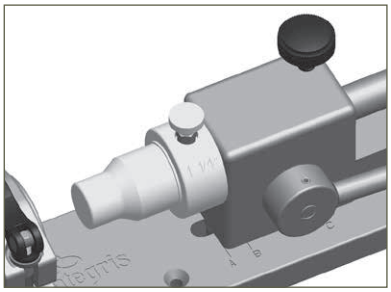
PRIMELOCK® MINIMUM TUBE UNIONS

Insert installation instructions for 1¼" and 1½" sizes

INSTRUCTIONS FOR

PrimeLock® Fitting

1. The bench top tool has three separate installation marks engraved into the base. Lift the black knob and move to position "A". Release the knob.



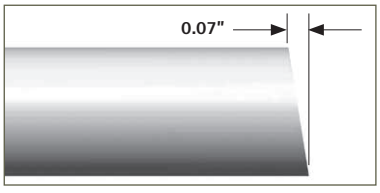
A. The nut resides on the outside of the clamp
B. The nut resides between the clamp and the mandrel
C. Minimum tube unions used to install insert in second side

2. Cut the tube to the minimum tube length.

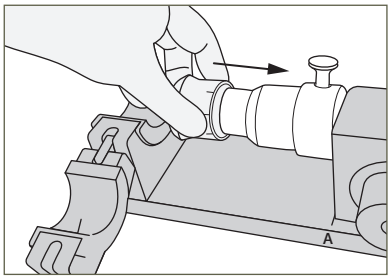
MINIMUM TUBE UNION LENGTH

Nut Size	Tube Length Prior to Installation
1¼"	4.00" (4")
1½"	5.00" (5")

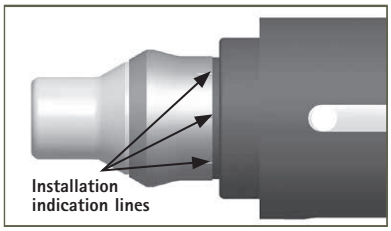
3. Ensure the tube end is square within the proper tolerance.



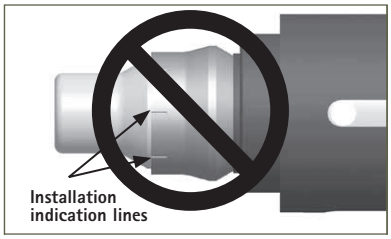
4. Slide the insert onto the mandrel as shown.



5. Verify the insert has been properly placed onto the mandrel. The installation indication lines on the insert are closest to the shoulder of the mandrel.

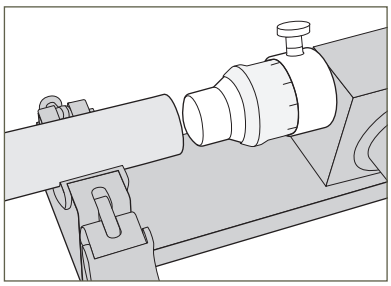


Correct installation of insert

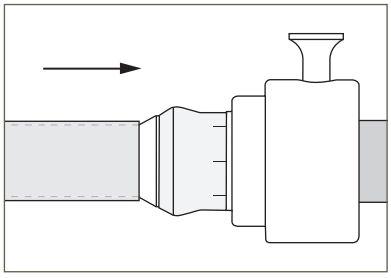


Incorrect installation of insert

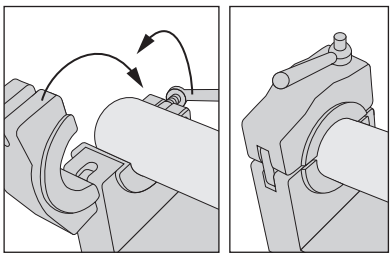
6. Insert the tubing into the clamp.



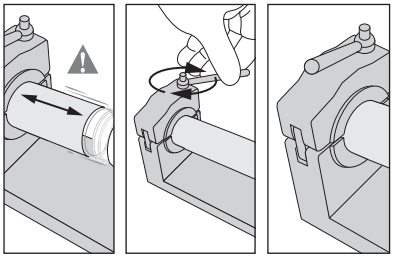
7. Slide the tube onto the mandrel until it stops.



