

INSTALLATION, MAINTENANCE & OPERATING MANUAL FOR 4" & 6" ADJUSTABLE LOUVERS

RECEIVING / INSPECTION:

INSPECT SHIPPING CRATES/CARTONS CLOSELY. IF SHIPPING CRATES/CARTONS ARE DAMAGED, CONTENTS MAY ALSO BE DAMAGED. NOTE ANY VISIBLE DAMAGE ON THE TRUCKERS RECEIPT. CONTACT THE FREIGHT COMPANY WITHIN 24 HOURS FOR A REPRESENTATIVE TO INSPECT THE DAMAGE.

STORAGE:

STORE CRATE/CARTONS IN A SAFE LOCATION AWAY FROM CONSTRUCTION TRAFFIC. COVER WITH A TARP OR WATERPROOF COVER TO PROTECT FROM MOISTURE, DIRT, AND DEBRIS. ARROW RECOMMENDS LEAVING THE PRODUCTS IN THEIR CONTAINERS UNTIL READY TO INSTALL.

INSTALLATION:

INSPECT FOR DAMAGE AND CORROSION BEFORE INSTALLATION. HANDLE LOUVERS BY THE FRAME TO ENSURE THE LOUVER WILL NOT BECOME RACKED OR TWISTED. DO NOT LIFT LOUVER BY THE ACTUATOR MOUNTING BRACKET, BLADES, OR USE BLADES AS A LADDER. USE SUFFICIENT SUPPORT TO EVENLY LIFT EACH LOUVER AND LOUVER SECTION. DO NOT DROP, DRAG, STEP ON, OR APPLY EXCESSIVE BENDING OR TWISTING FORCE WHEN HANDLING LOUVERS. INSTALL LOUVER WITH RESPECT TO BLADE ORIENTATION AND AIRFLOW. LOUVERS MUST BE INSTALLED SQUARE AND PLUMB. AFTER LOUVER INSTALLATION SEAL, CAULK THE GAP BETWEEN THE OPENING SUBSTRATE AND PERIMETER LOUVER FRAME.

LOUVER MAINTENANCE:

INSPECT FOR AND REMOVE ANY FOREIGN MATTER THAT MAY HAVE ACCUMULATED ON BLADE, FRAME, SCREEN OR OTHER SURFACE, WHICH WILL CAUSE INTERFERENCE WITH THE MOVEMENT OR RESISTANCE OF AIRFLOW.
INSPECT ALL MOVING PARTS, AS BLADES, LINKAGE, BEARINGS, AND AXLES FOR FREE OPERATION. CLEAN AND LIGHTLY LUBRICATE THESE SURFACES WITH A MOLLY-SPRAY OR DRY GRAPHITE AS REQUIRED TO MAINTAIN A SMOOTH OPERATION. NEVER USE REGULAR LUBRICATING OIL, AS IT TENDS TO ATTRACT DIRT AND GRIT.
CHECK FOR AND REMOVE ANY FOREIGN MATERIALS THAT MAY INTERFERE WITH COMPLETE BLADE CLOSURE OR EFFECTIVE SEALING.
OBSERVE THE UNITS THROUGH FULL OPERATING CYCLE. TIGHTEN ANY LOOSE CONNECTIONS AT THE ACTUATOR. IF THE UNITS DOES NOT OPEN OR CLOSE PROPERLY, ADJUSTMENTS SHOULD BE MADE AT THE ACTUATOR LINKAGE. IT MAY BE ADVISABLE TO HAVE THE ADJUSTMENT ACCOMPLISHED BY A LOCAL CONTROL CONTRACTOR.

LOUVER FINISH CLEANING:

LOUVERS WITH A FINISH APPLIED TO IT'S SURFACE THAT REQUIRES CLEANING DO NOT USE ANY TOOLS, OR BRUSHES THAT WILL ABRASE THE COATING SURFACE. DO NOT USE HARSH CHEMICAL CLEANING SOLUTIONS AS AROMATIC, CHLORINATED, KEYTONES, ESTERS, THINNERS, AND PAINT REMOVER ON LOUVER FINISH. INSTEAD, USE WATER WITH A 5% SOLUTION OF A COMMERCIAL DETERGENT WITH A CLOTH FOR THE CLEANING APPLICATION FOLLOWED BY AN ADEQUATE RINSE OF CLEAN WATER AND DRY THE FINISH WITH A SOFT CLOTH.
USE SOLVENT AS MINERAL SPIRITS, TO REMOVE NON-WATER SOLUBLE DEPOSITS AS TAR, GREASE, OIL, ETC. FROM THE LOUVER FINISH.

