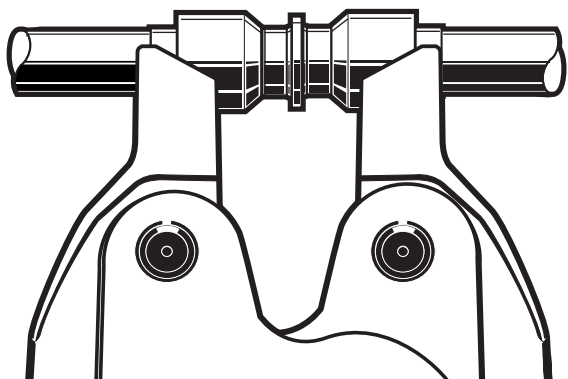




TECHNICAL SERVICE GUIDE



LOKRING Connectors





IMPORTANT SAFETY INFORMATION

Before cutting or using a torch on refrigerant tubes, recover the refrigerant from the system using approved recovery equipment.

Never charge new refrigerant through the purge valve. This valve is always located on the high pressure side of the system.

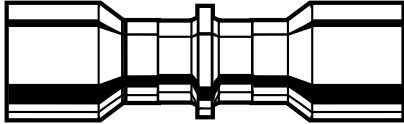
Never apply heat from any source to a container of refrigerant. Such action will cause excessive pressure in the container.

Always wear approved safety glasses when working with refrigerants and nitrogen holding charge in the replacement compressor. Contact with these gases may cause injury.

NOTE: The LOKRING system is **ONLY** approved for repair or replacement of GE/Hotpoint/RCA evaporators. Use of the LOKRING connectors on sealed system repairs other than the evaporator is **NOT** approved.

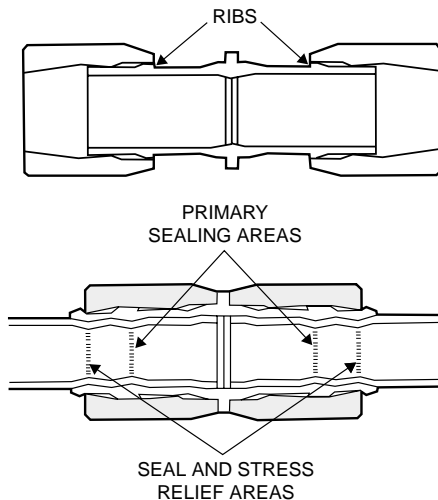
The LOKRING Connector

The LOKRING connector provides a durable, vibration resistant compression connection for both copper and aluminum tubing. The connector can be used within a temperature range of -58°F and +302°F and has shown to have a higher burst strength than that of the tube itself. They are available in both brass and aluminum.



NOTE: To prevent an electrolytic reaction between aluminum and brass, *always use an aluminum connector when either tube to be joined is aluminum.* For copper to copper tubes, use brass connectors.

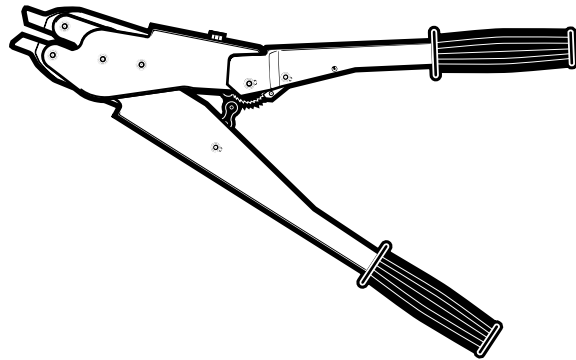
The compression joint is made when the tubes are inserted into the connector up to an internal stop and using the special LOKRING tool, the ends of the connector are compressed together. Internal ribs seal around the tube without changing the flow capability of the tube itself.



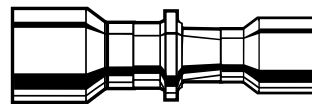
NOTE: When selecting a location to install the LOKRING connector, allow a minimum of 1 1/8" of straight tubing on either side of the connector to make the repair correctly.

