DYNAPAR™
RESOLUTION YOU CAN COUNT ON

NorthStar
SLIM Tach SL56
6 Easy Steps to Installation

NorthStar™ ACURO® Dynapar™ HENGSTLER® Harowe™

Slim TACH SL 56/85

- **Designed for heavy duty industrial applications**
- **Thin, bearingless construction ideal for space constraints**
- **Designed for 56/140 & 180 NEMA Frame Motor Flanges**
- **Up to 1024 base Pulse Count**
- **Utter Simplicity for Excellent Reliability and Quick Installation**
- **Large Array of Available Shaft Sizes**
- **Choice of Most Major Motor OEM's**
- **A and B channels with optional marker (Z) pulse.**
- **Operating Temperature Range: -40 to 90 C (Optional 120 C)**

SLIM Tach® SL56

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Step 1 Inspection and….

- Inspect shipping container for damage.
- Verify all components, accessories and manual were received.

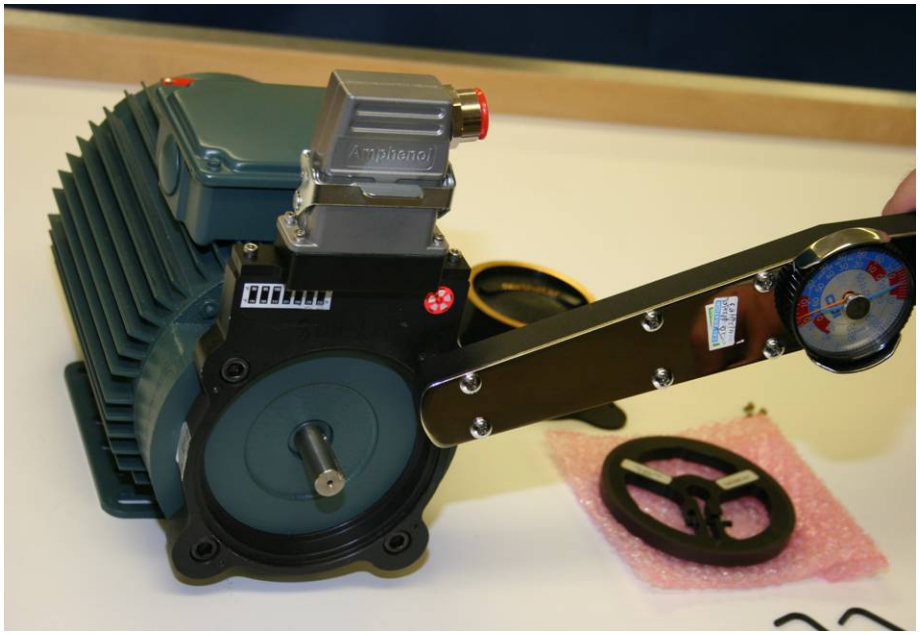
Step 1 Unpacking

- Lay out parts.
- Become familiar with instruction manual, exploded view of product and any warnings or cautions.

