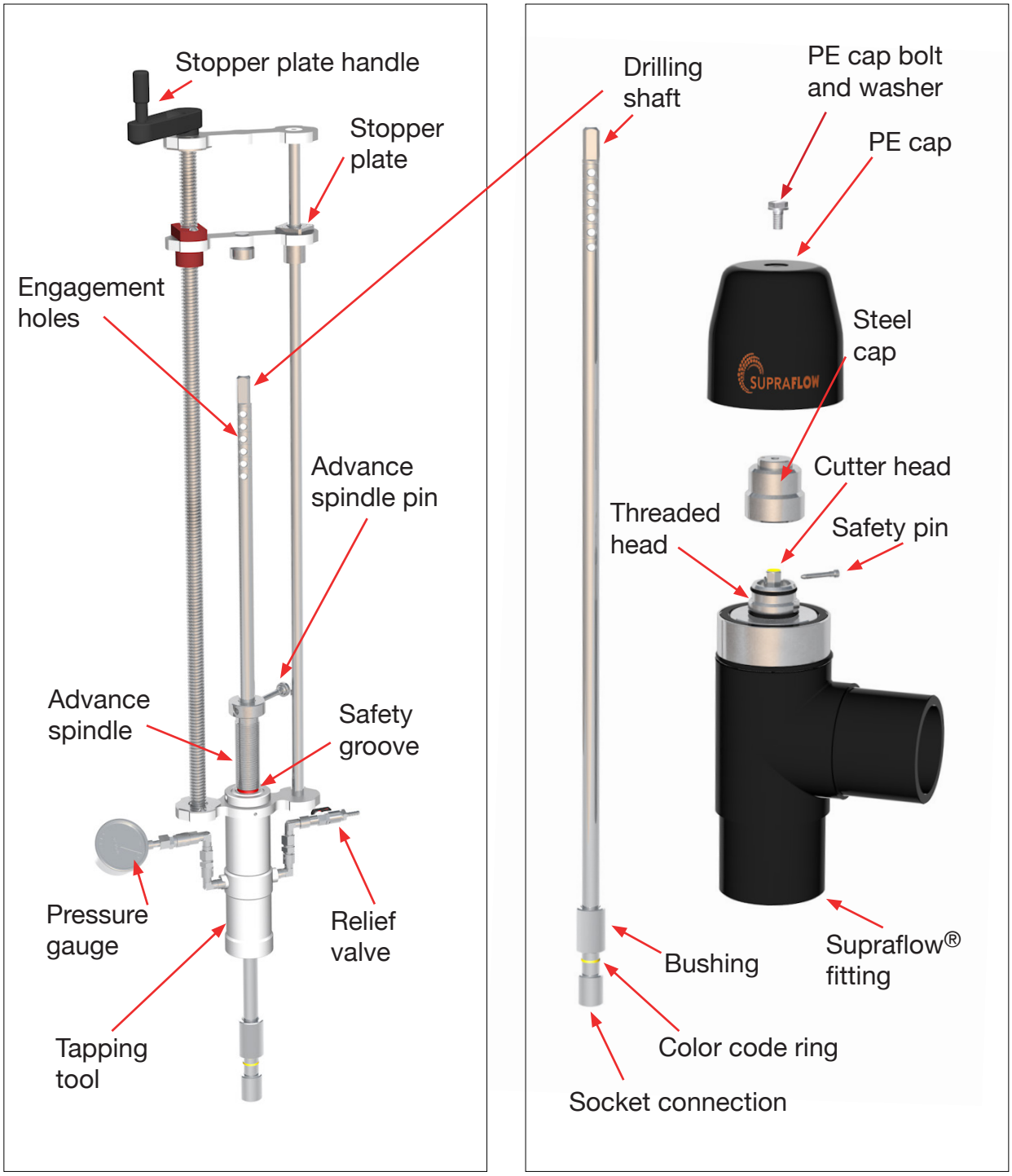
Step by Step Supraflow® Tapping Instructions

These instructions are for Supraflow® Gas Tapping Tees and Tapping Tools
125 psi for gas

Read these instructions carefully before proceeding

Tapping Tool Equipment and Supraflow® Gas Tapping Tee expanded view



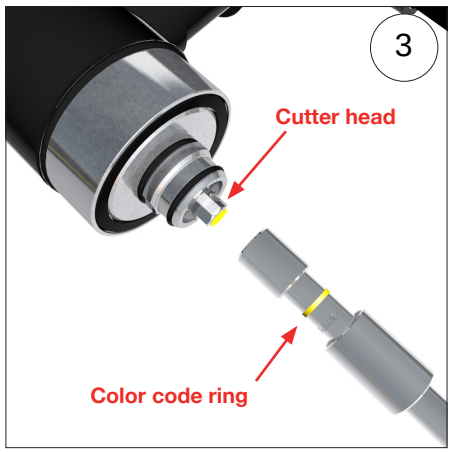
1 A branch saddle compliant with Supraflow® fitting instructions must be used. Ensure that the branch saddle and tee outlet are fused according to manufacturer's recommendations and industry standards to provide a pressure tight assembly.

IMPORTANT: Before attaching saddle ensure pipe in the immediate area is straight and round.

Note: For pressure tests ALWAYS remove the Supraflow® PE and Steel Caps and soap test before energizing branch.

