

Watch-DOG Installation Checklist

To ensure a successful installation, please confirm the following. See the **Watch-DOG Installation Guide** for further details.

Sensors:

Flow Temperature Sensor (if used):

- Sensor is securely clamped onto the underside of the flow line as close to the stuffing box as possible
- To avoid stress damage to the sensor, ensure sensor cable is not kinked or subjected to sharp bends immediately adjacent to the sensor bullet end
- Sensor is insulated
- Heat trace line (if present) is outside the sensor insulation
- Sensor cable is properly stress relieved
- An extension cable has been used if necessary to ensure the sensor cable is not subjected to excessive stress
- Sensor cable has been properly secured to eliminate tripping hazards
- Sensor connector (temperature sensor marked with red band) is connected to the appropriate connector on the Watch-DOG unit. Temperature inputs on the Watch-DOG unit are visually identified by a label on the enclosure and have a maroon colored nut.
- Ensure that the locking ring on the connector is locked onto the connector by turning clockwise until it clicks

Vibration Sensor (if used):

- Vibration sensor is tightly secured to mechanical equipment using a bolt and lock washer. Do not use nylon ties or similar since these do not provide a durable secure mounting.
- Secure the sensor cable close to the sensor. This helps avoid false vibration signals due to wind that could interfere with the Watch-DOG units ability to detect that the mechanical equipment has stopped operating.
- Sensor cable is properly stress relieved
- An extension cable has been used if necessary to ensure the sensor cable is not subjected to excessive stress
- Sensor cable has been properly secured to eliminate tripping hazards
- Sensor connector (vibration sensor marked with yellow band) is connected to the appropriate connector on the Watch-DOG unit. Vibration inputs on the Watch-DOG unit are visually identified by a label on the enclosure and have a yellow colored nut.
- Ensure that the locking ring on the connector is locked onto the connector by turning clockwise until it clicks

Watch-DOG Control Unit:

- Ensure the control unit is securely mounted using supplied mounting hardware.
- For units with a solar panel (Watch-DOG Plus), the solar panel must be pointed south with a clear view of the sky to allow proper battery charging. Ensure that no objects cast a shadow onto the solar panel as this will interfere with proper charging.
- The unit must remain properly oriented to the sky so that satellite data transmission is not degraded.
 - For units with a solar panel (Watch-DOG Plus), ensure that the top of the unit (connectors are on the bottom) has a clear view of the south half of the sky (satellite antenna is located under the lid)
 - For units without a solar panel (Watch-DOG 2), ensure that the front of the unit (with label) has a clear view of the southern half of the sky (satellite antenna located under the lid)
- Ensure there are no metal fences, shacks or overhangs blocking the unit's view of the sky.

Signal Quality, Alarm and Web Setup

- Whenever a unit is installed at a new location please contact Advanced Flow Technologies at (403)212-2382 or (866) 412-2383 with the following information:
 - I. **Controller serial number (this number will be next to the bar code label)** located on the side or rear of the controller and will be in the one of the following formats: CPxxxxx [Watch-DOG Plus] or WDxxxxx [Watch-DOG 2]
 - II. Surface location (LSD) where the Watch-DOG is installed
 - III. Type of equipment monitored (e.g. Pumpjack, PCP, ESP, Gen Set, Engine etc.)
 - IV. If a well is being monitored, please note the UWI (or bottom hole location)
 - V. If alarm email or text notifications are to be set up, please supply name and email addresses of intended recipients. For text messages to cell phones, please provide the 10 digit cell number and the name of the service provider (e.g. Telus, Bell, SaskTel, etc.)
- Advanced Flow Technologies will activate the alarms once the signal quality is checked. Generally this takes 24 – 48 hours. If any signal quality issues are seen, you will be contacted with advice. It may be necessary to relocate vibration sensors if the detected vibration level is too low to provide reliable alarms.