OPERATION AND MAINTENANCE PROCEDURES MULTI-BLADE AND TRUE ROUND FIRE DAMPERS MODEL SERIES: (D)1200(SS)(-3)(-OW)(-DOW), D1250 AND 1290F(-SS)

Dampers are an essential part of the fire protection system in a building. The IFC requires fire dampers be maintained and inspected in accordance with NFPA 80. NFPA 80 requires fire dampers be tested periodically to verify the operational abilities of each installed damper. For full up-to-date details and procedures on maintenance and inspection standards for Fire Dampers, please refer to the latest version of NFPA 80, Standard for Fire Doors and Other Opening Protectives.

Key NFPA 80 2025 Details:

20.1.5.1.1 Damper opening shall be kept clear of anything that could obstruct or interfere with the free operation of the damper.

20.3.2.1 Fire Dampers. After the installation of a damper is completed, an operational test shall be conducted.

20.3.2.1.5 The operational test shall verify that there is full and unobstructed access to the fire damper and all listed components.

20.3.2.1.7 The fusible link operating temperature shall be in accordance with NFPA 90A and UL 33…

20.3.3.5.1 Acceptance testing of dampers designed to close via a spring(s) or by gravity shall be conducted by removing the fusible link and confirming that the damper closes properly.

20.3.3.5.3 The fusible link shall be reinstalled or replaced.

20.3.4.1.1 Each damper shall be tested and inspected 1 year after acceptance testing.

20.3.4.1.2 After the inspection and test required by

20.3.4.1.1, the test and inspection frequency for dampers shall comply with one of the following:

(1) Every 4 years

(2) Every 6 years, in buildings containing hospitals

CAUTION:

High torque helical spring under tension, before any inspection or testing is conducted, ensure HVAC fans are turned off. **Testing spring assisted fire dampers under airflow conditions is NOT RECOMMENDED** and may severely damage or destroy ductwork. Use protective eyewear or safety glasses. Keep hands out of the blade path, as this can cause serious injury. Keep any hard objects or tools out of the blade path as they can damage the blades when closing.

Required Items:

(1) Protective eyewear or safety glasses

(1) Pair of work gloves

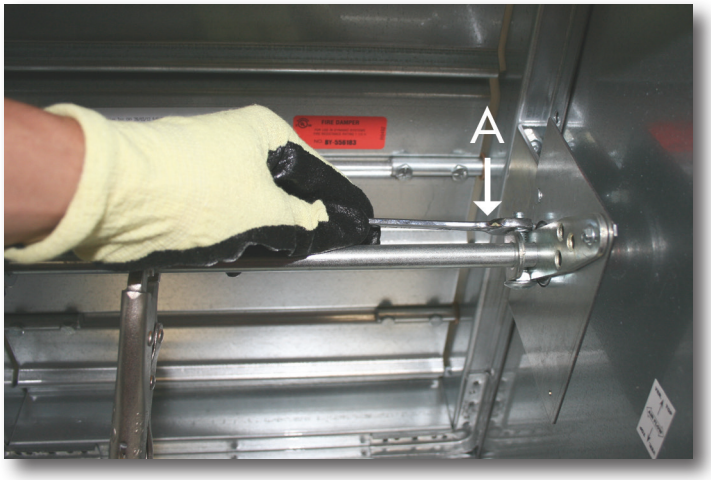
(1) Suitable heat source

(2) Vise grips

(1) 1/2" (13) wrench

(1) Needle nose pliers

(1) Replacement "Globe" Fusible link per damper section, of the same temperature rating as the original link.



Detail 1

Detail 2

Inspection Testing Method:

1. Release the fusible link. Using a suitable heat source, apply heat at a slightly higher temperature than the rating of the fusible link until the link melts. When applying the heat to the fusible link position the heat source in a manner so no heat is directed towards the spring as the excessive heat can negatively affect the spring performance.

AS SOON AS THE LINK HAS MELTED, THE SPRING WILL FORCE THE BLADES TO CLOSE INSTANTANEOUSLY. THE BLADE PATH MUST BE KEPT CLEAR.

