

Vertical Lift Magneblast Remote Elevating Device

- For use on Powell type PV-AM 5kV & 15kV vacuum replacement circuit breakers
- For use on original GE Magneblast 5kV* & 15kV Air-Circuit breakers
 - 5kV air breakers will require a replacement handle p/n: 61320P01

Elevating the Breaker

- ❖ Prior to racking a breaker into the cubicle, make sure the breaker is open and that the mechanism is discharged!
1. Remove existing elevating motor.
 2. On the remote control box move the power switch to middle/off position {Figure 2, Item 1}
 3. Place Powell remote racking motor onto motor shelf in cubicle. {Figure 1}
 4. Latch the motor plate into place – cubicle latch {Figure 1, item 1} should latch onto the tab on the rear of the motor base plate. There is also a guide pin on the bottom of the base that should match the hole in the cubicle mounting plate. Powell motor should mount in place the same way the original motor mounted in place.
 5. Plug the 5 prong plug on the remote racking motor into cubicle power socket {Figure 1, Item 2}
 6. Loosen the left hand knob {Figure 3, Item 1} so that the hinge assembly moves freely from the vertical position to 45 degrees to the left.
 - a. Left Hand Knob – when loosened the hinge assembly can move freely from vertical position to 45 degrees to the left. {Figure 3} shows the hinge assembly 45 degrees left of center, because the left knob is loosened. When hinge is vertical, by tightening the left hand knob, the hinge will be locked in the vertical position
 - b. Right Hand Knob – used to lock down the racking motor engagement handle {Figure 3, Item 3} in place so that the mercury switch will pick up & power will flow to motor
 7. Make sure the male & female drive couplers {Figure 3, Item 4} are lined up. They can be aligned by turning the knurled male coupler on the remote device.
 8. With the hinge assembly 45 degrees left of center {Figure 4}; pull the racking motor engagement handle {Figure 3, Item 3} down.
 9. Then move the hinge assembly back to the center position & turn the left knob until the hinge is locked in place {Figure 5}. At this point you should be able to release the cubicle elevating handle & it should be locked into place. If needed turn the right hand knob to push the cubicle elevating handle further down to fully engage drive pawl & pick up the mercury switch.
 10. With the breaker fully inserted into the cubicle; move the snap switch {Figure 2, Item 1} on the remote control box to the "Raise" position
 - ❖ Powell recommends the operator watch the breaker elevate for the first 3-4 rotations, while the shutters are still closed, to assure the breaker is elevating on a level plane. Once the operator is positive the breaker is level he/she can move away.
 11. The breaker will continue to elevate to the fully racked in position. The cubicle mercury switches will cut power to the racking motor once the breaker is fully racked in.
 12. Now the racking motor can be removed from cubicle. Loosen the left hand knob & move the hinge assembly to the left so the racking engagement handle will spring back into the disconnected/stationary position.
 - ❖ As soon as the cubicle racking lever is released the breaker charging motor will start running.

Lowering the Breaker

- ❖ Prior to lowering a breaker, make sure the breaker is open (tripped). Install the racking motor into the cubicle as described above. Then move the remote control switch to the "Lower" position until the breaker is racked out.