WARRANTY:

MISUSE OR ABUSE OF THE CLEANING MATERIALS LISTED ABOVE WILL RESULT IN VOIDING THE WARRANTY FOR THE SURFACE AREA AFFECTED.



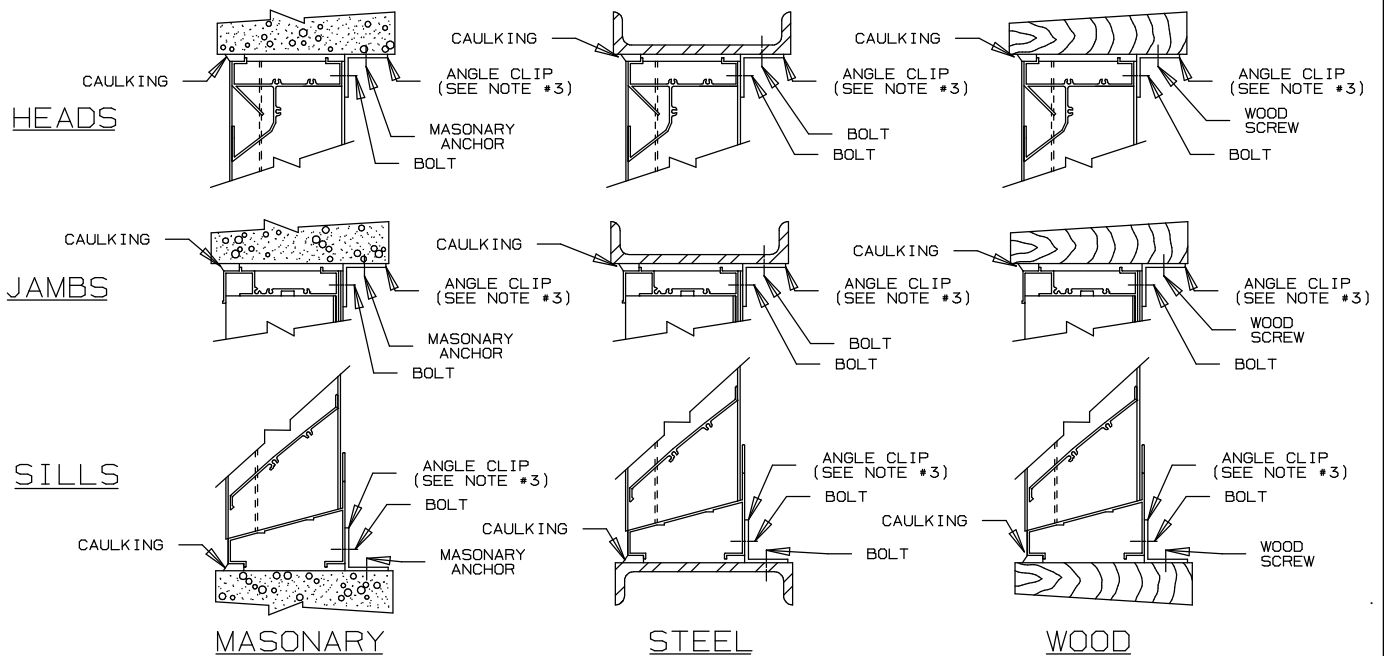
ARROW UNITED INDUSTRIES
A DIVISION OF MESTEK, INC.

