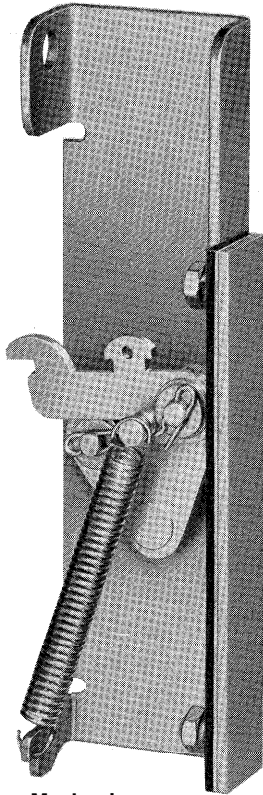


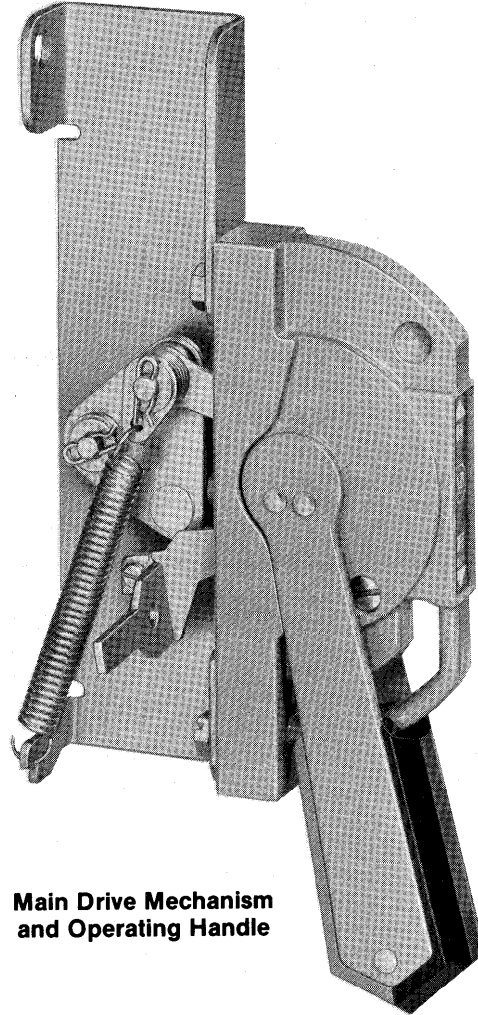


# REMOTE OR DUAL OPERATING MECHANISM

Used With Disconnect Switches (Cat. nos. 1494V-DS30, 1494V-DS60 and 1494V-DS100)  
and Circuit Breaker Mechanisms (Cat. nos. 1494V-M19 and 1494V-M20)



Remote Drive Mechanism



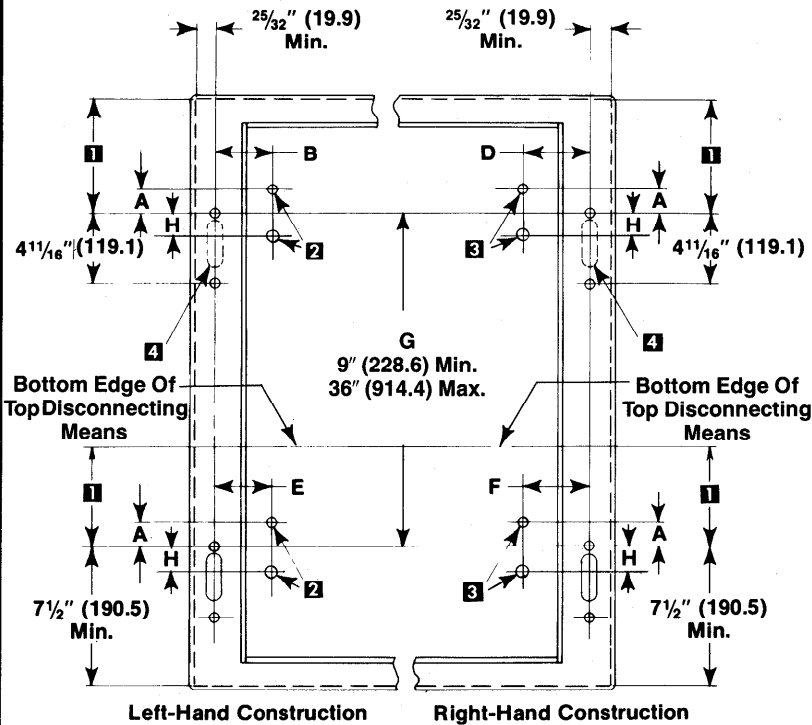
Main Drive Mechanism  
and Operating Handle

