



INSTRUCTIONS

ELECTRICAL INTERLOCK THREE-POSITION MAG BREAK* DISCONNECT AND GROUNDING SWITCH (LOAD INTERLOCK TO LOCK WHEN ENERGIZED)

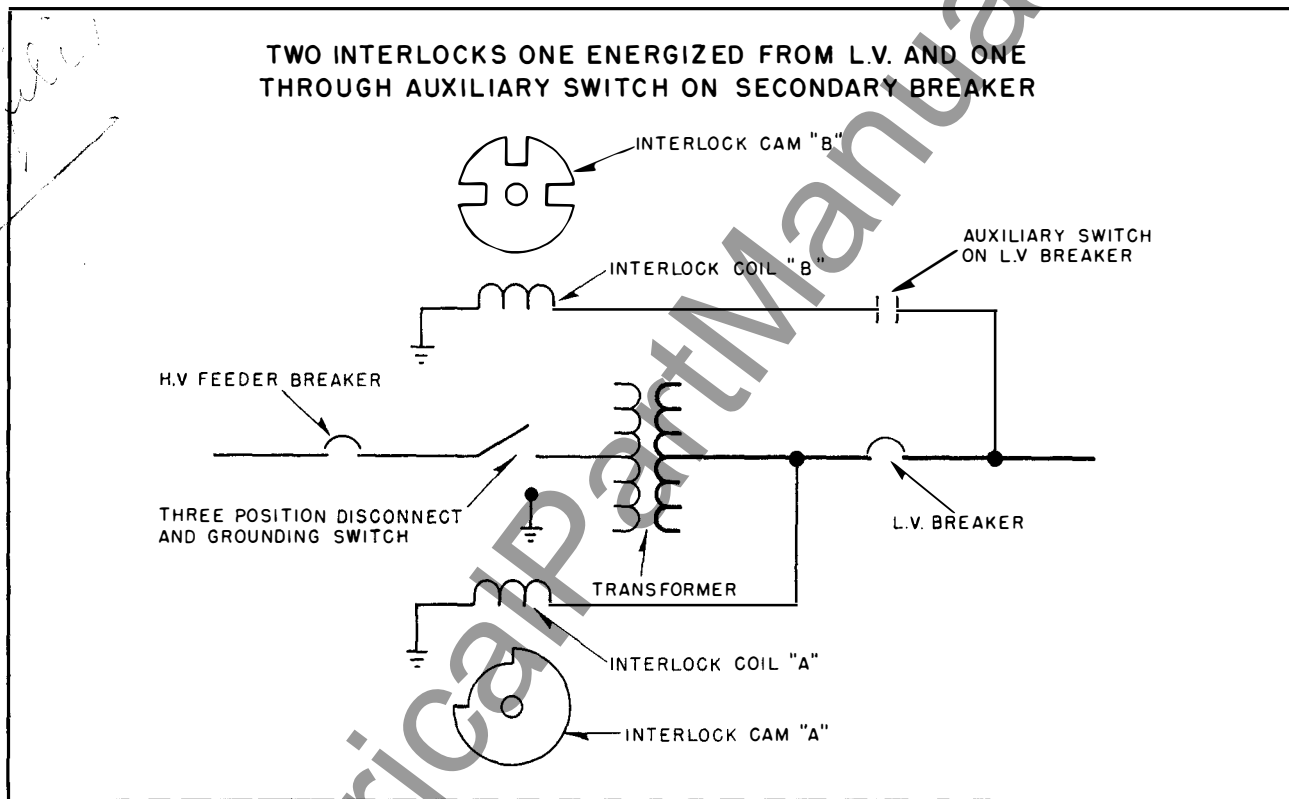


FIG. 1. Use of Interlocks with Three-Position Mag Break* Disconnect and Grounding Switch.

The three-position mag break switch requires two interlocks. One of these (A) prevents movement from "closed" to "ground" position while the transformer is energized; the second (B) prevents movement from "closed" to "open" position while the low voltage breaker or network protector is closed.

Interlock "A" is connected directly to the transformer low voltage so that the interlock is engaged whenever the transformer is energized. Its associated cam is slotted so that the interlock does not interfere with movement from "closed" to "open" position but prevents movement from "closed" to

"ground" position if interlock is energized.

Interlock "B" is connected through an auxiliary switch on the low voltage breaker to the power source. When low voltage breaker is open the auxiliary switch is open and interlock deenergized. Therefore as long as the breaker is closed the interlock is engaged and the switch cannot be operated.

This system requires an auxiliary contact on the low voltage breaker which is closed when the breaker is closed. The schematic diagram shows one interlock lead grounded. In some cases both leads are carried out and connected to the source.