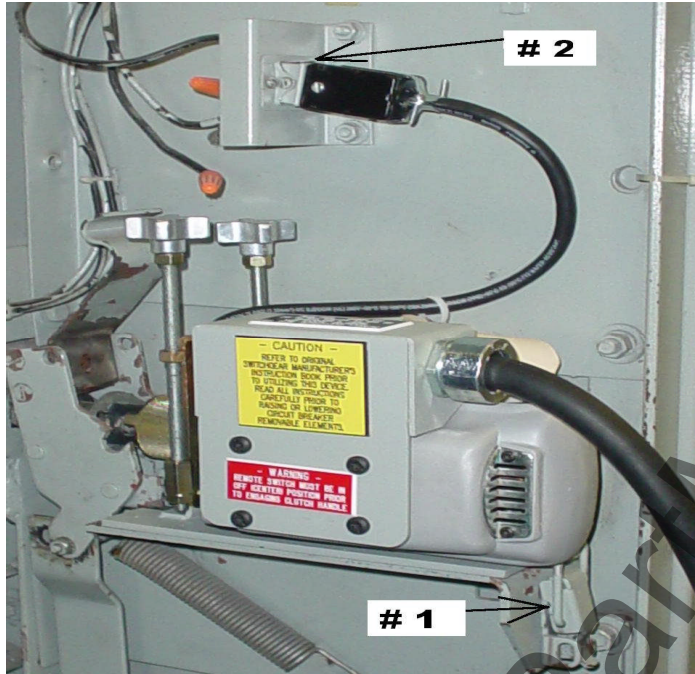


Figure 1 – Mounting Device

1. Cubicle Latch
2. Cubicle Power Socket

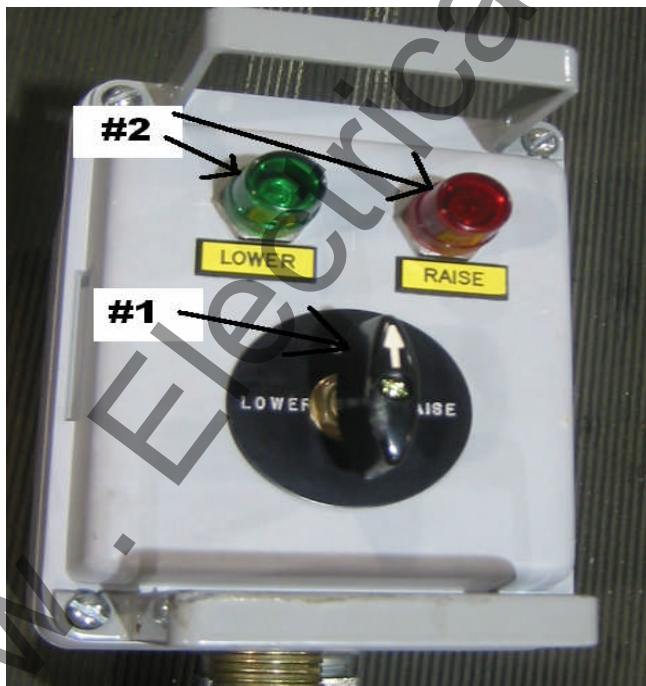


Figure 2 – Control Box

1. Snap Switch
(Show in neutral position)
2. Control Lights

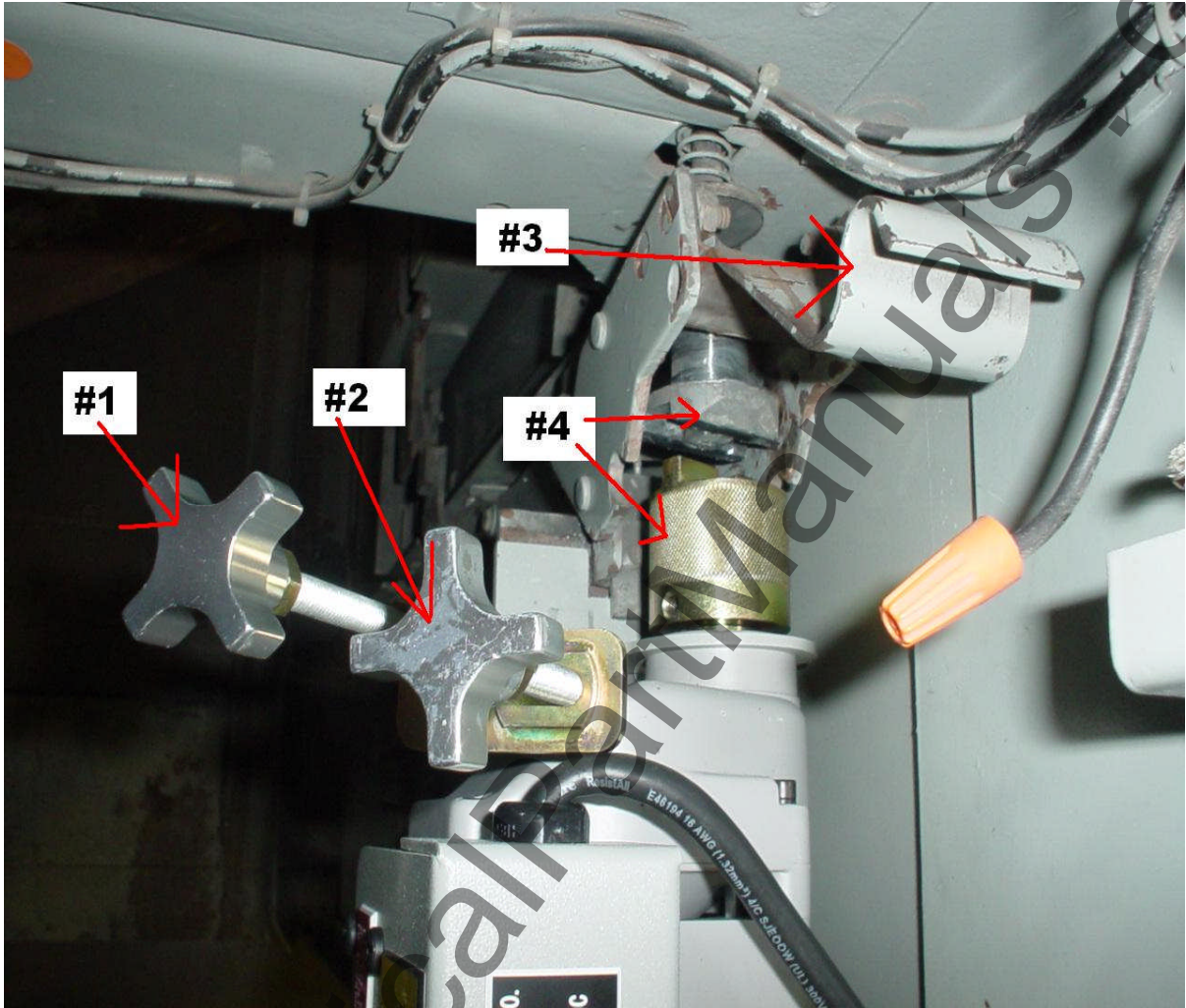