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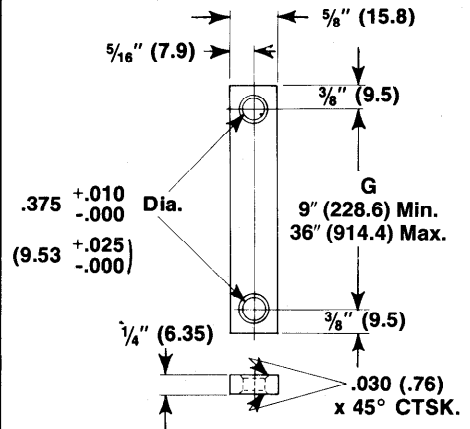
# Allen-Bradley Parts

**FIGURE 1 — Enclosure Construction**



- 1 Refer to Dimension "C" on disconnecting means instruction sheet.
- 2 Upper left-hand mounting hole of disconnecting means.
- 3 Upper right-hand mounting hole of disconnecting means.
- 4 Slot not required to mount the remote drive mechanism. Flange plate for mounting the remote drive mechanism will close the slot when a standard enclosure is used.

**FIGURE 3 — Connecting Bar**

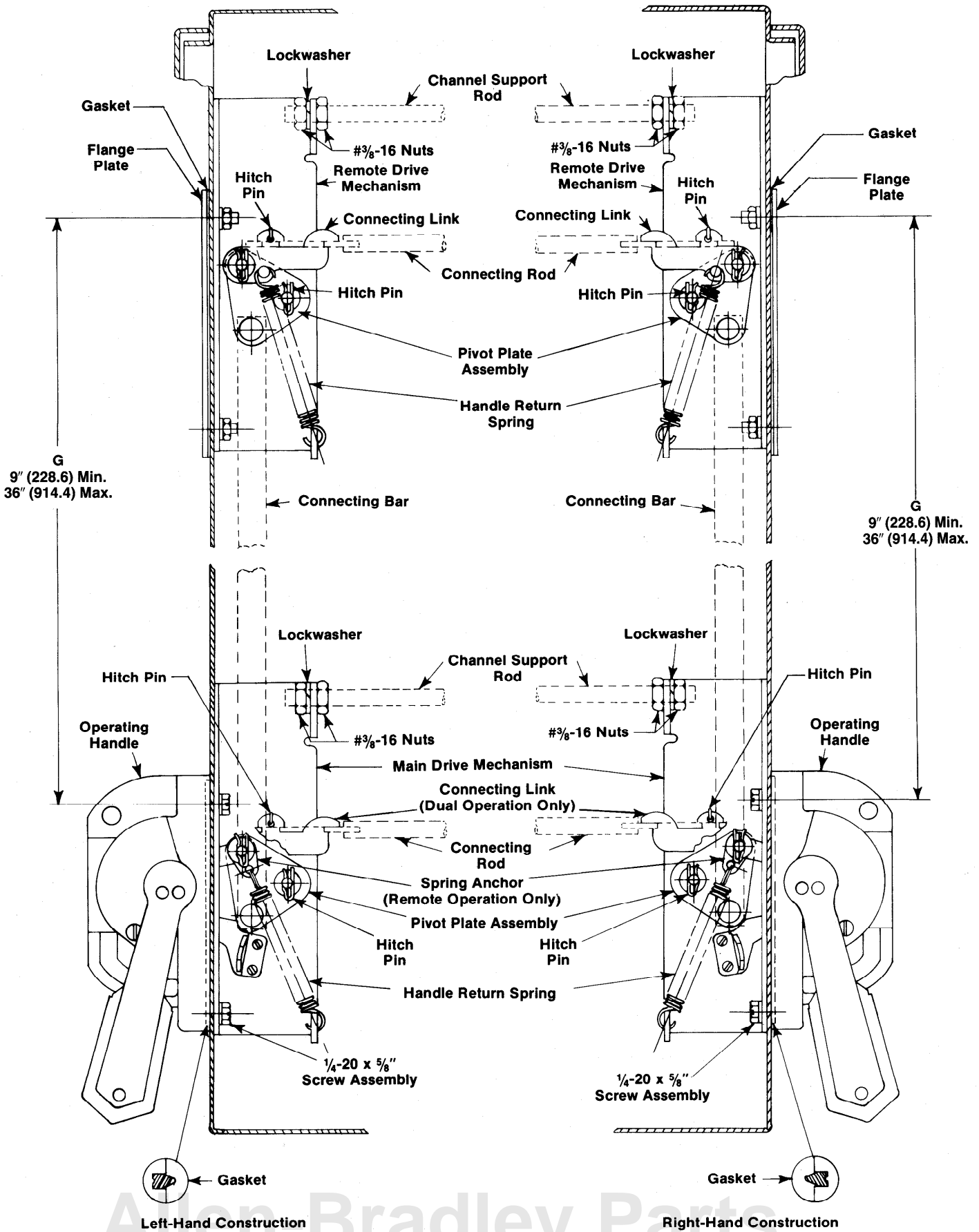


**FIGURE 2 — Dimension Chart in Inches (Millimeters) 5**

Disconnecting Means	A	B 6	D 6	E 7	F 7	H
Catalog Number						
1494V-DS30 1494V-DS60	1 <sup>27</sup> / <sub>32</sub> (46.8)	2 <sup>37</sup> / <sub>64</sub> (65.5)	3 <sup>29</sup> / <sub>64</sub> (87.7)	2 <sup>13</sup> / <sub>16</sub> (71.4)	3 <sup>11</sup> / <sub>16</sub> (93.7)	—
1494V-DS100	2 <sup>63</sup> / <sub>64</sub> (75.8)	2 <sup>61</sup> / <sub>64</sub> (75)	3 <sup>53</sup> / <sub>64</sub> (97.2)	3 <sup>3</sup> / <sub>16</sub> (81)	3 <sup>13</sup> / <sub>32</sub> (86.5)	—
1494V-M19	—	2 <sup>7</sup> / <sub>64</sub> (53.6)	2 <sup>7</sup> / <sub>64</sub> (53.6)	2 <sup>11</sup> / <sub>32</sub> (59.5)	2 <sup>11</sup> / <sub>32</sub> (59.5)	1/4 (6.4)
1494V-M20	—	2 <sup>1</sup> / <sub>4</sub> (57.2)	2 <sup>1</sup> / <sub>4</sub> (57.2)	2 <sup>31</sup> / <sub>64</sub> (63.1)	2 <sup>31</sup> / <sub>64</sub> (63.1)	1/2 (12.7)

- 5 These dimensions apply only to Figure 1.
- 6 These dimensions always apply only to the remote disconnecting means whether the operating handle is above or below it (same dimensions as on the disconnecting means instruction sheet).
- 7 These dimensions are only used for the disconnecting means in line with the operating handle on dual applications. (The dimensions are increased by 1<sup>5</sup>/<sub>64</sub>" (6) from those given on the disconnecting means instruction sheet.)

FIGURE 4



Allen Bradley Parts

## APPLICATION NOTES

1. Catalog Numbers 1494V-H5, 1494V-H50, etc. without a letter "L" in the suffix are designed for use on enclosures with right-hand flange construction.
2. Catalog Numbers 1494V-HL5, 1494V-HL50, etc. are designed for use on enclosures with left-hand flange construction.
3. The adaptor kits will permit mounting the operating handle either below or above the disconnecting means.
4. Two disconnecting means of the same or different sizes may be used in dual operation with the operating handle mounted in line with the upper or lower disconnecting means. **Note:** Due to the high operating forces it is not recommended that two 100 ampere disconnect switches be used in dual operation.
5. Use on enclosures with flange thickness from 16 ga. (1.5) to  $\frac{3}{16}$ " (4.8).

