

FSD-TD Damper

Installation and Maintenance Instructions

1 General-

Read this document in conjunction with FSD-TD actuator Installation operating and maintenance document.

2 Health and Safety.

- 2.1 Only competent personnel may carry out the work outlined in this document.
- 2.2 Wearing of appropriate Personal Protective equipment (gloves, footwear, safety glasses etc) as required for safe working and as the site dictates.
- 2.3 Dampers may be heavy. Larger dampers will require suitable lifting and supporting equipment.
- 2.4 Dampers may close without warning. Do not introduce limbs/fingers between blades while the actuator is fitted.

3 Equipment required

- 3.1 Equipment and tools will vary dependent upon fire barrier construction that the damper is being installed within. Standard equipment normally used for the building of the particular barrier should suffice.

4 Installation Procedure

- 4.1 Before installation, the damper should be inspected to ensure that it has not been damaged and is in good condition following transportation.
- 4.2 Remove packaging materials with the exception of the actuator packaging - leaving this will protect the actuator wiring / thermal fuse whilst the main damper is being installed.
- 4.3 Check damper (label) reference and size to site specification.
- 4.4 Install damper to site specification details and building codes of practice.
- 4.5 Ensure that the ductwork is independently and adequately supported.
- 4.6 Note: All Fire / Smoke Damper installations must be carried out to the satisfaction of the appropriate Building Control officer and/or specifying authority.
- 4.7 Refer to Actuator Installation and operating instruction for wiring of actuator, and testing of damper system.

5 Maintenance procedure

- 5.1 In accordance with BS5588 pt 12, and/or local regulations, periodic inspection should be made at least yearly. Inspection should be carried out more frequently where corrosive or dirty conditions prevail.
- 5.2 Check damper is in its 'normal state'.
 - 5.2.1 If damper is not in its 'normal state', refer to fault finding chart in (refer to FSD-TD actuator Installation operating and maintenance document), otherwise continue.
- 5.3 Test damper operation:
 - 5.3.1 Remove access doors.
 - 5.3.2 Remove/reapply electrical power to actuator (either by using toggle switch on the thermal fuse if provided, or isolating power for actuators without thermal fuses.
 - 5.3.3 Visually check damper blades open/close fully.
 - 5.3.4 If damper operates satisfactorily, go to 5.5
- 5.4 If damper has seized:-
 - 5.4.1 Firstly, it will be necessary to remove actuator (refer to FSD-TD actuator Installation operating and maintenance document).
 - 5.4.2 Spray a light lubricant (Connect Duck Oil recommended) into blade end bearings (through the holes in side gaskets).
 - 5.4.3 Using a 12mm A/F spanner on the transfer Drive Shaft, begin to progressively operate the blades manually until the torque has reduced to less than 5Nm for full travel.
 - 5.4.4 It may be necessary to re-apply lubricant a couple of times, whilst operating the damper using the 12mm A/F spanner.
 - 5.4.5 Remove any excess lubricant.
 - 5.4.6 Refit actuator and re-test (again referring to the FSD-TD actuator Installation operating and maintenance document).
 - 5.4.7 It important to log and review maintenance frequency to prevent future damper seizing.
- 5.5 Wipe clean the inside surfaces of damper (blades and inner casing) – Use cleaning cloth/rag. If corroded or very dirty, apply a light lubricant (Connect Duck Oil recommended) to the cloth.
- 5.6 Use of heavy oils is not recommended, as this will tend to lead to cause a build-up of dust/dirt on damper surfaces.
- 5.7 Replace access door covers, and check damper is left in 'normal state'
- 5.8 Record in maintenance log all work that has been undertaken.