

SJD Louvre Dampers Installation and maintenance

SJD dampers are louvre dampers with opposed, smooth damper blades of extruded aluminium. The damper blades are mounted on shafts suspended between sleeve bearings of synthetic material on a sheet steel or aluminium frame with flanges for duct connection. At the operating side the shafts are connected to a coupling plate with holes and shaft arm pivots (fig. 1).

Storage

The dampers can stand weather-protected outdoor storage for one month. Longer periods of storage should be indoors in a dry environment.

Transport

Avoid damaging the flanges and shaft pivots.

Duct Connections

The dampers are provided with either a 20 mm special flange for LS-rails (fig. 2) or with a 40 mm flange for bolting together with duct flange. Connections are to be provided with tightening fillets and angles which are part of the LS-system. They are not part of the Novenco delivery. Connections with duct flange are to be sealed with tightening material.

Note: The regulating device for manually controlled dampers should be mounted before connecting to ducting (see page 2).

Accessories

Accessories are supplied as loose parts and can be a manual control mechanism, a rod with arm and ball pivot, or a shaft extension with arms for direct coupled damper motor (fig. 3).

Coupling of damper and damper motor

Direct coupled damper motors are mounted as follows. First clamp the shaft extension on one of the middle shafts at the operating side in simultaneous gear with the damper arm pivot (fig. 3).

Afterwards bring the damper motor into direct gear with the extended shaft and fix it to it. Always follow the directions of the damper motor manufacturer. Please note that the damper motor is to be mounted so that pulls on the damper cannot distort the shaft.

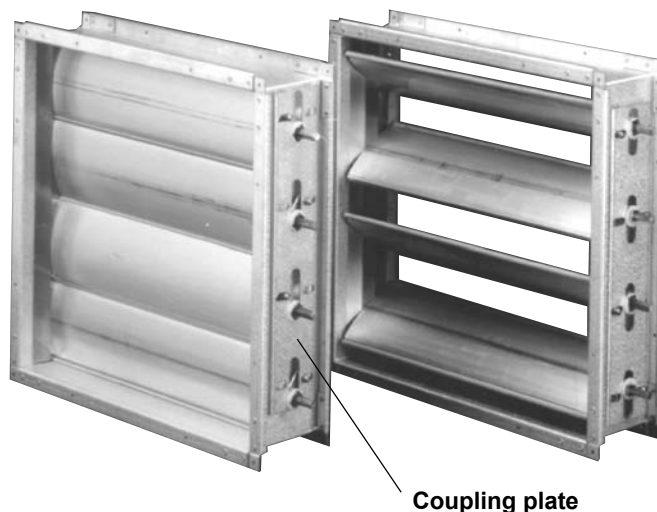


Fig. 1.

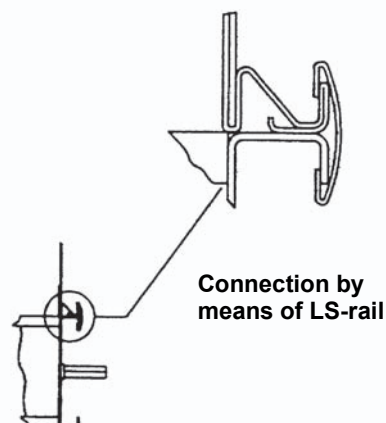


Fig. 2.

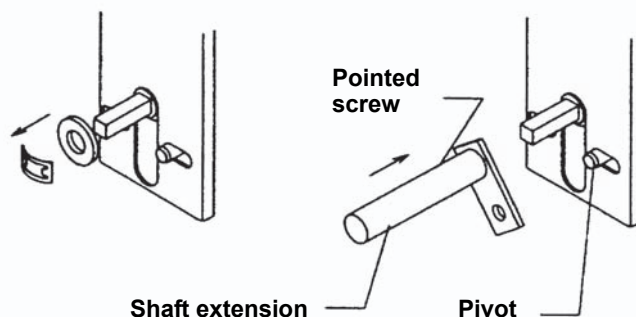


Fig. 3.

Coupling together of two dampers above each other (horizontal shafts) or next to each other (vertical shafts) is accommodated by means of a rod drive (fig. 4).

