

SOLITAX Mounting Hardware Installation

Safety Information

Please read this entire document before unpacking, setting up, or operating this equipment. Pay attention to all danger and caution statements. Failure to do so could result in serious injury to the operator or damage to the equipment.

To ensure that the protection provided by this equipment is not impaired, do not use or install this equipment in any manner other than that specified in this document.

Use of Hazard Information

DANGER

Indicates a potentially or imminently hazardous situation which, if not avoided, could result in death or serious injury.

CAUTION

Indicates a potentially hazardous situation that may result in minor or moderate injury.

Important Note: Information that requires special emphasis.

Note: Information that supplements points in the main text.

Precautionary Labels

Read all labels and tags attached to the instrument. Personal injury or damage to the instrument could occur if not observed. A symbol, if noted on the instrument, will be included with a danger or caution statement in the manual.



Electrical equipment marked with this symbol may not be disposed of in European public disposal systems after 12 August of 2005. In conformity with European local and national regulations (EU Directive 2002/96/EC), European electrical equipment users must now return old or end-of life equipment to the Producer for disposal at no charge to the user.

Note: For return for recycling, please contact the equipment producer or supplier for instructions on how to return end-of-life equipment, producer-supplied electrical accessories, and all auxiliary items for proper disposal.

Tools and Components

The following tools and components are required for mounting the SOLITAX pipe stand:

- Mounting hardware kit for SOLITAX probe (Cat. No. 6940500, [Figure 1 on page 2](#))
- Adjustable wrench or $\frac{9}{16}$ " box wrench
- Deep socket wrench, $\frac{9}{16}$ "
- Hex bits: 99-25, M5, M6, M8
- Heat gun (optional)

