

**SUBJECT:** Magnetic Compass Interference

**MODELS AFFECTED:** M20B 1701 thru 1851, 1853 thru 1939  
M20C 1852, 1940 thru 3286  
M20D 1, 101 thru 259  
M20E 101 thru 950

**TIME OF COMPLIANCE:** At owners discretion

**INTRODUCTION:** The compass error induced by using the airframe as a ground return path for the navigation lights, rotating beacon, and heated pitot may be reduced by the addition of a ground wire twisted together with the supply wire in each circuit.

**INSTRUCTIONS:** Remove necessary upholstery, inspection plates, access panels and fairings to provide access to the navigation light wires. Remove all navigation light wires from switch to lights. Using the attached schematic, install SLKit 20-134-1 wiring taking care not to displace grommets from wing ribs and fuselage bulkheads when pulling in new wires. Attach wires number 60 and 64 to switch and ground wires number 268 and 270 to the nearest instrument panel mounting bolt below switch. Solder wires number 90, 92 and 5 to the center contact of their respective navigation lights and solder wires number 262, 263, and 264 to the outside shell of lights. Check operation of lights.

On aircraft having rotating beacons installed, remove wiring from switch to light and remove ground wire from beacon if installed. Install SL Kit 20-134-2 wiring. Connect wire number 140 to switch and positive terminal on beacon. Ground wire number 261 to instrument panel mounting bolt nearest switch and connect to beacon negative terminal. Check operation.

On aircraft having heated pitot installed, remove wiring from switch to pitot head. Cut off terminal from pitot ground and install knife disconnect on wire. Install Service Letter Kit 20-134-3 wires using attached schematic. Connect wire number 141 to switch and ground wire number 273 on nearest instrument panel mounting bolt. Polarity at pitot head is not critical. Check operation.

Re-install upholstery, access panels, fairings, and inspection plates. Compensate compass, reswing and prepare a new compass card. Make appropriate entry in aircraft Log Book and return aircraft to service.

**SERVICE LETTER KIT NO. 20-134-1**

800007-5, -60, -61, -62, -64, -89, -90, -91, -92, -262, -263, -264, -265, -266, -267, -268, -269, and -270.

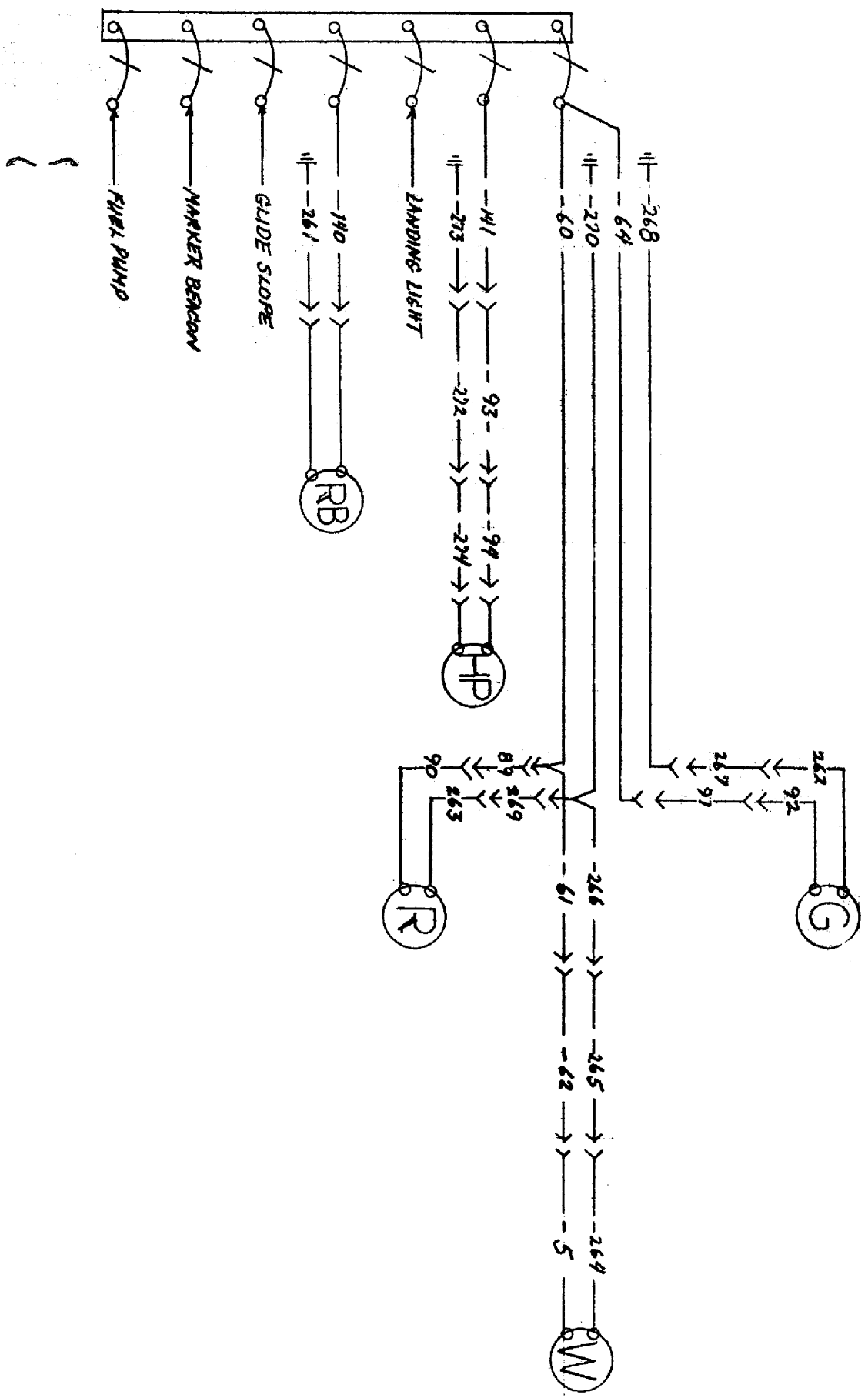
**SERVICE LETTER KIT NO. 20-134-2**

800007-140 and -261.

**SERVICE LETTER KIT NO. 20-134-3**

800007-93, -94, -141, -272, -273, and -274.  
Amp 32446 Knife Disconnect.

These Service Letter Kits may be purchased from your local Mooney distributor. Direct factory orders will not be accepted



WIRING SCHEMATIC FOR SERVICE LETTER NO. 20-134