

Fixed type ⇒ Drawout type Modification Procedures (Type: AE630-SW - AE3200-SW)

For modification from fixed type to drawout type, modification of both circuit breaker main body and drawout cradle is also required.

1. Parts for modification

Drawout mechanism 1 piece, drawout handle 1 piece

* These parts are included in the parts for modification (REC-FD-W).

2. Modification content

<Circuit breaker main body modification>

Place the fixed type main body in an easy to work place. (Make sure to turn OFF the circuit breaker to make it a "DISCHARGED" state.)

1) Removal of the fixing plate

Loosen SW-Hex. socket head cap screw M6×12(two) to remove the fixing plate. Remove the fixing plate on the opposite side in the same manner. The fixing plate is not required for modification.

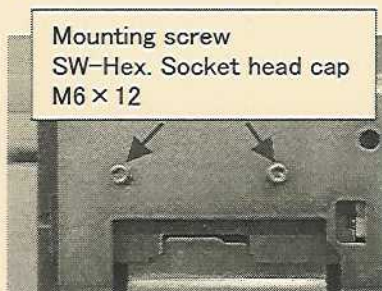


Fig. 1

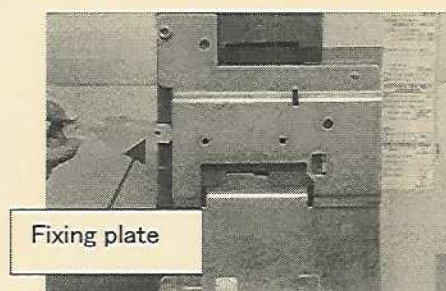


Fig. 2

2) Removal of mounting frames (L) and (R)

Loosen SW-Hex. socket head cap screw M8×20 (one) to remove the nut M8 in the recessed part of the ACB rear face. (Fig. 3)

Lift up the circuit breaker to remove the projection part of the Mounting frame (L) from the recessed part of the circuit breaker. (Fig. 4, Fig. 5)

Remove the mounting frame on the opposite side in the same manner. The fixing plate is not required for modification.

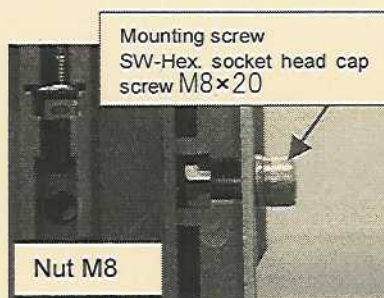


Fig. 3

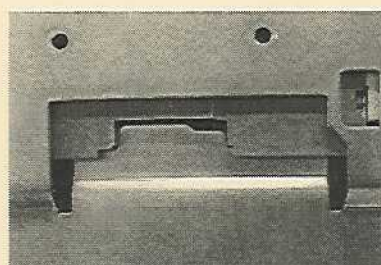


Fig. 4

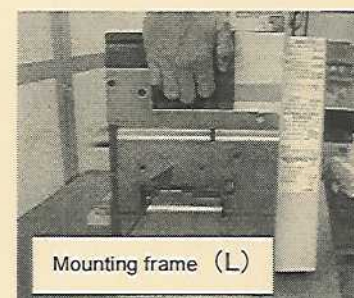


Fig. 5

3) Removal of the control circuit terminal

Loosen the SW-PW-P pan head screw M4×25 (two) (Fig. 6)

Horizontally remove the control circuit terminal (mount it to the drawout cradle afterward) backward. (Fig. 7)

Note: Please note not to remove the control circuit terminal upward or diagonally. (Fig. 8)

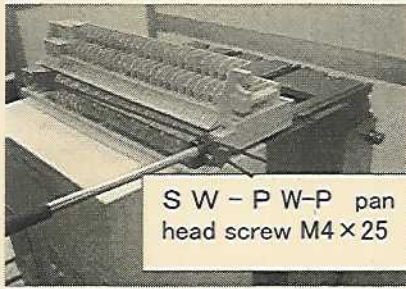


Fig. 6

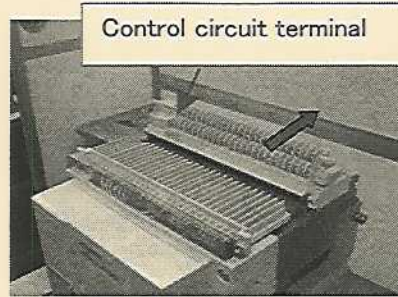


Fig. 7

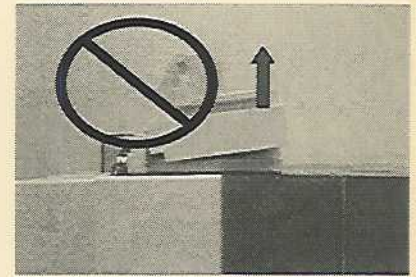


Fig. 8

4) Mounting of drawout indicator unit

4)-1. Loosen the cover screw (M6 × 65) on the ACB front face to remove the cover. (Fig. 9)

4)-2. Remove the fitting for transportation from the drawout indicator unit. (Fig. 10, Fig. 11)

Note) The two screws are necessary for mounting the drawout indicator into the ACB.

4)-3. Slowly insert the drawout indicator unit into the ACB.

Press the OFF button to allow the interlock lever to move upward, and hold it in this state.