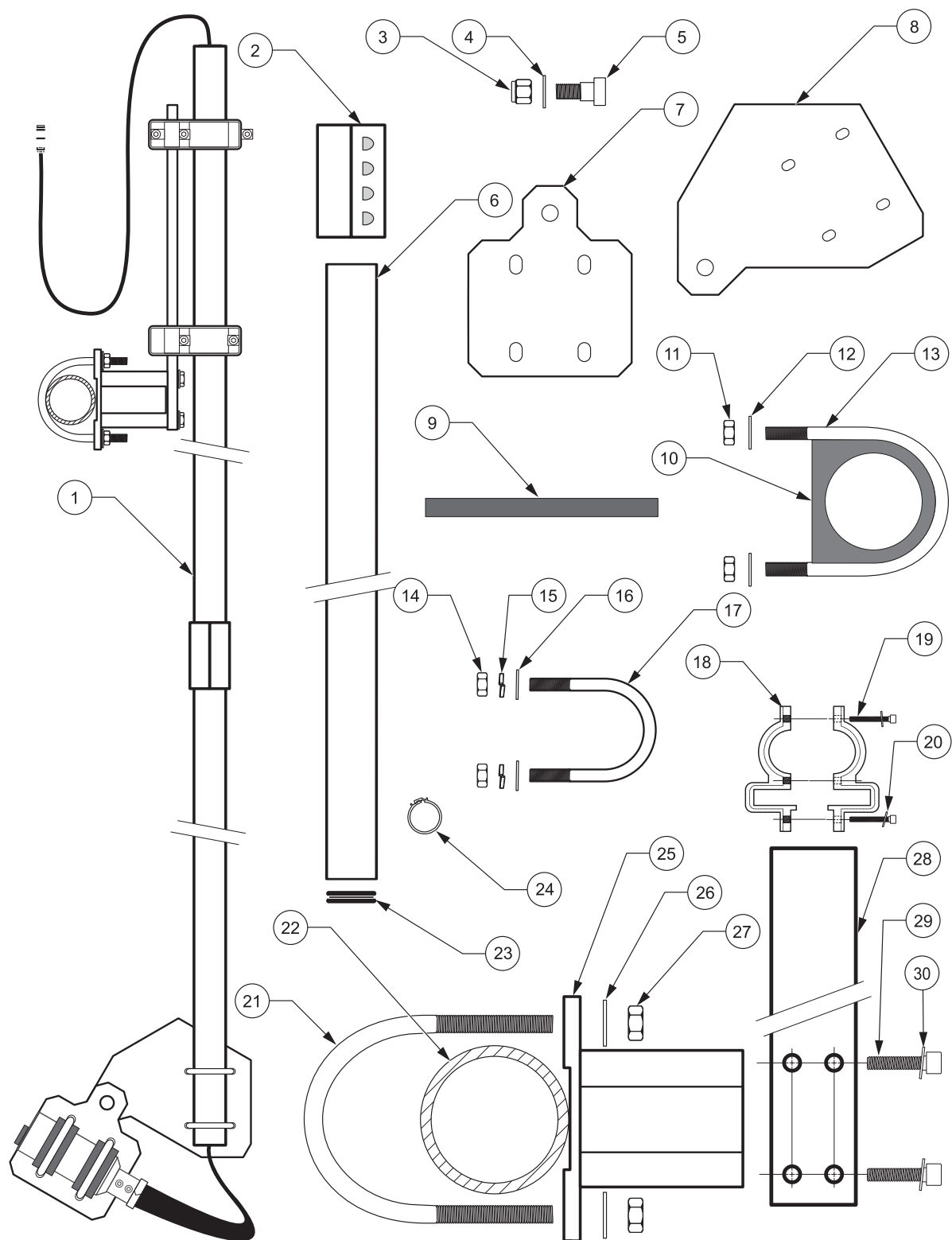


Figure 1 Mounting Hardware Components (Cat. No. 6940500)

Figure 1 Mounting Hardware Components (Cat. No. 6940500), Continued

1 Probe Mounting (assembled) ¹	11 Nut, $\frac{9}{16}$ " (2)	21 U-bolt, 3" x 2" for handrail (2)
2 Coupling, clamp	12 Washer, flat for cushioned U-bolt (2)	22 Handrail, mounting ²
3 Nut, locking	13 U-bolt, 2-inch pipe (2)	23 Grommet
4 Washer, flat	14 Nut, $\frac{9}{16}$ " (2)	24 Hose Clamp, $\frac{3}{4}$ "– $\frac{7}{8}$ " nylon
5 Shoulder Bolt	15 Washer, split lock (2)	25 Mounting Brace, pipe stand
6 Pipe Segment	16 Washer, flat (2)	26 Washer, flat for handrail U-bolt (2)
7 Probe Mounting Plate	17 U-bolt, 2" x 2" (2)	27 Nut, handrail U-bolt (2)
8 Pipe Mounting Plate	18 Bracket, pipe stand (2)	28 Pipe Stand Plate
9 Heat Shrink Tubing	19 Cap Screw, socket head, M5 x 20 (2)	29 Bolt, M8 x 40 (4)
10 Cushion for Cushioned U-bolt	20 Washer, flat for M5 x 20 cap screws (2)	30 Washer, flat, for M8 x 40 bolt (4)

¹ Probe not included in mounting hardware kit.

² Handrail not included in mounting hardware kit.

Assembling the Mounting Hardware

1. Thread the probe cable through the protective rubber heat shrink sleeve. Make sure the shrink sleeve covers the section of the probe where the cable begins. If desired, shrink the tube around the probe with a heat gun. Fasten the shrink tube to the narrow probe end using the $\frac{3}{4}$ -inch hose clamp.
2. Orient the probe so the wiper blade is parallel to the probe mounting plate and the large sensor lens is on top (Figure 2 on page 4). Bolt the probe to the probe mounting plate using two cushioned U-bolts.
3. Use a $\frac{9}{16}$ -inch deep socket wrench to fasten the U-bolts. Secure the four nuts with flat and split lock washers.
4. Bolt the probe mounting plate and the pole mounting plate together using a $\frac{1}{2}$ -inch diameter shoulder bolt and a $\frac{3}{8}$ -inch locking nut. Fasten the bolt until secure but still moveable. The plates should be able to rotate to accommodate probe movement.
5. Calculate the number of 5-ft pipe sections required by estimating the optimal probe depth in feet and dividing that number by five. Round to the nearest whole number.
6. Fit the rubber grommet securely inside the end of one pipe section.
7. Place the pipe section with the grommet on the probe end. Lay the pipe sections on the ground with the two-piece clamp coupling between each length of pipe.
8. Thread the probe cable through the grommet and through each section of pipe until most of the excess cable is to the top of the last pipe. If possible, use two people; one to push the cable, another to pull from the top.