The LOKRING Tool

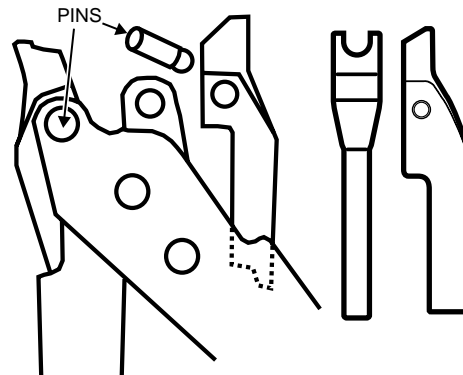
The LOKRING repair method utilizes a newly designed tool with a ratchet action that provides proper compression on the LOKRING connector while requiring less force than previous tools.



The tool is supplied with a 3/8" set of jaws, that are easily interchanged with 5/16" jaws, available through GE or your local part distributor. It is very important to use the correct size jaws for the connector being used. Some connectors have different dimensions at each end. In those applications, you will need to mix jaw sizes to make certain each jaw matches the size of the connector end.



Remove the locking pins to switch between different jaws.



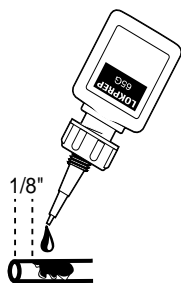
NOTE: It is important to keep the jaws as clean as possible. Dirt buildup over a period of time may cause the connector to seat improperly in the jaws. Make certain to wipe the jaws clean after every use.

The Lokprep Sealant

A solution called Lokprep is used as a sealant to fill any scratches, grooves or imperfections on the surface of the tubing. It is compatible with all known refrigerant oils.

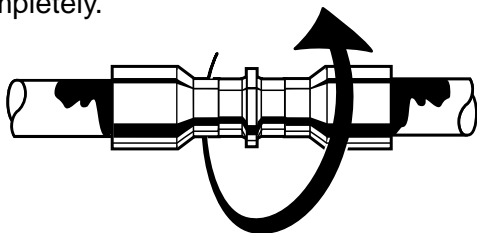


Three drops of the anaerobic solution (reacting in the absence of air) is applied to the end of each tube to be joined before compressing the connector. *Keep the solution approximately 1/8" away from the end of the tube.* The solution has been improved to allow up to a minute to complete the compression seal.



NOTE: Keep the solution approximately 1/8" away from the end of the tube. This will prevent the possibility of excessive solution from running into the tube and contaminating the system.

Once Lokprep has been applied to the tubing, fully insert the tubing into the connector until it hits the stop and rotate the connector several revolutions to distribute the sealant completely.



NOTE: Use of Lokprep beyond the expiration date on the bottle should be avoided. Once the solution reaches the expiration date, it has a tendency to thicken. If the solution cannot flow freely, its effectiveness in filling imperfections in the surface of the tubing is reduced and may cause leaks in the fitting.

Creating a Perfect Seal

One of the most important steps in the LOKRING repair method is the proper preparation of the tubing to be joined. It is critical that the tubing be clean and free from any burrs.

Clean any epoxy residue, dirt, oil or grease from the tubing using an emery cloth or 3M Scotch-Brite™ pad. Always clean the tube in a circular motion, going around the tube. Never clean along the length of the tube in a side-to-side direction, since this could create deep scratches in the tube that may prevent a good seal.

When cutting the tubing, use only a tubing cutter. *Do not use a hacksaw.* This ensures that the outer diameter of the tube is burr-free and filings don't contaminate the sealed system. Cut all the way through the tubing. Do not bend the tubing to break it since this could affect the shape of the end of the tube.



The Rules Of LOKRING

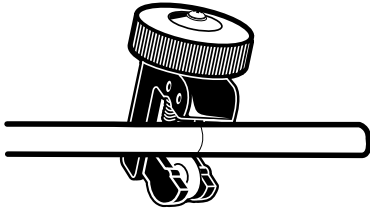
- You must have at least 1 1/8" of straight tubing on either side of the cut point
- Clean the tubing using a circular motion (3M Scotch-Brite™ is an excellent cleaning material)
- The tubing must be clean, dry and free of paint, epoxy, oil and dirt
- Use only a tubing cutter and cut all the way through the tubing to prevent burrs
- Apply 3 drops of Lokprep to each end of the tubing, staying 1/8" from the end
- Tubing must "bottom-out" at the internal stop when placed in the connector
- Rotate the fitting at least one complete revolution to evenly distribute Lokprep
- Lokprep should not be used after the expiration date
- You have one minute to compress the connector once Lokprep has been applied
- Make certain the connector is seated properly in the jaws and the tool is straight and aligned with the tubing to prevent an improper joint.
- Wipe the tool jaws clean after each use

LOKRING Step by Step

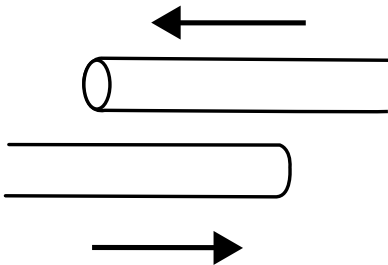
1. Locate an area of straight tubing that will allow at least 1 1/8" on either side of the connector.

