

Installation Instructions

Flexible Underground Piping System

Stainless Steel Pipe Couplings (SSPFC2)

IMPORTANT: Please read these warnings and assembly instructions completely and carefully before starting. Failure to do so may cause product failure, or result in environmental contamination due to liquid leakage into the soil, creating hazardous spill conditions.

Notice: OPW Fueling Containment Systems products must be used in compliance with applicable federal, state, provincial, and local laws and regulations. Product selection should be based on physical specifications and limitations and compatibility with the environment and material to be handled. OPW Fueling Containment Systems makes no warranty of fitness for a particular use. All illustrations and specifications in this literature are based on the latest production information available at the time of publication. Prices, materials, and specifications are subject to change at any time, and models may be discontinued at any time, in either case, without notice or obligation.

Standard Product Warranty: OPW Fueling Containment Systems warrants that products sold by it are free from defects in materials and workmanship for a period of one year from the date of manufacture by OPW. Proof of purchase may be required. For any product certified to California 2001 standards*, FlexWorks by OPW Fueling Containment Systems warrants that products sold by it are free from defects in material and workmanship for a period of one year from date of manufacture or one year from date of registration of installation not to exceed 15 months from date of manufacture by OPW. As the exclusive remedy under this limited warranty, OPW Inc. will at its sole discretion, repair, replace, or issue credit for future orders for any product that may prove defective within the one year date of manufacture period (repairs, replacements, or credits may be subject to prorated warranty for remainder of the original warranty period, complete proper warranty claim documentation required.) FlexWorks by OPW Fueling Containment Systems further guarantees that all FlexWorks primary pipe is free from defects in materials and workmanship for a period of ten (10) years from the date of manufacture. Any FlexWorks primary pipe proven to be defective in materials or workmanship within said 10-year period will, at OPW FCS's option, be repaired or replaced, or credit will be given for future orders. OPW FCS will bear the reasonable labor costs associated with the repair or replacement of non-conforming FlexWorks primary pipe when such pipe has been used exclusively in a complete FlexWorks Retractable System. Any defect will be corrected promptly upon written notification to FlexWorks by OPW, Inc. at P.O. Box 405003 Cincinnati, Ohio 45240, attention Customer Service Manager. This warranty shall not apply to any product that has been altered in any way,

which has been repaired by any other person than a service representative authorized by FlexWorks by OPW FCS or when failure is due to misuse, improper installation or maintenance. OPW FCS shall have no liability whatsoever for special, incidental, or consequential damages to any party, and shall have no liability for the cost of labor, freight, excavation, clean-up, downtime, removal, reinstallation, loss of profit, or any other cost or charges. *Products certified to the California 2001 standards will have an OPW registration card enclosed/attached to the product. THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, AND SPECIFICALLY THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THERE ARE NO WARRANTIES, WHICH EXTEND BEYOND THE DESCRIPTION ON THE FACE HEREOF.

IMPORTANT: FlexWorks piping system shall be installed by OPW trained and certified personnel and the use of non-qualified personnel or any deviations from these recommended procedures could result in damage or leakage of the system.

WARNING-DANGER: Using electrically operated equipment near gasoline or gasoline vapors may result in a fire or explosion, causing personal injury and property damage. Be sure that the working area is free from such hazards, and always use proper precautions.

A FlexWorks Coupling Machine is required to attach Primary Pipe Couplings to FlexWorks Primary Pipe. FlexWorks Coupling Machines are available in manually, electrically, and pneumatically operated models. Consult your local FlexWorks Distributor for the availability for rental or purchase of FlexWorks Coupling Machines.

IMPORTANT: Use only FlexWorks coupling equipment, FlexWorks couplings, and FlexWorks fittings for FlexWorks Piping Systems.

Step #1 (See Figure 1)

Mount the proper size guide block on the cylinder assembly. Insert the draw bar through the back of the swage block assembly.

IMPORTANT: Use only mandrel part numbers SWE-0150 and SWE-0200 for FlexWorks pipe when using machine model numbers CMP-200 or CMM-200. When using machine model number CME-0110, use only mandrel part number SSSBE-150. When using machine model number CME-0220, use only mandrel part number SSSBE-200.

