REPAIRING DAMAGED PEX

REPAIRING A KINK (PEX ONLY)

Note: When repairing a kink in a Pex-al-Pex tubing follow step 3 only!

Although MrPEX® Tubing is the most flexible and kink-resistant tubing on the market, it may still happen that a kink could occur. PEX-a (peroxide cross-linked PEX) has the very important property of being extremely crack-resistant, so that the kink will not result in a crack. This property results in a couple of "extra" options to repair kinks:

If the kink is not very accentuated, just rounding the tubing carefully with a pair of smooth pliers is acceptable. However, if the kink is in a place where there has to be a bend, there could be a risk that the kink re-develops. If so, measures have to be taken in order to prevent this from happening. One option is to apply a bend support in such a way that the kink gets firm support.

A kink will disappear if the kinked section of the tubing is heated to a temperature above the material's crystalline melting point, 270°F. This temperature can be reached with a thermostat controlled hot air gun. It is quite important that the hot air reaching the tubing surface does not exceed 330°F. Please check with a thermometer. First, relieve the tension on the kink by straightening the tubing. Carefully heat the tubing while continuously turning the hot air gun, allowing all sides of the kinked tubing section receive the same heat. The tubing wall will turn transparent in 2–4 minutes. When turning transparent, the kink will disappear. Stop heating and let the tubing cool down to room temperature, untouched, before continuing the installation. Applying cool water will speed up the cooling. The Tubing wall will turn opaque again. The very thin barrier layers may be slightly damaged during this process, but the core of the PEX Tubing will be fine. Local damage to the barrier layers will not affect the integrity of the installation. You may notice a very slight expansion of the heated section. That is because of the slight dimensional calibration performed during manufacturing will disappear, and that is okay. Never use a torch to heat the tubing! Overheating the tubing can lead to thermal degradation, which means that the life expectancy is compromised.

The third method to repair a kink is the "conventional repair method". See following pages 60–66 for instruction on specific coupling style used.

PEX COMPRESSION REPAIR COUPLING

Making the repair:

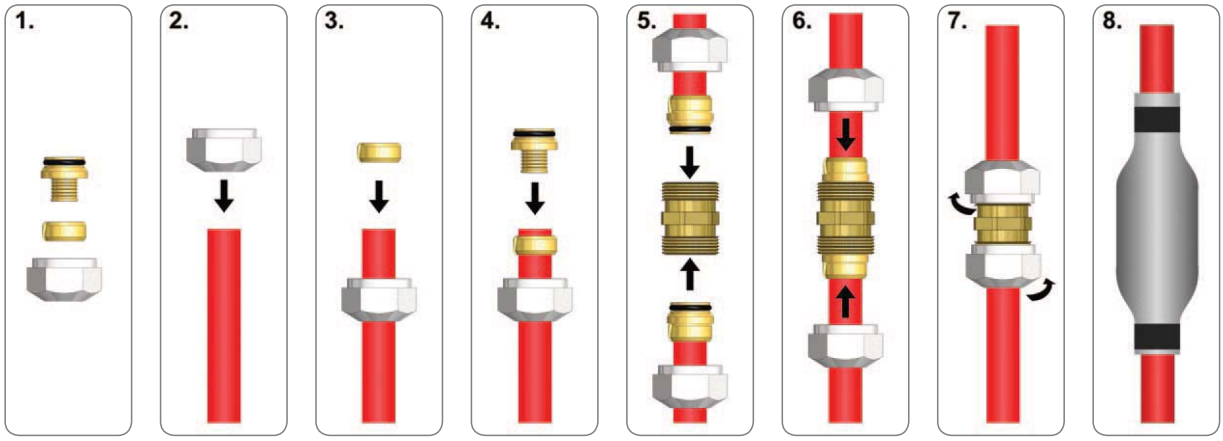
STEP 1 Start by cutting out the damaged piece of PEX, make sure the cut is square using a suitable tubing cutter.

STEP 2–3 After cutting the tubing, slide the nut then the compression ring onto each tubing end.