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INSTRUCTIONS

ELECTRICAL INTERLOCK DISCONNECT AND SELECTOR SWITCHES (ONE INTERLOCK ENERGIZED FROM TRANSFORMER LV)

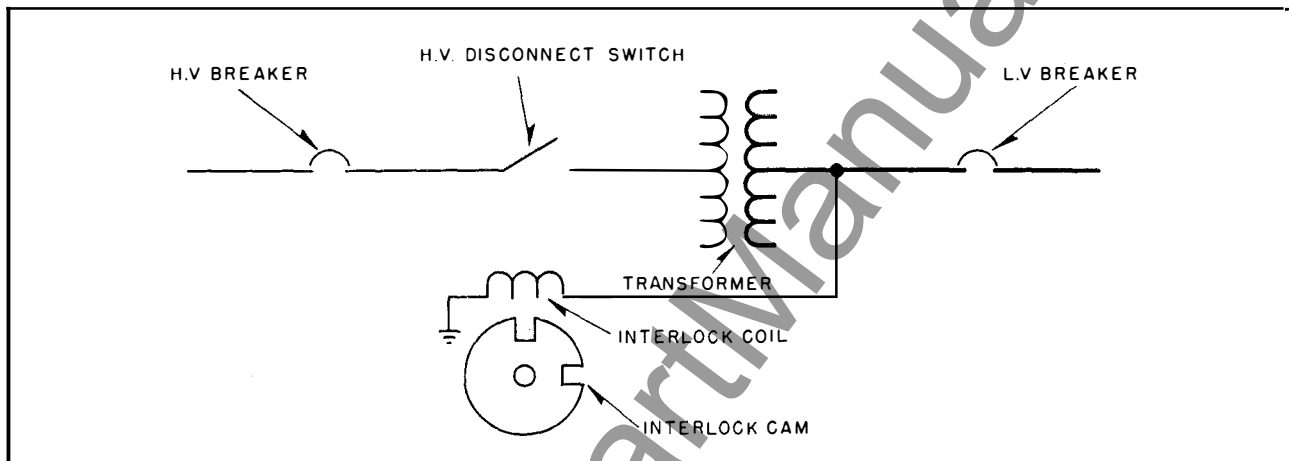


FIG. 1. Use of Interlock with Two-Position Disconnect Switch.

This electrical interlock prevents movement of the switch from the "closed" to "open" position for Fig. 1 and from either of the two "closed" positions to the "open" position for Fig. 2 unless the transformer is deenergized. If transformer is in parallel with other units the secondary must be disconnected, unless all transformers are deenergized, to prevent energizing the interlock from the low voltage source.

Fig. 1 shows interlock with one lead grounded and the other lead connected to the secondary. In some cases this may be modified in that the interlock will have both leads carried into and connected to the transformer. This is normally the case when the transformer secondary is connected in delta.

The feeder selector switch shown in Fig. 2 uses one interlock to prevent movement of the switch

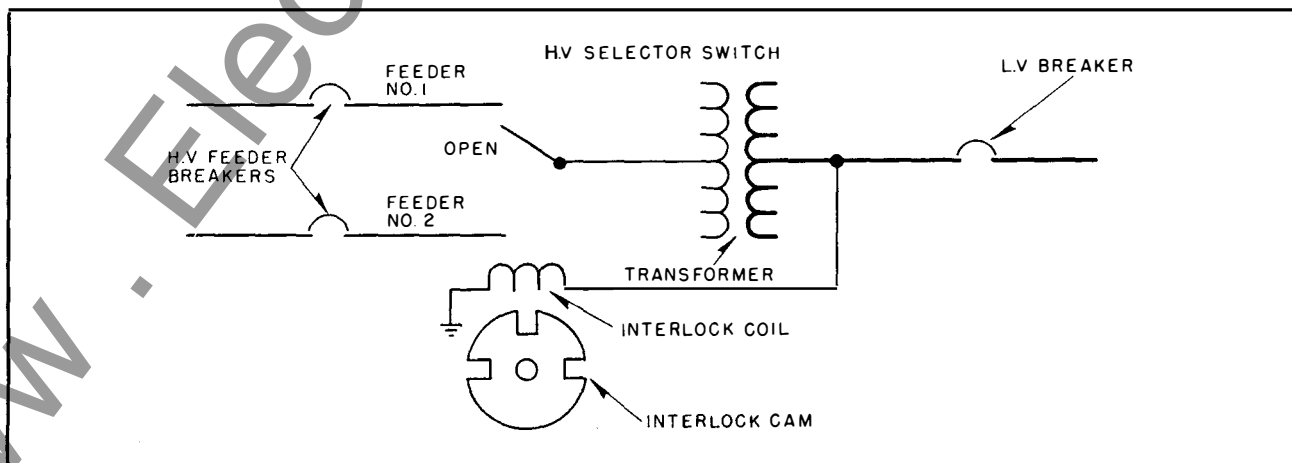


FIG. 2. Use of Interlock with Three-Position Selector Switch.