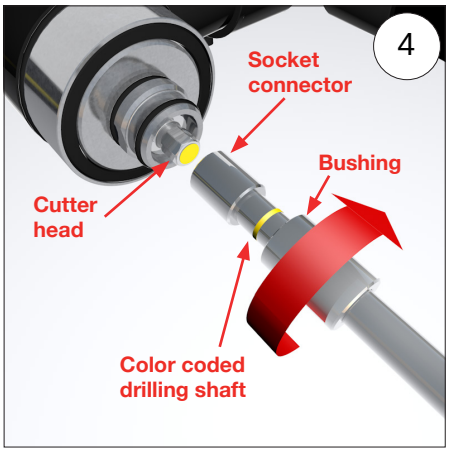
FITTING SET UP

Using wrenches provided, remove (counterclockwise) PE cap bolt and washer, PE cap, and steel cap. Pull out safety pin. Keep everything to the side, DO NOT lose these parts.



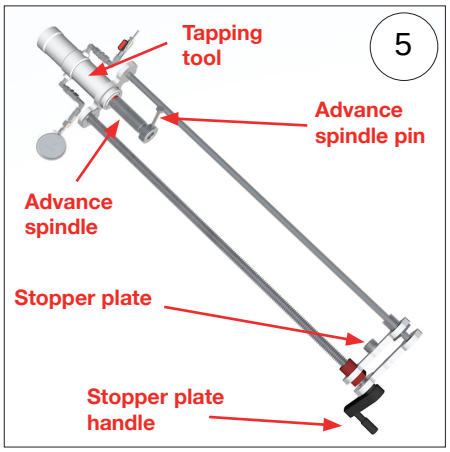
DRILLING SHAFT CHOICE

Check color mark on top of the cutter head and select drilling shaft with matching color code ring, except when using 4x4" MTD saddle.



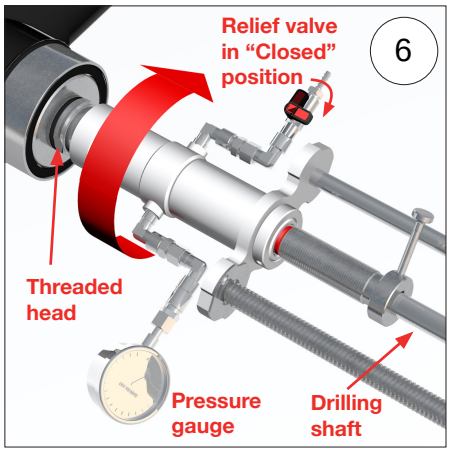
DRILLING SHAFT ATTACHMENT

Attach drilling shaft socket connector to cutter head, slide bushing over socket connector, and ROTATE bushing (clockwise) by hand, until it bottoms out. Pull drilling shaft to check it is correctly engaged.



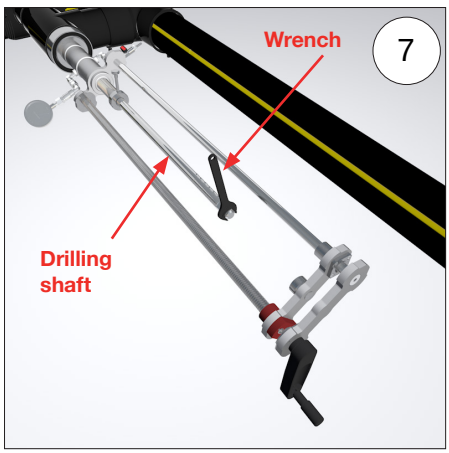
TAPPING TOOL SET UP

Ensure that: advance spindle is in start position (safety groove can be seen), advance spindle pin is disengaged (it will not completely detach), and stopper plate is fully retracted (rotate handle clockwise).



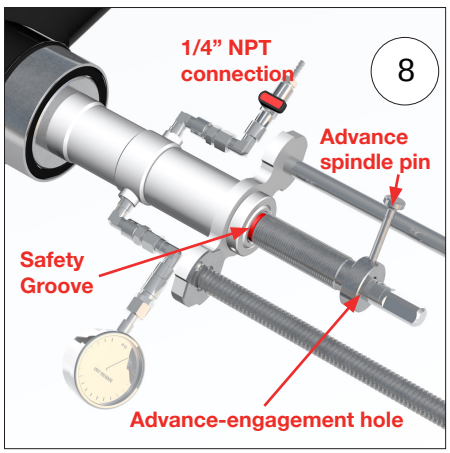
TAPPING TOOL ATTACHMENT

Slide it over/onto the drilling shaft and rotate (clockwise) onto Supraflow threaded head, by hand, until it bottoms out. Attach pressure gauge provided to quick-connect port/close relief valve.



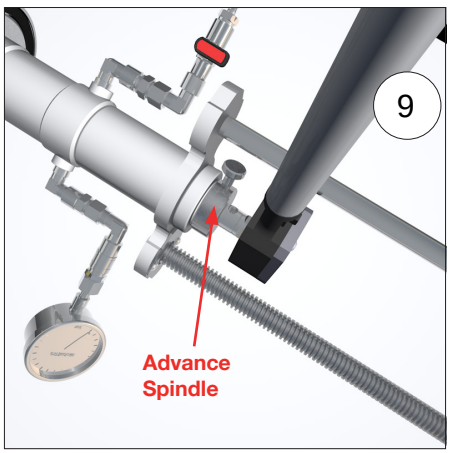
CUTTER RELEASE

Use wrench provided, to rotate drilling shaft (approximately 6 clockwise rotations) until cutter is released from its threaded housing and push drilling shaft until cutter is in contact with the pipe main.



