

SQUARE D®

CLASS 9423, TYPE M10

DOOR CLOSING MECHANISM

For Single or Multiple Door Enclosures
with 40" High Maximum Door Openings

Instruction Sheet
30072-309-07-D
March, 1981

GENERAL

This kit is designed for use:

- on doors for NEMA 1 or 12 enclosures,
- on doors constructed of 10-16 gauge material,
- on doors of 1-1/8, 1-1/4, 1-3/8, 1-1/2 inch depth,
- on doors hinged on left hand side,
- on doors for enclosures with or without a Class 9422 Flange Mounted Operating Mechanism.

ENCLOSURE CONSTRUCTION

1. See Figure 5 for enclosure construction and dimensional limitations.

NOTE: Standard enclosures designed to accept Square D door closing mechanism are available from several enclosure manufacturers. These enclosures are pre-drilled and often include a cover interlock bracket and other items of door hardware. A pre-drilled cover latch bar may also be furnished. As a result, purchased enclosures may not require some parts included in the Type M10 Kit.

2. If door closing mechanism is used with a disconnect switch or circuit breaker operating mechanism, see appropriate Class 9422 instruction sheet for flange drilling information and additional construction dimensions. Measure dimension B and drill hole A per Figure 3 or 4. See table below for figure selection.

B (range)	Figure
1-11/16 to 5-5/16	3
5-5/16 or more	3 or 4

If door closing mechanism is used independently, roller latch assembly may be assembled either per Figure 3 or Figure 4.

3. Drill all remaining holes shown in Figure 5 observing minimum dimensions. Assemble cover interlock blade, items 1, and cover interlock angle, item 2, with (2) screw assemblies, item 22, for appropriate door depth as shown in Figure 6. Weld or rivet (rivets are included with the handle mechanism kit) cover interlock angle to door. If post (customer supplied item) is to be welded to door, weld it at this time as shown in Figure 1A. Enclosure may be painted at this time.
4. Fabricate cover latch bar from 1/4" x 1/2" steel bar per Figure 2. Determine dimensions C and D by measuring appropriate holes in enclosure door as shown in Figure 5. Determine dimension A by measuring between flange and door holes as shown in Figure 3 or 4.

INSTALLATION

1. Attach 1/2" wide gasket around inside of door as shown in Figure 1.
2. Rivet spacers, item 3, roller latch arms, item 4, to cover latch bar with rivets, item 23. Rivet latch bracket, item 15 to cover latch bar with rivet item 27. **NOTE:** Roller latch arms and bracket must be free to rotate. Attach latch bar angle, item 5, to cover latch bar with (2) screw assemblies, item 24. Assemble latch bar blade, item 6, to latch bar angle with (2) screw assemblies, item 22, for appropriate door depth as shown in Figure 6.
3. Position gasket, item 7, and front plate assembly, item 8, on door. Thread deflector pin bushing, item 9, and handle shaft bushing, item 10, into front plate assembly.
4. If post has not been welded to door, mount gasket, post, (customer supplied items) roller latch arms, item 4, and washer, item 11, to door with screw, lock-washer, and nut (customer supplied item) as shown in Figure 1. If post has been welded to door, mount roller latch arms and washer to post with screw and lockwasher (customer supplied items) as shown in Figure 1A.
5. Place "O" ring, item 12, in groove in handle assembly, item 13. Lubricate handle assembly shaft and slide handle assembly into handle shaft bushing, item 10. Engage latch bar spring, item 14, with latch bracket, item 15, and place them over the handle shaft bushing. Latch bar spring must be positioned as shown in Figure 1. Secure handle assembly with lockwasher and nut, items 25 and 26.
6. Place cover interlock spring, item 16, over deflector pin bushing, item 9, and position as shown in Figure 1. Place "O" ring, item 17, in groove in deflector pin, item 18, and lubricate deflector pin. Slide deflector pin into deflector pin bushing. Assemble locking lever blade, item 19, and locking lever base, item 20, with (2) screw assemblies and nuts, items 28 and 29, for appropriate door depth as shown in Figure 6. Slide locking lever base onto deflector pin and engage cover interlock spring. Secure with lockwasher and nut, items 25 and 26.
7. Apply pressure sensitive instruction plate, item 21, to enclosure flange adjacent to handle assembly. **NOTE:** Flange must be clean and dry for instruction plate to adhere.