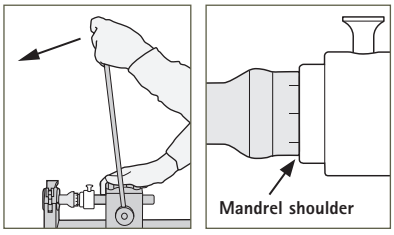
8. Clamp the tube in place.



9. If the tubing is not held firmly, readjust the clamping mechanisms to increase the tube clamping force.

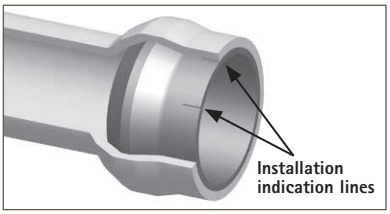


10. Rotate the handle, driving the insert into the tube until the tube contacts the mandrel shoulder.

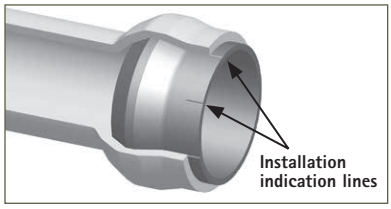


11. Retract the handle when the insert is installed into the tube. Unclamp the tube.

12. Verify the insert has been properly installed into the end of the tube. The insert has molded indication lines for gauging proper installation in the tube. For correct installation, the tubing will cover all or at least a portion of the indication lines. The insert does not need to be pushed fully into the tube.



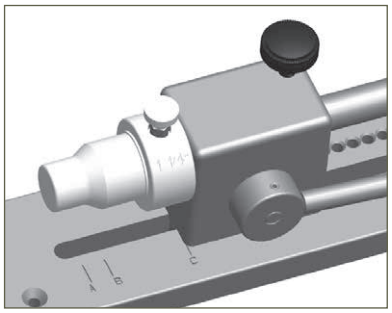
Correct installation of insert



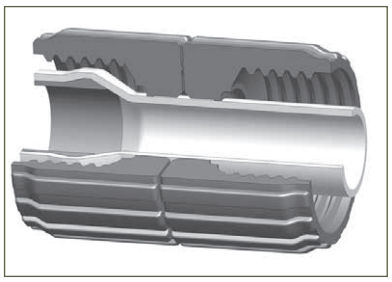
Correct installation of insert

Incorrect installation of insert

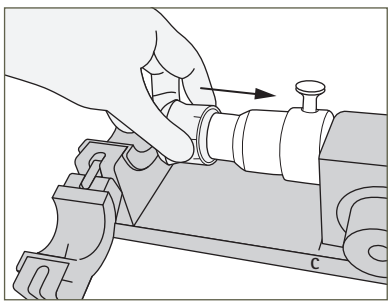
13. Lift the black knob and move to position "C" to install insert into other end..



14. Insert the cut end of the tubing through the two PrimeLock nuts. Verify the nuts are placed on the tube in the proper orientation.



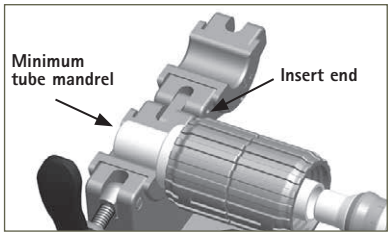
15. Slide the insert onto the mandrel as shown.



16. Verify the insert has been properly placed onto the mandrel. See step 5 for proper insert orientation.

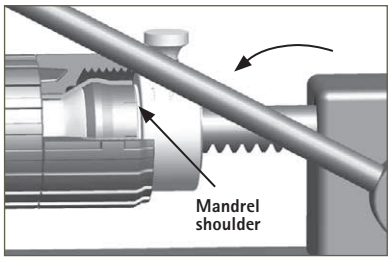
17. Insert the minimum tube mandrel into the end of the tube with the installed insert.

18. Place the minimum tube mandrel assembly into the clamp.



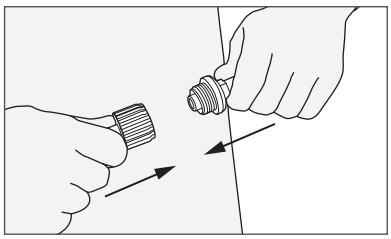
19. Clamp the minimum tube mandrel in place.