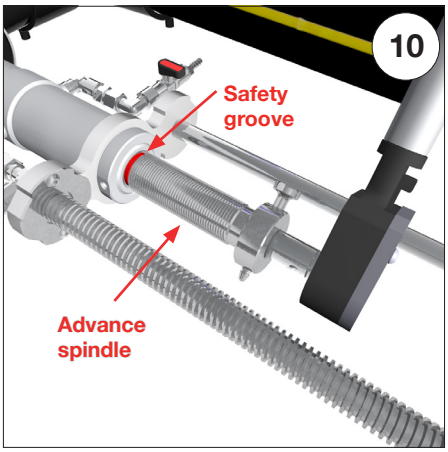
DRILLING SHAFT ENGAGEMENT

Align so the Safety Groove is just visible. Line-up first advance engagement hole available in drilling shaft and re-engage advance spindle pin.



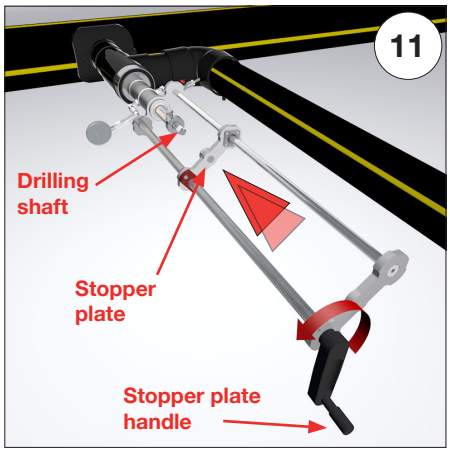
START TAPPING

Attach ratchet wrench provided to drilling shaft and rotate it (clockwise) to forward cutter through pipe main until advance spindle bottoms out. DO NOT attach any power drives to drilling shaft.



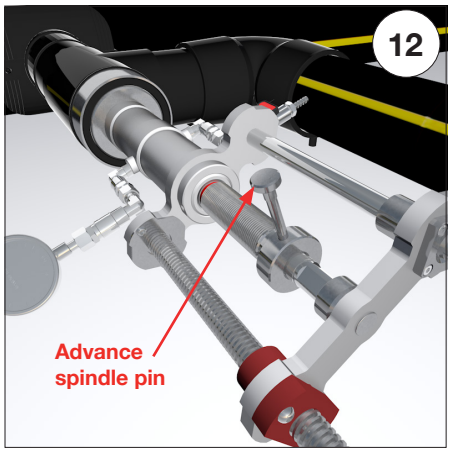
TAPPING COMPLETION

Reverse ratchet wrench and bring advance spindle back (counterclockwise) to start position. STOP retrieval of advance spindle as soon as safety grove is initially visible. FOR SAFETY REASONS, DON'T UNTHREAD BEYOND **RED** safety groove.



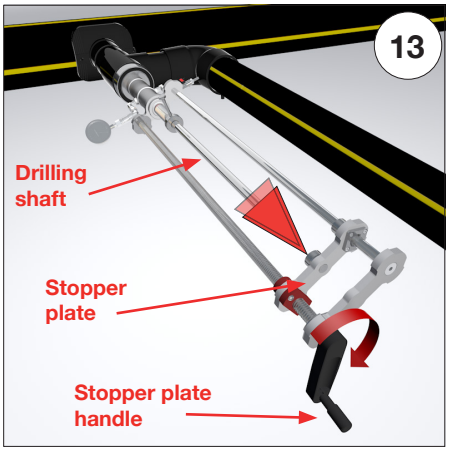
BACKPUSH CONTROL

Before disengaging advance spindle pin, rotate stopper plate handle (counterclockwise) until stopper plate contacts drilling shaft. Skip step if using low-pressure tapping tool.



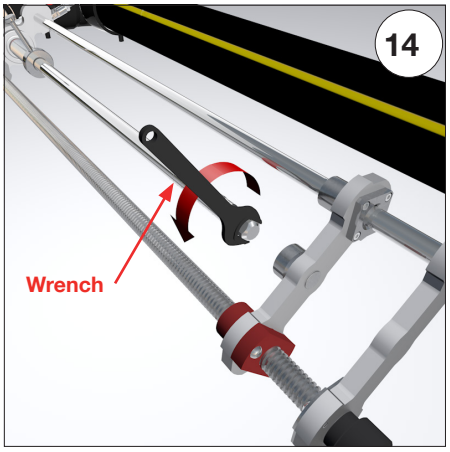
ADVANCE SPINDLE PIN DISENGAGEMENT

Safely pull out advance spindle pin (it will not completely detach). Backpush pressure on the drilling shaft is withheld by stopper plate.



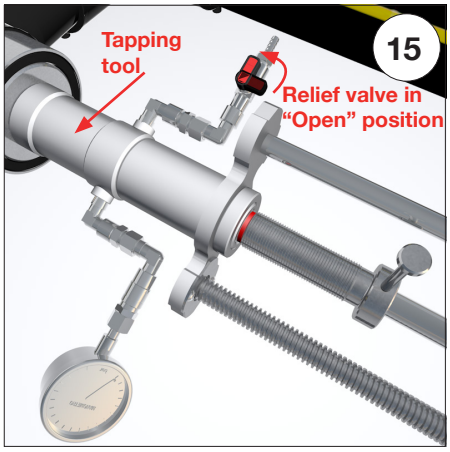
DRILLING SHAFT RETRACTION

Rotate stopper plate handle (clockwise) until it bottoms out. Ensure that drilling shaft travels with stopper plate; if pressure is not pushing drilling shaft out, pull it manually until it can no longer be retracted.