314 RIVERSIDE DRIVE
WYALUSING, PA 18853

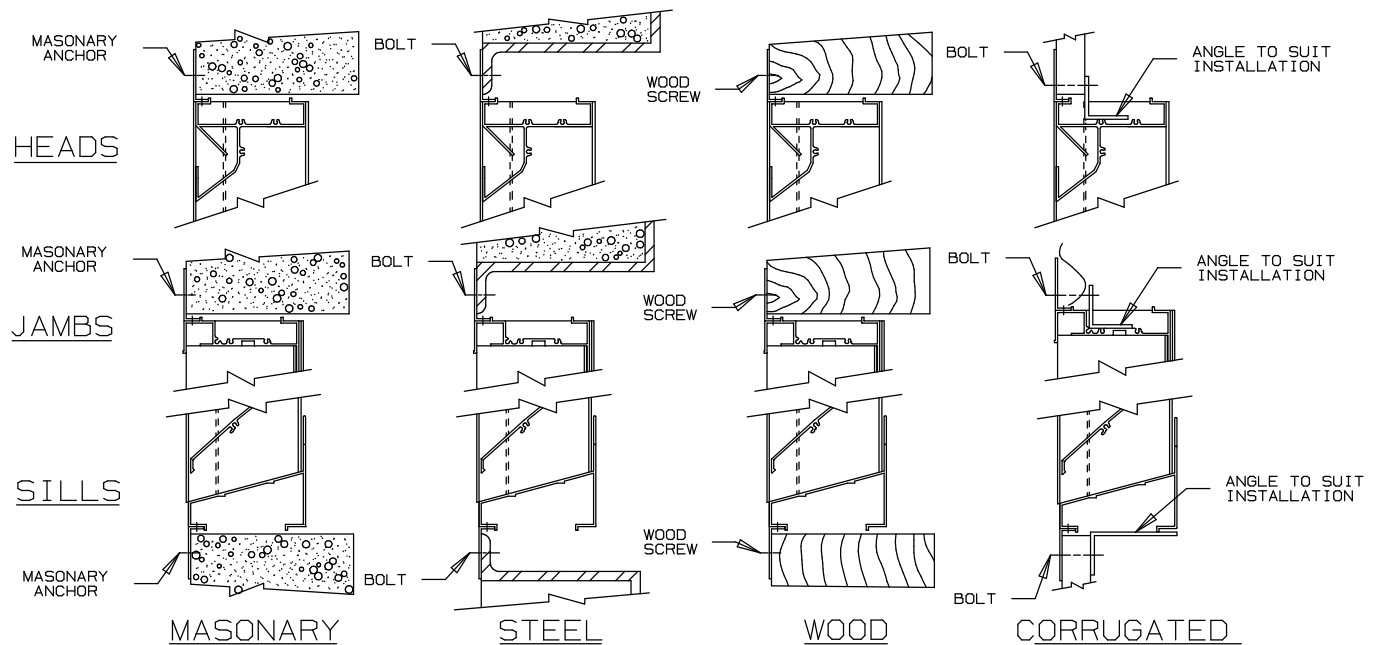
TEL: (570) 746-1888 FAX: (570) 746-9286

STANDARD INSTALLATION METHODS