STEP 4 Push the inserts into the tubing until it stops.

STEP 5–7 Using a coupling nipple, connect each tubing end onto the nipple making sure not to damage the o-ring. Tighten the compression nuts using two suitable wrenches. Make sure to perform a pressure test prior to covering or burying the coupling.

STEP 8 Wrap coupling with suitable material such as foam insulation if coupling is to be buried to making sure the fitting is not in direct contact with the ground or concrete.



PEX F1807 PRESS BRASS REPAIR COUPLING

Note: This coupling method is considered a manufactured fitting and is approved by MrPEX® to be used to repair the MrPEX® PEX Tubing.

Making the repair:

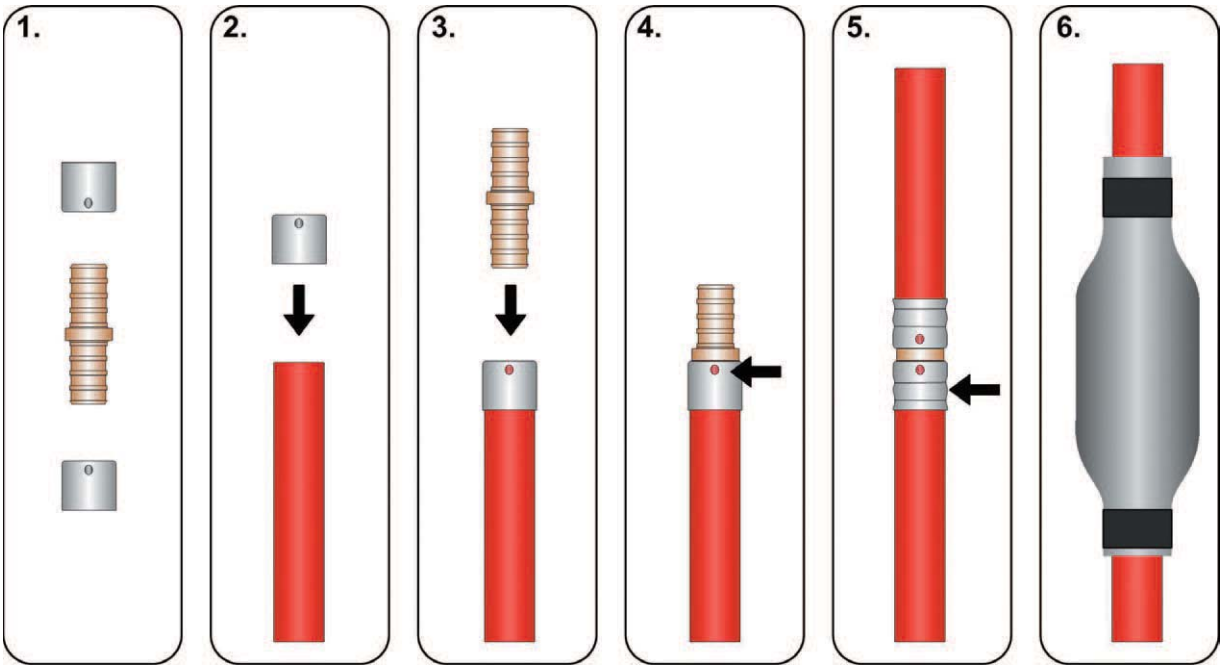
STEP 1 Start by making a square cut at the end of the tube using a suitable tubing cutter.

STEP 2 After cutting the tubing, slide the stainless steel press sleeve onto the tubing, making sure it seats all the way at the bottom. Tubing should be visible in the witness hole at the bottom of the press sleeve.

STEP 3 Push the tubing and sleeve onto the fitting until it stops.

STEP 4 Using either a manual or battery press tool, complete the fitting. Making sure that the press jaw is up against the shoulder of the fitting. Make sure to perform a pressure test prior to covering or burying the coupling.

STEP 5 Wrap coupling with suitable material such as foam insulation if coupling is to be buried to making sure the fitting is not in direct contact with the ground or concrete.