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from either of the two "closed" positions to the "open" position when the transformer is energized.

If the transformer is in parallel with other units the secondary must be disconnected, unless all transformers are deenergized, to prevent energizing the interlock from the low voltage side.

This diagram shows interlock with one lead grounded and the other lead connected to the secondary. In some cases both leads may be brought into and connected to the transformer secondary. This is normally the case when the transformer secondary is connected in delta.



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INSTRUCTIONS

ELECTRICAL INTERLOCK MAG BREAK* DISCONNECT OR SELECTOR SWITCHES INTERLOCK LOCKED WHEN DEENERGIZED

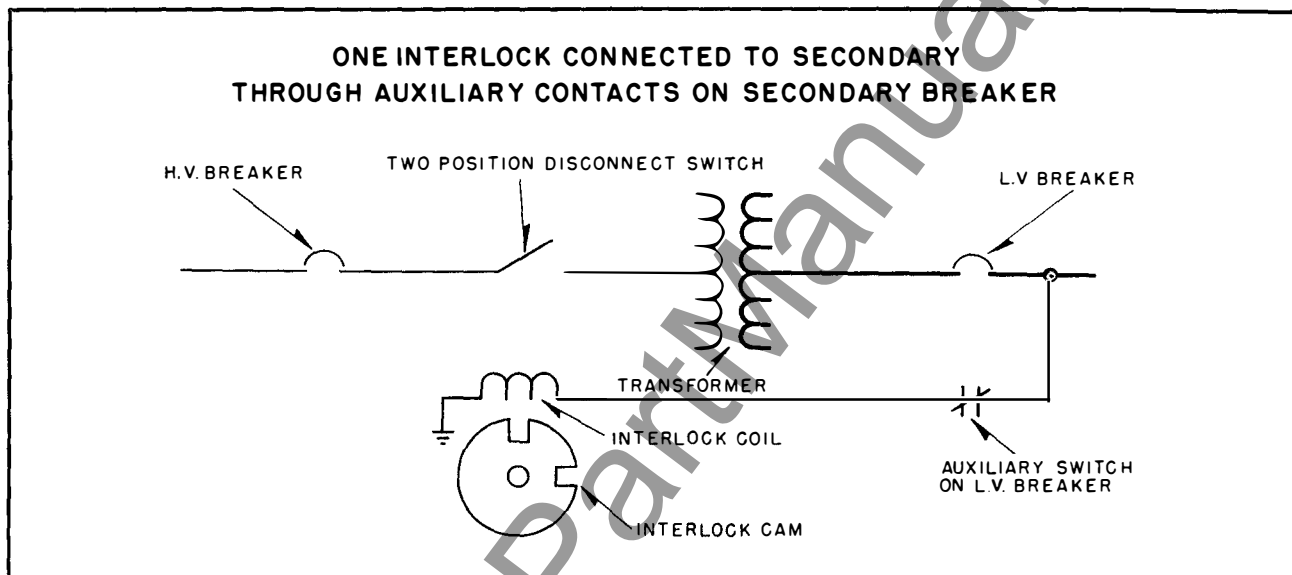


FIG. 1. Use of Interlock with Two-Position Switch.

The interlocking system used on mag break switches uses one interlock. This interlock prevents movement of the switch from "closed" to "open" position for Fig. 1 and from either of the two "closed" positions to "open" for Fig. 2 when load is on the transformer. The secondary breaker must be opened to energize the interlock as the interlock is arranged

to lock when voltage is removed from the coil. Therefore a source of voltage independent of the transformer is required. This may be the secondary grid or a separate supply such as the A-C or D-C supply in switchgear. Voltage required for the interlock coil will be shown on the diagram instruction plate furnished with the transformer.