STANDARD CHANNEL FRAME

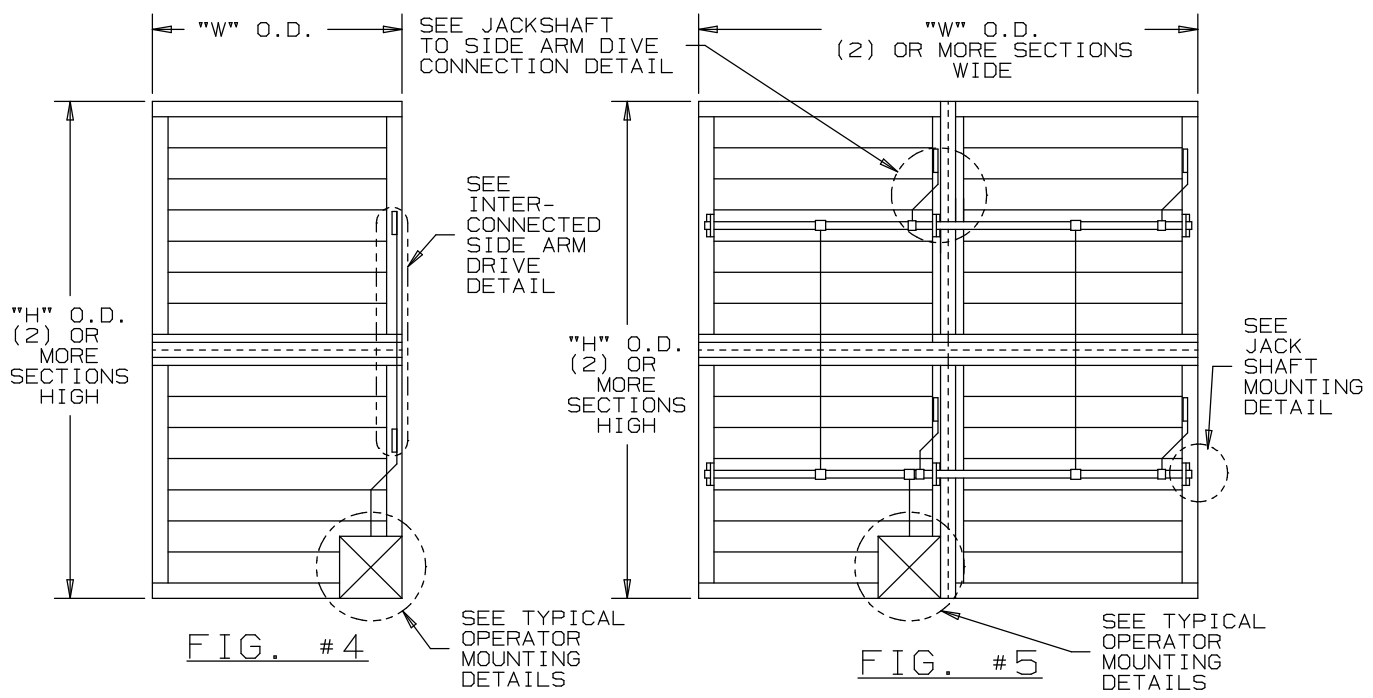
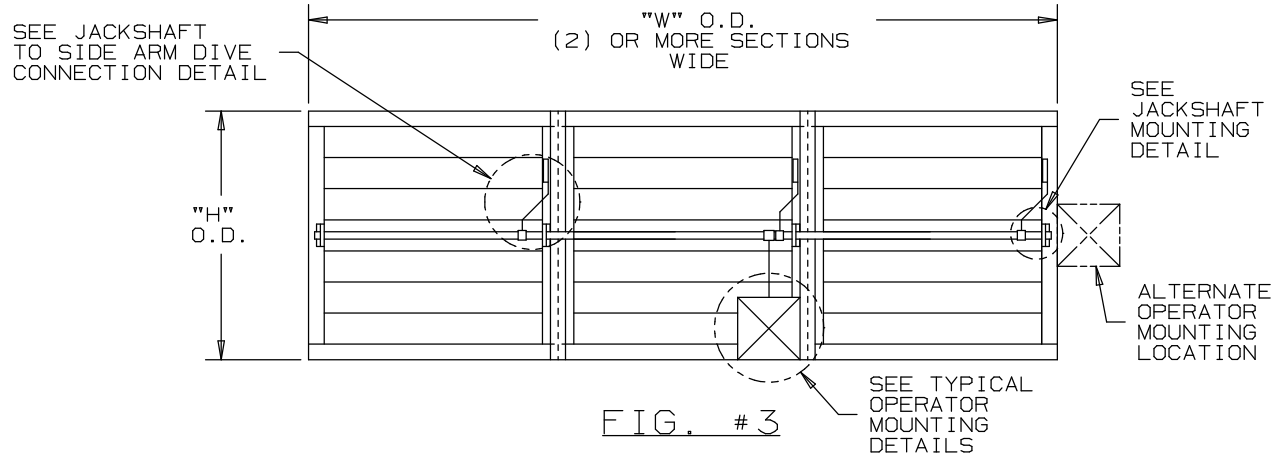
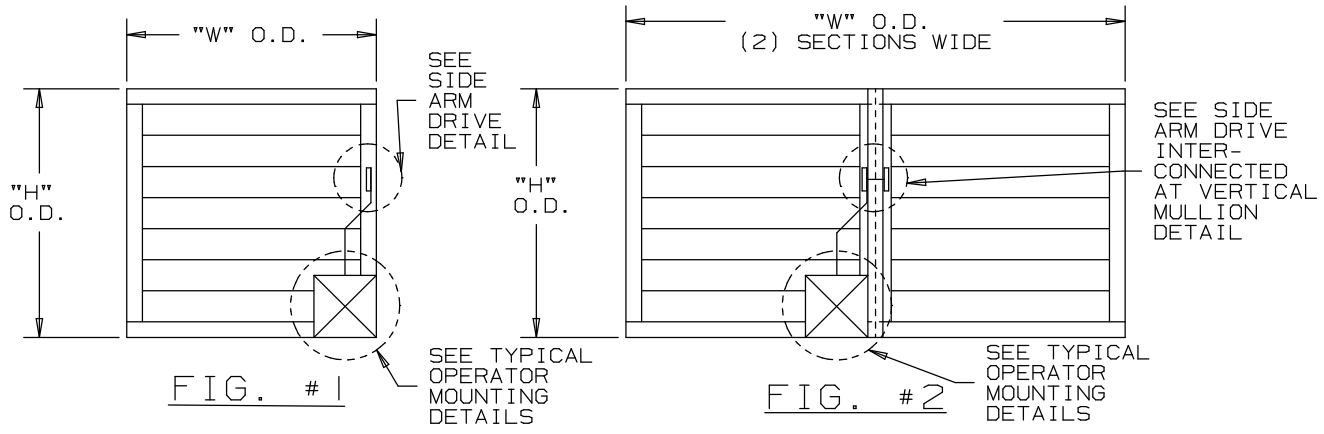


