

1.35  
2nd floor  
7

PIECE PART DATA AND REPLACEMENT PROCEDURES

KS-14156 SWITCHBOARD POSITION CLOCKS

1. GENERAL

1.01 This section covers the information necessary for ordering parts to be used in the maintenance of KS-14156 switchboard position clocks. It also covers approved procedures for replacing these parts.

1.02 Part 2 of this section covers the various parts which may be replaced in the field in the maintenance of this apparatus. No attempt should be made to replace parts not designated. Part 2 also contains explanatory figures showing the different parts. This information is called "Piece Part Data."

1.03 Part 3 of this section covers the approved procedures for the replacement of the parts covered in part 2. This information is called "Replacement Procedures."

2. PIECE PART DATA

2.01 The figures included in this part show the various piece parts in their proper relation to other parts of the apparatus, and also their corresponding names.

2.02 When ordering parts which have a KS and list number, give the KS number, the list number, and the name of the part; such as "KS-14156, List 10, Window Assembly." When ordering parts which do not have a KS and list number, give the name of the part, and state that the part is for the KS-14156 List - Switchboard Position Clock (or KS-14295 List - Clock Mounting); such as "Adjusting Screw for KS-14156 List 13 Switchboard Position Clock." Do not refer to the BSP number.

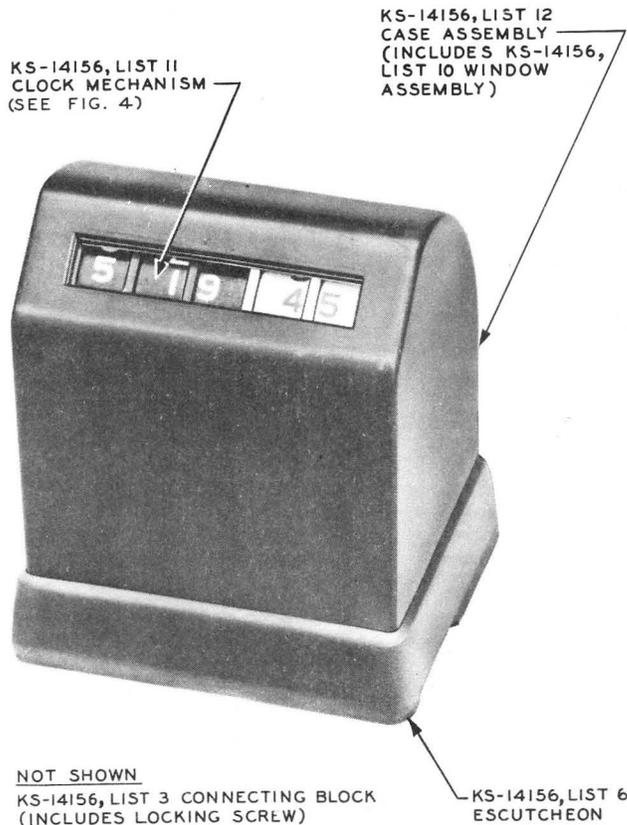


Fig. 1 - KS-14156, List 14, Switchboard Position Clock for Surface Mounting

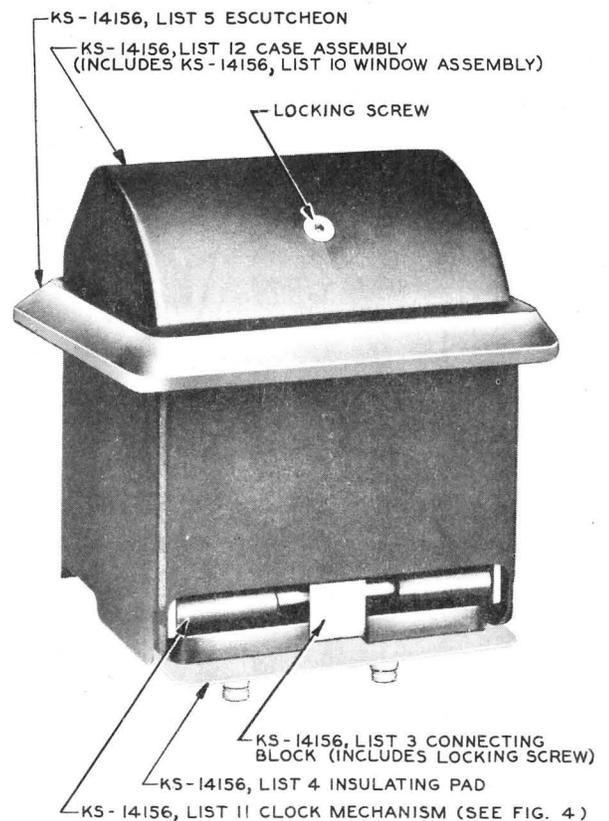


Fig. 2 - KS-14156, List 13, Switchboard Position Clock for Well Mounting

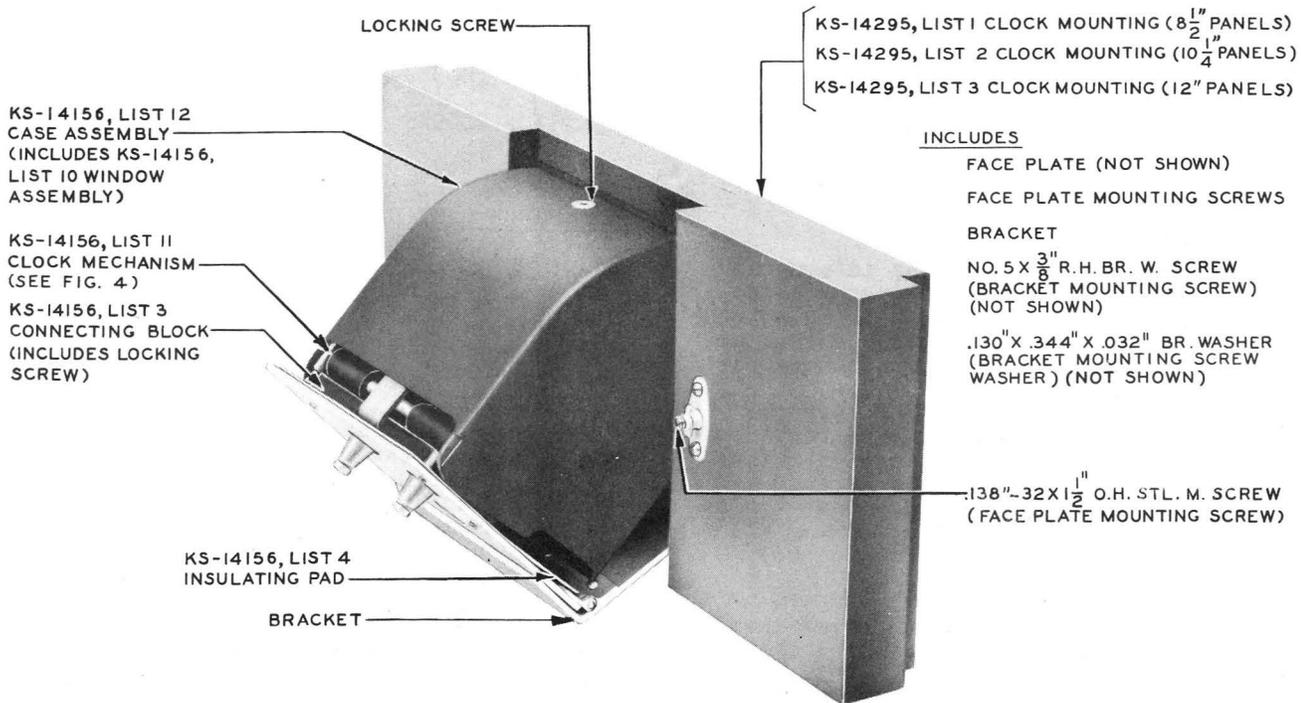


Fig. 3 - KS-14156, List 15, Switchboard Position Clock - Mounted in KS-14295, List 2, Clock Mounting for Panel Mounting.