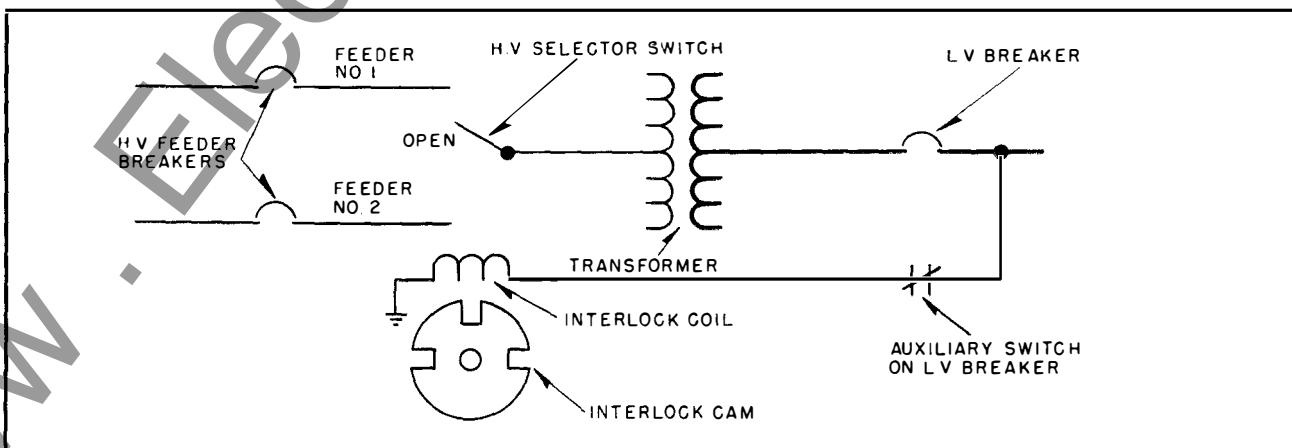


FIG. 2. Use of Interlock with Three-Position Switch.

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The schematic diagram shows the interlock coil with one lead grounded and one lead brought out for connection to the auxiliary switch. In some cases both leads may be brought out through the junction box. In this case one lead is connected directly to the secondary and the other is connected through the auxiliary switch.

This system requires an auxiliary contact on the secondary breaker which is arranged to close when the breaker is open.

The feeder selector switch uses one interlock to prevent movement of the switch from either of the two "closed" positions to "open" position when load is on the transformer. The secondary breaker must be opened to energize the interlock as the interlock is arranged to lock when voltage is removed from the coil. Therefore a source of voltage

independent of the transformer is required. This may be the secondary grid or a separate supply such as the A-C or D-C supply in switchgear. Voltage required for the interlock coil will be shown on the diagram instruction plate furnished with the transformer.

The schematic diagram shows the interlock coil with one lead grounded and one lead brought out for connection to the auxiliary switch. In some cases both leads may be brought out through the junction box. In this case one lead is connected directly to the source and the other is connected through the auxiliary switch.

This system requires an auxiliary contact on the secondary breaker which is arranged to close when the breaker is open.



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INSTRUCTIONS

ELECTRICAL INTERLOCK MAG BREAK* DISCONNECT OR SELECTOR SWITCH (INTERLOCK LOCKED WHEN ENERGIZED)

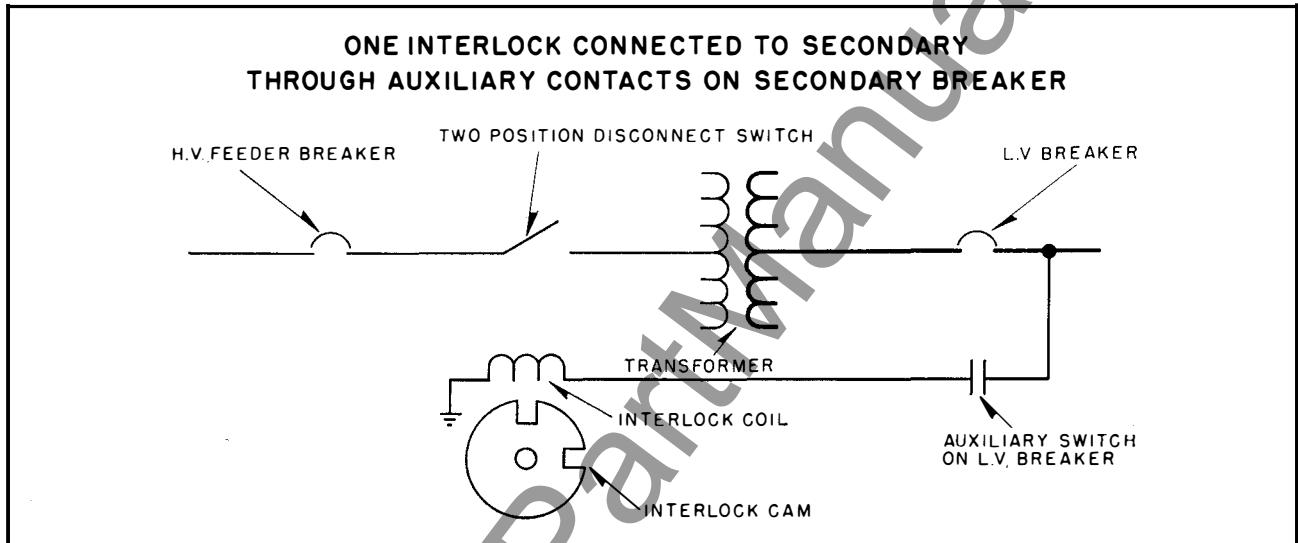


FIG. 1. Use of Interlock with Two-Position Disconnect Switch.