STANDARD FLANGE FRAME



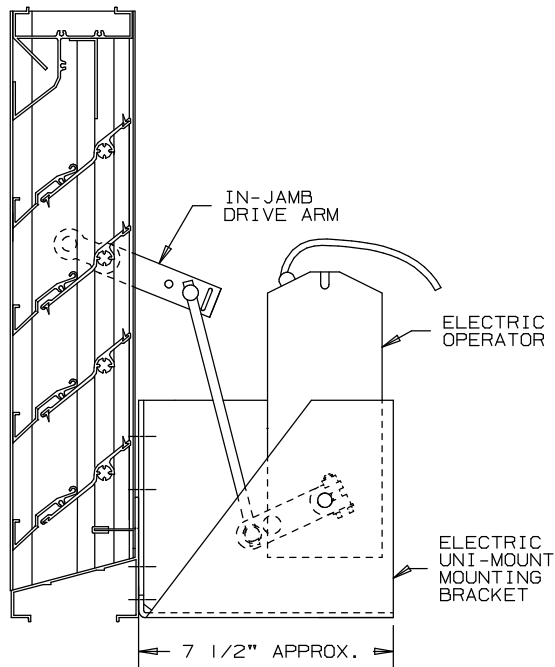
INSTALLATION NOTES:

- 1) LOUVER WIDTH AND HEIGHT DIMENSIONS ARE NORMALLY UNDERSIZED TO ALLOW FOR INSTALLATION INTO THEIR OPENINGS. ARROW STANDARD UNDERSIZE IS 1/2" FROM THE GIVEN OPENING SIZE. OTHER DEDUCTIONS AVAILABLE BY REQUEST.
- 2) THE DETAILS SHOWN HERE ARE ONLY GENERAL MOUNTING ARRANGEMENTS AND COVER MOST INSTALLATION CONDITIONS FOR LOUVER WALL OPENINGS FOR SINGLE LOUVER SECTION. MULTIPLE LOUVER SECTIONS IN WIDTH AND/OR HEIGHT MAY REQUIRE STRUCTURAL SUPPORTS AT THE INTERIOR SIDE OF THE LOUVER SURFACE. STRUCTURAL SUPPORTS, CLIP ANGLES, MOUNTING FASTENERS, SEALANT, SHIMS, ETC. ARE TO BE FURNISHED AND INSTALLED BY OTHERS, NOT BY ARROW.
- 3) THE RECOMMENDED MINIMUM MOUNTING OF LOUVERS INTO THEIR OPENINGS IS A 1 1/2" x 1 1/2" x 1/8" CONTINUOUS OR CLIP ANGLE AT THE INTERIOR SIDE OF THE LOUVER FRAME WITH 1/4" DIAMETER FASTENERS ON 18" CENTERS AROUND THE LOUVER FRAME PERIMETER. ONE FASTENER IN EACH ANGLE LEG.
- 4) LOCAL BUILDING CODES MAY VARY THE INSTALLATION FROM THE CONDITIONS DESCRIBED ABOVE AND IS SUGGESTED THAT THEY BE FOLLOWED OVER OURS WHEN AND WHERE REQUIRED.

