

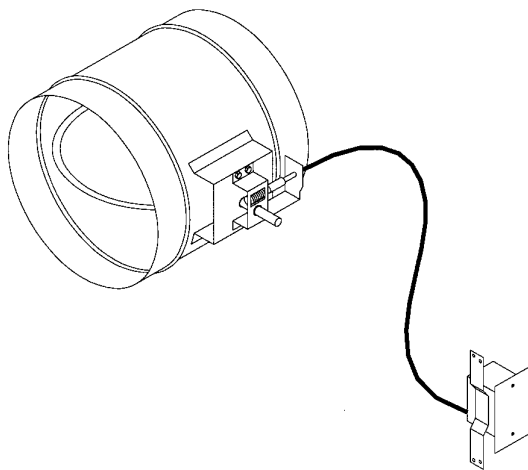
INSTALLATION INSTRUCTIONS RUSKIN CABLE DRIVE DAMPERS MODELS ZCDR25, ZCD36

INSTALLATION:

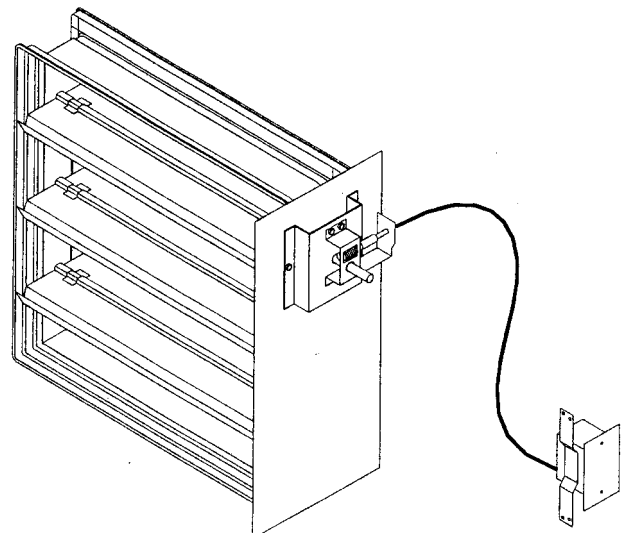
1. Prior to installing damper in duct, check to make sure blades operate freely with no binding or restrictions.
2. Screw or rivet damper to duct. Make sure that fasteners do not interfere with blade operation and that damper is not racked.
3. Adjust worm gear rotation so that set screws will be accessible when in position. Align square shafts so as to catch set screws directly on flats. Set screws are 90° opposed.
4. Slip worm gear assembly over shaft. Tighten (2) set screws onto damper shaft with furnished 1/8" allen key, then secure to duct or mounting plate. Assembly mounts horizontally or vertically as required for best cable run. Test for free operation by rotating cable. Do not attempt to rotate worm gear by pushing on damper blade.
5. Support cables as required at all changes in direction and at 3 foot intervals. Use retaining clips furnished. **NO DRAPING** – cable should be taut or nearly so. 4" minimum turn radius. The longer the cable and the larger the damper – the more attention should be paid to cable support.
6. Fasten ceiling / wall cup or other termination to framing. Align depth for proper fit with finished surface. Depth gage provided. Cable entry to cup may be relocated as required.
7. **TEST** individual damper operation to evaluate cable support scheme prior to ceiling close-up.
8. Install cover plate after ceiling installation and air system balancing, but prior to painting.

OPERATION:

1. Damper may be adjusted with a quality 1/4" nut driver or hex socket wrench. (Thinblade screwdriver if ordered.) Often cable end may be pulled out several inches to ease adjustment.
2. Worm gear has a 20-1 ratio, therefore a 90 degree blade rotation requires five (minimum) complete rotations.
3. Damper will hold set position. Gear design will not allow reverse movement from the damper end.



ZCDR25 WITH FACTORY INSTALLED MOUNTING BRACKET
(WALL MOUNT SHOWN)



ZCD36 SHOWN WITH WALL MOUNT AND
FACTORY INSTALLED SIDE PLATE AND CABLE DRIVE