## Warnings

Stop the machine and disconnect all electrical power before beginning installation.

- Firmly secure the unit to the equipment using the base foot mount or C-Clamp, if applicable. See C-Clamp Installation.
  - For oil well pump jacks, attach the VS2 and VS94 Series to the Samson post or walking beam. See Typical Mounting Locations.
- Make the necessary electrical connections to the vibration switch. See Internal Switches for electrical terminal
  locations and for typical wiring diagrams. DO NOT EXCEED VOLTAGE OR CURRENT RATINGS OF THE
  CONTACTS. Follow appropriate electrical codes/methods when making electrical connections. Be sure that
  the run of electrical cable is secured to the machine and is well insulated from electrical shorting. Use of
  conduit is recommended.

**NOTE:** If the electrical cable crosses a pivot point such as at the pivot of the walking beam, be sure to allow enough slack in the cable so that no stress is placed on the cable when the beam moves.

If conduit is not used for the entire length of wiring, conduit should be used from the electrical supply box to a height above ground level that prevents damage to the exposed cable from the elements, rodents, etc. or otherwise required by applicable electrical codes. If conduit is not directly attached to the VS2 and VS94 Series switch, use a strain relief bushing and weatherproof cap on the exposed end of the conduit. A drip loop should be provided in the cable to prevent moisture from draining down the cable into the conduit should the weatherproof cap fail.

**NOTE:** Hazardous area enclosures installed in hazardous areas require explosion-proof, poured conduit seals. Installation should only be done by qualified personnel trained in hazardous area electrical practices

## Sensitivity Adjustment

## Warnings

Remove all power before opening the enclosure. It is your responsibility to have a qualified person perform adjustments and make sure it conforms to NEC and local codes. Do not adjust sensitivity while the machine is running. Stand clear of the machine at all times when it is operating.

All models of the VS2 and VS94 Series cover a wide range of sensitivity. Each model is expected to be adjusted to the specific piece of machinery on which it is installed in a satisfactory location.

**NOTE:** The sensitivity of this device is affected by extreme temperatures. Some adjustment may be necessary in extreme environments.

The sensitivity adjustment will be increased or decreased so that the switch does not trip during start up or under normal operating conditions. Some machinery experiences a shock on startup. Remote reset versions are available to hold the switch in reset during equipment startup. This allows a more sensitive setting of the switch; however, it is not always practical. Instructions are given for adjusting sensitivity to not trip on startup. This is typically done as follows:

- 1. Replace all covers, lids and electrical enclosures.
- Press the Reset push button to engage the magnetic latch.
   To be sure the magnetic latch has engaged, observe latch through the window on the VS2 and VS2C (see DETAIL A).
   On the VS2EX and VS94 Series, the Reset button remains depressed meaning the magnetic latch has engaged.
- 3. Start the machine.
- If the instrument trips on startup, allow the machine to stop. Turn the sensitivity adjustment ¼ turn clockwise (less sensitive), (adjustment for the VS94 is located within the box, see DETAIL B).