Figure 3 – Overhead View of Motor

1. Left Hand Knob
2. Right Hand Knob
3. Racking motor engagement handle
4. Male & Female Drive Couplers

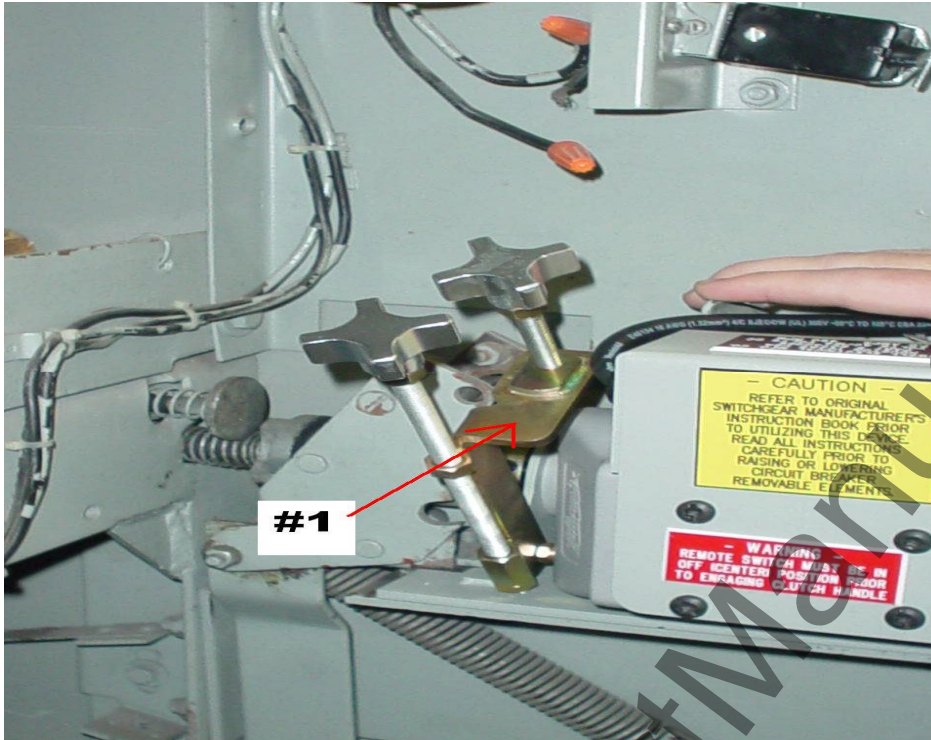


Figure 4 – Hinge Assembly

1. Hinge assembly

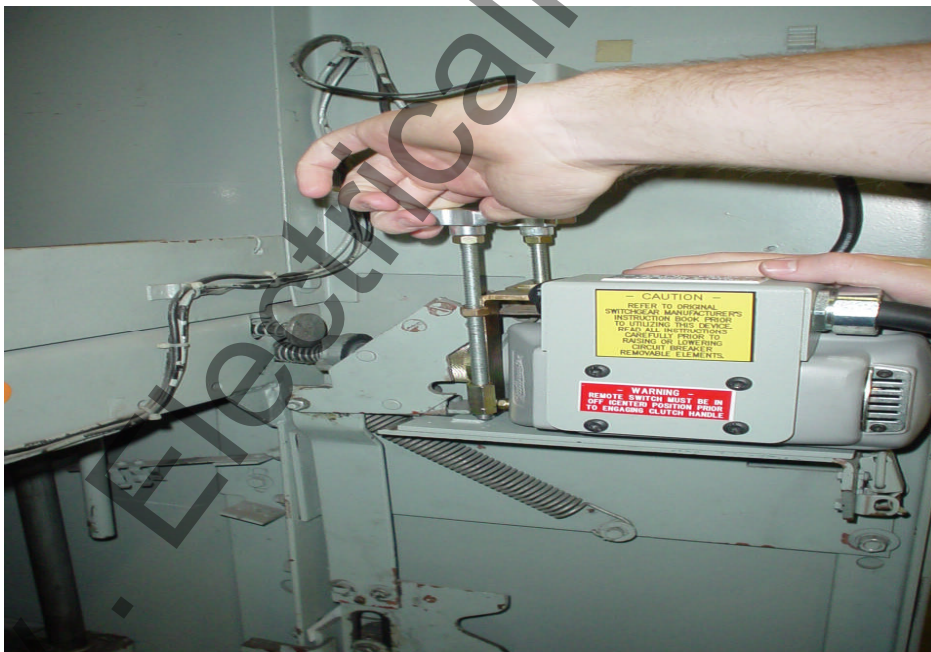


Figure 5 – Locking Hinge Assembly in Place