Reloading the spring assembly

1. Loosen the jackshaft from the bolt on crank arm quadrant, located on the jackshaft side opposite of the spring assembly **(A)**. Do not remove the bolt completely. See Detail 1.

2. Attach a pair of vise grips on the jackshaft **(B)** and turn upwards until the two pins on the spring assembly are at a distance at which the new fusible link can be installed **(C)**. This is approximately 90° of rotation. See Detail 2.

Note: On smaller size dampers, two vise grips may be required to open the damper. Use one vice grip to open as much as the duct free area will allow, then set the second vise grips on the jackshaft per above. Unlock the first set of vise grips, remove and turn the second set upwards as free area will allow. Repeat as necessary.

3. Place the new fusible link over the two pins on the spring assembly (making sure temperature rating is visible) and locate in the pin grooves **(C)**. See Detail 2.

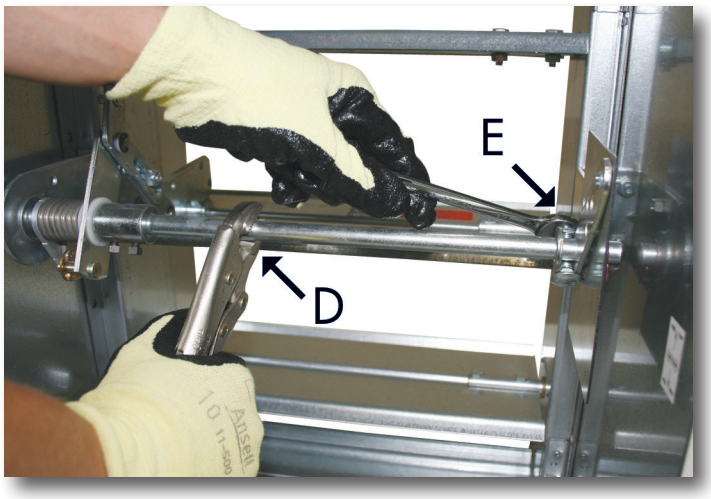
4. Manually open the damper to 100% fully open position **(D)**. See Detail 3.

5. Tighten the bolt on the crank arm **(E)**. See Detail 3.

Inspection, Testing and Maintenance Summary

Consult your local building code to verify whether there is a required maintenance and testing schedule. Most local jurisdictions reference NFPA 80 for Fire Dampers.

Per NFPA 80, each damper should be inspected 1 year after installation and then every 4 years, except for hospitals, where the frequency is every 6 years.



Detail 3

1. Remove any obstructions, dirt, rust, corrosion, or other observed conditions that could impede proper damper operation. Clean damper blades and other moving parts if necessary. Use of a mild detergent or solvents is recommended for any cleaning required.

2. Check closure springs. If damaged or defective, repair or replace.

3. If desired, linkage and jackshaft brackets should be lubricated with a dry silicone or graphite lubricant. Never use a petroleum-based lubricant on dampers, as this can accumulate dirt and dust. Blade Linkage is concealed in the side jamb out of the airstream and is maintenance free. Bearings are self-lubricating oilite bronze (or stainless steel for -SS models).

4. If firing of the fusible link is not required by local code, cycle damper with its quadrant handle to verify that it fully opens and closes. HVAC fans should be shut down. Care should be exercised to ensure that such tests are performed safely and do not cause system damage.

5. All inspections and testing shall be documented indicating the location of the damper, date of inspection, name of inspector, deficiencies detected, and how deficiencies were corrected.

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Receiving, Storage, Preparation

Upon delivery, inspect shipping containers and contents closely. Note any damages on freight carrier's delivery receipt.

Store dampers in a cool, dry and safe location in an orderly manner away from the construction site, warehouse traffic, and other materials, etc. Cover with plastic sheeting to protect from excessive moisture, dirt and debris.

Inspect dampers prior to installation. Dampers must be cleaned per procedures outlined in this document prior to installation if dirt, rust or corrosion is observed.

SPARE PARTS LIST		PART NUMBER
Fusible Links: Model 1200, 1250, 1290	165°F/74°C 212°F/100°C	B2-037 B2-038

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