ENCODER
PRODUCTS COMPANY

TR2 - Tru-Trac™ Installation Instructions

<u>Notes</u>

1. For installation, spring tensioning, and removal of the Tru-Trac™ unit itself, refer to Technical Bulletin TB-518.

2. To install a TR2 rack-based gearing system, see the instructions below.

3. It is most common to mount the rack on the moving component of the system, and to mount the TR2 encoder on the stationary component.
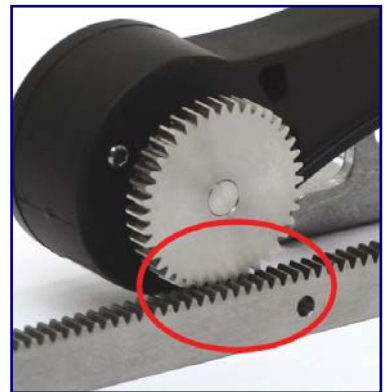
<u>Required Tools</u>

- EPC Rack Spacer Block ~ TR2 accessory
        part number # 176219
- 5/32" or 4 mm hex "L" key and 7/16" end wrench
- 3/32" hex "L" key

<u>Installation</u>

1. Place the rack section against the mounting surface.
    - A mounting surface that is flat within +/-0.001" is preferred.
    - Either the side mounting holes or bottom mounting holes may be used.

2. Insert 6-32 UNC screws into the available holes and tighten securely.

3. Mount the encoder with the pinion gear aligned to the rack so that it will run in the center.
    - Misalignment will cause unnecessary wear on the pinion and the rack teeth.

4. Adjust the Tru-Trac™ spring tension so that the pinion teeth are positively engaged to the rack, and ensure that the spring travel is not up against the stops.
    - For most applications, a spring setting in its midrange (2-3 lbs.) is sufficient.
    - A properly adjusted spring should allow the Tru-Trac™ pinion to be lifted 1/8" to 1/4" above the surface of the rack.

5. To create rack lengths over 36" long, use the rack spacer block to accurately join two or more pieces of rack. (View bottom right photos)
    - Place the spacer block upside down over the gap between the two adjacent pieces of rack.
    - Clamp the spacer block securely in place so that the teeth of both pieces of rack are fully engaged.
    - Use a straight-edge or sight level to align the adjacent rack pieces along their length.
    - Tighten the mounting screws in the rack evenly until secure.
    - Remove the spacer block and clamps.

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Perfect TR2 Rack and Pinion Fit

Pinion misalignment can cause inaccuracies or wear.

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