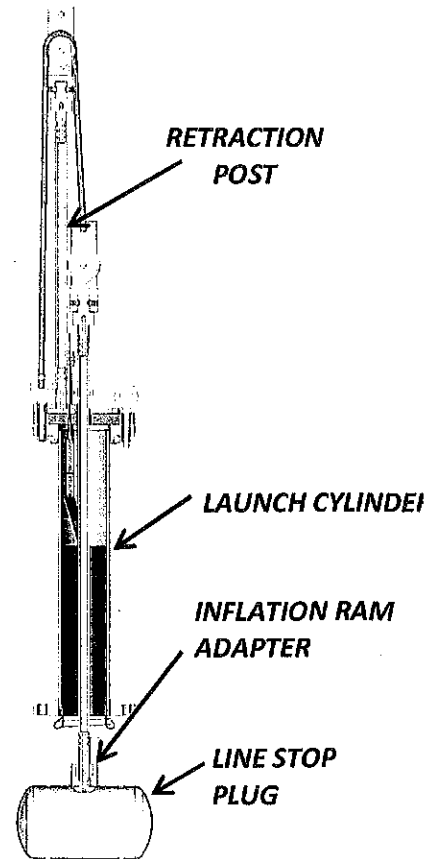
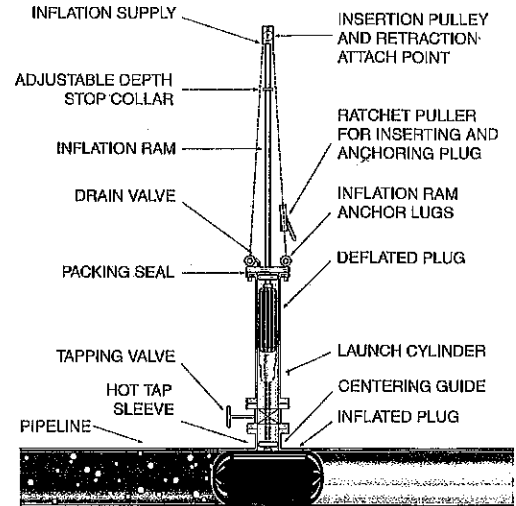


129-Series Multi-Flex™ Line Stop Plug Hot Tap Installation Check List

This check list is supplemental to Installation Instructions
Must be Adapted to Specific Project by a Qualified
Engineer.

1. Assemble the Pipe Plug with the Inflation Ram
2. Assemble Inflation Ram Sections
3. Install three locking collars on the Inflation Ram but do not tighten
4. Install the Pulley to the top of the Inflation Ram
5. Install the Inflation Ram through the Retraction Post Base (if any) and Packing Seal.
6. Bolt Retraction Post Base to Packing Seal
7. Attach the Packing Seal to the Launch Cylinder
8. Attach Inflation Ram Adapter to Line Stop Plug if not already connected
9. Attach the Plug to the Inflation Ram
10. Mark the Inflation Ram to orient the plug in pipeline direction.
11. Set Temporary Inflation Ram Stop Collar at the Packing Seal to prevent the plug from dropping prematurely.
12. Position and secure a Plug Positioning Stop Collar
13. Attach the Launch Cylinder to the Tapping Valve.
14. Attach the Inflation Pressure Hose and Pressure Monitoring Hose to the Inflation
15. Calculate forces on Inflation Ram
16. Install a Ratchet Puller adequate to anchor the Inflation Ram
17. Stop the flow in the pipeline.
18. Open the Tapping Valve
19. Loosen the Temporary Stop Collar
20. Push the Plug into the pipeline with the Ratchet Puller
21. Anchor the Inflation Ram
22. Inflate the Plug to its rated pressure
23. Plug Removal:
 - 23.1. Stop the pipeline flow and equalize the head pressure
 - 23.2. Deflate the Plug .
 - 23.3. With Ratchet Puller pull the plug back into the Launch Cylinder
 - 23.4. Close the Tapping Valve
 - 23.5. Purge Launch Cylinder.
- 23.6. Remove the Launch Cylinder and Multi-Flex™ Line Stop Plug



Contact Petersen with any questions or suggestions