

## TELECHRON MOTORS LUBRICATION AND REPLACEMENT

### 1. GENERAL

- 1.01 This section covers the method of lubricating and replacing Telechron motors.
- 1.02 This section is reissued to delete ordering information for the oil cap and gasket.
- 1.03 If no re-oiling interval is specified, it is recommended that re-oilable type motors be re-oiled at 2-year intervals.
- 1.04 It is inadvisable to store motors for more than 1 year without running or re-oiling, due to the possibility of the motor failing to start when put into service. Motors should be stored with the shaft horizontal.
- 1.05 Reference to CX-type motors in this section applies to those motors designated C4X and C5X type.

### 2. REPLACEMENT PARTS AND LUBRICANT INFORMATION

- 2.01 If any part of the motor requires replacement, the entire motor should be replaced except as noted in 2.04.
- 2.02 When ordering a replacement motor, give the following information to identify the motor.
- (a) If the motor is identified by a number on the job information, order accordingly; for example, one P-419571 Telechron motor.
- (b) If the motor has a KS marking, order accordingly; for example, one KS-7780 Telechron motor.
- (c) If the motor is part of a device covered by a KS specification, include the KS number, list number, if any, and the name of the device; for example, one Telechron motor for KS-6835 Brown indicating controller.

(d) If the information covered in (a) through (c) does not apply, order by motor nameplate data; for example, one Telechron motor C2 type, 2 rpm, Model 33M782, Serial No. 20931, 110 volts, 60 cycles, 6 watts.

2.03 Manufacture of the C4X-type motor has been discontinued. If the C4X motor is to be replaced, order a C5X motor giving the complete nameplate data of the C4X motor.

2.04 Manufacture of the C6 re-oilable type motor has been discontinued and no replacement parts are available. If a complete C6 motor is to be replaced, order a C5 motor giving complete nameplate data of the C6 motor. If only the rotor of the C6 motor requires replacement, order a sealed-type rotor now used in the C5 motor, giving complete nameplate data; for example, one sealed-type rotor (C5 motor) for use in Telechron motor C6 type, 2 rpm, Model, Serial No., 110 volts, 60 cycles, 6 watts.

2.05 All re-oilable type motors shall be lubricated with KS-7470 oil. This oil replaces Telechron motor oil RM639157 (93X866).

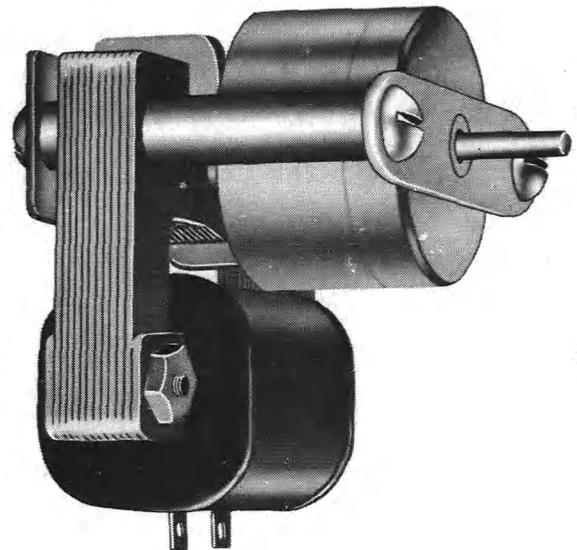


Fig. 1 - B-Type Telechron Motor

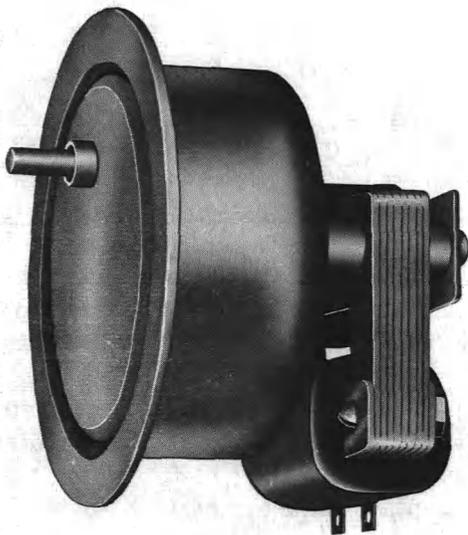


Fig. 2 - C-Type Telechron Motor

### 3. PROCEDURES

**3.01** *Caution: The power supply to the motor should be disconnected while working on the motor. Avoid short circuits and personal contact with live parts, particularly on motors operating from service voltage.*

**3.02** *Caution: No attempt should be made to turn gears by means of the motor shaft extension as this would damage the gearing.*

#### Replacing Motors

**3.03** Replacement of a motor is a simple operation involving removal of the motor mounting screws. For satisfactory operation of B-type motors, the casing should be positioned when mounting the motor so that the TOP marking on the casing is at the top.

#### 3.04 Electrical Connections

- (a) **Single-field Motors:** Tagging of leads or terminals is not required, since either lead may be connected to either terminal.
- (b) **Double-field Motors:** Leads or terminals should be tagged to insure proper reconnection.

#### Re-oiling Motors

**3.05** To re-oil a motor, first disconnect and remove the motor from its mounting. Remove one nameplate screw, loosen the other screw sufficiently to swing the nameplate to one side, and then tighten the screw. Using the screwdriver, unscrew and remove the oil cap, taking care not to damage the gasket. Drain the oil from the motor and re-oil as follows.

- (a) **B and BC Re-oilable Type Motors:** Add 1/2 teaspoonful (approximately 2.2 cubic centimeters) of KS-7470 oil to the motor through the oil hole.
- (b) **C, CM, and CX Re-oilable Type Motors:** Add 1 teaspoonful (approximately 5 cubic centimeters) of KS-7470 oil to the motor through the oil hole.
- (c) After re-oiling the motor, remount the oil cap. Remount the motor and connect the leads to the proper terminals. In mounting the motor, hold it so that the oil will not seep out of the shaft bearing. Check the operation of the motor as covered in 3.06.

**3.06** To check the effect of re-oiling, observe the operation of the motor after remounting it on the apparatus for approximately 15 minutes during which time the power should be intermittently interrupted. If the motor operates under varying load, such as obtained from driving a cam, the motor should be stopped and started several times under the maximum load condition. If accurate motor speed is required, such as with clocks, check the motor on a timing test.