ADJUSTMENT PROCEDURE

When these door closing mechanisms are used with a switch or circuit breaker operating mechanism, check the following:

1. With switch or circuit breaker in "OFF" position, open door with screwdriver per instruction plate, item 21.
2. Close door but do not turn door handle. Door should latch so that it cannot again be opened without a screwdriver. It should not be possible to close the disconnect switch or circuit breaker with door in this position.
3. Turn door handle to handle stop. Door should seal tightly. It should now be possible to close the disconnect switch or circuit breaker if the latch bar blade, item 6, has been positioned correctly. Adjust blade if required.
4. With disconnect switch or circuit breaker in "ON" position, it should not be possible to open door. If door can be opened, bend cover interlock blade, item 1, downward. If entry to controller is desired with the switch or breaker in the "ON" position: **FIRST** — Unlatch door handle and maintain opening pressure. **SECOND** — Operate defeater screw in disconnect handle. Door should now open.

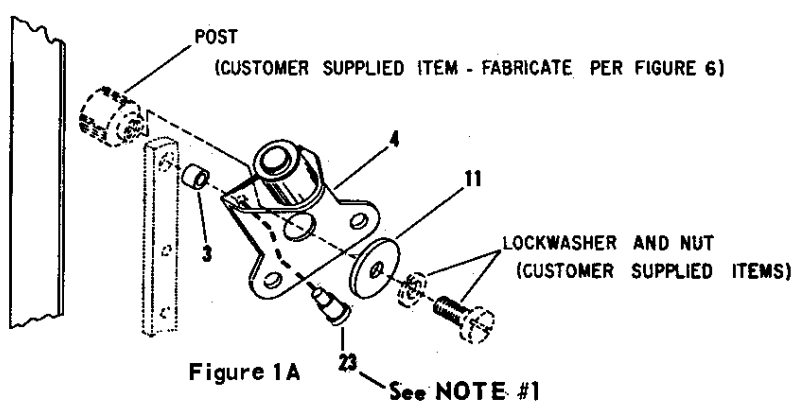
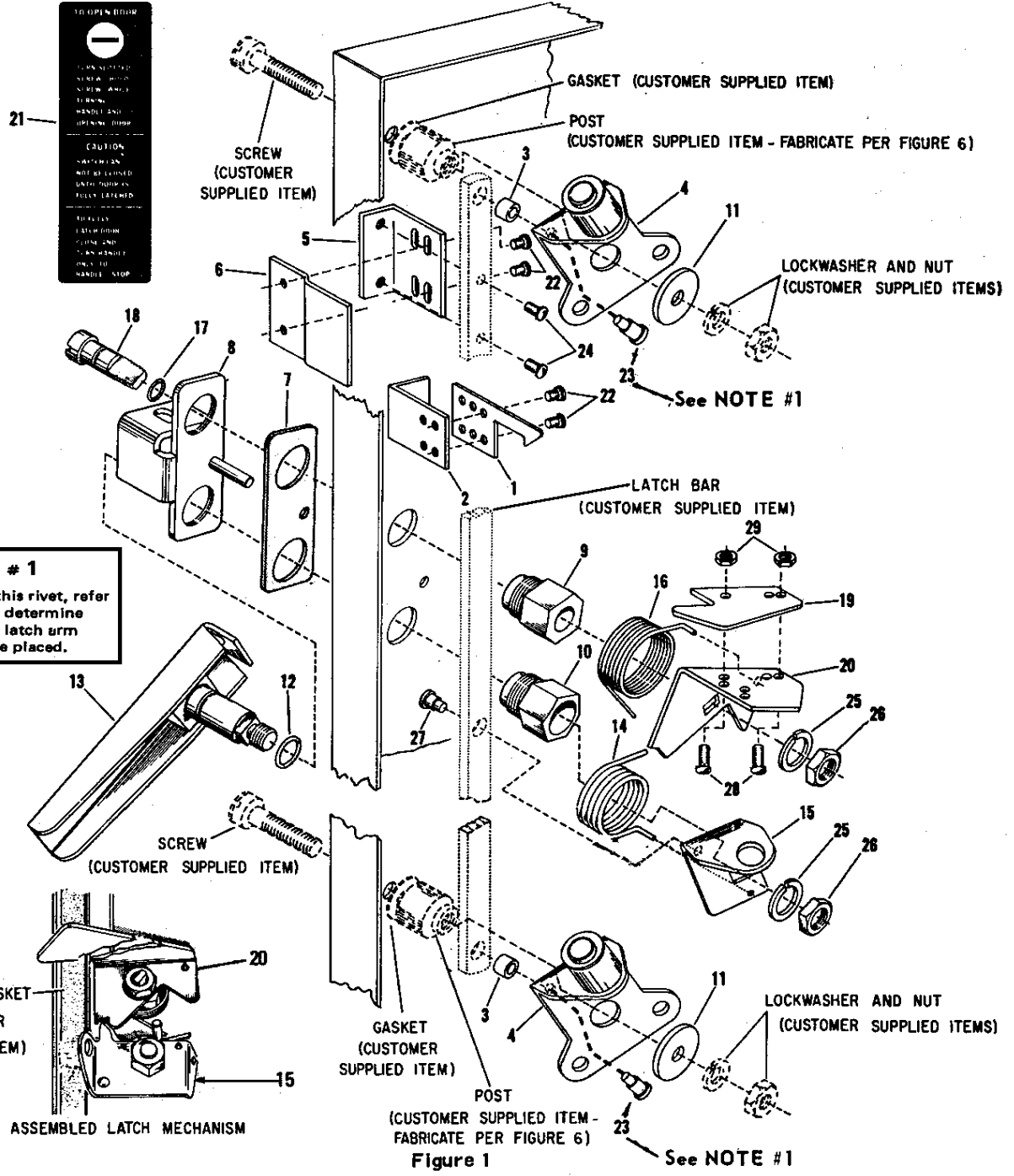
PARTS LIST