PEX PRESS F2159 PPSU REPAIR COUPLING

Note:This coupling method is considered a manufactured fitting and is approved by MrPEX® to be used to repair the MrPEX® PEX Tubing.

MAKING THE REPAIR:

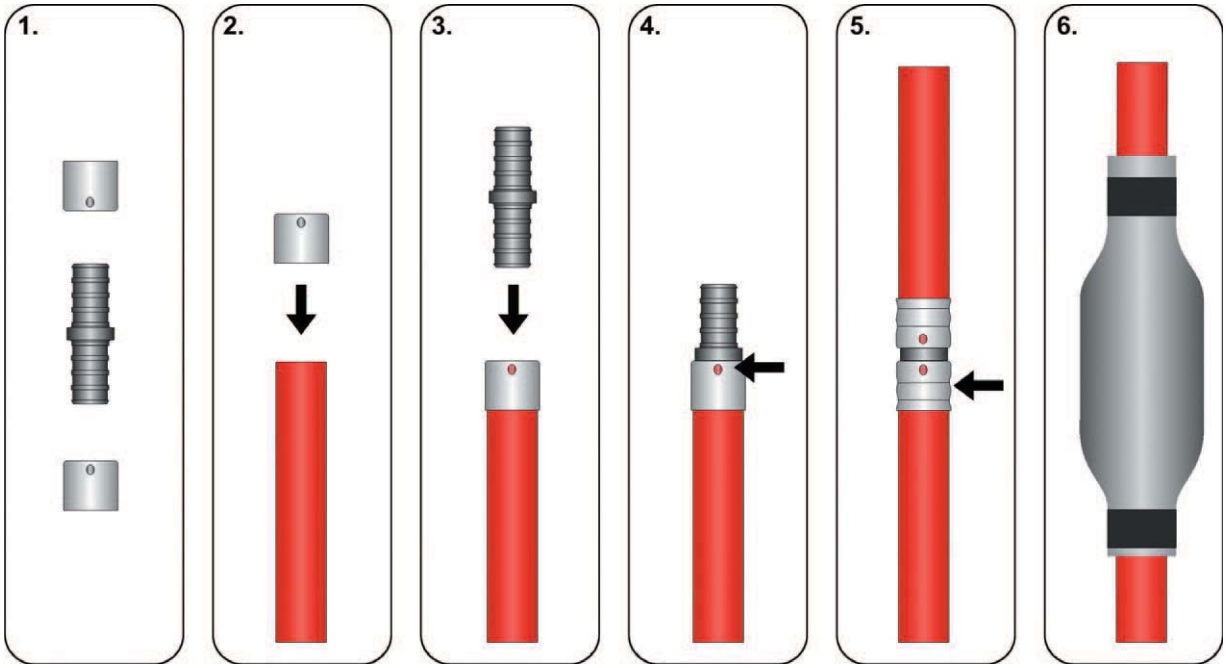
STEP 1 Start by making a square cut at the end of the tube using a suitable tubing cutter.

STEP 2 After cutting the tubing, slide the stainless steel press sleeve onto the tubing, making sure it seats all the way at the bottom. Tubing should be visible in the witness hole at the bottom of the press sleeve.

STEP 3 Push the tubing and sleeve onto the fitting until it stops.

STEP 4 Using either a manual or battery press tool, complete the fitting. Making sure that the press jaw is up against the shoulder of the fitting. Make sure to perform a pressure test prior to covering or burying the coupling.

STEP 5 Wrap coupling with suitable material such as foam insulation if coupling is to be buried to making sure the fitting is not in direct contact with the ground or concrete.



PEX F2080 AXIAL PRESS BRASS COUPLING

Note: This coupling method is considered a manufactured fitting and is approved by MrPEX® to be used to repair the MrPEX® PEX Tubing. Make sure to follow tool instructions.

MAKING THE REPAIR:

STEP 1 Start by making a square cut at the end of the tube using a suitable tubing cutter.