20. Rotate the handle to push the insert into the tube until the tube contacts the mandrel shoulder



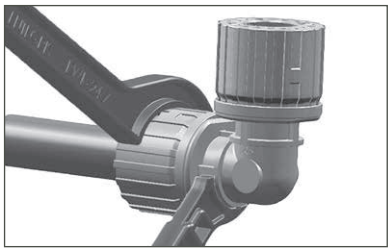
21. Verify the insert has been properly installed. See step 12.

22. Slide the assembly onto the fitting and hand-tighten the nut.

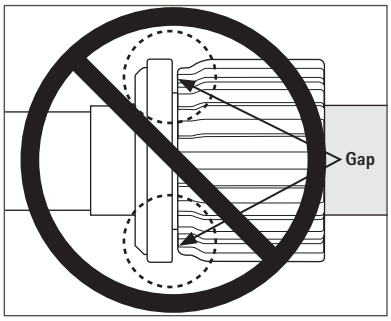


23. Place the PrimeLock wrench over the ribs of the fitting nut and rotate clockwise. Tighten the nut until the connection verification ring creates an audible click or the leading edge of the nut travels under the connection verification ring.

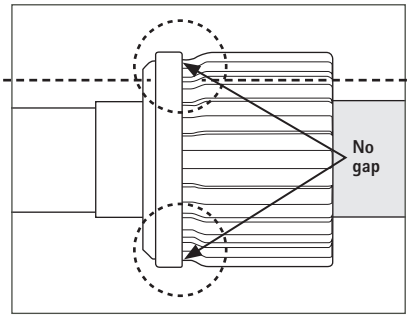
Note: Do not overtighten to the point where the nut bottoms out on the fitting body.



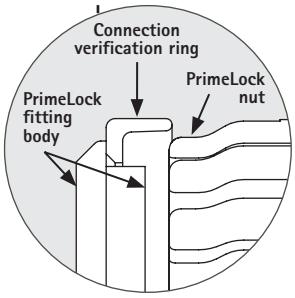
23. If there is excessive background noise, the connection can be verified by looking at the position of the connection verification ring relative to the nut.



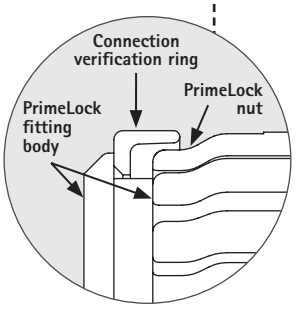
Incorrect tightening of the fitting — additional tightening required



Correct tightening of the fitting



Initial tightening of the fitting — nut travels underneath connection verification ring



Maximum tightening limit — nut bottoms out on the fitting body

CAUTION: Do not retighten the fitting while the fitting assembly is above 30°C (86°F) or in a pressurized condition.

When reassembling the fitting, tighten the nut beyond the initial tightening position.

PRIMELOCK INSERT INSTALLATION TOOLS

Part Number	Description	Tubing Size
PBNCH-TOOL-L2	Tool – Bench top	1¼", 1½"
PMTMND-20	Mandrel – minimum tube	1¼"
PMTMND-24	Mandrel – minimum tube	1½"
PMND-20-B	Mandrel – directional sleeve*	1¼"
PMND-24-B	Mandrel – directional sleeve*	1½"
PCLMP-20	Clamp insert	1¼"
PCLMP-24	Clamp insert	1½"
PCLMP-20-R	Clamp insert – EPDM-lined**	1¼"
PCLMP-24-R	Clamp insert – EPDM-lined**	1½"
PWR-20	Wrench	1¼"
PWR-24-A***	Wrench	1½"
PWR-24-B***	Wrench	1½"
PWR-24-Set	Wrench – PWR-24-A and PWR-24-B	1½"

**Prevents backward installation of insert.*

***Eliminates clamp marks on tubing.*

****Two PWR-24-A or PWR-24-B or a combination thereof are required to assemble 1½" size fittings.*

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