

MOONEY AIRCRAFT INC.
SERVICE LETTER 20-42 (REV. A, 4/27/59)
(This service letter is F.A.A. approved)

SERVICE BULLETIN M 20-42

Date: 1/14/59
Subject: Kit-Rheostat for Instrument Lights

Models Affected: Serial No. 1002 thru 1374

Parts List:

1. Clarostat Power Rheostat #25-25 (Wired by Mooney with 8239-60, 8239-61, and 8239-68)
2. Jumper wire #18 x 33 inches long with Amp. 32445 Terminal connected to one end and AN659-2 connected to the other end.
3. 8204-1 Cover - for serial 1251 and on.
4. AN 3021-2 Switch
5. Jumper wire #18 x 33 inches long with two AN659-2 terminals.
6. Amp. 32445 Knife Disconnect
7. One Decal (Instrument Lights)

Instructions:

1. Trip circuit breaker to off position.
2. Remove knobs & Royalite cover p/n 8204-1 overhead.
3. Remove mounting nut on old Rheostat and Push up into opening.
4. Disconnect wires at knife type disconnects and remove Rheostat. Mark wire as noted below.
 - a. The wire to the switch is the Hot wire lead and should be marked #58 from circuit breaker to knife disconnect, and #68 from knife disconnect to the switch.
 - b. The wire from the Rheostat to the Compass light is #60 and the lead from the knife disconnect to the compass light is "C".
 - c. The Panel light lead is #61 from the Rheostat to the knife disconnect and #62 & #63 from the knife disconnect to the panel lights.

5. For Serial No. 1002 thru 1250

Locate rheostat so that terminals do not short out and drill #30. (.128)D holes (or 9/64 D) for guide pin.

For Serial No. 1251 & on

Hold new royalite cover in place and mark new rheostat location on bracket which is aft 3/4 inches

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SHEET TWO

from the center of the old mounting hole. Drill a 3/8
Dia. Hole. Exercise care so as not to damage cabin skin.
The terminals of the rheostat should point aft and 45°
outboard. Mark guide pin location and drill a #30
(.128)D or 9/64 diameter hole.

6. Connect the wires to the rheostat as follows:
#58 on the rheostat to #58
#60 on the rheostat to # "C", (Compass - rht lead).
#61 on the rheostat to #62 and #63
7. Mount the rheostat in position. Tape terminals and
knife disconnects, and secure wires to structure (as
they were) with electrical plastic tape.
8. Mount the new Royalite cover and knobs in place.
9. Install switch in hole just to the left of pilot
control column. If this hole is occupied, install
switch in one of the existing holes above the throttle
or prop governor or other convenient location. Add
decal below switch.
10. Disconnect the lead from the instrument light circuit
breaker (Wire #58), and clip the terminal off. Install
the new knife disconnect, and connect the new wire (item
2, parts list) to this wire; taping the splice with
electrical plastic tape. This wire is run with the
existing wiring bundle across the panel to the instrument
light switch and connected.
11. Connect the remaining wire (item 5, parts list) to
instrument light switch and instrument circuit breaker.
Running this wire with the wire installed in step 10.
These wires should now be taped in place with
electrical plastic tape.