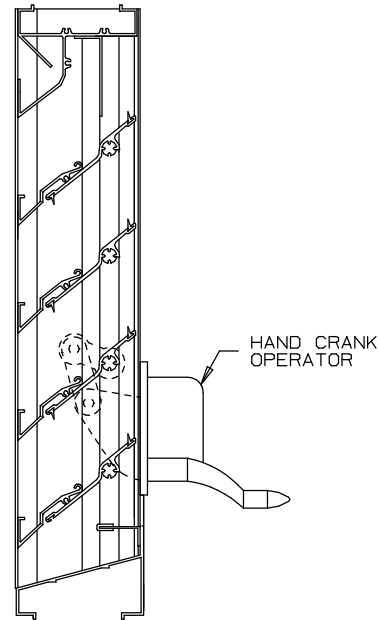


- NOTES:
1. THE SCHEMATICS ABOVE SHOW ACTUATOR ARRANGEMENTS IN STANDARD LOCATIONS. THESE SCHEMATICS ALSO SHOW STANDARD LOCATIONS FOR LINKAGE CONNECTIONS
 2. ACTUATOR ASSEMBLIES FOR SINGLE PANEL LOUVERS ARE SHIPPED LOOSE FOR FIELD ASSEMBLY. MULTI-PANELS, LINKAGE, AND ACTUATOR COMPONENTS ARE SHIPPED LOOSE FOR FIELD ASSEMBLY BY OTHERS.
 3. ELEVATIONS OF SCHEMATICS ARE VIEWED FROM THE INTERIOR (REAR) FACE OF LOUVER.

