

## Rapid Seal Adapter (RSA) Fittings Sprinkler Installation and Gasket Replacement

### General Description

Rapid Seal Adapter (RSA) Fittings are intended for use in fire protection sprinkler systems comprised of CPVC pipe and fittings. A gasket housed within the fitting eliminates the need to apply sealant to sprinkler threads and reduces the effort necessary to complete a leak-free installation.

These installation instructions do not take the place of nor do they eliminate the need for the installer to fully read and understand the complete CPVC Fire Sprinkler Products Installation Instructions and Technical Handbook IH-1900 and individual product technical data sheets. Current documentation can be obtained by contacting Johnson Controls or visiting [www.tyco-fire.com](http://www.tyco-fire.com).

### Technical Data

#### Approvals

UL and C-UL Listed  
FM Approved  
LPCB Certified  
Certified to all requirements of  
NSF/ANSI 61, Annex G

#### Maximum Working Pressure

175 psi (12,1 bar)

#### Pipe Thread Connection

1/2 inch NPS

#### IMPORTANT

Refer to Technical Data Sheet TFP2300 for warnings pertaining to regulatory and health information.

Always refer to Technical Data Sheet TFP700 for the "INSTALLER WARNING" that provides cautions with respect to handling and installation of sprinkler systems and components. Improper handling and installation can permanently damage a sprinkler system or its components and cause the sprinkler to fail to operate in a fire situation or cause it to operate prematurely.

#### Physical Characteristics

Housing . . . . . BLAZEMASTER CPVC Compound  
Cap . . . . . BLAZEMASTER CPVC Compound  
Gasket . . . . . Polyurethane

### Sprinkler Installation in Rapid Seal Adapter (RSA) Fittings

Install sprinklers in RSA Fittings in accordance with the following procedure.

Refer to individual sprinkler data sheets for additional information including required sprinkler wrenches.

#### CAUTION

Do not apply thread sealant or TEFLON thread tape on sprinklers intended to be installed in RSA Fittings. Thread Sealant or TEFLON tape may not allow the sprinkler to seat properly and cause leakage and/or equipment failure.

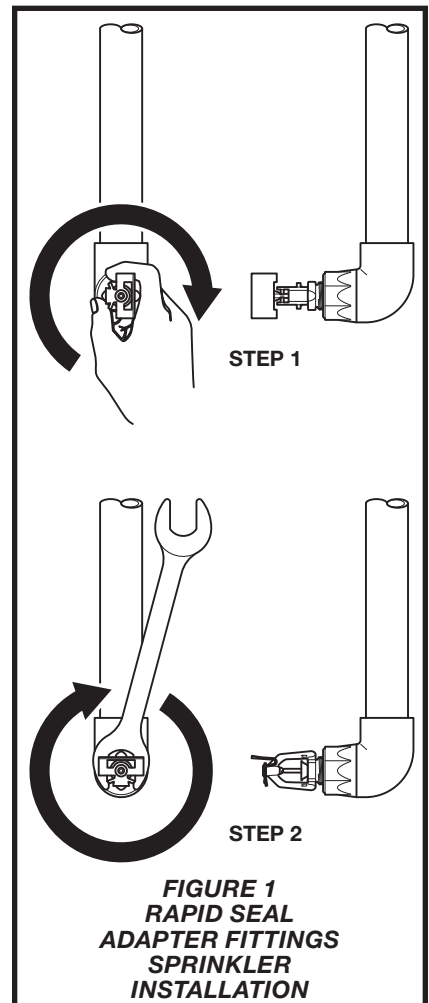
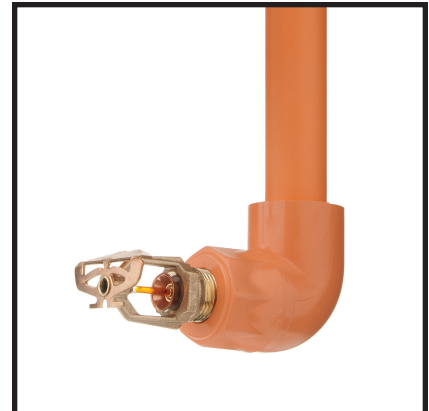
**Step 1.** Ensure the sprinkler threads are clean and do not have thread sealant such as tape or paste applied. Avoiding cross-threading, gently thread the sprinkler into the fitting and hand-tighten until firmly seated.

#### CAUTION

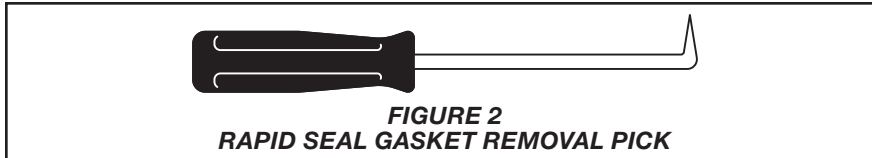
Do not over-torque sprinklers when wrench-tightening with the manufacturer required sprinkler wrench. Over-torquing may result in equipment damage.

For recessed applications do not attempt to compensate for insufficient sprinkler depth within the Escutcheon Plate by under- or over-tightening the sprinkler. Re-adjust the sprinkler fitting position to suit.