Step 2 Preparation

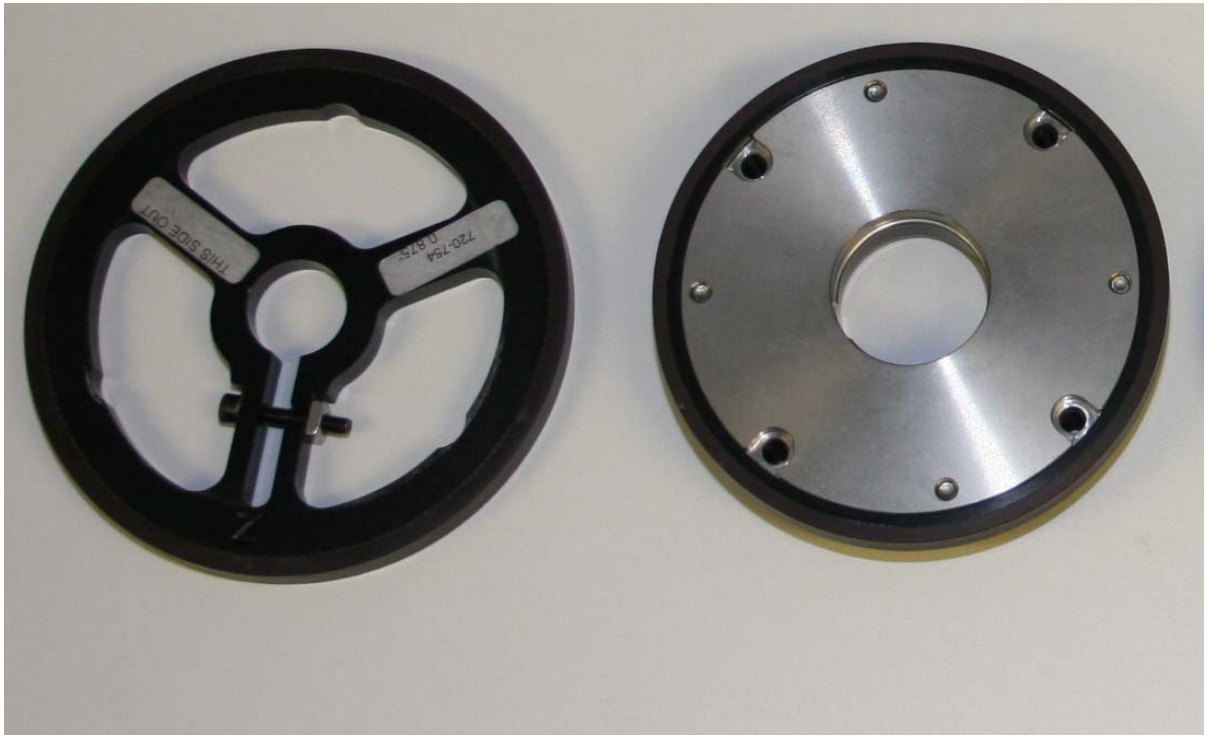
- Clean motor face, outer rim-rabbit surface and shaft of paint, grease, dirt and other debris.
- Also ensure that mating surfaces or shaft have not been damaged.
- Apply a thin coat of corrosion inhibitor or oil to motor face and shaft to aid assembly and provide corrosion protection.

Step 3 Encoder Frame Installation



- Orient the encoder frame so that the 4.5 inch I.D. surface fits over the 4.5 inch C flange. (Encapsulated “large blue potted” side toward motor)
- Mount encoder frame onto the motor flange.
- Insert (4) 3/8 x 16 UNC socket head caps screws through the encoder frame and into the motor frame.
- Using a 5/16 hex wrench, tighten to a nominal 25 Ft-lbs.

Step 4 Inspect & Confirm wheel type



J Wheel (smaller bores)
- J04 – 0.625” shaft
- J05 – 0.875 “ shaft
- J06 – 1.000” shaft
- J07 – 1.125” shaft
- J08 – 1.250” shaft

K Wheel (larger bores)

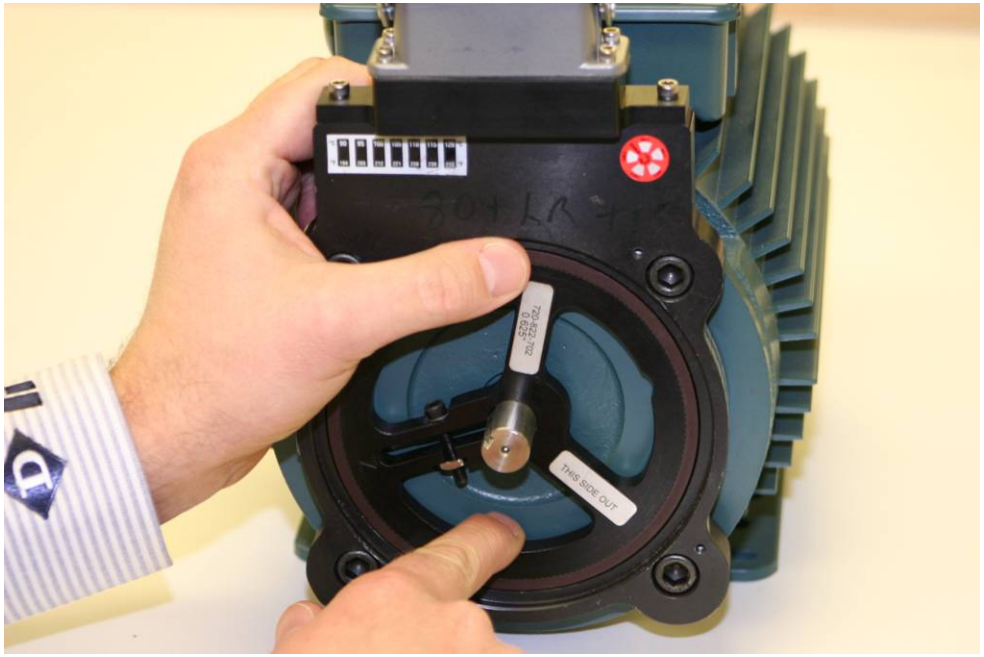
K09 – 1.375” shaft	K14 – 2.000” shaft
K10 – 1.500 “ shaft	K15 – 2.125” shaft
K11 – 1.625” shaft	K16 – 2.250” shaft
K12 – 1.750” shaft	K17 – 2.375” shaft
K13 – 1.875” shaft	K18 – 2.500” shaft