Item	Description	Part Number	Quantity
1	Cover Interlock Blade	30007-213-01	1
2	Cover Interlock Angle	30007-218-01	1
3	Spacer 3/8 x 3/8 (for 1-1/8" deep doors)	30007-219-01	2
	Spacer 3/8 x 1/2 (for 1-1/4" deep doors)	30007-219-02	2
	Spacer 3/8 x 5/8 (for 1-3/8" deep doors)	30007-219-03	2
	Spacer 3/8 x 3/4 (for 1-1/2" deep doors)	30007-219-04	2
4	Roller Latch Arm	30007-139-50	2
5	Latch Bar Angle	30007-214-01	1
6	Latch Bar Blade	30007-215-01	1
7	Gasket	31008-050-01	1
8	Front Plate Assembly	31008-120-50	1
9	Defeater Pin Bushing	31008-118-01	1
10	Handle Shaft Bushing	31008-119-01	1
11	Washer 1/4	23602-11606	2
12	"O" Ring 3/8	29206-00240	1
13	Handle Assembly	31008-125-50	1
14	Latch Bar Spring	31008-043-01	1
15	Latch Bracket	31008-058-02	1
16	Cover Interlock Spring	31008-044-01	1
17	"O" Ring 1/4	29206-00160	1
18	Defeater Pin	31008-061-01	1
19	Locking Lever Blade	30007-212-01	1
20	Locking Lever Base	30007-211-02	1
21	Instruction Plate	30009-032-01	1
22	Screw Assembly 8-32 x 1/4	21911-14081	4
23	Rivet 1/4 x 29/32 (for 1-1/8" deep doors)	30007-216-01	2
	Rivet 1/4 x 1-1/32 (for 1-1/4" deep doors)	30007-216-02	2
	Rivet 1/4 x 1-5/32 (for 1-3/8" deep doors)	30007-216-03	2
	Rivet 1/4 x 1-9/32 (for 1-1/2" deep doors)	30007-216-04	2
24	Screw Assembly 8-32 x 7/16	21911-14141	2
25	Lockwasher 3/8	23701-00240	2
26	Nut 3/8-16	23003-00240	2
27	Rivet 5/16 x 7/16	31008-124-01	1
28	Screw Assembly 8-32 x 1/2	21911-14161	2
29	Nut 8-32	23001-00140	2