2. Clean any epoxy residue, dirt, oil or grease from the tubing using an emery cloth or 3M Scotch-Brite™ pad. Always clean in a circular motion around the tubing. Never clean in a side-to-side motion.

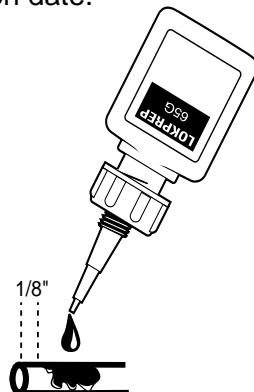
3. Cut all the way through the tubing using a tubing cutter.



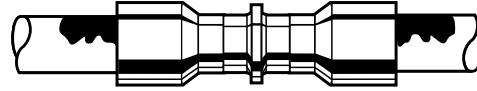
4. Bend the tubing so that the ends overlap each other. This will provide tension and keep the tubing "bottomed-out" in the connector.



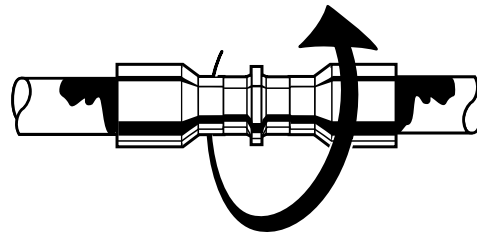
5. Apply 3 drops of Lokprep to each end of the tubing. Keep the solution 1/8" from the end and do not use Lokprep that has exceeded its expiration date.



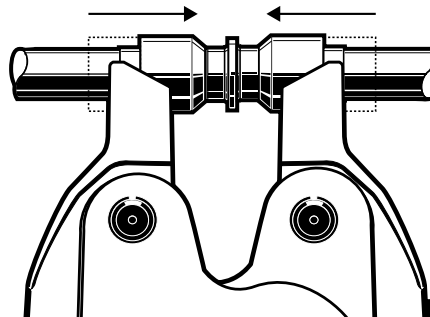
6. Insert the tubing into the connector until the ends "bottom-out" inside the connector.



7. Rotate the LOKRING connector at least 1 complete revolution to thoroughly distribute the sealant.



8. Within 1 minute of applying Lokprep, use the LOKRING tool to compress the connector on the tubing. Make certain the connector is seated properly in the jaws and the tool is straight and aligned with the tubing to prevent an improper joint. Compress the connector until the ends meet the center stop.

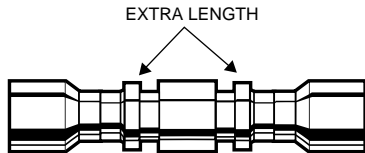


9. Wipe the jaws clean of any residue.

10. The connection is complete and pressure can immediately be put into the system. Make certain to check all fittings for leaks.

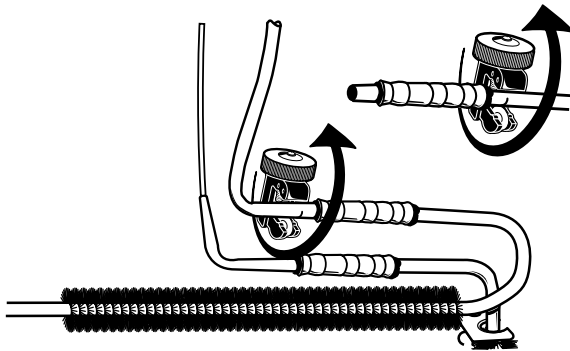
Replacing an Epoxy Joint

In situations where a refrigerant leak is in the epoxy joint of an evaporator, a special LOKRING connector can now be used to repair the leak rather than replace the evaporator. The connector has an extended center section to compensate for the removal of the entire epoxy coupling.