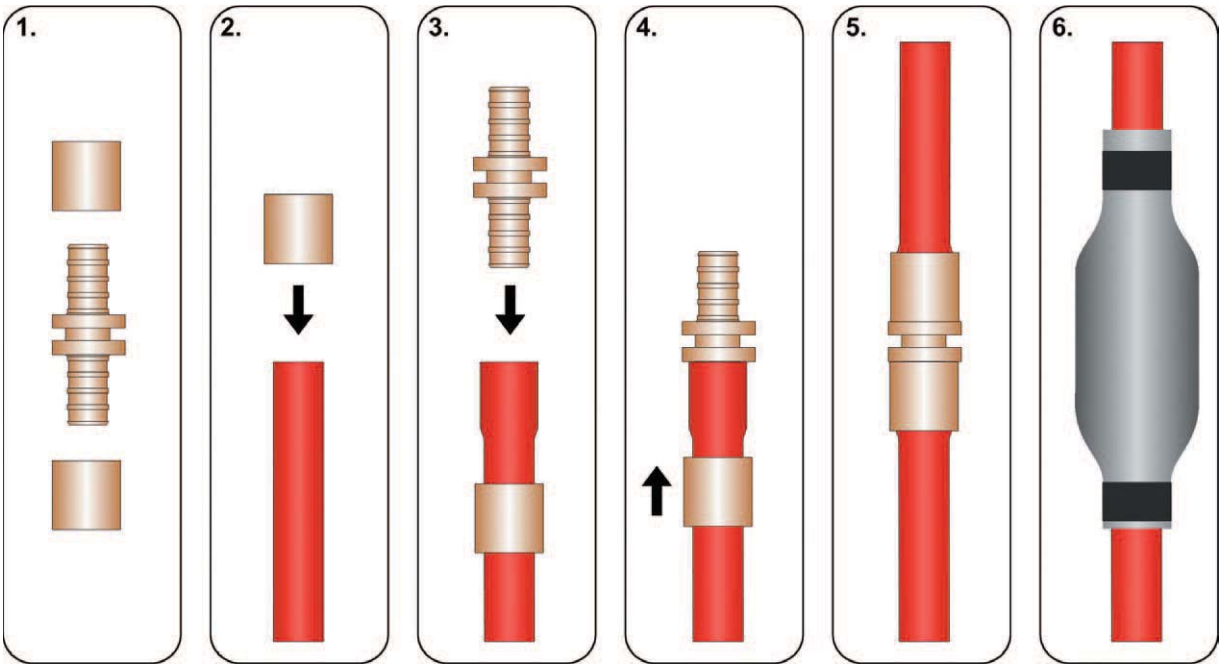
STEP 2 After cutting the tubing, slide the brass press sleeve onto the tubing. Using the blunt expander tool, expand the end of the tubing.

STEP 3 With the tubing expanded, push the fitting into the tubing until it stops.

STEP 4 Then using the ratchet tool, slide the brass sleeve up onto the fitting.

STEP 5 Secure the tubing until the sleeve seat against the brass shoulder. Make sure to perform a pressure test prior to covering or burying the coupling.

STEP 6 Wrap coupling with suitable material such as foam insulation if coupling is to be buried to making sure the fitting is not in direct contact with the ground or concrete.



