

## Standard Linkage Kits for use with all models of Hays Cleveland Actuators and Regulators

- **Clevis Assembly (P/N 26908) (Quantity of 2 needed)**

Each P/N 26908 Clevis Assembly consists of a reducing coupling, a threaded linkage adjusting rod, two hex nuts, the clevis, a clevis pin (.371" DIA), and a cotter pin. The reducing coupling is the connection for 1/2" pipe, supplied by the customer at the length appropriate for the application. One complete clevis assembly is needed for each end of the pipe. Attach the clevis and pin to the eyebolt of the actuator at one end of the pipe; attach the clevis and pin at the other end of the pipe to a damper lever arm.

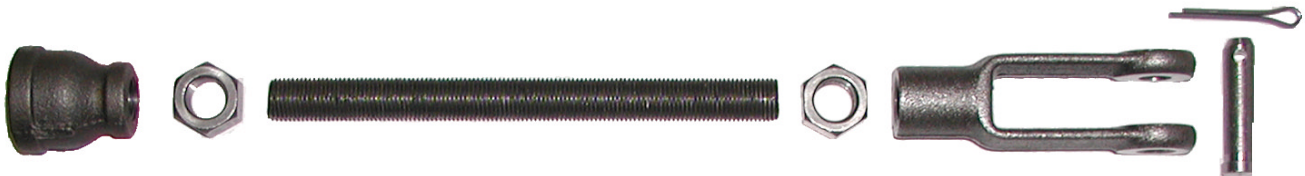


Figure 1

- **Damper Lever Arm Assembly (P/N 11372)**

P/N 11372 Damper Lever Arm includes a two-piece lever arm, two set screws, two hexhead screws with hex nuts, and a sleeve bearing (.376" ID) which can be inserted into the appropriate hole in the lever arm for the application. The Damper Lever Arm accepts any shaft size from .50" dia to 1.375" dia. Attach the damper lever arm to a damper shaft at a 45° angle to the damper as shown in Figure 5.



Figure 2

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## Mounting

These instructions are specific to connecting a draft actuator or regulator to an uptake damper. Other applications are possible, and are installed similarly.

Typical linkage for connecting the thrust bar of a linear actuator or the output shaft of a rotary actuator to an uptake damper consists of a lever arm, two clevis assemblies, and at least a 2-foot length of 1/2" pipe. The linear draft actuator or regulator should be mounted to create a straight line of thrust through at least two feet of linkage (including pipe) to the damper lever arm. The actuator or regulator thrust arm should be fully retracted when the damper lever places the damper in the fully closed position.

1. Place the damper in fully closed position.
2. Attach the lever arm at 45° angle to the damper as shown in Figure 3.
3. Insert the bronze bushing into one of the holes in the lever arm. For most applications, the third hole provides sufficient damper movement for effective draft control. Figure 2 shows the approximate damper travel from various holes.
4. Attach one clevis to the lever arm with the clevis pin through the bushing.
5. Attach the other clevis to the actuator or regulator thrust bar with the clevis pin through the eyebolt. Thrust bar should be fully retracted; damper fully closed.
6. Adjust each clevis so that about 1" of thread extends through the adaptors.
7. Install length of 1/2" pipe between adaptors. Length must be at least 12". At least 2 feet is recommended; the longer the linkage the more effective the thrust.
8. Before operating actuator or regulator electrically, disconnect the clevis at the thrust bar by removing the pin. Hold the clevis in position (as if connected), and run the actuator/regulator through the full cycle of travel, moving the damper correspondingly. Make sure the linkage moves freely and the damper travels to desired open and closed positions.
9. Reconnect the linkage. The damper is now ready for operation.

