

FIELD REPLACEMENT OF TRIP LATCH

- 1. Refer to standard instructions IB 6.1.1.7-1B for removal of circuit breaker from the switchboard, observing all safety precautions. The circuit breaker should be placed on a work surface with primary and secondary de-energized, closing springs discharged and the circuit breaker open.
- 2. Remove front covers to allow access to front of breaker. To facilitate disassembly and reassembly, the breaker can be tilted back and supported at the center of the mechanism by a wooden block four inches high.
- 3. Remove the solid state box and escutcheon panel. Remove the magnetic latch (Figure 1). If equipped with horizontal magnetic latch, remove the entire horizontal mag latch assembly by removing two screws and one 7/16 inch nut from left side support.
- 4. Rack breaker to the disconnect position to allow access to pins which will be removed.
- 5. Clip the wire ties on wires leading to the close coil (on electrically operated breakers). Remove close button/coil assembly by removing retainer from through pin then remove pin. Remove two slotted-head screws on the left side of the mechanism. Pull assembly out the front. There should be enough wire (on E.O. coils) to position the assembly to the right side of the breaker without clipping the wire.
- 6. Refer to Figure 2. Remove padlock hasp (4) by unhooking spring (1) from mechanism. Next remove retainer (2) on right side of pin (3). Pull pin out to the left, tilt hasp downward and pull out.
- 7. Remove charging handle spring. This can be done by positioning a screwdriver in the bottom loop of the spring and striking screwdriver with a hammer.
- 8. Note orientation of prop latch in mech. Remove the prop latch (5) by first removing Truarc type retainer (6) from left side of latch pin (7). Pull pin out from the right side catching prop latch spacer (8) when they fall.
 - Next remove Truarc type retainer (9) from right side of pivot pin (10). Before this pin can be removed from the left, partially charge the closing springs by operating the manual charging handle four (4) times. Do not operate handle more than four (4) times. Remove pivot pin by pulling to the left through the racking position indicator. The prop latch will fall out.
- 9. Note orientation of trip latch in mech. Remove the trip latch (14) by removing retainer (11) from left side of trip latch pin (13). This retainer is behind the racking screw lock plate assembly (12) which must be moved to the left to gain access to the retainer. With retainer removed, pull pin out to the right. The trip latch will drop and can be removed by moving back, down, and out.



INSTALLATION OF NEW TRIP LATCH

- 1. Assemble trip latch spring (15) onto new trip latch (14). With needle nose pliers, hold the bottom leg of the trip latch. As the trip latch is moved up into place, tilt the trip lever up then through the racking screw lock plate assembly (12). Install pin (13) from left through mech side into latch and on through the right side of mech. Install pin retainer (11).
- 2. Again using needle nose pliers, hold the prop latch by its rear. Move the prop latch into position and push pivot pin (10) back through racking position indicator, mech, prop latch, and other side of mech. Install Truarc type retainer (9). Start prop latch main pin (7) through side of mech. Using needle nose pliers, hold spacer (8) in position and push pin through it. Push pin through prop latch (5) next. Hold the left side spacer (8) in position with needle nose pliers making sure trip latch spring (15) is resting on top of spacer. Push pin on through spacer and mech then secure with Truarc type retainer (6).
- 3. Re-install padlock hasp (4) by tilting hasp up and into position. Push pin (3) part of the way through mech and hasp to hold hasp in place. Lightly lubricate the small piece of rubber tubing provided with Anderol grease. Push tubing onto pin until tubing is centered on pin. Push pin on through other side of padlock hasp and mech housing. Install retainer (2); re-install padlock hasp spring (1).
- 4. Prior to installing close button assembly, the close button shaft must be changed. (See Figure 3) Disassemble close button assembly by removing Phillips-head screw in the front of the assembly. Remove the front plate of the assembly. Remove the retainer from one side of the pin which secures the close button shaft to the rear lever. Remove pin, the close button shaft, Using the new shaft provided, reverse the above procedure to reassemble unit.
- 5. Install reassembled close latch by holding rear leg up and over close latch. Re-install front pin and afix retainer. Install screws on left side.
- 6. Reinstall handle spring using a spring puller. Hook the top loop over the upper pin then pull down on spring hooking lower loop over bottom pin. When spring is properly seated in grooves, squeeze the loops with pliers to enhance their hold on the pins. Install wire ties on close coil wires (if necessary) keeping wire away from moving parts.
- 7. Check the operation of the charge handle, close button, and trip lever before reinstalling mag latch parts. Charge, close, then trip several times to be sure trip-free condition is eliminated.
- 8. After reinstalling mag latch, check operation of mag latch with a 505 Test Set as described in instruction bulletin 6.1.1.7-2B.



- 9. Reinstall front and top covers.
- 10. Return circuit breaker to its cubicle. Refer to BBC Installation/Maintenance Instruction Bulletin 6.1.1.7 for guidance in placing the circuit breaker back in service.



