

## **CTC Automatic Lens and Aperture Changer Installation Instructions**

### **TOOLS NEEDED:**

**SLOTTED SCREWDRIVER**

**3/4" COMBINATION WRENCH**

**STANDARD ALLEN WRENCH SET**

**ELECTRIC SABRE SAW**

**ELECTRIC DRILL**

**TAP HANDLE**

- STEP 1:** Remove Lens from Projector and store in a safe place.
- 2:** Remove Projector Head from Sound Head and place on a sturdy work surface.
  - 3:** Remove the Door and Hinges from Operating side of Projector.
  - 4:** Remove the Film Trap from Projector and set aside.
  - 5:** Remove the Light Shield Assembly from the Projector and set aside for reuse.
  - 6:** Remove the Film Trap Support Assembly.
  - 7:** Remove the Film Gate Tube Assembly.
  - 8:** Remove Lens Holder Assembly.
  - 9:** Open Installation kit and remove the Scribing Template.
  - 10:** Place Scribing Template on Front of Projector and Trace the line on the inside of template on the Projector.
  - 11:** Remove Template From Projector and with the Sabre Saw **CAREFULLY** cut along the line.

**IMPORTANT**  
**DO NOT CUT PROJECTOR HEAD WITH TEMPLATE IN PLACE**

- 12: Remove Alignment Jig from Installation kit and place Turret Mounting Base on the Jig with the narrow tail of Plate to the opposite of the steel Plate on the Jig. There are two Index pins For proper alignment of this plate. Now Secure Plate to Jig with the (4) 1/4-20 x 1 1/2" Allen Cap Screws with Washers.
- 13: Remove the (4) Hex Head Jack Screws from the bag that contained the Turret Mounting Plate and insert them into the Front of the Mounting Plate so that the screw end is just flush with the Back of the Mounting Plate
- 14: Take the Alignment Jig with the Mounting Plate and Install it In the Projector where the Trap and Lens Holder were previously mounted. The Jig Indexes on the Pins in the Casting. Secure in place with the (5) 1/4-20 x 2" Allen Cap Screw supplied in the Installation Kit.
- 15: Now that the Jig is Securely in place turn the (4) Jack Screws on the Mounting plate by HAND so that the screws bottom out on the Projector Casting.

**\*\*\* IMPORTANT \*\*\***

***DO NOT USE A WRENCH TO TIGHTEN JACK SCREWS IT MIGHT CAUSE THE MOUNTING PLATE TO WARP SLIGHTLY AND CAUSE MISALIGNMENT***

- 16: Remove Drill Guide from Kit and insert into Jack Screws and drill Casting with the supplied #7 Drill Bit. Do this for all (4) locations.
- 17: Tap the (4) Holes that were just Drilled with the 1/4-20 Tap supplied in this kit.
- 18: Using a 9/16" Box Wrench hold the Jack Screws in place and insert the 1/4-20 x 1" Allen Cap screws and tighten.

**\*\*\* IMPORTANT \*\*\***

***TIGHTEN ONLY THE ALLEN CAP SCREWS USE THE BOX WRENCH TO HOLD THE JACK SCREWS IN PLACE***

- 19: Remove the (9) Allen Cap Screws From the Front of the JIG and remove the Front Plate from the Horizontal Bar. Place this in a safe place so its face does not get Damaged. Now remove the Horizontal bar from the Projector and Reassemble the Jig.
- 20: Remove the New Kelmar Automatic Lens Turret Assembly from Its shipping container.
- 21: Install the New Kelmar Automatic Lens Turret Assembly on the Mounting bracket.

- 22: Remove the New Kelmar Automatic Gate and Trap Assembly from its Shipping container.
- 23: Separate the Trap from Gate by first pulling on the Gate release pin then loosen the Trap retaining screw which is located on the side of the Trap just above the Aperture change mechanism.
- 24: Install the new Gate and Trap assembly where the previous Film Trap Support casting was located on the Main Frame and fasten it in position.

If further assistance  
is required contact:

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- 1 = FLAT STOP
- 2 = SCOPE STOP
- 3 = SIDE TO SIDE FLAT
- 4 = SIDE TO SIDE SCOPE
- 5 = FOCUS FLAT
- 6 = FOCUS SCOPE
- 7 = FLAT LENS CLAMPING SCREWS
- 8 = SCOPE LENS CLAMPING SCREWS
- 9 = DRIVE CLUTCH
- 10 = CHAIN TENSION ADJ. SCREWS

**ADJUSTMENTS**