Turn the handle lock pin downward and hold it so as not to contact with the interlock lever, and insert the drawout indicator unit all the way back. (Fig. 12, Fig 13, Fig 14)

4)-4. Insert two mounting screws and temporarily tighten. (Fig. 15, Fig. 16)

4)-5. Tighten two mounting screws in a state where the drawout indicator unit is pressed upward and frontward. (Tightening torque 10~12N·m) (Fig. 17)

4)-6. Remove the drawout indicator mounting part of the ACB cover. (Fig. 18, Fig 19)

4)-7. Tighten the cover screw (M6 × 65) for attaching the ACB cover. (Fig. 9)

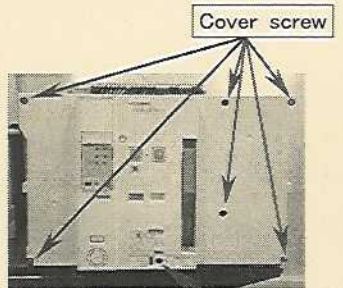


Fig. 9 Drawout indicator unit

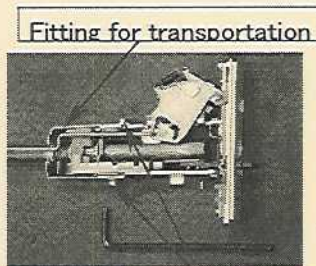


Fig. 10 Mounting screw

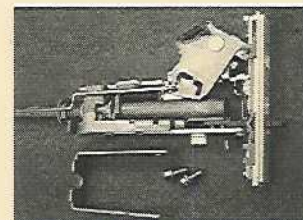


Fig. 11



Fig. 12



Fig. 13

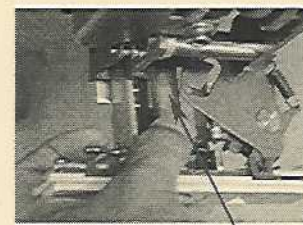


Fig. 14 MAIN SCREW

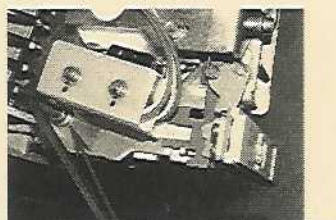


Fig. 15

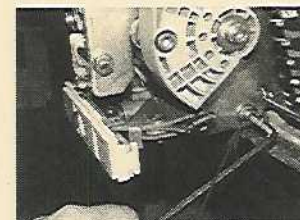


Fig. 16

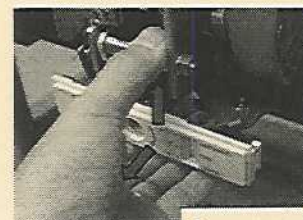


Fig. 17

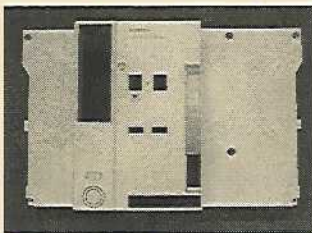


Fig 18

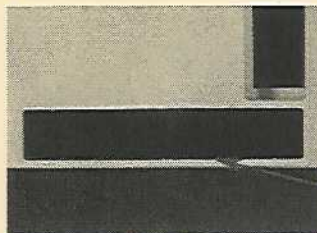


Fig 19

Pierce the square hole

<Drawout cradle modification>

Place the darwout cradle in an easy to work place.

① Mounting of the control circuit terminal

Loosen two screws on the both sides of the drawout cradle to remove them.

Mount the control circuit terminal removed from the circuit breaker main body to the drawout cradle with two screws. (Fig. 20, Fig. 21)

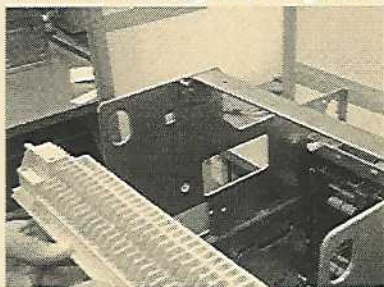


Fig. 20



Fig. 21

M6 screw
Torque: 9~11.2N·m

3. Confirmation after modification (Check ● items.)

- ① Place the circuit breaker on the drawout cradle and push it in.
- ② Press the OFF button to insert the drawout handle into the aperture.
 - It cannot be inserted unless the OFF button is pressed.
 - Red line of the drawout position indicator indicates "DISCONNECT."
- ③ Insert operation: Check that the ACB can be inserted smoothly by turning the drawout handle by hand. (If the lock plate is protruding, press it in before operation.)
 - The lock plate protrudes to lock at the TEST position and CONNECT position.
 - Red line of the drawout position indicator indicates "TEST" at the TEST position.
 - Red line of the drawout position indicator indicates "CONNECT" at the CONNECT position.
- ④ Drawout operation: Check that the ACB can smoothly be drawn out by turning the drawout handle by hand. (If the lock plate is protruding, push it in before operation.)
 - The lock plate protrudes to lock at the TEST position.
 - The lock plate does not protrude at the DISCONNECT position. (It may protrude when a shock is applied.)
 - Red line of the drawout position indicator indicates "TEST" at the TEST position.
 - Red line of the drawout position indicator indicates "DISCONNECTED" at the DISCONNECT position.



Never carry out modification from fixed type to drawout type for AE2000-SWA and AE4000-SWA.