K19 – 2.875” shaft

Step 5 Install Wheel - (J) “Spoke” Style

- Slide pulse wheel onto shaft, letter “Z” or label “THIS SIDE OUT” being visible.
- Position the wheel so that it is flush with the inner machined recess in the encoder frame. This properly centers the wheel under the sensor.
- Using a straight edge, align two surfaces across the wheel to within +/- 0.010 inch. A quick check can be made with your thumb, to feel that the two surfaces are flush.
- Using the provided 9/64 inch hex wrench, tighten the socket head cap screw to a nominal 30 in-lbs.

Step 5 Check Installation



- Verify that the wheel does not have excess wobble greater than 0.010 inch.
- Rotate the motor shaft by hand to ensure it rotates freely and does not touch the encoder frame at any time.
- If everything is mechanically correct, the resulting sensor to pulse wheel air gap will be a nominal 0.011 inch.

Step 5 Install Wheel – (K) “Clamp” Style

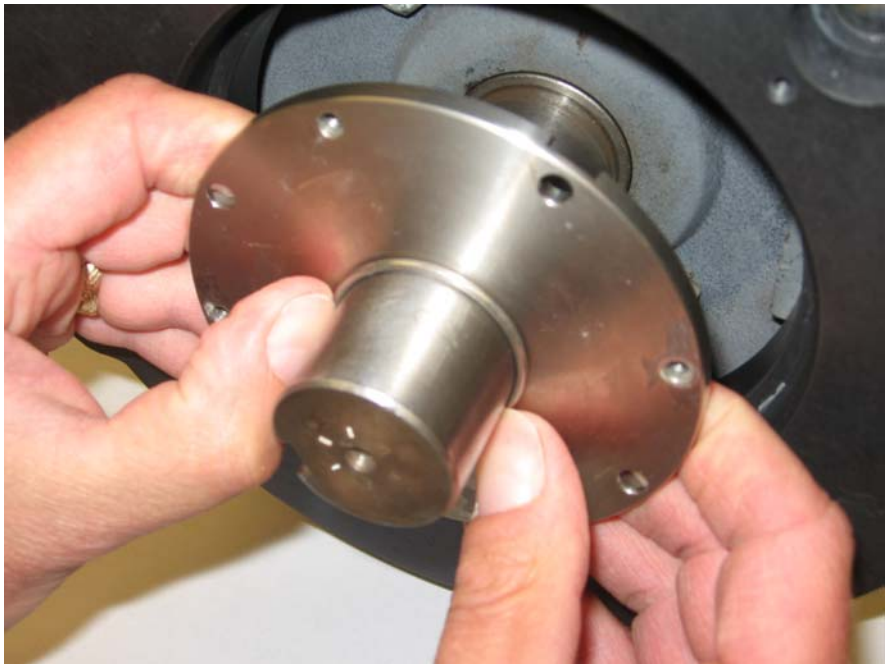
Parts 1-4

- The Clamp Style Wheel consists of three parts:
  1. Pulse Wheel 2. Wire Ring 3. Clamping Plate

