

# Service Bulletin

SB 1394T100-()RB-01

1394T100-()RB Turn Coordinator

**SUBJECT:** PCB Assembly Redesign

## 1. PLANNING INFORMATION

### A. Effectivity:

This service bulletin applies to 1394T100-()RB Turn Coordinator with electrical rate output, manufactured by Mid-Continent Instrument Co., Inc. Upon completion of this service bulletin units shall be marked as “MOD 1” on the nameplate.

### B. Reason:

The PCB assemblies were redesigned to improve reliability of the optical position sensors. There was also an addition of multiple trimming potentiometers to aid in the electrical calibration during manufacturing.

### C. Description:

This service bulletin replaces the 1394T100-()RB PCB Assembly 9016342 and PCB Main Assembly 9016330-().

### D. Compliance:

This service bulletin is to be completed on a voluntary basis only.

### E. Approval:

FAA and TSO approval is not affected.

### F. Manpower:

The manufacturer will cover none of the associated cost in completing this service bulletin. Any cost inquired while performing the service bulletin will be the responsibility of the customer.

### G. Material – Cost and Availability:

The parts and material necessary to accomplish this service bulletin are available from Mid-Continent Instruments, Inc. Refer to Section 3, Material Information, for part numbers. Check for current pricing.

### H. Tooling:

No special tooling is required.

I. Weight and Balance:

No change.

J. Electrical load data:

No change.

K. Other Publications affected:

Maintenance Manual P/N 34-20-47

**2. ACCOMPLISHMENT INSTRUCTIONS:**

- A. Refer to the 1394T100-() Component Maintenance Manual for part locations, disassembly instructions, and wiring diagrams.
- B. De-solder and remove all wires from the PCB Assy. (9016342) and PCB Main Assy. (9016330-()).
- C. Remove both PCB assemblies from the unit.
- D. Attach new PCB Assembly 9016510 in the same location as 9016342 was removed using the same hardware. Attach the new PCB Main Assembly in the same location as 9016330-() was removed using the same hardware.
- E. Reattach the three wires from the Rotor PCB Assy. by looping the wires through the hole in the PCB Main and soldering them to the backside of the board in the locations shown in figure 1.
- F. Solder four wires (red, yellow, brown, and green) to the 9016510 PCB Assy. in the locations shown in figure 2. Solder the other end of these wires to the 9016499-() PCB Main Assy. in the locations shown in figure 1.
- G. Secure these wires using a cable tie to the upper standoff.
- H. Solder the red and black flag wires to the Main PCB at the locations shown in figure 1. Attach these wires to one of the lower standoff using cable ties.
- I. **\*\*\*For 1394T100-8RB Only:** Solder the red and black flag wires and the two orange heater wires to the Main PCB Assy. at the locations shown in figure 1. Attach these wires to one of the lower standoffs using cable ties. Solder the black, blue, and red wires from the heater regulator to the Main PCB Assy. at the locations shown in figure 1. Attach these wires to the other lower standoff using cable ties.
- J. Calibrate the unit as described in the Component Maintenance Manual.
- K. Assemble the unit and perform the functional tests called out in the 1394T100-()RB Component Maintenance Manual.
- L. Upon completion of this service bulletin, units will be identified with "MOD 1" on the nameplate. To do this, use permanent black ink and mark out block 1 on the modification section of the nameplate.

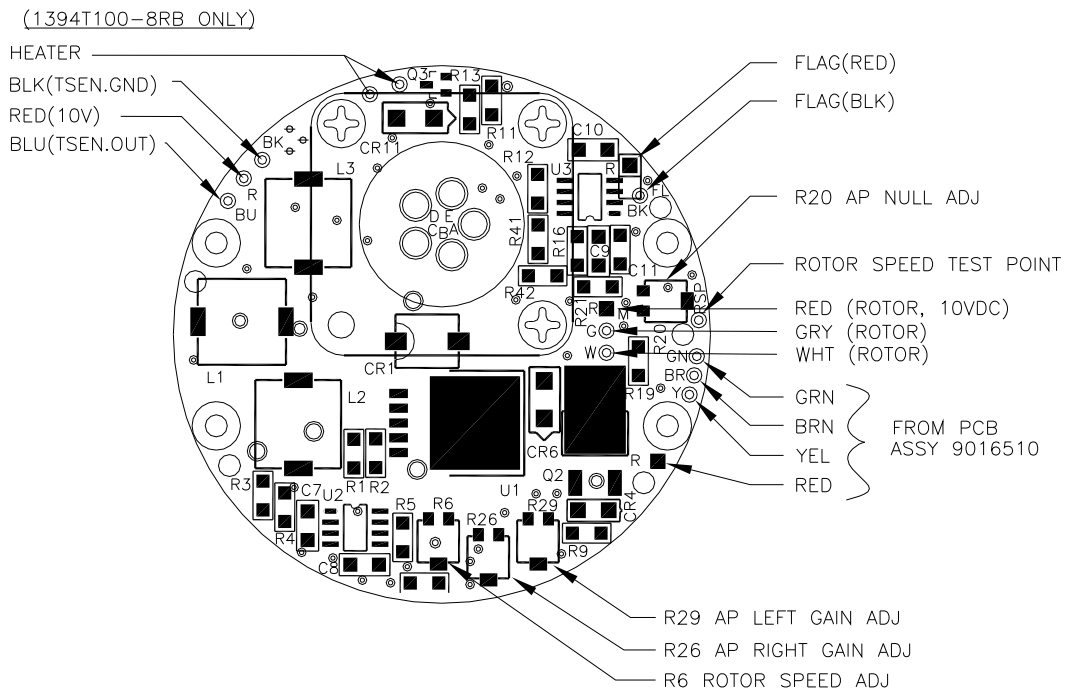


Figure 1 9016499-() Main PCB Assembly

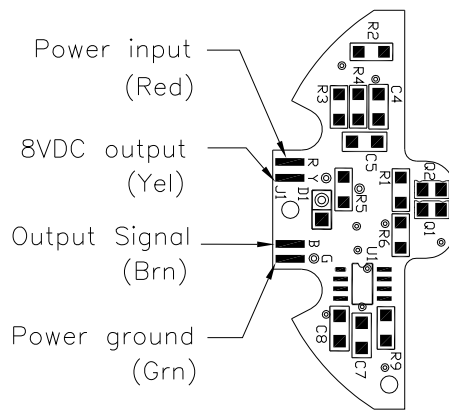


Figure 2 9016510 PCB Assembly

3. MATERIAL INFORMATION

Parts:

New Part Number	Qty.	Description	Old Part Number
9016510	1	PCB Assy	9016342
9016499-1*	1	PCB Main Assy.	9016330-1*
9016499-2**	1	PCB Main Assy.	9016330-2**
7015043	6*, 4**	Cable Ties	N/A

\* for -8RB and -20RB

\*\* for -7RB, -10RB, -12RB, -14RB