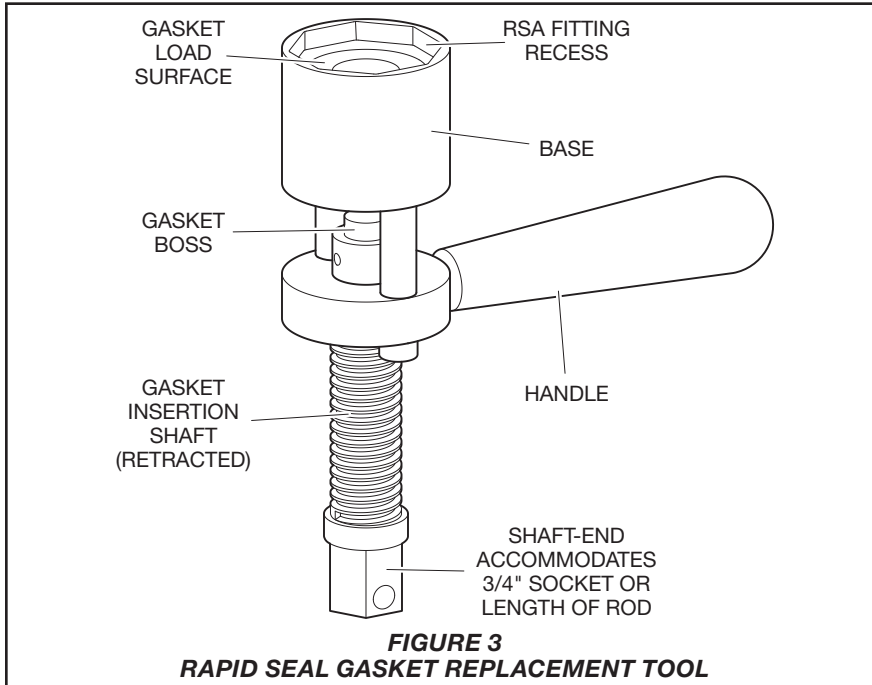
**Step 2.** Orient the sprinkler as needed by applying the manufacturer specified sprinkler wrench to the sprinkler wrench flats and tighten up to an additional full turn, or by applying up to a maximum torque of 7 lb-ft (9,5 N·m).



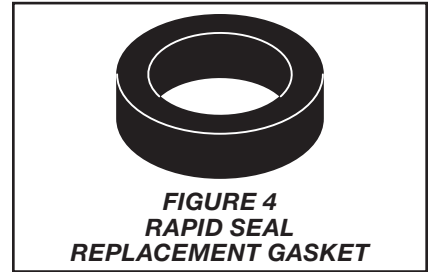
**FIGURE 1  
RAPID SEAL  
ADAPTER FITTINGS  
SPRINKLER  
INSTALLATION**



**FIGURE 2**  
**RAPID SEAL GASKET REMOVAL PICK**



**FIGURE 3**  
**RAPID SEAL GASKET REPLACEMENT TOOL**



**FIGURE 4**  
**RAPID SEAL REPLACEMENT GASKET**

## Limited Warranty

For warranty terms and conditions, visit [www.tyco-fire.com](http://www.tyco-fire.com).

## Ordering Procedure

Contact your local distributor for availability. When placing an order, indicate the full product name and Part Number (P/N).

### Rapid Seal Adapter

Specify: Rapid Seal CPVC Sprinkler Adapter, (specify type), (specify size, Inch Slip x NPS), P/N (specify):

<b>Female</b>	
3/4 x 1/2	.....80175RS
1 x 1/2	.....80176RS
<b>Spigot</b>	
1 x 1/2	.....80178RS
<b>90° Elbow</b>	
1 x 1/2	.....80198RS
3/4 x 1/2	.....80199RS

### Replacement Tools and Gasket

Rapid Seal Gasket Replacement Tool	.....3060
Rapid Seal Gasket Removal Pick	.....3061
Rapid Seal Replacement Gasket (Qty 10)	.3062

# Gasket Replacement in Rapid Seal Adapter (RSA) Fittings

### NOTICE

Gasket Replacement and its associated tools were not evaluated as part of the UL Listing program.

In the event that a sprinkler, installed in an RSA fitting longer than six months, is removed due to damage or activation, the RSA fitting or the RSA fitting gasket must be replaced.

**Step 1.** Remove the sprinkler from the RSA fitting.

### CAUTION

Use caution when removing the gasket to avoid damaging the adapter threads. Failure to do so may result in equipment damage or failure.

**Step 2.** Using the Rapid Seal Gasket Removal Pick, (Ref. Figure 2) carefully remove the gasket from the RSA fitting. Discard the old gasket.

**Step 3.** Verify that the RSA fitting port is clean - free of all debris, chips, or burrs. Failure to do so may result in equipment damage or failure.

**Step 4.** Rotate the Rapid Seal Gasket Replacement Tool insertion shaft (Ref. Figure 3) counter-clockwise until fully retracted. Place the Rapid Seal Replacement Gasket (Ref. Figure 4) onto the shaft end boss and rotate the shaft clockwise until the gasket is flush with the surface of the base recess.

**Step 5.** Holding the Rapid Seal Gasket Replacement Tool (Ref. Figure 3) base recess firmly against the face of the RSA fitting, rotate the insertion shaft until fully engaged. Remove the Rapid Seal Gasket Replacement Tool from the RSA and verify that the gasket is evenly seated and fully installed in the RSA fitting port.

**Step 6.** Install the replacement sprinkler in accordance with the Sprinkler Installation section in this data sheet.