

Assembly Instructions for Electrofusion Saddle Fittings (like Service Saddles VA, Branch Saddles SA, High Pressure Tap-Ping Tees DAA, Repair Clamps VWS, Top-Loading Repair Patches VSC-TL and Balloon Saddles SPA / SPA-TL)

WARNING (DISCLAIMER): IPEX's Installation Instruction MUST BE ADHERED to, subject to our TERMS & CONDITIONS OF SALE which you may find online at: <http://www.ipexna.com/usa/general-terms-and-conditions-of-sale-ipex-usa-llc/> or our Limited Warranty is null and void! IPEX requires a Qualified Technician to be on every jobsite!

WARNING: Note safety guidelines for working on pipes under operating pressure, especially for gas.

VERY IMPORTANT: Electrofusion Safety Fittings can be fused to all PE pipes within MFR 190/5 in the range of 0.2 – 1.7 g/10 min. and pipe SDR Range 17.6 to 11. For installation on other pipe SDR please contact IPEX.

1. Verify the pipe O.D. and the ovality. The pipe O.D. must be within the tolerances of the applicable pipe standard. Clean pipe of rough contaminations.
2. Measure and mark the pipe surface covered by the saddle fitting with the IPEX Silver Pipe Marker.
3. Scrape off the complete oxidized layer on the pipe using either a hand scraper or another suitable scraper tool available from IPEX. Follow the operation instructions for the scraper tool!
A one-time removal of the oxidized layer with a min. swarf thickness of 0.006" is sufficient.
Remove any chips from the pipe surface.
4. Re-mark pipe surface at fitting placement area.
5. Clean pipe surface and bottom / fusion side of saddle fitting liberally with an appropriate PE cleaning agent (we recommend using Isopro-pyl alcohol cleaning agent with alcohol percentage of at least 96.0%) in combination with absorbent, lint-free and non-dyed paper. Alternatively, appropriate PE cleaning wipes can be used. Make sure surfaces are completely dry before assembly.
6. Install fitting on pipe to marked pipe surface.
Underclamp version: Firmly tighten all four bolts. Working diagonally, without using excessive force until saddle and underclamp align.



ATTENTION

For branch saddles SA 4x2, 6x2, 6x4 and High Pressure Tap-ping Tees DAA 4x2, 6x2 the final installation position of the underclamp is limited by the length of the threads. Observe for an equal gap between underclamp and saddle.

Care should always be taken to not contaminate fusion zone area.

Top-Loading version (for saddle parts in dimension 10" and larger):

Fit the FRIATEC Pneumatic Top-Loading Tool FRIATOP as directed in the operating instructions.

Observe cooling times after fusion process before removing FRIATOP

7. Assembly of pipe and fitting must be in an as clean, supported and stress free condition as possible.
8. Connect fitting to universal fusion processor, scan barcode and start fusion.



For your general safety, always maintain a 3' min. distance from fitting during fusion.

9. After the end of the fusion process, record the end of fusion time (time of day), total fusion time (in seconds), installers initials, cooling time (in minutes) and date on pipe using IPEX Silver Pipe Marker.
10. Wait for indicated cooling time. Cooling times CT for the tapping process are given on the saddle barcode. In addition all cooling times for tapping and pressure test are given on card "Cooling Times for FRIALEN Safety Fittings" with the fusion processor or in the installation manual.

For TL: Respect cooling times before removing FRIATEC Pneu-matic Top-Loading Tool FRIATOP as given in manual. Attention: Before tapping make sure that the main pipe is not pressurized and ventilized.

NOTE for High Pressure Tapping Tees DAA:

Tapping: Observe cooling time CT before tapping! Remove plug cap. Turn the drill down up to the lower stop using the matching activating key and turn anti-clockwise up to the upper stop.



Before tapping make sure that the main pipe is not pressurized and ventilized or the branch pipe is connected pressure tight in the pipe net.

After Tapping: The plug cap must be screwed all the way down until the collar of the plug slightly touches the front face of the drill spigot. After-wards turn back the plug half a turn to relieve the O-ring tension. This will assure a leak free installation.

NOTE for Service Saddles VA:

Assemble Nipple, Bushing or Corporation Stop into saddle until snug using Red LOCTITE # 262. The female outlet is straight standard pipe thread. The use of tapered fittings for the outlet is not permitted!

NOTE for Balloon Saddles SPA / SPA-TL:

Equipment for use as balloon shut-off saddle must be matched to SPA / SPA-TL, in particular the function of driller, balloon setting and brass plug setting equipment. Note the manufacturer's instructions and application limits, especially the safety guidelines for working on gas pipes under operating pressure.

IPEX offers in-house and external training seminars as well as training videos (DVD and Online). If you have not attended a training session and are not qualified as prescribed in Title 49 of the Code of Federal Regulations, Section 192.285, you must do so prior to the installation of this fitting (For Gas Applications Only).

For further information and technical support, please contact us at the address below: