The Knox FDC Lock has been designed for ease-of-use when installing or removing the lock from a fire department connection (FDC). Fire personnel properly equipped with a Knox FDC Wrench can quickly remove the lock. In the event of debris or ice buildup on the locking bolt head, a small flathead screwdriver or similar tool will quickly remove any foreign matter.

### INSTALLATION

1. Remove the attached warning tag. Check for and remove debris from both the connection’s coupling threads and inside the pipe. If necessary, flush system.
2. The cap will be in the locked position. Using the Knox FDC Wrench turn the locking bolt counterclockwise until it stops to ensure it’s fully unlocked.
3. Place the FDC Lock into coupling and hand turn clockwise until no threads are showing. Do not use a spanner wrench. Hand tighten ONLY.
4. Tighten the lock bolt clockwise with the Knox FDC Wrench until a hard stop is felt. Try an additional 1/2 turn to ensure the lock bolt is tight.

### REMOVAL

1. Inspect locking bolt head and remove any debris.
2. Use the Knox FDC Wrench to turn the locking bolt head counterclockwise until fully unlocked (FDC Wrench will stop).
3. Use the pin holes on the Knox FDC Wrench to unscrew the Knox FDC Lock from the connection.
4. If the locking bolt is completely loosened and the lock will not release, use the spanner end of the FDC Wrench to engage the pins on the face of the Knox FDC Lock and unscrew counterclockwise (as shown below).

### INSTALLATION NOTES:

- For the Swivel-Guard model, line up locks on swivel with cut outs in swivel guard ring, then spin swivel to thread the Knox FDC Lock into the connection.
- The Knox FDC Lock should easily thread into connection coupling (loose fit). If the Knox FDC Lock thread binds, remove and check threads for damage or incorrect size.

### CAUTION:

Knox FDC Locks are not designed to function as pressure seal plugs for wet systems. If the check valve upstream is defective and leaks water, the water will go through the FDC Lock to show leakage. The defective check valve must be repaired.

When backflushing your FDC system for clean out, remove all Knox FDC Locks to provide proper system purging.

Knox FDC locks should be inspected at least annually, by a qualified inspector.
FDC BRASS ADAPTER RECOMMENDED INSTALLATION PROCEDURE

Theft of items containing materials such as copper and brass are a growing problem for property owners and firefighters. Knox recommends taking the following steps to ensure the entire FDC assembly is permanently secured to the pipe thread on the building to reduce risk of theft and vandalism of the housing and pipe.

This procedure involves installing one or more 5/16”-18 Allen set screws and a special permanent adhesive to secure the FDC Brass adapter to the pipe thread on the building.

1. Use Letter F drill bit to drill a hole entirely through the brass adapter lip, approximately 1/2” from lip edge. One hole provides extra security. Three holes spaced 120° apart will provide much better security.

2. Tap threads in the holes using a 5/16”-18 thread tap.

3. Clean pipe threads thoroughly with solvent and wire brush. Dry completely. NO grease or oil can be present on the pipe threads in order for adhesive to work properly.

4. Apply Permabond® HM162 to threads on both the adapter and pipe. Coating should be thin and completely coat the threads.

5. Tighten and position FDC brass adapter on pipe.

6. Use 1/4” drill bit to spot drill through the set screw holes in adapter and into pipe approximately 1/16” deep. Do not drill too deep and pierce pipe.

7. Clean drill holes of debris then place a small amount of remaining Permabond HM162 in hole and on set screws, securing firmly with a 5/32” Allen wrench.

8. After set screws have been secured, insert a ball bearing slightly larger than the Allen hole into the screw head and use punch to hammer into place. Alternatively, fill the screw head with a permanent epoxy material. This will virtually eliminate removal attempts.

NOTE:

To minimize potential pipe thefts, attach a clamp on the backside of install wall.

Use Letter F drill bit to drill a hole entirely through the brass adapter lip, approximately 1/2” from lip edge. One hole provides extra security. Three holes spaced 120° apart will provide much better security.

Tap threads in the holes using a 5/16”-18 thread tap.

Clean pipe threads thoroughly with solvent and wire brush. Dry completely. NO grease or oil can be present on the pipe threads in order for adhesive to work properly.

Apply Permabond® HM162 to threads on both the adapter and pipe. Coating should be thin and completely coat the threads.

Tighten and position FDC brass adapter on pipe.

Use 1/4” drill bit to spot drill through the set screw holes in adapter and into pipe approximately 1/16” deep. Do not drill too deep and pierce pipe.

Clean drill holes of debris then place a small amount of remaining Permabond HM162 in hole and on set screws, securing firmly with a 5/32” Allen wrench.

After set screws have been secured, insert a ball bearing slightly larger than the Allen hole into the screw head and use punch to hammer into place. Alternatively, fill the screw head with a permanent epoxy material. This will virtually eliminate removal attempts.

NOTE:

To minimize potential pipe thefts, attach a clamp on the backside of install wall.