## ENCLOSURE INSTRUCTIONS

1. Check all enclosure and door dimensions required per the instruction sheets for the disconnecting means and the door hardware kit being installed to ensure that all minimum dimensions are being maintained. **Note:** For applications with door hardware kits also refer to either Figures 5 and 6 (Catalog Numbers 1494V-L1, LL1 and L2) or Figure 7 (Catalog Numbers 1494V-L3 and LL3).
2. Provide flange slots and holes per Figure 1 and the disconnecting means instruction sheet.
3. Locate the holes required to mount the disconnecting means as shown in Figure 1, Figure 2, and the disconnecting means instruction sheet.
4. Locate and mount the door catch bracket per the disconnect means instruction sheet unless a door hardware kit (Catalog Numbers 1494V-L1, LL1, L2, L3 or LL3) is used. Then use the door catch bracket or catch supplied with the door hardware kit.

## INSTALLATION INSTRUCTIONS

1. Cut and drill the connecting bar as shown in Figure 3. Measure the "G" dimension on the enclosure as shown in Figure 1. **Do not** exceed the minimum and maximum limits. **Note:** These  $\frac{1}{4}$ "(6.4) X  $\frac{5}{8}$ "(15.8) standard mill rectangular connecting bars are not supplied with these kits.
2. Remove the hitch pin, washer, and pivot plate assembly from the main drive mechanism, Figure 4. Slide the connecting bar onto the pivot plate assembly and reassemble the main drive mechanism. **Note:** The main drive mechanism on remote adapter kits is the assembly without a connecting link. On dual adapter kits it is the assembly having the  $\frac{1}{8}$ "(3.2) longer connecting link shaft on the pivot plate assembly.
3. Remove the other hitch pin,  $\frac{1}{4}$ " I.D. washer, and the spring anchor and four  $\frac{3}{8}$ " I.D. washers or the connecting link from the main drive mechanism assembly, Figure 4. Insert the operating handle connecting link through the flange slot and onto the shaft of the pivot plate assembly as shown. Secure the

drive mechanism assembly and operating handle to the flange with the two  $\frac{1}{4}$ -20 X  $\frac{5}{8}$ " screw assemblies. The gasket must be installed in the handle housing groove as shown in Figure 4.

4. Final Main Drive Mechanism Assembly:
  - A. On remote operation only, reassemble the four  $\frac{3}{8}$ " I.D. washers, spring anchor,  $\frac{1}{4}$ " I.D. washer and hitch pin removed in Step Number 3.
  - B. On dual operation, replace the connecting link, the  $\frac{1}{4}$ " I.D. washer and hitch pin.
5. Remove the hitch pin, washer, and pivot plate assembly from the remote drive mechanism, Figure 4. Fasten the remote drive mechanism bracket to the enclosure with the flange plate, gasket, lockwashers and  $\frac{1}{4}$ -20 nuts provided.
6. Slide the connecting bar onto the pivot plate assembly and reassemble the remote drive mechanism.
7. Cut the connecting rod (Catalog Number 1494V-RA1 or RA2) and turn it into the disconnecting means drive bar per the disconnecting means instruction sheet. **Note:** Depending on your enclosure flange thickness the initial installation may require several extra turns.
8. Mount the disconnecting means, assemble the connecting link and rod, and adjust the connecting rod per the disconnecting means instruction sheet. Insert the hitch pin in the hole of the ear on the connecting link, Figure 4.
9. Attach the handle return springs as shown in Figure 4.
  - A. Place the spring in the outside groove of the connecting link on the remote drive mechanism.
  - B. Main Drive Mechanism:
    1. Attach the spring to the spring anchor on remote applications only.
    2. On dual applications place the spring in the inside groove of the connecting link.
10. Assemble the defeater bracket, and fasten and adjust the door catch per the disconnecting means instruction sheet.