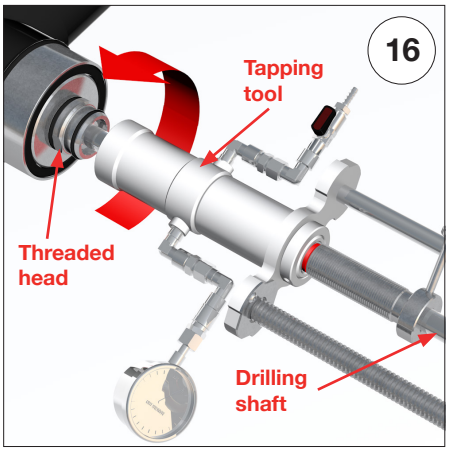
SECURE CUTTER

Use wrench provided to rotate drilling shaft (approximately 6 counterclockwise rotations) until cutter is firmly tightened in its housing.



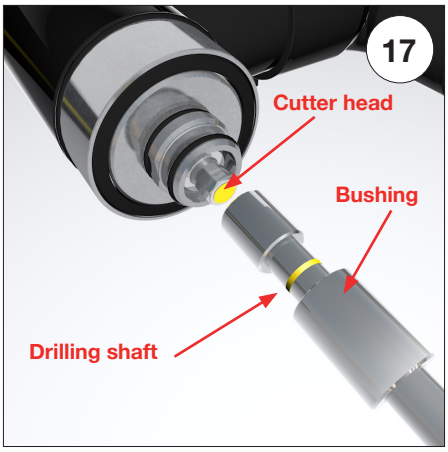
PRESSURE RELIEF

Release the pressure remaining inside tapping tool by opening relief valve before removing tapping tool. If gas keeps flowing (cutter not properly secured), close relief valve and return to step 15.



TAPPING TOOL REMOVAL

Rotate tapping tool (counterclockwise) until released from threaded head and slide it off the drilling shaft (still attached to cutter). Thoroughly clean tapping tool and gauge, and store in tooling case.



DRILLING SHAFT REMOVAL

Rotate bushing (counterclockwise) by hand until it is no longer attached to cutter head and pull drilling shaft off. Clean drilling shaft and store in tooling case. Check for leaks around cutter head.

INSTALLATION COMPLETION

Re-insert safety pin. Using wrench provided, rotate steel cap (clockwise) onto threaded head until firmly tightened. Re-insert PE cap, and use wrench provided to secure PE cap bolt and washer (clockwise).

SUPRAFLOW® TAPPING INSTRUCTIONS

125 psi for gas

Warning !

Torre Gas S.L. guarantees the correct performance of its products, according to their technical specs and instructions of use, and accepts no liability for whatever misuse of them.

Do's and Don'ts

Always follow the given steps and guidance. Do not eliminate any steps or attempt shortcuts. Contact your supplier for guidance if any steps are unclear.

In the event of malfunction or broken components, stop operation and contact your supplier immediately.

All parts must be thoroughly cleaned after use and before storing back in tooling case.

Never attempt to repair or replace any part of equipment. Only authorized service is entitled to do repairs and replacements on equipment.

NO CLAIMS ON THE EQUIPMENT OR ITS PERFORMANCE WILL BE ACCEPTED IF NOT COMPLYING WITH THE SAFETY WARNINGS ABOVE

Supraflow® video installation instructions

GRUPO TORRE

Supraflow® Tee branch saddle choice guidelines

The information contained herein is provided for convenience only, without warranty or guarantee of any kind, either express or implied. No party should rely on such information without prior independent verification. This information is subject to change at any time without prior notice.

Branch saddles meeting the "S" and "A" dimensions required in the Supraflow® Tee insructions, and welding options available

SADDLE SIZE / MANUFACTURER	4"x 4"	6"x 4"	8"x 4"	12"x 4"	6"x 6"	8"x 6"	12"x 6"	18"x 6"	8"x 8"	12"x8"	18"x 8"
GFCP	✓	✓	✓	✓		✓	✓	✓		✓	
MT DEASON	✓*	✓	✓	✓	✓	✓	✓		✓	✓	
NUPIGECO		✓	✓	✓	✓						

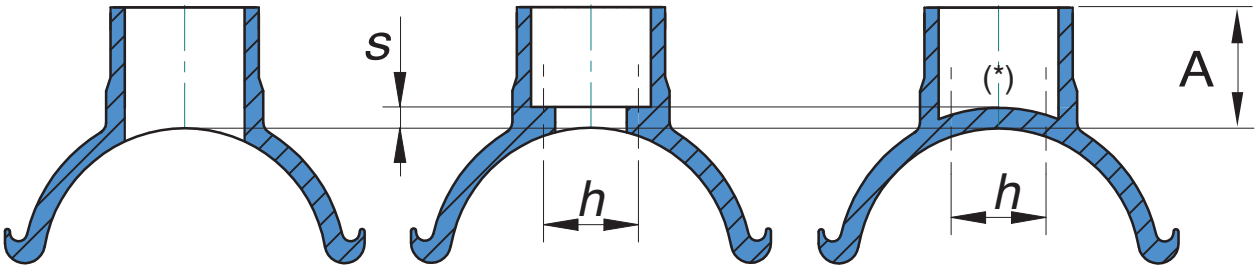
*Because the outlet of the MTD saddle is longer than specifications, the yellow shaft must be used and only utilizing the second hole from bottom, with 5 holes visible. Failure to follow this instruction could allow the cutter to drill into the opposite pipe wall I.D.