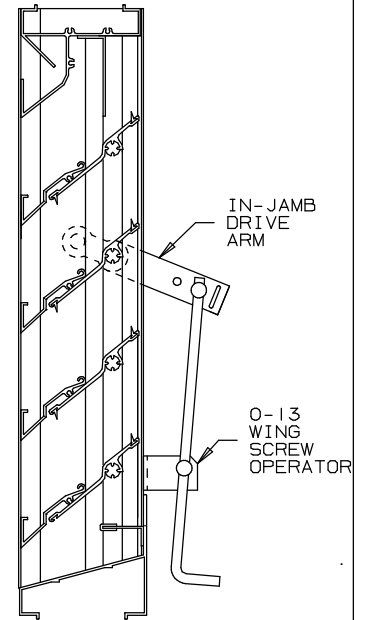
TYPICAL OPERATOR MOUNTING DETAILS



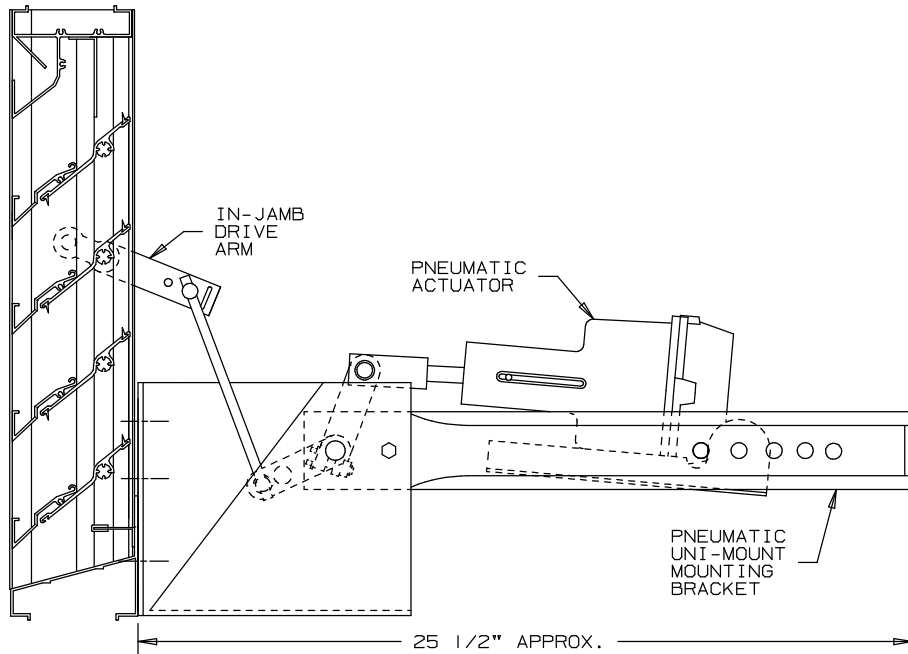
ELECTRIC OPERATOR



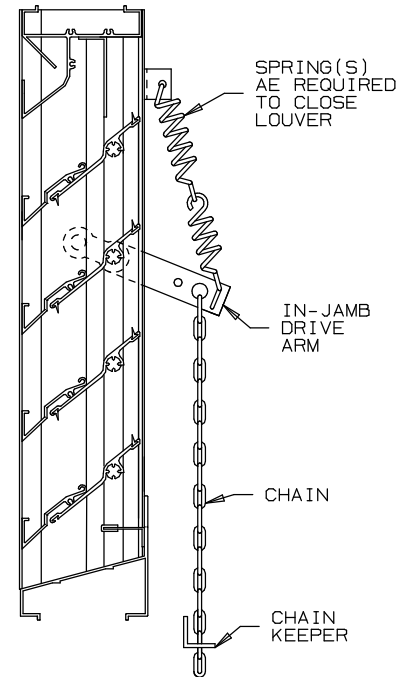
0-24/0-25 HAND
CRANK OPERATOR



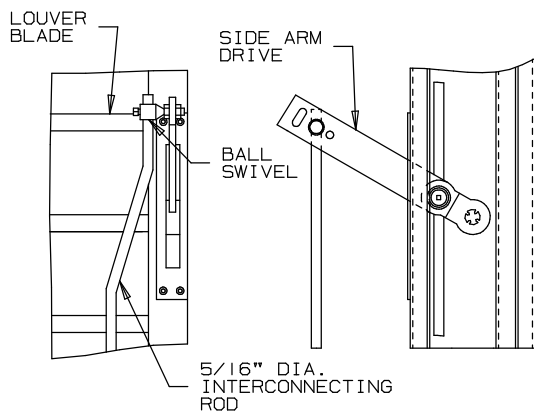
0-13 WING SCREW
OPERATOR



PNEUMATIC OPERATOR



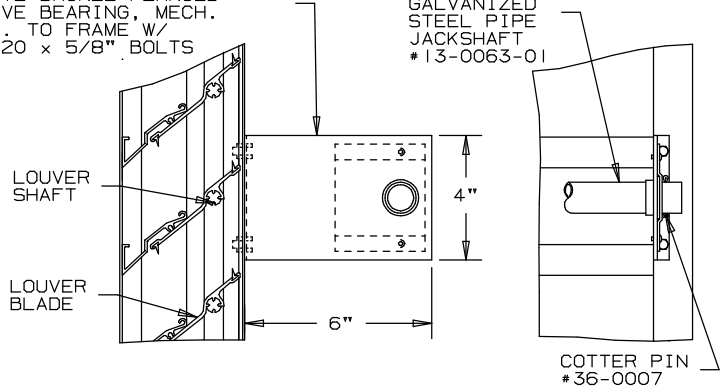
0-17 CHAIN OPERATED
SPRING CLOSURE



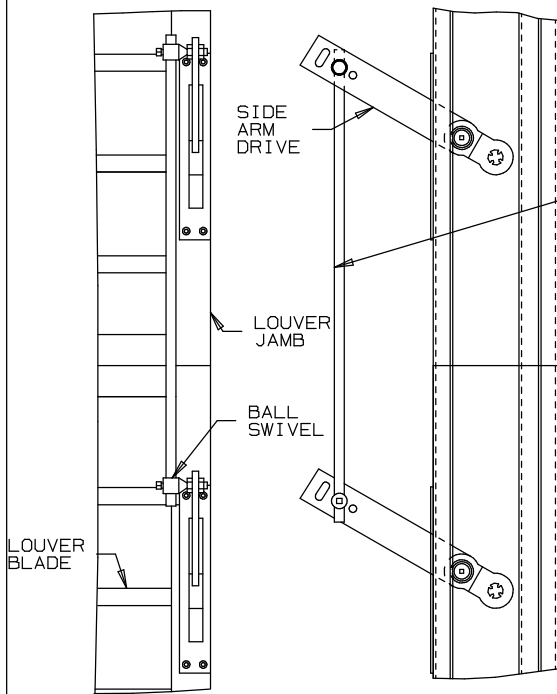
SIDE ARM DRIVE
DETAIL