Manual control

Mount the manual control (fig. 5) mechanism – consisting of a quadrant, operating lever and tightening handle – before the duct is connected. The handle can be mounted in two optional positions at 90° degrees displacement. Furthermore, the whole mechanism can be turned 180° degrees.

Mounting

- Choose location of manual control and remove clips and nylon disc on the chosen shaft end.
- Put the operating lever through the middle slot of the quadrant. The bearing with square hole is pressed in the lever from the inside and out into the quadrant. Carriage bolt is also mounted from the inside and tightening handle is screwed on.
- The whole mechanism is located with the hole centred up to the chosen shaft end after which mounting holes are drilled with the quadrant as drill gauge. Then the quadrant is mounted with tubular rivets from the inside of the damper. Finally, the nylon disc is located above the square shaft and locked with the clips.

Change into parallel operation

The dampers are supplied with opposed damper blades, however, they can be changed into parallel operation as follows (fig. 6).

Remove the shaft end retainers at the operating side and remove the coupling plate; then dismantle every second pilot bearing of the coupling plate.

Afterwards take off the corresponding shaft arms and set them so as to fit into the opposed holes of the coupling plate. Now turn all pivots into the same direction, mount the pilot bearings, push back the regulation plate back to its own position and fasten it by means of the retainers.

Maintenance

The SJD damper requires no maintenance other than keeping the damper free from accumulations of dust or dirt.

This applies to both air path and regulator outside air path.

Furthermore, a regulation free of problems is secured by always making sure the regulator is lubricated, e.g. with graphite grease, where moving metal parts slide against each other.

It is important to notice this if the passing air works degreasingly.

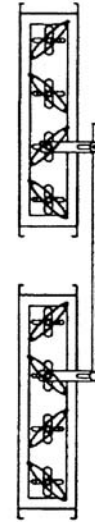


Fig. 4.

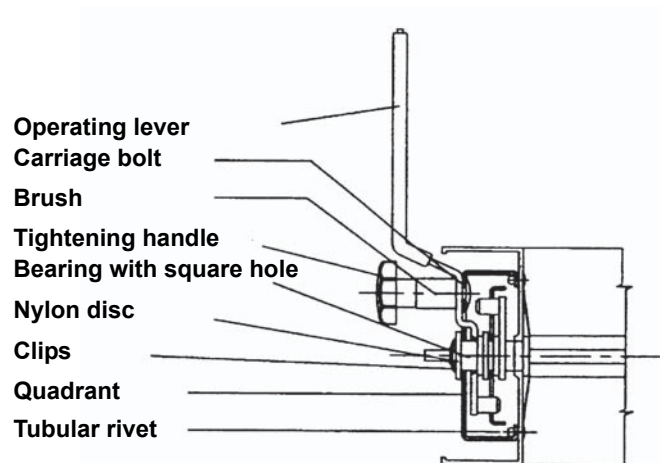


Fig. 5.

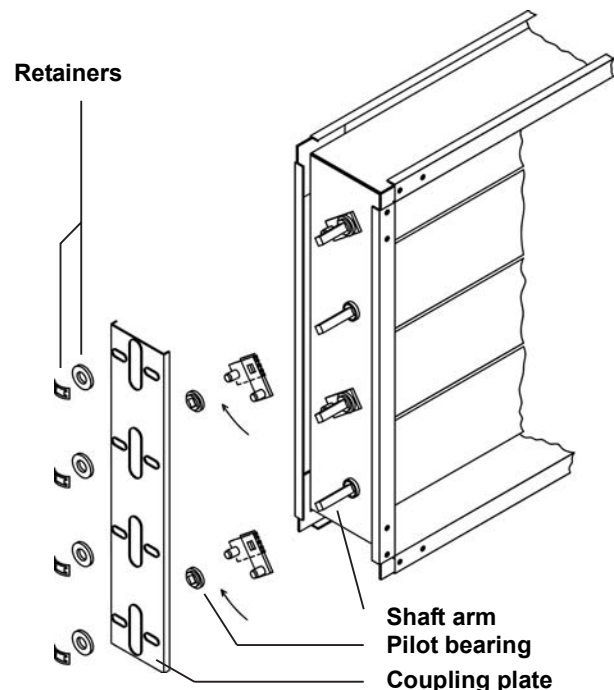


Fig. 6.