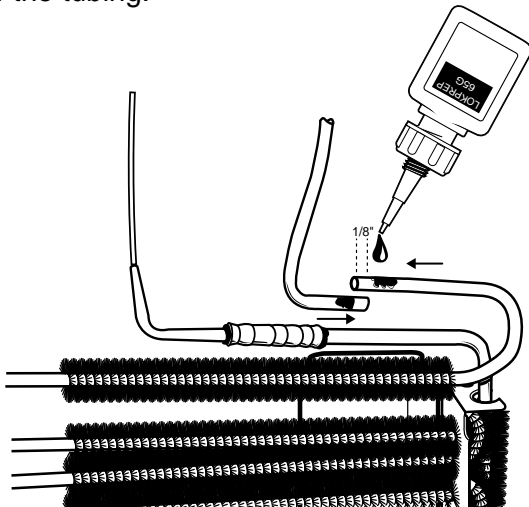


Although the steps are similar to the standard LOKRING connector, the epoxy joint repair requires a different method of compressing the connector.

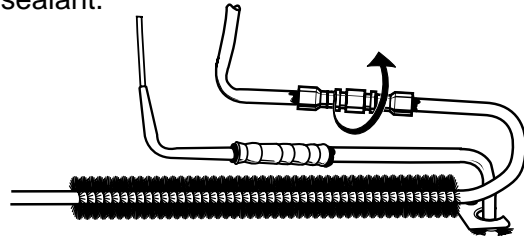
1. Clean the tubing on both sides of the epoxy joint to be removed and cut the tubing as close to the epoxy joint as possible.



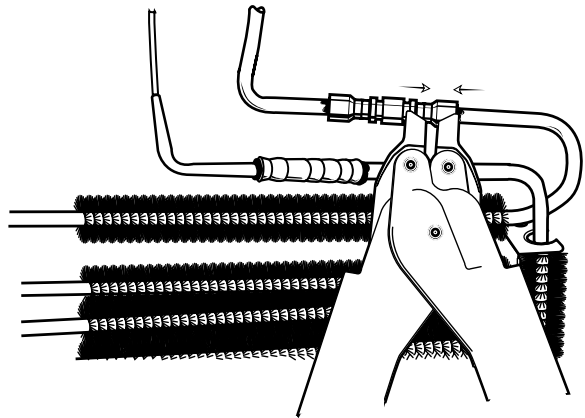
2. Bend the tubing together to keep it fully inserted in the connector when compressing. Then apply 3 drops of Lokprep to each end of the tubing.



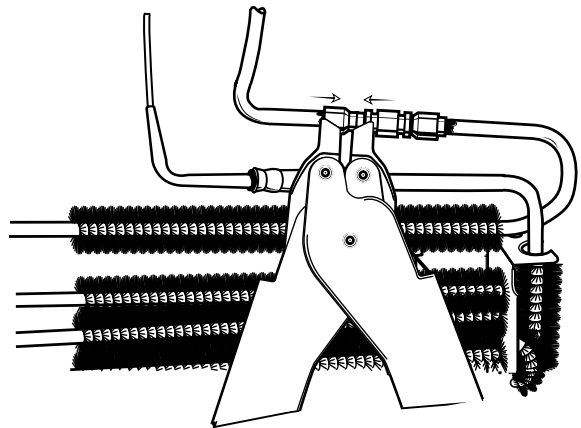
3. Insert the tubing into the connector until it "bottoms-out." Rotate the connector at least one full revolution to thoroughly distribute the sealant.



4. Compressing this type of connector is a two step process. You have one minute to complete both compression joints. Using the LOKRING tool, compress one side of the connector.

