NorthStar[™] brand Trouble Shooting Procedure for use with NexGen RIM Tach 1250 Bearingless Encoder

RIM 1250 AirGap Adjustment Procedure

(added as a troubleshooting section to the 1250 manual)

When to use this procedure?

This unit has been designed for a maximum mounting flange (C-Face) runout of the 0.004" of an inch. If in the case that the actual runout is slightly larger than that, a small amount can be compensated by a shimming of the sensor modules.

• Why use this procedure?

This procedure will shift the effective Sensor Airgaps by approximately 0.004" on each side, for a total effective runout adjustment of 0.008".

Caution: This adjustment procedure is designed for troubleshooting only and not meant to be part of the routine installation method for the North Star RIM Tach 1250. Please take care when following the guidelines of this procedure to avoid damage to the sensor. Sensor damage can cause premature failure of the unit during operation. We recommend contacting the Dynapar applications department prior to performing procedure to receive guidance as to the applicability of this procedure.

• How to use this procedure?

1: Determine the runout of the mounting flange with a dial indicator or runout gauge.

To use a dial indicator: mount The base of the indicator to the shaft and sweep the face of the flange to insure the squareness of the flange to the shaft The perpendicularity should be with 0.010" to the shaft. Next, sweep the OD of the Flange to measure the runout to the shaft. It should be less than 0.004".



2: If the Mounting Flange runout is greater the 0.004", then identify the "High" side and the "Low" side.

Temporarily place the housing of the RIM 1250 onto the flange. It is recommended that the magnetic wheel not be in place at this time.



3: Locate the Silver colored metal foil shims on each sensor module port hole on each side of the housing. They are held on with a self adhesive.



3: Continued

Carefully Remove the shim from the sensor port house of the "High" side and place it on top of the opposite shim on the "Low" side.





Be careful to align it (including the keyway notches) with the shim underneath to insure the sensor module will be easy to insert later. Make sure the shim is smooth, with no crinkles or ridges and fully adhered.

If one is applying a new shim, be sure to remove the paper backing layer from the shim

4: Continue with the regular installation procedure.

Be extra sure to look and listen to possible interference of the wheel touching the sensor module face. Any running contact of the wheel to the sensor module face can cause permanent damage to the sensor module.





Customer Service: Tel.: +1.800.873.8731 Fax: +1.847.662.4150 custserv@dynapar.com

Technical Support Tel.: +1.800.234.8731 Fax: +1.847.662.4150 northstar.techsupport@dynapar.com

European Sales Representitive Hengstler GmbH Uhlandstrasse 49, 78554 Aldingen Germany www.hengstler.com

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Headquarters: 1675 Delany Road • Gurnee, IL 60031-1282 • USA