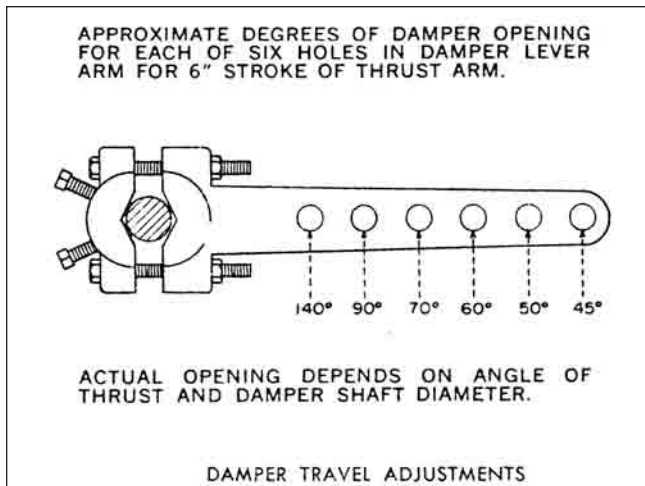


Figure 3

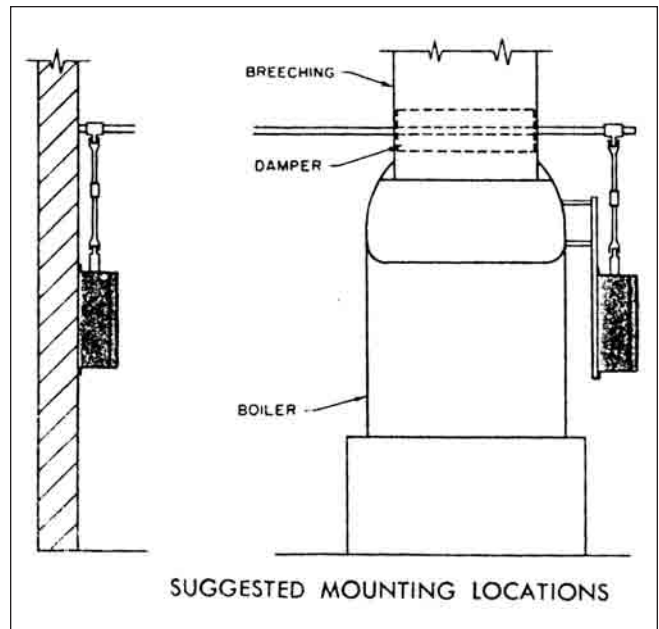


Figure 4

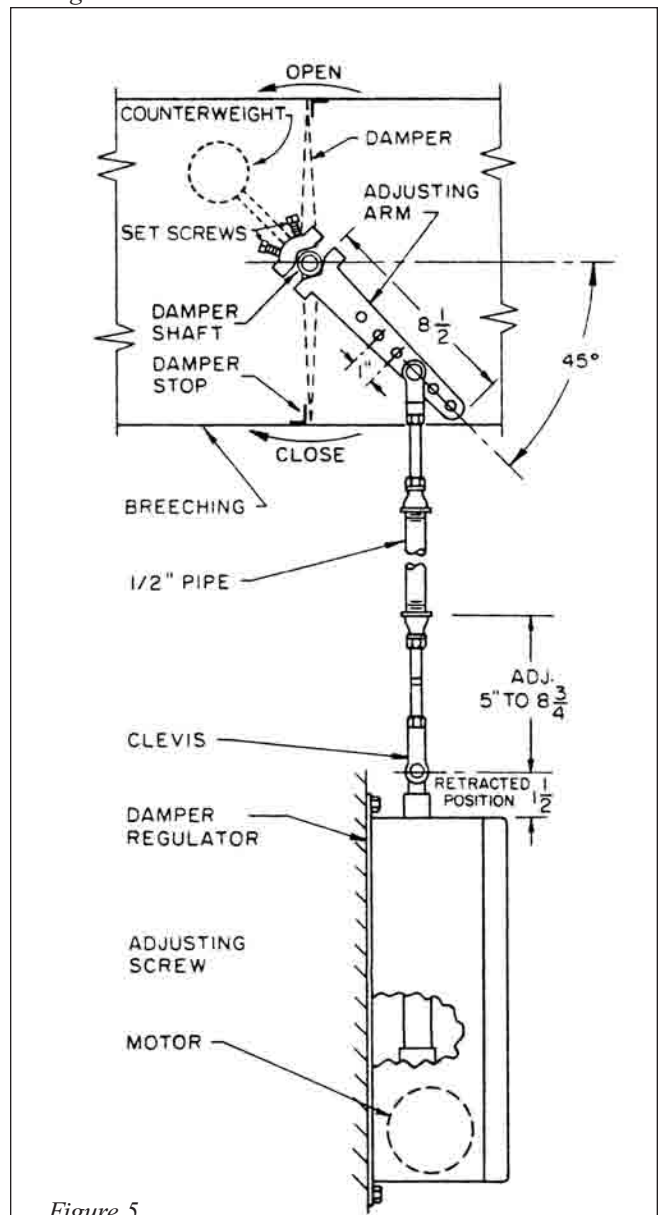


Figure 5