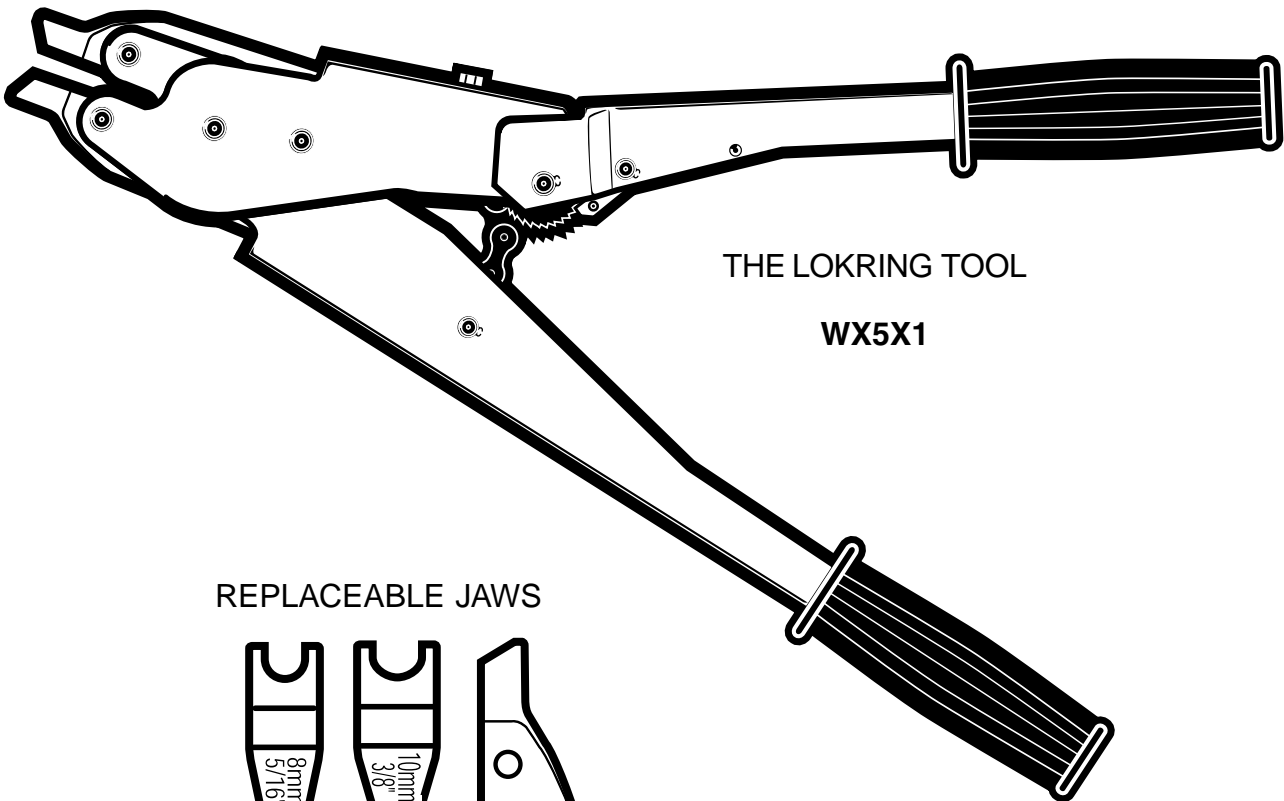


5. Compress the other side of the connector.



6. Wipe the jaws clean of any residue.

LOKRING COMPONENTS

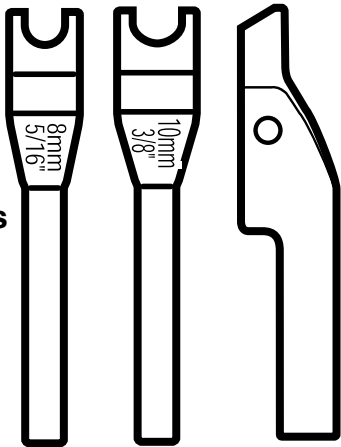


THE LOKRING TOOL
WX5X1

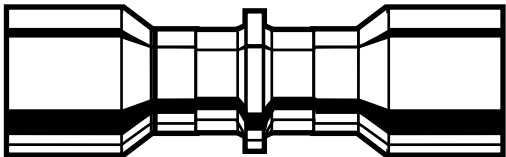
REPLACEABLE JAWS

(2) 5/16" Jaws
WX5X516

(2) 3/8" Jaws
WX5X38



THE LOKRING CONNECTOR



LOKRING
SEALANT
WR88X16



PART	TYPE	SIZE	APPLICATION
WR97X10014	Brass	3/8" X 3/8"	Copper to Copper
WR97X10021	Brass	5/16" X 5/16"	Copper to Copper
WR97X10022	Aluminum	3/8" X 3/8"	Copper to Aluminum
WR97X10023	Aluminum	5/16" X 3/8"	Copper to Aluminum
WR97X10024	Brass	5/16" X 3/8"	Copper to Copper

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- The tubing must be clean, dry and free of paint, epoxy, oil and dirt
- Use a tubing cutter and cut all the way through the tubing to prevent burrs
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- Lokprep should not be used after the expiration date
- You have one minute to compress the connector once Lokprep has been applied
- Make certain the connector is seated properly in the jaws and the tool is straight and aligned with the tubing
- Wipe the tool jaws clean after each use to prevent the possibility of the connector not seating properly in the jaws