

Service Information Letter

SIL 1394T100-B-01

1394T100-B Series TURN COORDINATOR

Mid-Continent Instrument Co, Inc., Electric Gyro Corp division has developed an improved version of the Turn Coordinator, 1394T100-(), series units. This new version is designated by placing the letter “B” in the dash number.

Replacement for “A” Series:

The introduction of the “B” series units has superseded the “A” series units. All fit, form, and function of the “B” series is identical to the “A” with the additional capability to operate on any input voltage from 11 to 32VDC.

Superseded P/N (28VDC Only)	Replaced by P/N (11-32VDC)
1394T100-3A	1394T100-3B
1394T100-3AC	1394T100-3BC
1394T100-7A	1394T100-7B
1394T100-8RA	1394T100-8RB
1394T100-10RA	1394T100-10RB
1394T100-12RA	1394T100-12RB
1394T100-14RA	1394T100-14RB

Replacement for “Z” Series:

The -B Series is also designed as an alternative to the -Z Series Turn Coordinators manufactured by Mid-Continent Instruments.

Both series are certified to the same FAA TSO C3b. Differences between the -Z and -B Series are listed at the top of the following page.

Feature Comparison between -Z Series Turn Coordinator versus new -B series

	-Z Series	-B Series
Rotor Type	Brush	Brushless
Power Requirement	11-32VDC	11-32VDC
Typical Maintenance	Brush replacement	None
Approximate Life (MTBF)	1800 hours	4500 hours
Starting Current	1.0 amps	0.45 amps
Running Current	0.35 amps	0.32 amps
Audible Noise Suppression	No	Yes
External Temperature, Operating	132° F	105° F
Warning Flag Validation*	Unit power	Rotor Speed
Unit Weight	1.2 lbs	1.4 lbs
Unit Length	4.2 inches max	5.0 inches max

Fit, Form, and Function between the two series is identical except for the length and weight noted above. Below is a reference table to identify the -Z series unit and its new -B series alternative.

"Z" P/N	"B" P/N
1394T100-3Z	1394T100-3B
1394T100-7Z	1394T100-7B
1394T100-7RZ	1394T100-7RB
1394T100-8RZ	1394T100-8RB
1394T100-10RZ	1394T100-10RB
1394T100-12RZ	1394T100-12RB
1394T100-20RZ	1394T100-20RB

* The "warning flag validation" is defined as the method used to 'pull' the flag and indicate valid gyro operation. The -Z series will present a valid visual indication when unit power is applied regardless of proper rotor operation. The -B series, alternatively, will indicate valid visual indication when the rotor has achieved 70% of full speed (within 3 minutes) and thus, accurate and available unit operation.