TSP4IPS10

4”IPS outlet (3.11” drill)

Suitable for 4” IPS PE pipe only (DR9, DR11 & DR 13.5)

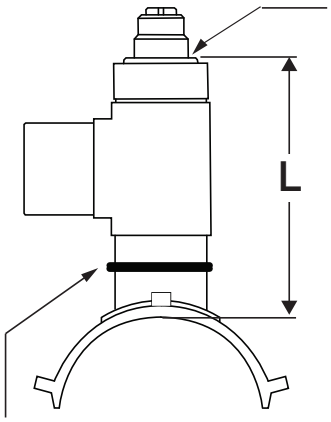
BEFORE BUTT/ELECTRO FUSING SADDLE & TEE **VERIFY** THAT (S), (h) and (A) DIMENSIONS OF THE BRANCH SADDLE **MEET THE REQUIREMENTS** IN THE TABLE BELOW



Branch Saddle	S	h	A
4”x 4” IPS GFCP SADDLES & OTHERS	0.79” max 0.00” min	- 3.11” min	4.13“ max 3.86” min
4”x 4” IPS MTD SADDLES	0.39” max 0.00” min	- 3.11” min	5.00“ max 4.90” min

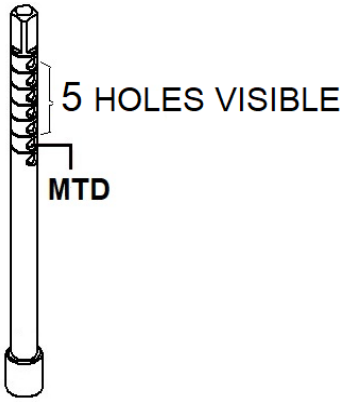
(S) Saddle lip (solid or as a sleeve) max. thickness
(h) Permitted hole saw by saddle manufacturer, after fusing
(A) Saddle outlet height
(*) Any saddle’s testing port must be removed leaving a lip compliant with (S) dimension

THE **OVERALL HEIGHT (L) OF THE WELDED ASSEMBLY** OF THE BRANCH SADDLE AND THE SUPRAFLOW TEE **MUST MEET THE DIMENSIONS** IN THE TABLE BELOW



Welded assembly	L	
	With GFCP & other saddles	With MTD saddles
Tee + Branch saddle	16.50” max 15.65” min	17.50” max 16.50” min

MTD Saddles ONLY
Because the outlet of the MTD saddle is longer the YELLOW shaft must be used and ONLY utilizing the hole shown in the schematic shown at right with five (5) holes showing.
Failure to follow this instruction could allow the cutter to drill into the opposite pipe wall I.D.

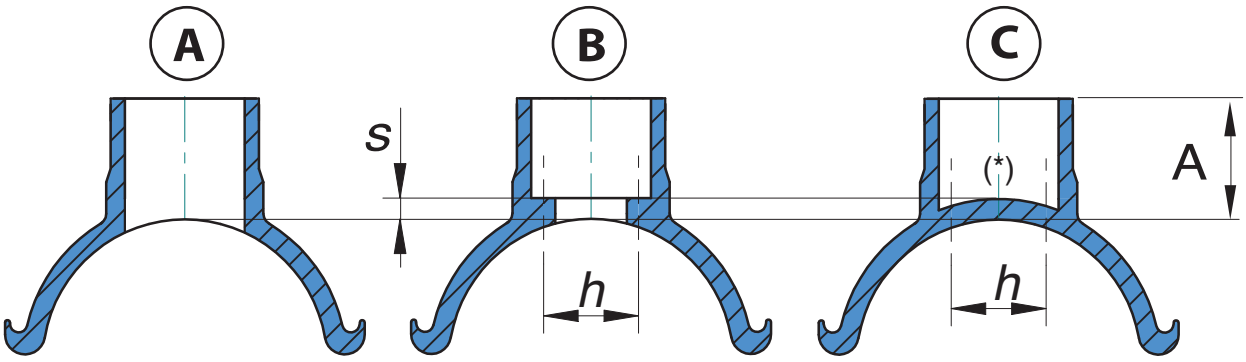


TSP4IPS9

4”IPS outlet (3.11” drill)

Suitable for 6” to 12” IPS PE pipe (DR11 & DR 13.5)

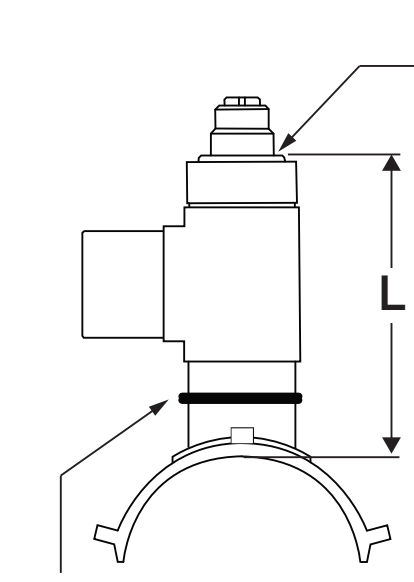
BEFORE BUTT/ELECTRO FUSING SADDLE & TEE **VERIFY** THAT (S), (h) and (A) DIMENSIONS OF THE BRANCH SADDLE **MEET THE REQUIREMENTS** IN THE TABLE BELOW



(S) Saddle lip (solid or as a sleeve) max. thickness
(h) Permitted hole saw by saddle manufacturer, after fusing
(A) Saddle outlet height
(*) Any saddle’s testing port must be removed leaving a lip compliant with (S) dimension