Part 1 of Clamp Style Wheel Installation

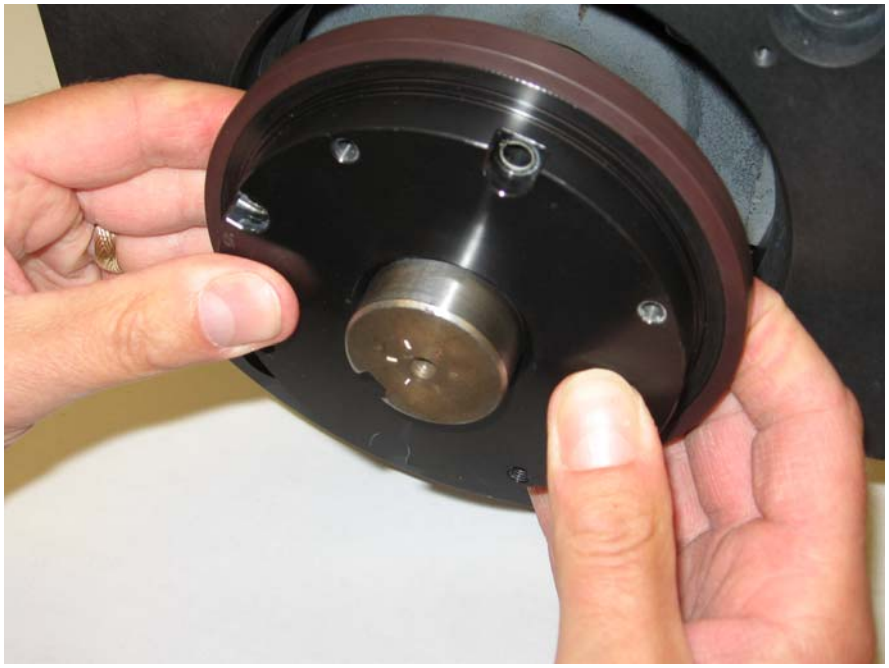
- Slide the clamping plate onto the motor shaft. Which side faces out does not matter.

Part 2 of Clamp Style Wheel Installation



- Slide the wire ring onto the motor shaft, until it is seated against the clamping plate.
- Make sure the wire ring is snug against the motor shaft.

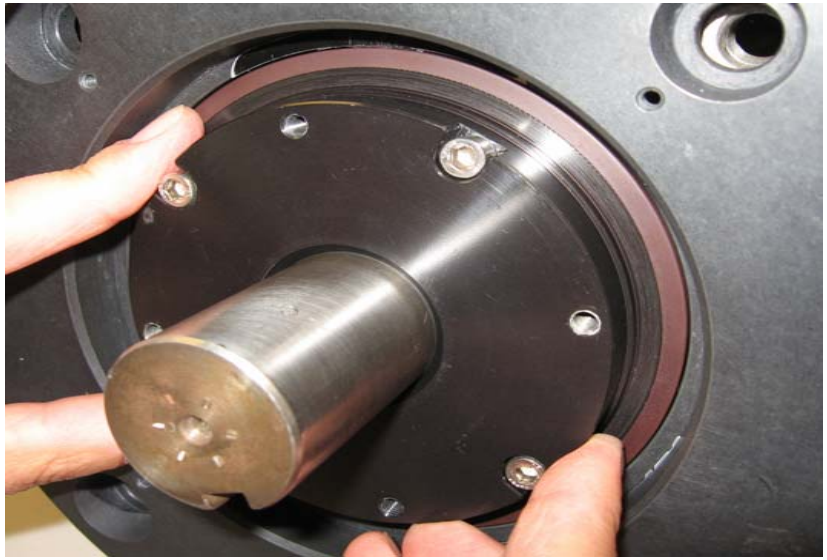
Part 3 of Clamp Style Wheel Installation

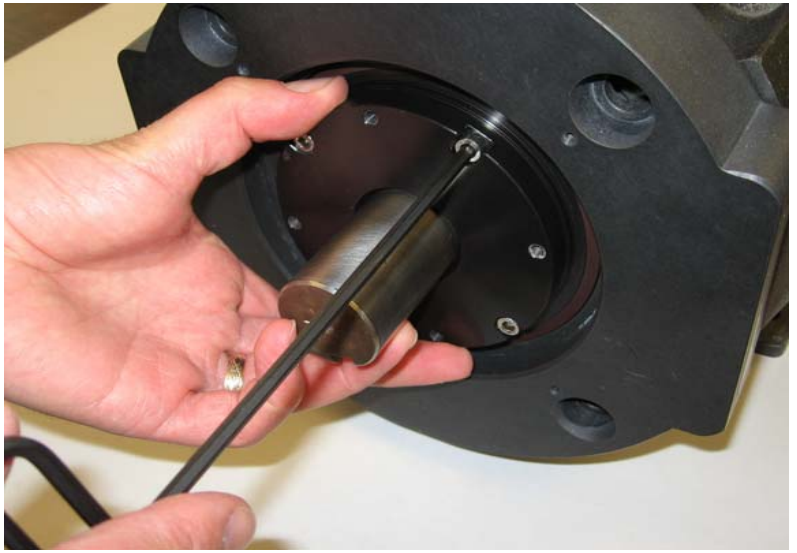


- Slide the pulse wheel (hub out) onto the motor shaft, until it is in contact with the wire ring and clamping plate.
- Align the unthreaded holes on the wheel with the threaded holes in the clamping plate, then insert and snug screws.

Step 5

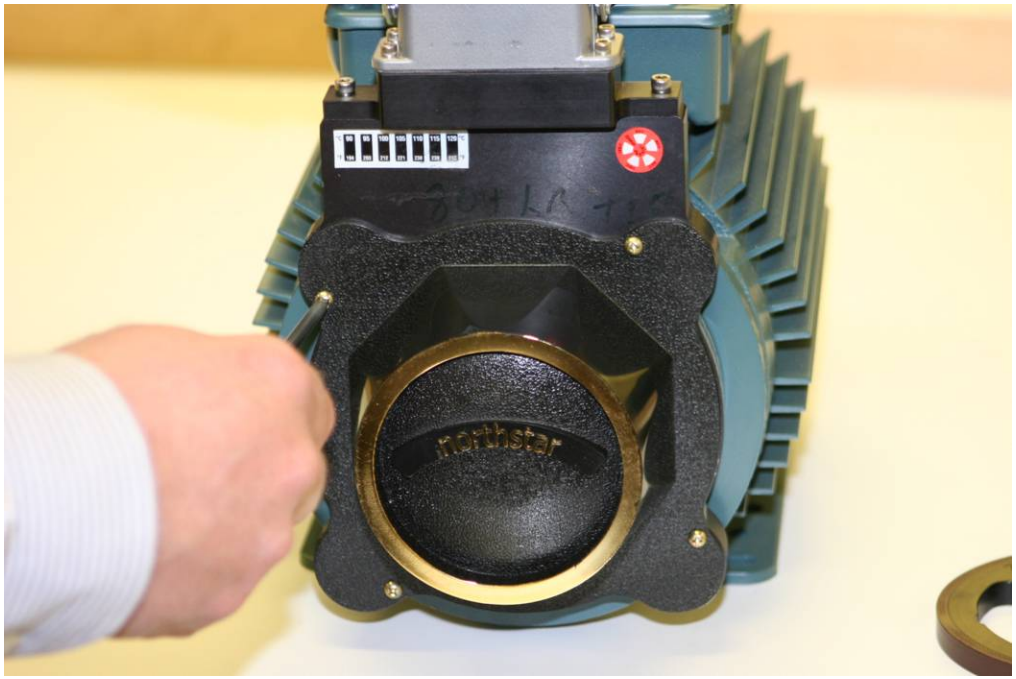
- **Part 4 of Clamp Style Wheel Installation**





- Position the wheel so that it is flush with the inner machined recess in the encoder frame. This properly centers the wheel under the sensor.
- Using a straight edge, align the two surfaces across the wheel to within +/- 0.010 inch. A quick check can be made with your thumb, to feel that the two surfaces are flush.
- Tighten the clamping screws in a star pattern, to 30 inch-pounds.

Step 6 Secure Encoder Cover



- Position the encoder cover (Thru-hole for Clamp Style Wheel) over the mounted encoder frame.
- Insert and tighten (4) encoder cover Phillips head screws.
- This completes the mechanical mounting of the unit.

Installed SLIM Tach SL56