Important Note: Avoid rubbing the cable against the pole ends and causing cable damage.

9. Connect the pipe lengths using the two-piece clamp couplings. The couplings must be extremely tight for the mounting apparatus to work properly.
10. Attach the probe and pole mounting plates to the end of the pipe with two 2" x 2" U-bolts. Tighten the nuts firmly using the $\frac{9}{16}$ -inch deep socket wrench.
11. Attach the pipe stand to the mounting brace with four M8 x 40 bolts and tighten firmly.

12. Use four M8 x 40 bolts to attach the pipe brackets to the pipe stand approximately one foot apart. Tighten securely.
13. Use two 2" x 2" U-bolts to attach the mounting brace to the hand rail. Secure the nuts with flat and split lock washers. To allow for later adjustment, avoid over-tightening.

CAUTION

Use two people to safely complete steps 14–15.

14. Lower the probe into the trough and position the pipe through the pipe clamps on the pipe stand. Tighten the pipe clamps securely.
15. Adjust the probe placement in the trough as needed. Adjust the bracket on the hand rail and tighten the U-bolts firmly.
16. Configure the controller for the SOLITAX probe. Refer to the SOLITAX sc User Manual (Cat. No. DOC023.54.03232) for controller set-up instructions.

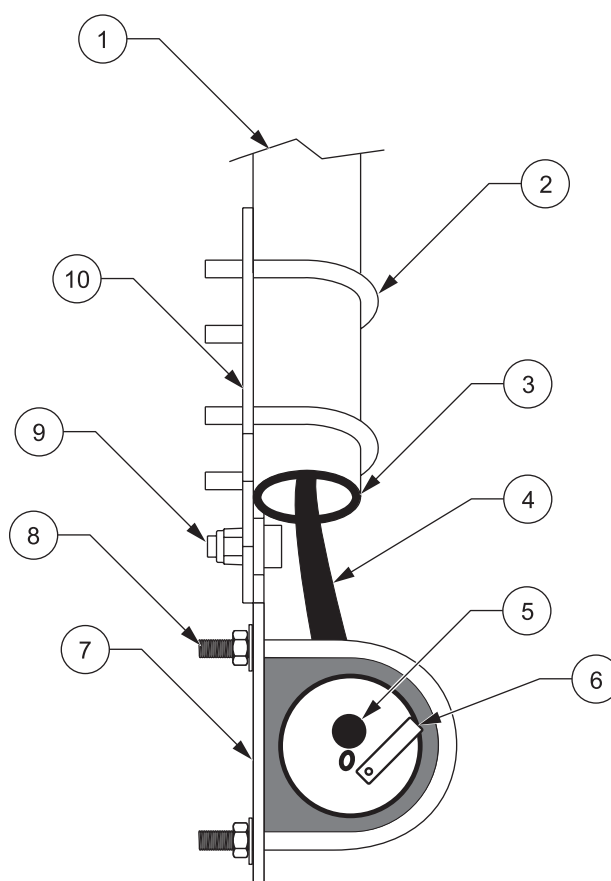


Figure 2 Probe Orientation

1 Mounting Pipe	5 Sensor Lens	8 Cushioned U-bolt
2 U-bolt	6 Wiper Blade	9 Shoulder Bolt
3 Grommet (inside pipe)	7 Probe Mounting Plate	10 Pipe Mounting Plate
4 Probe Cable, with heat shrink tubing		



FOR TECHNICAL ASSISTANCE, PRICE INFORMATION AND ORDERING:
 In the U.S.A. – Call toll-free 800-227-4224
 Outside the U.S.A. – Contact the HACH office or distributor serving you.
 On the Worldwide Web – www.hach.com; E-mail – techhelp@hach.com

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