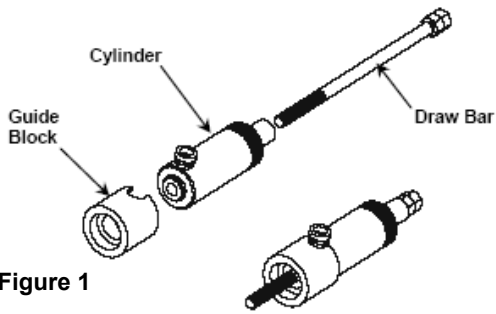


Figure 1

Step #2 (See Figure 2)

Mount the coupling insert face first onto the guide block. Lubricate the inside of the coupling insert with molybdenum grease. (Do not use WD40 or hydraulic fluid). Screw the mandrel onto the draw bar (small end first) until it is snug against the neck of the coupling body. Lubricate the outside of the mandrel with molybdenum grease. (Do not use WD40 or hydraulic fluid).

IMPORTANT: Use only the proper coupling for FlexWorks piping systems.

Pipe #	Coupling #
C15, S15	SSPFC2-150
C20, S20	SSPFC2-200

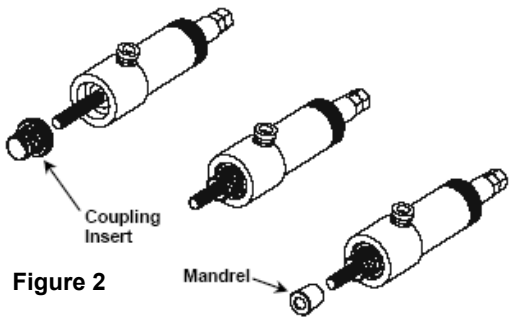


Figure 2

Step #3 (See Figure 3)

Insert the coupling ferrule onto the primary pipe.

IMPORTANT: When using double wall pipe, a section of the outer pipe must be stripped from the ends of the primary pipe before attaching the couplings using a FlexWorks Jacket Stripper Tool.

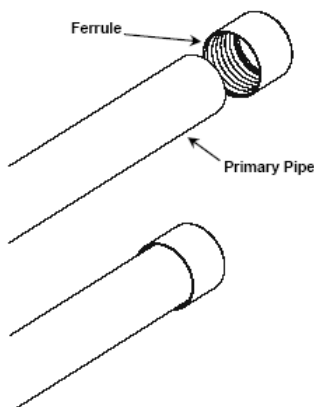


Figure 3

Step #4 (See Figure 4)

Slide the pipe and ferrule assembly over the mandrel until pipe and ferrule bottom out on the coupling insert.

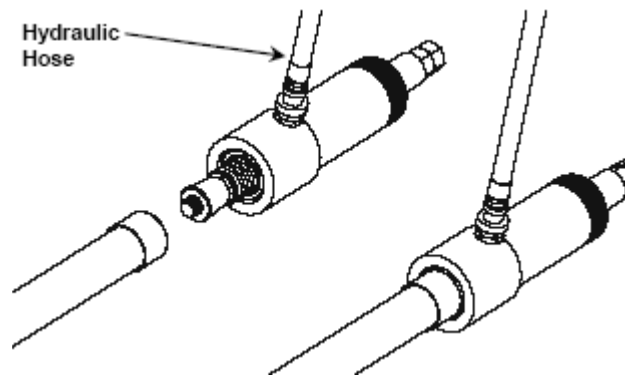


Figure 4

Step #5

Connect the hydraulic hose; make sure the vent is open on the hydraulic fluid reservoir; work hand pump or push the start button on electric and pneumatic models. Continue until the mandrel has been drawn through the coupling and the pipe/coupling assembly pops free.

Step #6

Inspect the coupling fitting insert sealing face for damage or debris.

IMPORTANT: Make sure o-ring is free of dirt and debris and is fully seated correctly in the base of the tee/elbow (SSPFL/SSPFT) insert. Failure to completely seat the o-ring fully into the tee/elbow insert can cause the o-ring to be cut during connection, resulting in a coupling leak.

WARNING: When connecting coupling insert to FlexWorks fittings; hand tighten them firmly and then rotate ¼ turn using a wrench. Tighten to 60 ft. lbs. (23 N-m).

Step #7 (See Figure 5)

Before attaching coupling to tee or elbow, apply Loctite 242, Blue Medium-Strength Threadlocker (included; OPW part number H08923M), to the male threads on the coupling as shown below.

