SERVICE BULLETIN

No. 504 January 18, 1965

1964-65 SERVI-CAR ELECTRIC STARTER SERVICE

Reliable starting on the electric start Servi-Car depends upon good electrical and mechanical condition of the starting system. This is especially true in cold weather.

Here are some important points to remember about preventive maintenance - to prevent starting difficulties before they occur - and information for correcting starting difficulties through use of latest parts and repair procedures.

1. BATTERY: Charge battery as necessary during the Servi-Car down-period so as to have a full battery when starting the operating period. This is especially important if operating at night with lights, radio and accessories, or if Servi-Car runs at low speed or engine idles for long periods. Remember other points of good battery maintenance - keep electrolyte level up in all cells, keep battery clean, keep terminal connections clean and tight.

2. TRANSMISSION AND ENGINE OIL: Light engine oil, 58-W, must be used in both transmission and engine when temperature is 32^{O} F or below.

   Note: Servi-Cars shipped from the factory have transmission filled with 75 medium-heavy oil. This must be removed and replaced with 58-W special-light oil for winter operation. To drain oil into pan, support left rear wheel about 8 inches above floor. Remove remainder of oil from transmission oil filler hole with a hand suction gun, such as the one pint size Alemite No. 4038 suction gun. 58-W oil must also be used in the engine which is delivered from the factory with a small amount of light break-in oil remaining in the system.

3. STARTER DRIVE: If starter motor spins but does not crank engine because the Bendix pinion does not throw in, it is probably caused by dirt and grease on the Bendix spiral. In this case, disassemble starter shaft and clean parts.

   To prevent this from occurring in the future, install a starter spring kit, part No. 31505-64 which provides for manually putting pinion into engagement when automatic feature fails. Details on this installation are described in Service Bulletin No. 496.

   Do not oil Bendix spiral when parts are reassembled. Starter shaft nut, which has a self-lock feature, should be tightened securely (approximately 45 ft-lbs). If this nut is loose, it may cause starter shaft to bind.

   Another possible cause of binding could be a worn starter motor shaft bushing, or a loose or worn starter shaft bushing. These should be checked and replaced if necessary.

4. TRANSMISSION COVER & PARTS: Starting with the 1965 season, new transmission cover with No. 12-24 socket screws were used for a stronger, tighter installation. If there is any difficulty with 1964 covers becoming loose, install new cover part No. 34804-64A which uses 2-1782W, 6-1757 W, and 1-1755 W socket screws (size 12-24). Use 12-24 hand taps (plug tap followed by bottoming tap) to enlarge existing No. 10-24 screw holes in transmission case to the new thread size.

   The top cover does not use a gasket, but instead requires a new product called plastic gasket, supplied in a tube containing enough for one transmission application. Order under Part No. 99622-65.

   To be sure screws stay tight (either the old 10-24 screws if not replaced, or new 12-24 socket screws) use Grade C Loctite, Part No. 99619-60, on all cover screw threads.

5. TROUBLESHOOTING STARTING SYSTEM: If starter motor does not operate at all, or if it cranks engine slowly, check the starter system with the Sun Vat 26 tester as described in Service Bulletin No. 502. This provides for a quick electrical check of the battery, wiring, starter motor and solenoid to determine the cause of trouble.