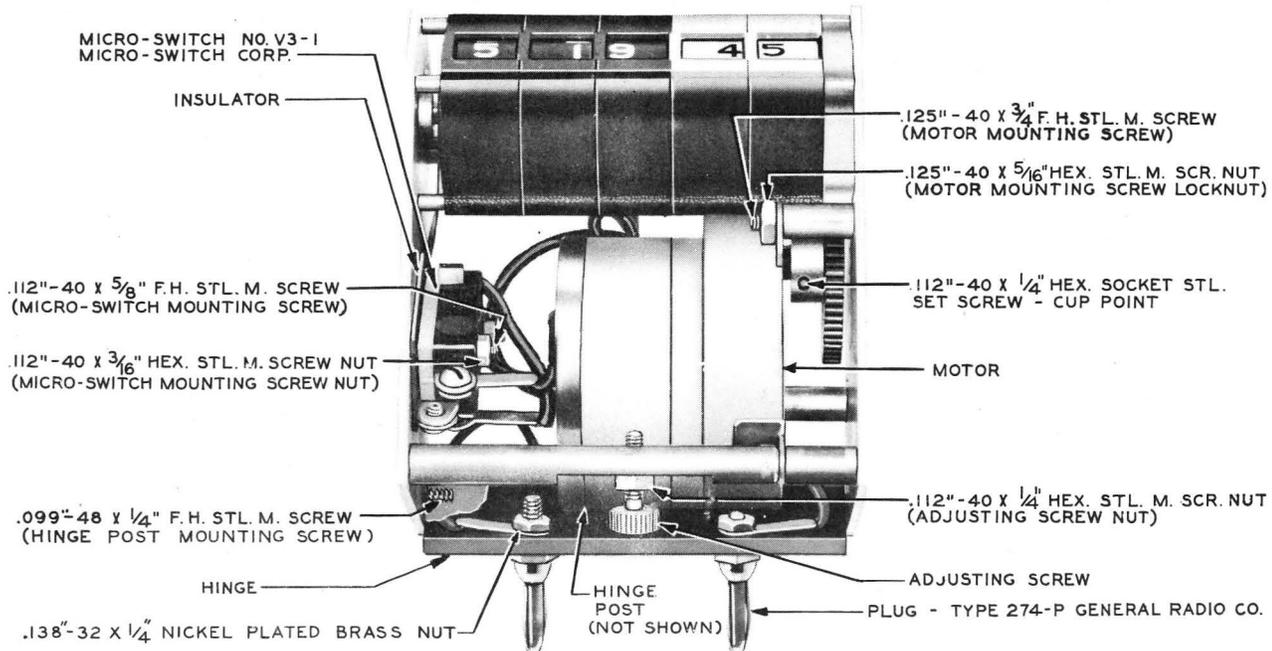


Fig. 4 - KS-14156, List 11, Clock Mechanism

3. REPLACEMENT PROCEDURES3.01 List of Tools

| <u>Code or Spec. No.</u> | <u>Description</u>                               |
|--------------------------|--|
| 417A                     | 1/4" and 3/8" Hex. Open Double-end Flat Wrench   |
| 418A                     | 5/16" and 7/32" Hex. Open Double-end Flat Wrench |
| KS-6854                  | Screwdriver                                      |
| R-2958                   | Allen Socket Screw Wrench                        |
| R-2961                   | Allen Socket Screw Wrench                        |
| -                        | 3" Cabinet Screwdriver                           |

3.02 No replacement procedures are specified for screws or other parts where the replacement consists of a simple operation.

3.03 General: To replace any part of a clock except the escutcheon or the face plate, it will be necessary to remove the clock mechanism from the connecting block, as covered in 3.04 or 3.05, depending on the clock on which the work is being done.

3.04 Panel-mounted Clocks: To remove the clock mechanism, remove the face plate mounting screws, using the 3" cabinet screwdriver, and remove the face plate. Remove the locking screw from the back of the clockcase, using the R-2958 wrench. Remove the clockcase. Pull the clock mechanism away from the connecting block while lifting upwards on the mounting clip. After making the necessary replacement of parts, remount the clock. Check that the numerals are properly aligned with the slot in the face plate and set the time, as covered in Section A502.045.

3.05 Well- and Surface-mounted Clocks: Remove the locking screw from the back of the clockcase, using the R-2958 wrench. Remove the clockcase. Pull the clock mechanism away from the connecting block while lifting upwards on the mounting clip. After making the necessary replacement of parts remount the clock. Position the adjusting screw, if necessary, and set the time as covered in Section A502.045.

3.06 Case Assembly, Clock Mechanism, and Window: Substitute a new case assembly or clock mechanism, as required. To replace the window, remove the window from the case by pressing on the outside of the glass. Substitute the new part, pressing it into place from the inside of the clockcase.

3.07 Connecting Block and Insulating Pad: Remove the connecting block mounting

screws, using the 3" cabinet screwdriver. Substitute a new connecting block or insulating pad, as required, mounting the connecting block securely in position. If the connecting block was replaced, remove the locking screw from the bracket of the new one and use it in remounting the clock.

3.08 Adjusting Screw and Adjusting Screw Lock Nut: Loosen the adjusting screw lock nut, using the No. 417A wrench, and remove the screw. Substitute the new part. Place the nut on the screw and mount the screw in place, adjusting the position of the clock as covered in Section A502.045.

3.09 Micro Switch and Micro Switch Insulator: Remove the micro switch mounting screws, using the 3" cabinet screwdriver, while holding the associated nut with the No. 418A wrench. Remove the micro switch terminal screws and lock washers, using the 3" cabinet screwdriver, and remove the leads connected to the micro switch. Mount the leads on the corresponding terminals of the new micro switch, position the lock washers, and tighten the terminal screws securely. If necessary, substitute a new insulator and mount the insulator and micro switch in the clock, tightening the nuts on the mounting screws securely.

3.10 Motor: Remove the motor lead from the micro switch, as covered in 3.09. Remove the other motor lead from the plug to which it is connected by loosening the plug mounting nut with the No. 417A wrench, while holding the plug with a No. 418A wrench. Remove the motor mounting screws, using the 3" cabinet screwdriver, and remove the motor from the clock. When the motor is removed, take care that the three mounting spacers are not lost. Loosen the setscrews in the gear assembly, using the R-2961 wrench. Remove the gear assembly from the motor being replaced and position it on the new one. Tighten the setscrews securely. Mount the motor securely in place, inserting a spacer between the plate and each ear on the motor. Connect the motor leads to the terminals on the micro switch and plug, tightening all screws and nuts securely.

3.11 Plugs: To replace a plug, hold the plug with a No. 418A wrench, while removing the mounting nut with a No. 417A wrench. Remove the plug and connecting lead from the hinge, and substitute a new plug. Remount, and securely tighten the mounting nut.

3.12 Hinge and Hinge Post: To replace the hinge or hinge post, remove the plugs, as covered in 3.11. Remove the hinge post mounting screws, using the KS-6854 screwdriver, and remove the hinge and hinge post as a unit. Substitute the new part, as required, and place the unit in position in the clock. Insert and securely tighten the mounting screws. Connect the leads securely in position.