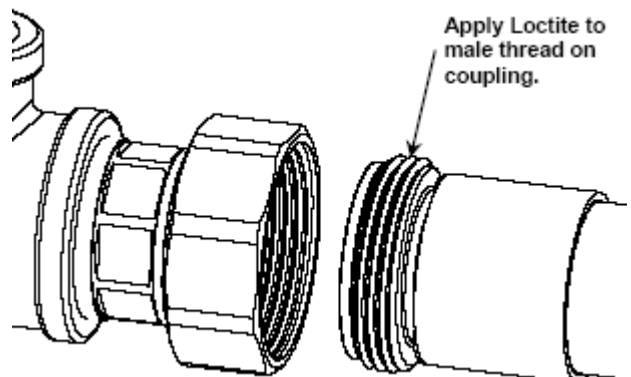
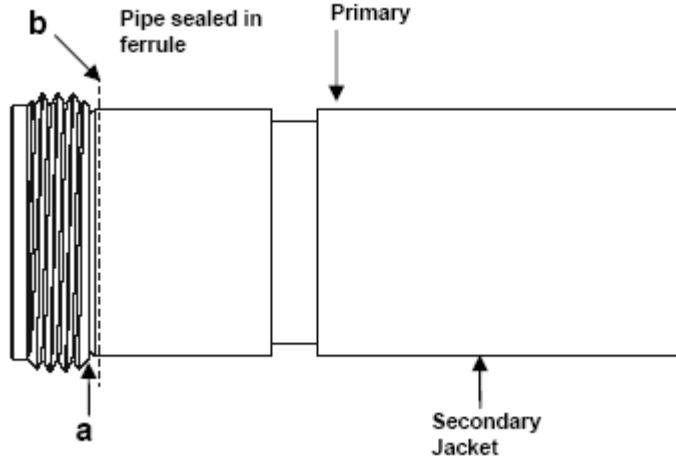


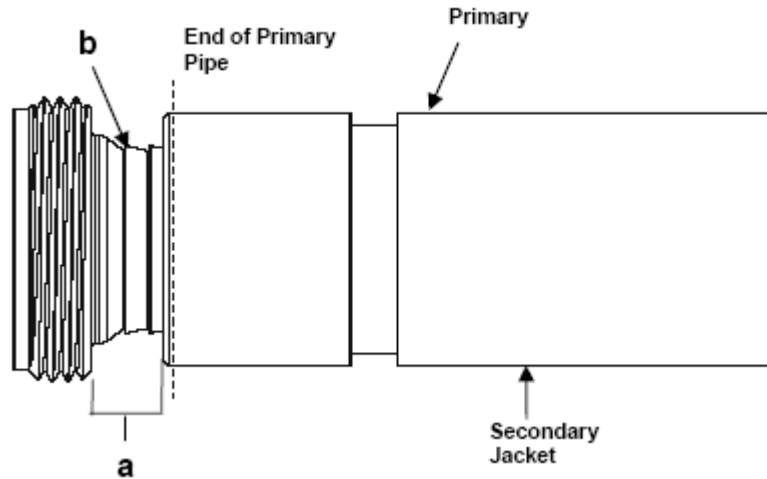
Figure 5

PROPERLY INSTALLED COUPLING



- a. Ferrule properly inserted onto coupling insert.
- b. Pipe ferrule assembly bottomed out on the coupling insert.

IMPROPERLY INSTALLED COUPLING



- a. Notice ferrule not inserted onto pipe coupling insert completely.
- b. Pipe ferrule assembly not bottomed out on the coupling insert.

IMPORTANT INFORMATION - FOLLOW ALL INSTRUCTIONS

Please contact your OPW-FCS sales representative or OPW-FCS customer service representative at 1-800-422-2525 for OPW-FCS products installation procedures. All FlexWorks literature including installation instruction sheets and manuals can be accessed from the OPW-FCS website at: www.opwfcs.com.

OPW Fueling Containment Systems • 3250 US 70 Business West • Smithfield, NC 27577
Customer Service: 800-422-2525 • Customer Service Fax: 800-421-3297 • www.opwfcs.com



Notice: OPW-FCS products must be used in compliance with applicable federal, state, provincial and local laws and regulations. Product selection should be based on physical specifications and limitations and compatibility with the environment and material to be handled. OPW-FCS makes no warranty of fitness for a particular use. All illustrations and specifications in this literature are based on the latest production information available at the time of publication. Prices, materials and specifications are subject to change at any time, and models may be discontinued at any time, in either case, without notice or obligation. For complete OPW-FCS warranty information, visit our web site at www.opwfcs.com.