

# Cypress 4-Hole Tie-In Plate

Part Nr./Ref: CA400-TIP



## INSTALLATION INSTRUCTIONS

The Cypress 4-Hole Tie In Plate is a simple and versatile in-line system that may be used alone or configured to function as passive expulsion or elevated vacuum suspension. It is designed for use in both definitive and check sockets.

Combine with any of these inserts/add on items to achieve your desired application:

- Cypress Thread-In Auto-Expulsion Valve Insert - CA400-V
- Cypress Thread-In High Vacuum Insert (straight barb fitting) - CA400-HV
- Cypress Thread-In High Vacuum Insert (90° barb fitting) - CA400-HV9
- Cypress Thread -In Solid Plug Insert - CA400-P
- Aria HV Plate Valve - CA300-AHVP
- Aria Plate Valve - CA300-APV

### Installation for Check Sockets:

1. Insert fabrication dummy into center hole of 4-Hole Tie In Plate
2. Fabricate check socket and roughen the distal end of the socket. Bond Cypress 4-Hole Tie In Plate to the distal end of the socket using a mixture of resin, hardener and Bondo®.
3. Once bonding mixture sets, put check socket back onto the cast model.
4. Wrap the distal end of the check socket and 4-Hole Tie In plate with Scotchcast™ and then rope the Scotchcast™ into the groove of the 4-Hole Tie In Plate. Once set, remove excess material.
5. Remove fabrication dummy and screw in insert of choice or bolt on choice of plate valve.
6. Install 4-bolt pattern in-line components of choice.

### Installation for Definitive Sockets:

1. Fabricate plastic socket over plaster positive model and prepare it for lamination by sanding with 80 grit sandpaper.
2. Prepare the 4-Hole Tie-In Plate by lubricating the threads of the dummy and inserting the dummy into the 4-Hole Tie In plate.. The dummy should be flush with the bottom surface of the plate.
3. Install a four bolt attachment adapter of choice to the bottom end of plate and then insert plumbers putty into the center hole of the dummy and into the 4 holes of the Tie In Plate.
4. Position plate in alignment jig and secure. Apply electrical tape into the groove of the Tie-In Plate to protect it from bonding materials.
5. Blend a small amount of resin, pigment, promoter and Bondo® and pour the mixture into the center of the 4-hole plate and work the mixture into the threads of the dummy with a tongue depressor.
6. Lower the plaster positive model with plastic onto the 4-Hole Plate and allow mixture to set before removing it from the alignment jig.
7. Remove the electrical tape and the 4-bolt attachment adapter. Install the lamination dummy and secure.
8. Tie the first layer of carbon into the groove of the 4-hole plate. Tie it a second time underneath the plate around the bondo.
9. Reflect the first layer of carbon and then tie a double length of fiberglass into the plate groove. Reflect the layer of fiberglass over the cast.
10. Tie a double length of release nylon into the groove. Measure a length of carbon 1 1/2 times the length of the socket and slip it over the release nylon. Tie the carbon into the groove of the 4 hole plate.
11. Reflect the full layer of carbon down over the cast and then reflect the final layer of release nylon over the carbon. The lamination dummy should not be covered with any of the layup material.
12. Place some plumbers putty in the bolt heads, pull PVA bag over layup and pour resin to laminate. Apply electrical tape to bottom portion of lamination dummy to remove resin from edge of the plate.
13. One resin has set, remove electrical tape, PVA bag, excess resin and the lamination dummy.
14. Remove the valve dummy and drill a 1/8" hole through the center of the plate to the plaster cast.
15. Thread in Cypress Adaptive Plate Valve insert of your choice into the center of the plate.