Outlet size	Type	S	h	A
4” IPS	A B	0.79” max 0” min	3.11” min	6.20“ max 4.00“ min
	C	0.63” max 0.00” min	3.11” min	6.20“ max 4.00” min

THE **OVERALL HEIGHT (L) OF THE WELDED ASSEMBLY** OF THE BRANCH SADDLE AND THE SUPRAFLOW TEE **MUST MEET THE DIMENSIONS** IN THE TABLE BELOW



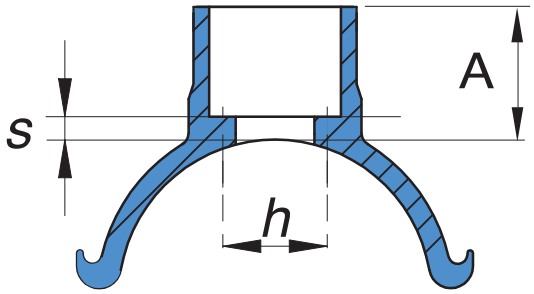
Welded assembly	L
Tee + Branch saddle	18.60” max 15.80” min

TSP6IPS2

6”IPS outlet

Suitable for 6” to 18” IPS PE pipe (DR11 & DR 13.5)

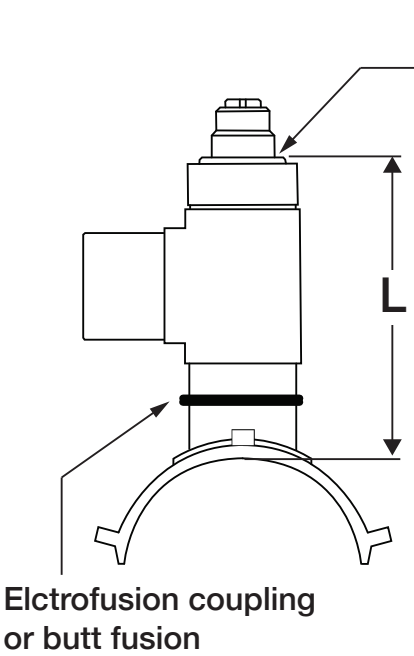
BEFORE BUTT/ELECTRO FUSING SADDLE & TEE **VERIFY** THAT (S), (h) and (A) DIMENSIONS OF THE BRANCH SADDLE **MEET THE REQUIREMENTS** IN THE TABLE BELOW



(h) Permitted hole saw by saddle manufacturer, after fusing
(S) Saddle lip (solid or as a sleeve) max. thickness
(A) Saddle outlet height

Outlet size	S	h	A
6” IPS	0.79” max 0.00” min	4.53” min	9.00“ max 5.40” min

THE **OVERALL HEIGHT (L) OF THE WELDED ASSEMBLY** OF THE BRANCH SADDLE AND THE SUPRAFLOW TEE **MUST MEET THE DIMENSIONS** IN THE TABLE BELOW



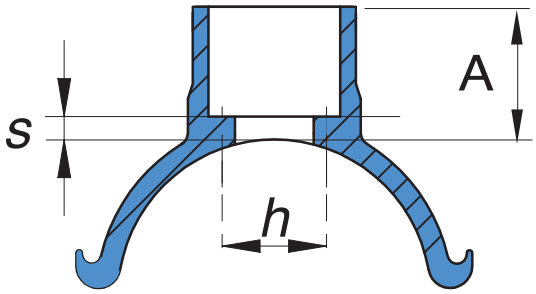
Welded assembly	L
Tee + Branch saddle	23.80” max 19.65” min

TSP8IPS2

8”IPS outlet (6.30“ cutter)

Suitable for 8” to 18” IPS PE pipe (DR11 & DR 13.5)

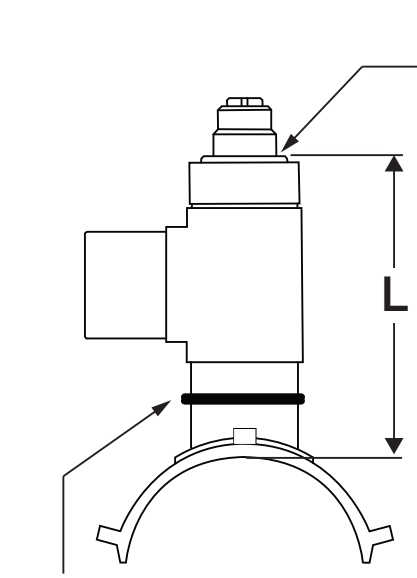
BEFORE BUTT/ELECTRO FUSING SADDLE & TEE **VERIFY** THAT (S), (h) and (A) DIMENSIONS OF THE BRANCH SADDLE **MEET THE REQUIREMENTS** IN THE TABLE BELOW



(h) Permitted hole saw by saddle manufacturer, after fusing
(S) Saddle lip (solid or as a sleeve) max. thickness
(A) Saddle outlet height

Outlet size	S	h	A
8” IPS	0.31” max 0.00” min	6.30” min	9:00“ max 6.50” min

THE **OVERALL HEIGHT (L) OF THE WELDED ASSEMBLY** OF THE BRANCH SADDLE AND THE SUPRAFLOW TEE **MUST MEET THE DIMENSIONS** IN THE TABLE BELOW



Welded assembly	L
Tee + Branch saddle	30.35” max 27.25” min

Supraflow Tee EF Top Clamp

The 4"-8" PLCS Modular Top-Load Clamp prevents fitting movement during electrofusion.

