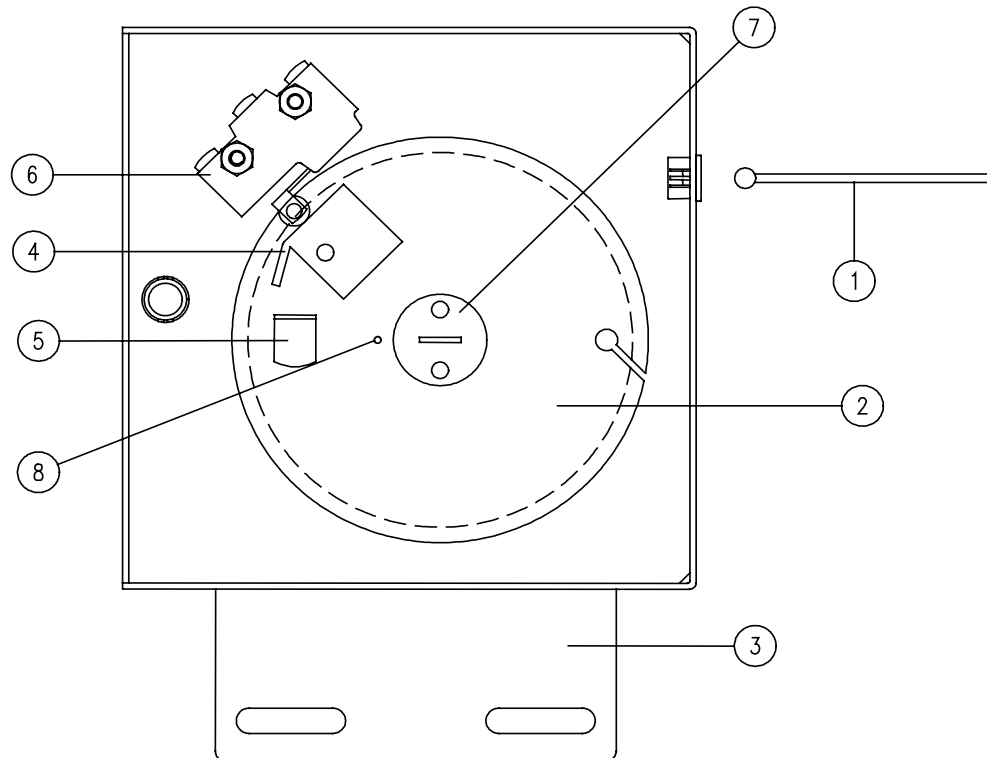


PRE-ALPHA VARIAC ADJUSTMENT

Product Information Bulletin #2621

INSTALLATION

CAUTION: TO AVOID ELECTRICAL SHOCK HAZARD unplug the power supply cord before making any adjustments.



1. Remove the cover from the variac unit. Rotate the plastic variac disk (item 2) until there is sufficient slack in the cable (item 1) to allow the cable to be removed. Disconnect the cable from the plastic disk and pull it free from the variac unit. Unplug the variac outlet cord from the base of the Platter System.
2. Remove the two $\frac{1}{2}$ " bolts holding the variac unit to the Platter system. Set the variac unit on a bench top with the plastic disk up and the open side (exposing the transformer) towards you.

IMPORTANT: Do not let go of the plastic disk and allow the spring to snap it back to its stop. This could result in damage to the transformer! Remove the switch limit ramp (item 4) and rotate the plastic disk by hand until it reaches its internal stop.

3. Located inside the variac case on the transformer rotor, between the transformer rotor and the copper windings, are two setscrews holding the hub & shaft assembly in place. Rotate the plastic disk until these screws are accessible, and then loosen them. Slide the plastic disk and hub & shaft assembly out of the transformer.
4. Verify that the grommet is still in place in the hole that the hub & shaft slides into and that the 1 3/4" flatwasher is in place under the spring. There are four holes in the spring housing, one every 90 degrees. Place the prong of the spring that comes perpendicular out of the side of the spring into the hole closest to the variac mount angle (item 3).
5. Slide the new hub & shaft assembly (item 7) into the transformer until it is seated against the plastic bushing (the plastic disk will be mounted later). Tighten the two setscrews on the transformer rotor.
6. Place the plastic disk onto the hub & shaft assembly orientating the hole (item 8) in the plastic disk to the other prong on the spring. The hole in the center of the plastic disk should fit down on the lip of the hub & shaft assembly. Verify that the angled cable-mounting slot in the plastic disk is orientated as in the diagram.
7. Screw the two truss head screws into the holes in the top of the hub & shaft assembly. Tighten them finger tight against the plastic disk, then back them off sufficiently to allow the plastic disk to still rotate on the hub & shaft assembly.
8. Rotate the plastic disk one full turn clockwise and then as much more as required to bring the mounting hole for the limit ramp (item 4) past the limit angle (item 5). Orientate the limit ramp to the plastic disk as shown in the diagram and tighten the screw.
9. Place the variac back on the platter system, positioning it so that the bolts are approximately in the center of the mounting slots. Snug both bolts at this time. Install the cable through the grommet and around the top of the plastic disk in a counter-clockwise direction. Install the cable lug into the slot in the plastic disk.

SETTING THE FAIL SAFE SWITCH

10. Verify that the roller on the switch (item 6) is making contact with the variac switch limit ramp (item 4). The roller on the switch arm should make contact at the bend in the ramp. To adjust this, loosen the 2 case mounting bolts and move the case forward or backward to put the switch in the proper position. Tighten the mounting bolts.
11. Raise the take-up plate and lower it down slowly. You should hear the micro switch (item 6) engage approximately $\frac{1}{2}$ inch before the take-up plate is in its bottom position. To adjust this, loosen the 2 hex nuts holding the switch in place, adjust the switch, then retighten the nuts.

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12. Raise the take-up plate to the top of its travel and lock it there with a rubber band. Insert a coin into the slot of the hub & shaft assembly (item 7), and rotate it clockwise until it stops. Back off approximately 1 or 2 degrees from this position. Tighten the truss head screws securing the plastic disk.
13. With the take-up plate still held at the top of its travel, the plastic disk should turn only $\frac{1}{16}$ " to $\frac{1}{8}$ " in the clockwise direction before reaching its internal mechanical stop. Return the take-up plate to its normal position. Replace the cover. Plug the outlet plug into the base of the column and plug the power cord into a 110 volt grounded outlet.
14. Test the electrical setting of the transformer by setting the variac power switch in the "ON" position, set the motor selector switch of one motor to the rewind position and set the other two motor switches to the "off" position. Slide the take-up plate to the top of its travel. The motor should be receiving a minute amount of power, but with the drive wheel engaged the film platter should not move. If the film platter creeps, recheck steps 12 and 13.
15. Slide the take-up plate down. The motor should speed up as the take-up plate moves down. When the take-up plate is approximately $\frac{1}{2}$ inch from the bottom of its travel, the micro switch in the variac should engage and cut off power to the motor. If this fails to occur, recheck steps 10 and 11.