

IMU Sensor Assembly Product Manual



Product Name: IMU Sensor Assembly

Model No: 51005

Manufactured by:

Petropower LLC
3003 E 37th St N #100
Wichita, KS 67219

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING:

Changes or modifications not expressly approved by PetroPower could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

Contact Information

Phone: (316) 361-0222
Email: info@petropower.com
Web: <https://www.petropower.com/>

How to install T-Rex Sensors (drive shaft and polish rod) at the Edge

⚠ What you need before you go to install site:

1. T-Rex V2 Installation Kit (includes 2 T-Rex motion sensors, one polish rod mount, and two hose clamps)
2. Standard tools (flat head screw driver)
3. A ladder

ℹ Pre-requisite: The T-Rex box must be powered on

1. Open T-Rex box, confirm all parts are in place (compare to included manifest in box)
2. Pair each sensor in turn to the T-Rex box by placing the back of the sensor where it is labeled "Pairing" directly against the front of the T-Rex box where it has a corresponding "Pairing" label.
 - a. When placed correctly, the "Pairing" LED light on the front of the T-Rex box should change from blue (ready state) to green (active pairing).
 - b. Wait for the display screen to show a pairing confirmation message.
3. Depending on which device you are pairing, the D.S. (Drive Shaft) or the P.R. (Polish Rod) LED light on the front of the T-Rex box will continue to change colors for 3-5 minutes, so wait patiently if the LED indicator is still changing colors.
 - = Updating Firmware
 - = Connected, Good signal
 - = Not Connected
 - = Connected, Poor signal
 - (off) = Sensor not Paired
4. Repeat for each sensor and once both sensor LEDs display solid green, you are ready for install.
5. Turn off main power to the pump and wait for it to completely stop.
6. Gather the polish rod sensor, the metal bracket it will sit in, and the two hose clamps needed to attach the bracket to the polish rod.
7. Assemble the polish rod sensor clamp:
Loop each of the hose clamps through the openings on the bracket as shown here.



Example LED



8. Attach sensor to bracket:

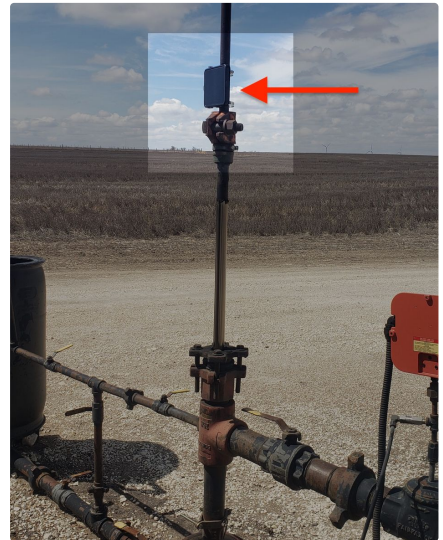
Place the sensor into the bracket so that it is nested neatly between all of the bracket's side tabs. Ensure the arrow on the back side of the sensor is pointing up.



9. Attach the polish rod sensor:

Use a ladder to reach the top of the polish rod. Securely attach the sensor+bracket just above the bridle using a 5/16 socket or a flathead screwdriver to tighten the hose clamps.

Ensure the arrow on the back side of the sensor is still pointing up and position the front (solar panel) of the sensor so that it is facing the T-Rex control box.



10. Attach the drive shaft sensor:

Take the drive shaft sensor and attach it to the side of the rotating drive shaft by pressing the magnetic side of the sensor to the metal surface (solar side should be facing out). Aim to place the sensor as close to the epicenter of the rotating shaft.

11. Remove the ladder and any other materials from the well pump area and turn the main power back on.

12. Call T-Rex Operational Support at (855) 719-2433 - notify them you have completed the sensor install and need to verify the data is coming through for each (drive shaft and polish rod).