Simple Quick Lock Adjustment Collars

End support adds extra stability.

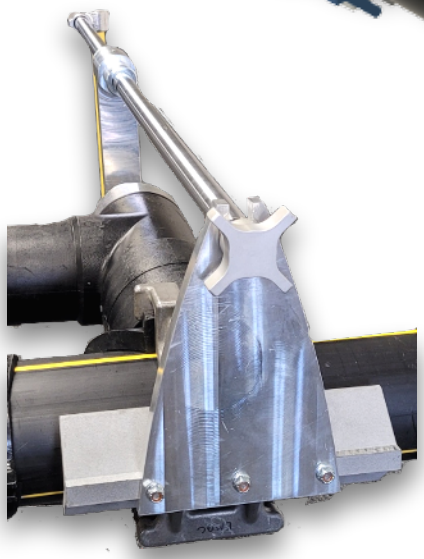
Hand tight screw for rock-steady clamping force.

Super strong support shaft

Self aligning close fit socket

#90-TLC46
Dimensions: 48.5" x 9.375"
Clamp Wt. 26 lbs.
Material: Steel & Aluminum

Low profile fits over saddle clamp

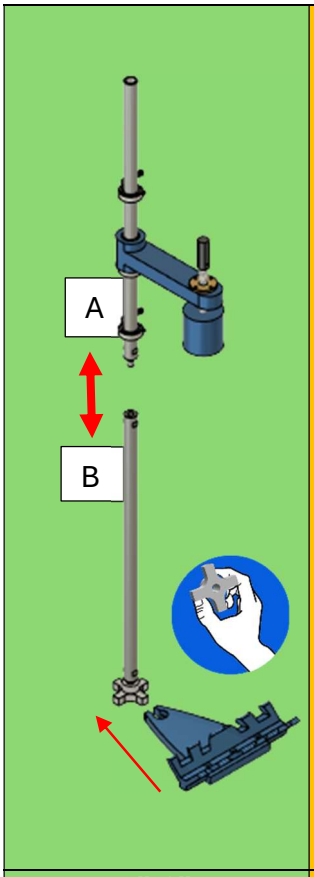


Custom weatherproof case.

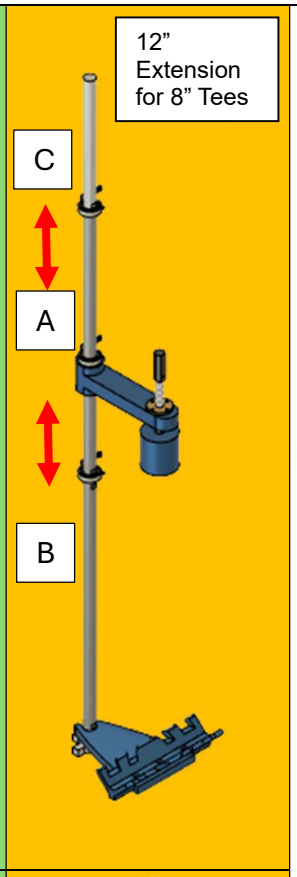
Case Size: 39.6" x 17.6" x 6.6"
Wt: Clamp & Case: 33 lbs.

PLCS
(856) 722-1333 info@plcsusa.com www.plcsusa.com

#90-TLC46 PLCS 4”-8” Supraflow Tee Clamp Instruction Guide



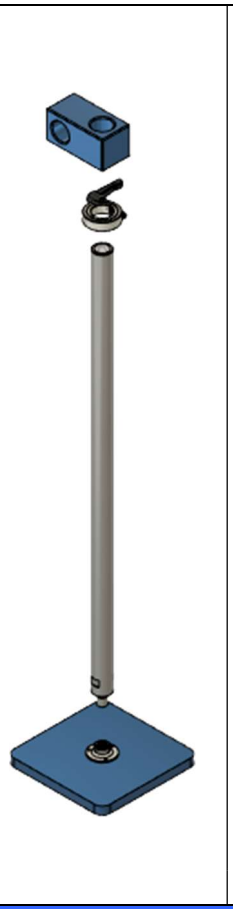
4”-6”

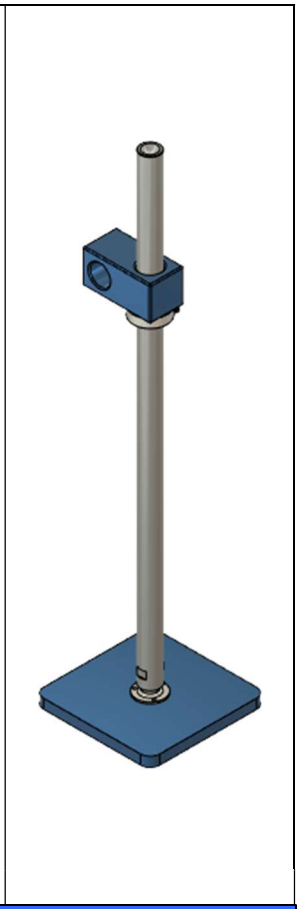


8”

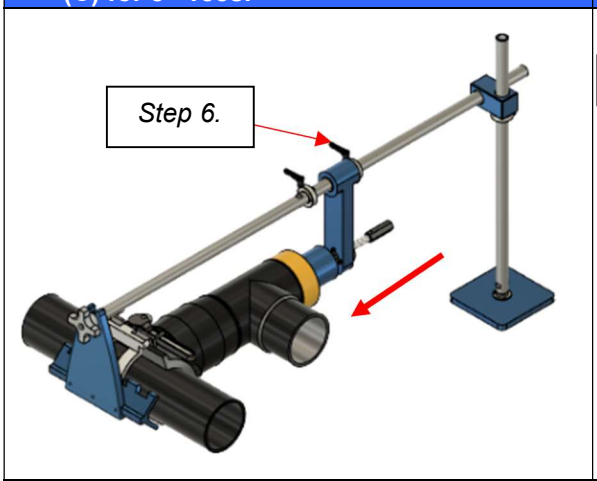
1. Fit the V-Base recess onto the shaft and tighten the Hand Knob. Then, join shaft (A) to shaft (B) and tighten by hand. Add (C) for 8” Tees.