PEX F1960 COLD EXPANSION COUPLING

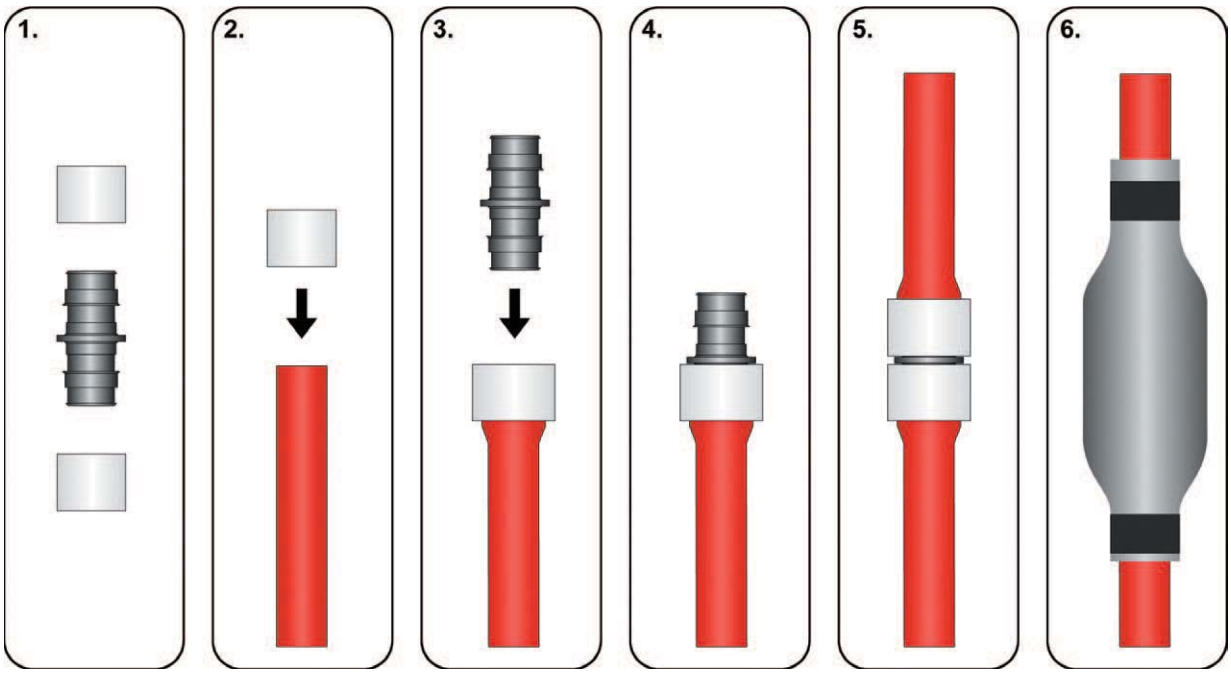
Note: This coupling method is considered a manufactured fitting and is approved by MrPEX® to be used to repair the MrPEX® PEX Tubing. Make sure to follow tool instructions.

MAKING THE REPAIR:

STEP 1–2 Start by making a square cut at the end of the tube using a suitable tubing cutter. After cutting the tubing, slide the PEX ring onto the tubing leaving about 1/16" over hang, or if the ring has a stop slide it until it stops. Using the expander tool, expand the tubing and ring as per instructions. Rotate tool ¼ turn

STEP 3–5 With the tubing and ring expanded, push the fitting into the tubing until it stops. Timing is critical since the tubing and ring wants to retract right away. If the fittings is not seated all the way, the fitting needs to be redone. Make sure to perform a pressure test prior to covering or burying the coupling.

STEP 6 Wrap coupling with suitable material such as foam insulation if coupling is to be buried.



PEX-AL-PEX PRESS COUPLING REPAIR

Note: This coupling method is considered a manufactured fitting and is approved by MrPEX® to be used to repair the MrPEX® Pex-Al-Pex Tubing.

MAKING THE REPAIR:

STEP 1 Start by making a square cut at the end of the tube using a suitable tubing cutter. If PEX-AL-PEX tubing is used, also ream the tubing using our reaming tool.

STEP 2 After reaming the tubing, push the tubing into the fitting making sure that the tubing seat all the way at the bottom. Tubing should be visible in the witness hole at the bottom of the press sleeve.
CAUTION: THE FITTING HAS 2 O-RINGS TO ENSURE TIGHNESS. IF TUBING IS NOT REAMED/CHAMFERED, IT COULD CUT THE O-RING AND RESULT IN A LEAK.

STEP 3 Using either a manual or battery press tool, complete the fitting. Making sure that the press jaw is up against the shoulder of the fitting. Make sure to perform a pressure test prior to covering or burying the coupling.

STEP 4 Wrap coupling with suitable material such as foam insulation if tubing is to be buried making sure the fitting is not in direct contact with the ground or concrete.