JACKSHAFT BEARING MOUNTING BRACKET #36-0179-01 WITH OILITE BRONZE FLANGED SLEEVE BEARING, MECH. FAST. TO FRAME W/ 1/4-20 x 5/8" BOLTS

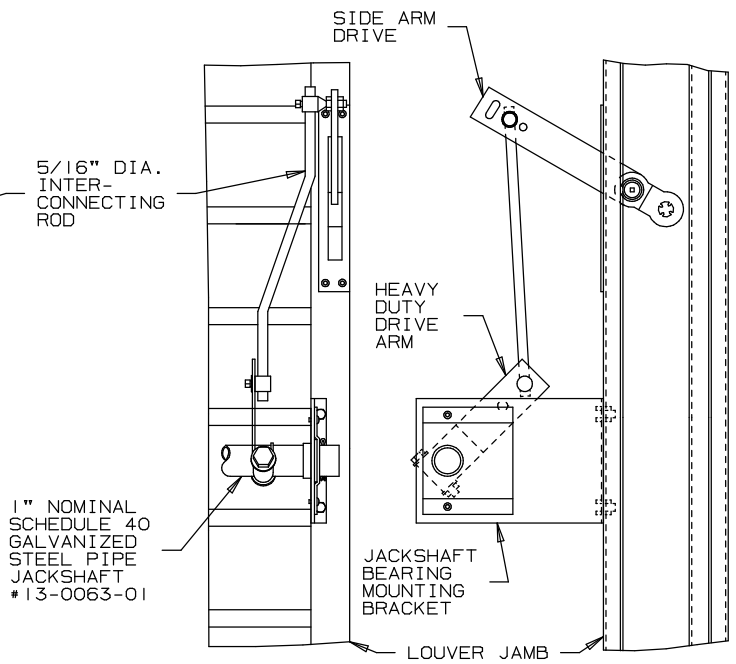
1" NOMINAL SCHEDULE 40 GALVANIZED STEEL PIPE JACKSHAFT #13-0063-01



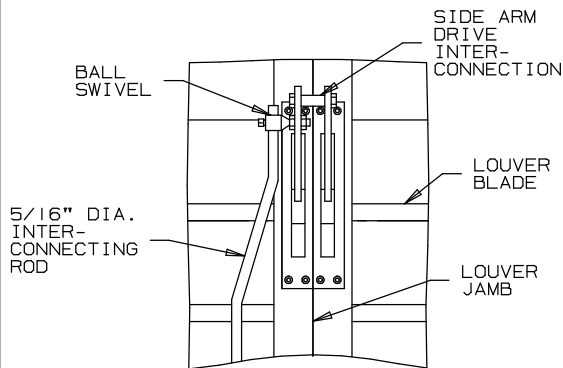
JACKSHAFT MOUNTING
DETAIL



INTERCONNECTED SIDE ARM
DRIVE DETAIL



JACKSHAFT TO SIDE ARM
DRIVE CONNECTION DETAIL



SIDE ARM DRIVE
INTERCONNECTED
AT VERTICAL MULLION
DETAIL