The interlocking system used on mag break switches uses one interlock. This interlock prevents movement of the switch from "closed" to "open" position for Fig. 1 and from either of the two "closed" positions to "open" for Fig. 2, when load is on the transformer. The secondary breaker must be opened to de-energize the interlock coil as it is arranged to lock when voltage is applied to

the coil. This system is used whenever an auxiliary source of power is not available. Voltage required is usually the same as the low voltage of the main transformer, and will be shown on the diagram instruction plate on the transformer.

The schematic diagram shows the interlock coil with one lead grounded and one lead brought out for connection to the auxiliary switch. In some cases

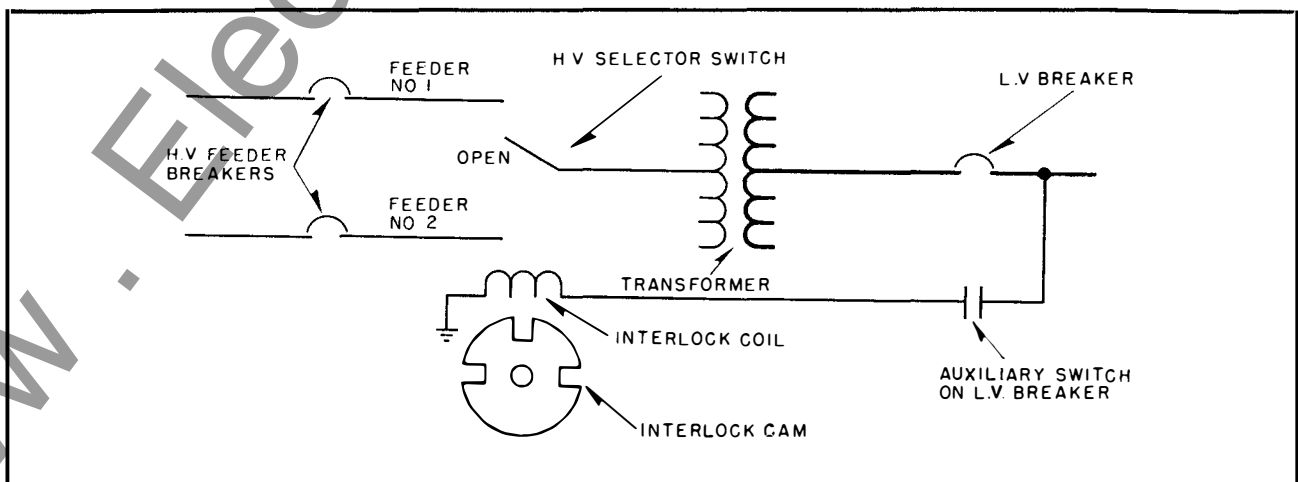


FIG. 2. Use of Interlock with Three-Position Selector Switch.

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both leads may be brought out through the junction box. One of these leads is connected directly to the source and the second one connected through the auxiliary switch.

This system requires an auxiliary contact on the secondary breaker whenever the secondary grid may be energized from another source. If the transformer is the only source of power the auxiliary contact is not required, since opening the breaker will remove voltage from the interlock coil.

The feeder selector switch, shown in Fig. 2, uses one interlock to prevent movement of the switch from either of the two "closed" positions to "open" position when load is on the transformer. The secondary breaker must be opened to deenergize the interlock coil as the interlock is arranged to lock when voltage is on the coil. This system is

used whenever an auxiliary source of power is not available. Voltage required is usually the same as the low voltage of the transformer, and will be shown on the diagram instruction plate on the transformer.

The schematic diagram shows the interlock coil with one lead grounded and one lead brought out for connection to the auxiliary switch. In some cases both leads may be brought out through the junction box. One of these leads is connected directly to the source and the second one connected through the auxiliary switch.

This system requires an auxiliary contact on the secondary breaker whenever the secondary grid may be energized from another source. If the transformer is the only source of power the auxiliary contact is not required, since opening the breaker will remove voltage from the interlock coil.



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