TO OPEN DOOR

TURN HANDLE
TO THE RIGHT
UNTIL YOU
HEAR A
CLICKING
SOUND AND
THE DOOR
OPENS.

CAUTION
DO NOT
FORCE THE
DOOR OPEN
IF IT DOES
NOT OPEN
EASILY.
IF IT DOES
NOT OPEN
EASILY,
CALL A
LOCKSMITH.



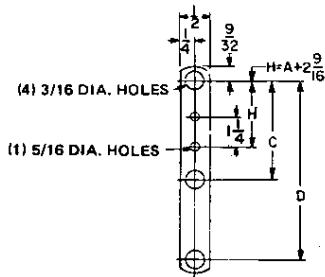


Figure 2
Cover Latch Bar

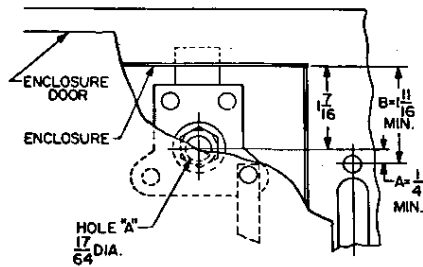


Figure 3

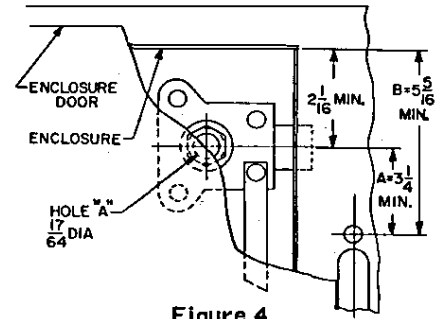


Figure 4

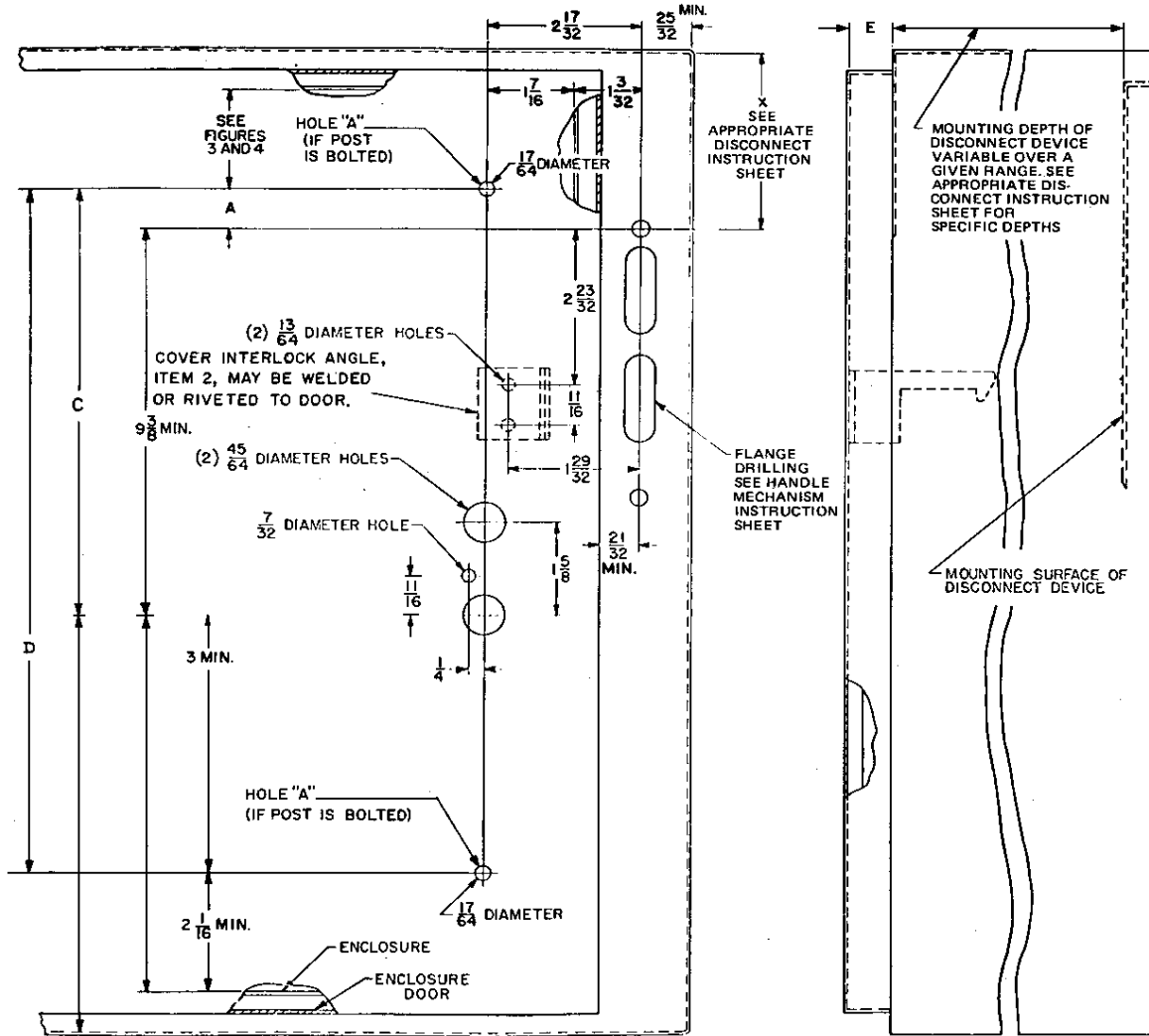


Figure 5. Enclosure Construction

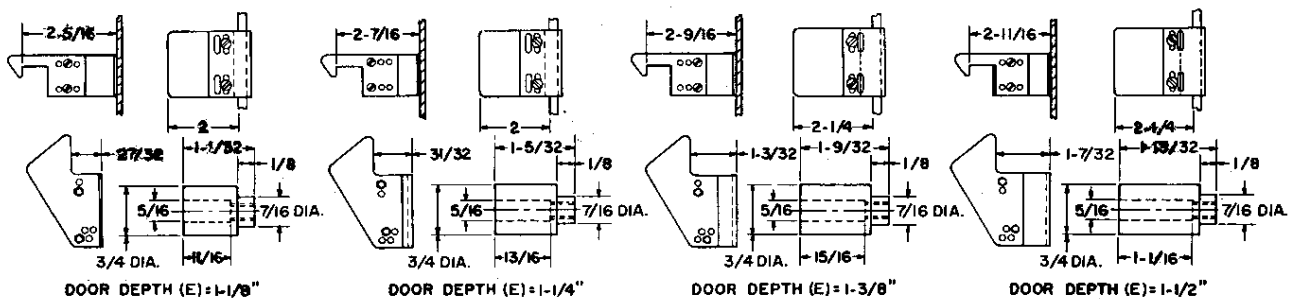


Figure 6. Variable Depth Parts