

M15 and M15H Commutating Modular Encoder U, V, W Alignment Instructions

Revision 0

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The Timken Company

M15 and M15H
RoHS Compliant

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Timken M15 Target Magnet U, V, W to BLDC Shaft Alignment

1. Mount the sensor base with the supplied centering tool.
2. Use the supplied shim to space the target. The rotational alignment of the target magnet can be done using steps 3 through 5.
3. Energize the motor phase winding U with motor to lock the rotor. It is done by connecting the supply voltage to phase winding U with the V winding connected to ground. The motor shaft should move to same position when rotated in either direction in when power is applied.
4. Apply 5V to the M15 and observe the index pulse or U signal with a scope or meter.
5. Rotate the target (With the supplied shim between the target and the sensor circuitry) using the supplied Allen wrench until the index is on or the U signal just goes high and tighten the set screw.

Note: The Index pulse signal is aligned with the rising edge of U on M15 encoders.