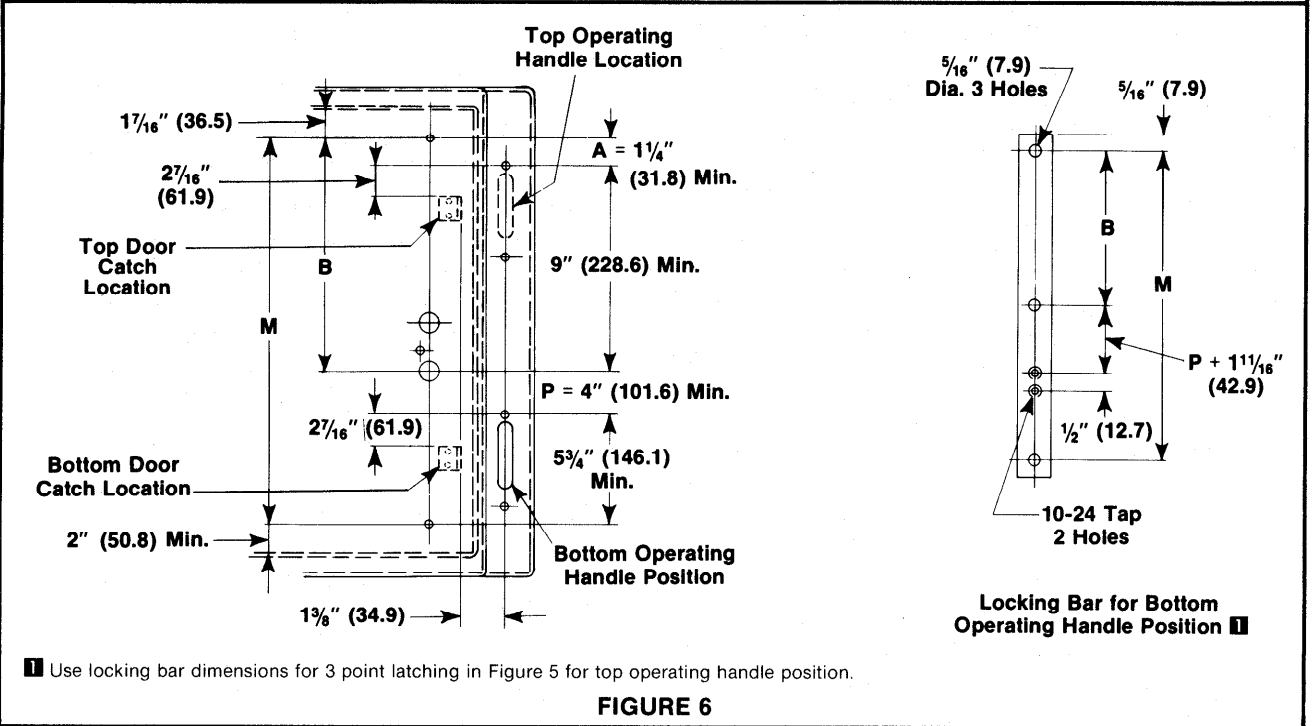
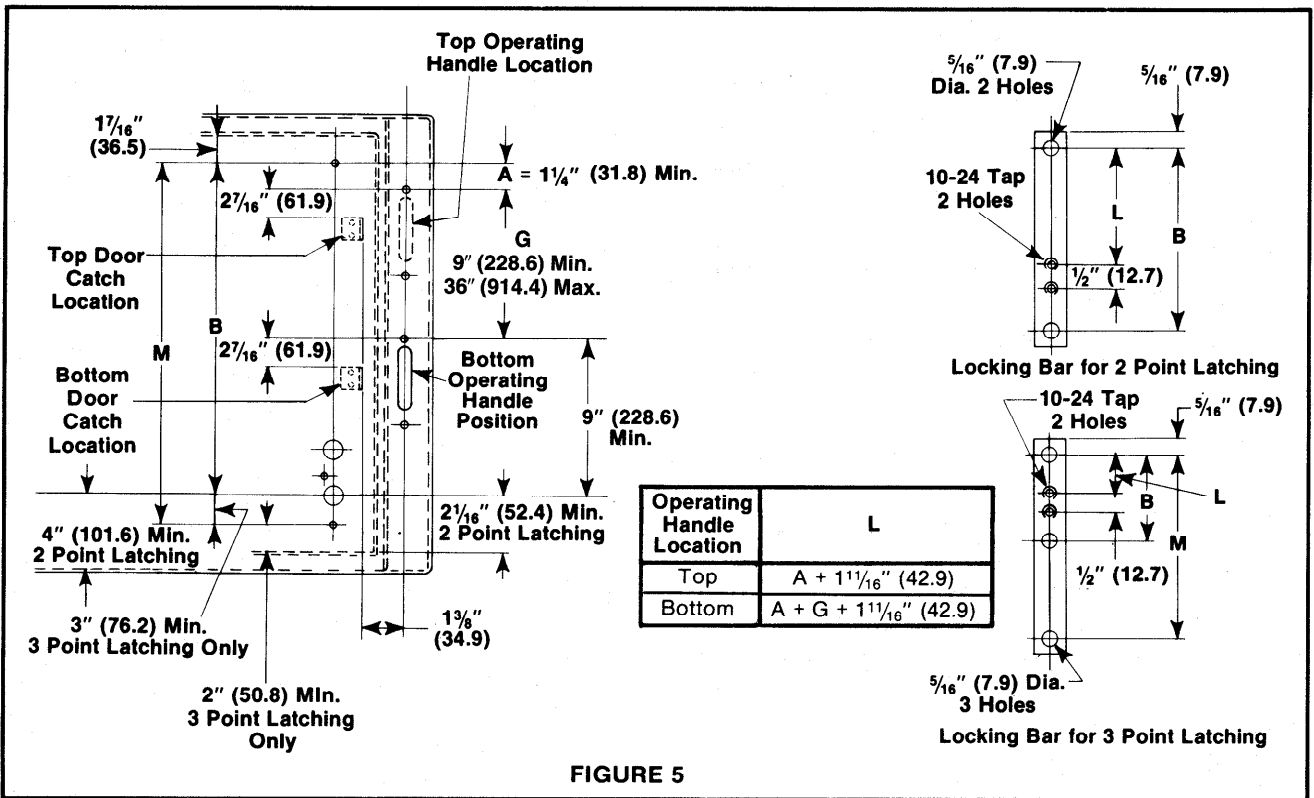
## CHANNEL SUPPORT INSTALLATION Catalog Number 1494V-H4

1. Drill and tap the mounting plate per the channel support kit instruction sheet, Publication 1494V-5.3.
2. Cut the  $\frac{3}{8}$  -16 rod to the proper length  $L = N - 3.5$  (88.9).
3. **Do not** use Items 1, 2, and 3 (the channel support bracket, support plate and nutsert assembly) of the channel support kit.
4. Secure the rod to the remote (main) drive mechanism as shown in Figure 4 with a lockwasher and two  $\frac{3}{8}$ -16 nuts not included in this kit.
5. Fasten the panel support bracket to the panel per Publication 1494V-5.3.

**Note** – Dimensions shown in parentheses are in millimeters.

# DOOR HARDWARE INSTALLATION

Small And Intermediate Enclosures (Catalog Numbers 1494V-L1, LL1 and L2)



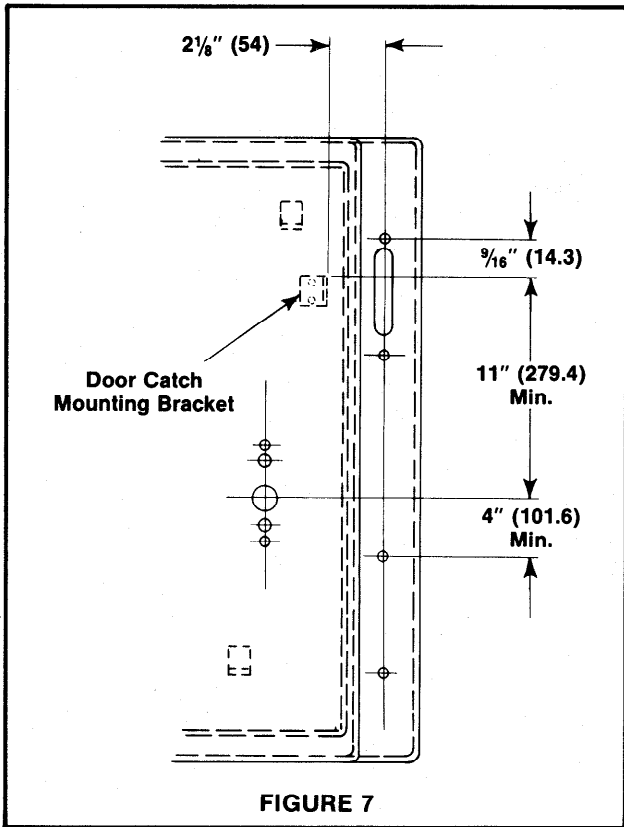
■ Use locking bar dimensions for 3 point latching in Figure 5 for top operating handle position.

1. The door hardware handle can be installed either below the bottom operating handle position or between the top and bottom positions as shown in Figures 5 and 6 respectively.
2. All door hole diameters and the remaining hole locations are as shown on the door hardware instruction sheet, Publication 1494V-5.4.
3. