11. Reinstall spring on friction drive.
- 12. Reinstall turntable actuating cable.
- 13. Make selection to test.

For quick reference to the parts mentioned, refer to the numerical parts list in the 2300, 2400 or 2500 Service Manuals, which in turn will refer you to the parts section page with a drawing of the parts mentioned so you will be familiar with the particular parts referred to.