2. Snug tighten the Shafts using the two Wrenches against each flat.

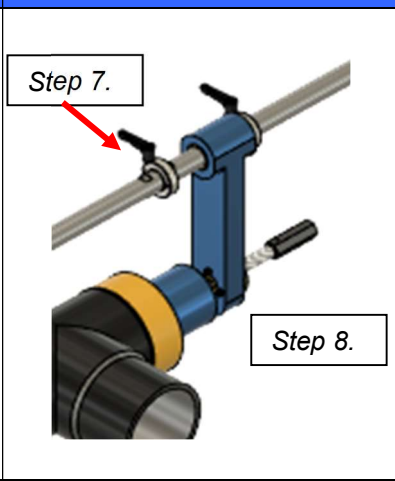




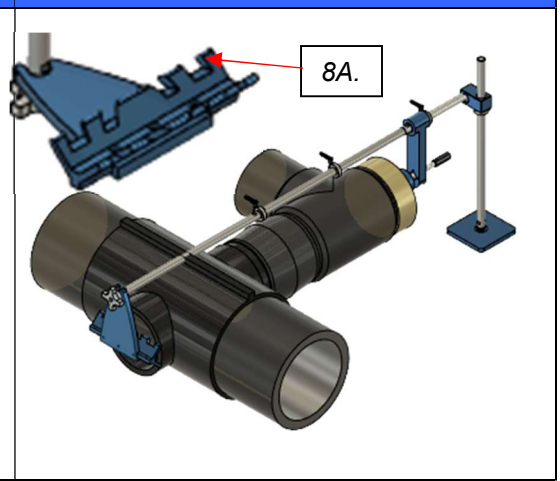
3. Assembled End Support



4. Place the V-Base on the pipe or over the saddle clamp.
5. Adjust the Socket to fit over the top of the tee.
6. Tighten the shaft collar so it fits flush against the top of the Arm.
7. Use the other shaft collars to tighten over each shaft connection seam for added strength.



8. Hand-tighten the adjustment screw until moderate resistance is felt. Do not over-tighten. Fit the End Support Assembly onto the end of the Shaft. Adjust it using the Quick Lock Collars.



8A: The slots on the V-Base fit over saddle fittings with an opposite molded round boss. Typically, GF saddles.

NOTE: Support the Tee Assembly as necessary using wood blocks or other company-approved methods. ALWAYS FOLLOW COMPANY PROCEDURES.

#90-TLC46 PLCS 4”-8” Supraflow Tee Clamp Instruction Guide

PARTS LIST				
ITEM#	SECTION	PLCS#	DESCRIPTION	QTY. PER KIT
1	SHAFT	90-94846A533	5/8" HAND KNOB	1
2	BASE	90-10VB	V-BASE PLATE (ALUMINUM)	1
3	BASE	90-10V	10" V-BASE (ALUMINUM)	1
4	SHAFT	90-23L	23" SHAFT (LOWER)	1
5	ARM	90-TS	TOP SOCKET	1
6	BASE	90-92210A545	1/4 X 20 FLAT HEAD CAP SCREW	3
6.1	BASE	90-94238A101	1/4 X 20 FLANGE LOCK NUT	3
6.2	ARM	90-90154A238	10MM SNAP RING	1
7	ARM	90-DB	DRIVE BLOCK ARM	1
8.1	ARM	90-MVBLK-ASN-3PF-UJ2WD	DRIVE SCREW COUPLING NUT	1
8.2	ARM	90-92015A111	SET SCREW M4 X 5MM SS	1
8.3	ARM	90-DS	DRIVE SCREW (M16, M10 X 1)	1
8.4	ARM	90-MTSER16	LEAD SCREW NUT M16	1
8.4	ARM	90-7421K45	10MM X 18MM THRUST WASHER	2
9	ARM	90-DBB	DRIVE BLOCK BUSHING	1
10	SHAFT	90-24U	24" SHAFT (UPPER)	1
11	SUPPORT	90-1QL	1IN SHAFT COLLAR	4
12	SHAFT	90-12X	12" EXTENSION SHAFT	1
12.1	SHAFT	90-2108T521	ADJ TELESCOPIC STORAGE TUBE	1
13	SUPPORT	90-1X1CO	1IN CROSSOVER	1
16	SUPPORT	90-90611A121	SCREW MOUNT NUT	1
16.1	SUPPORT	90-95307A200	6-32 LOCK NUT	3
16.2	SUPPORT	90-92210A151	6-32 X 3/4L FLAT HEAD SCREW	3
17	SUPPORT	90-6X6	6 X 6 SF SUPPORT BASE	1
18	CASE	54-V700	V700 CASE	1
19	CASE	90-TLCF	FOAM ONLY - TOP LOAD CLAMP	1
20	TOOL	90-91825A140	#8 OPEN END WRENCH BLUE	2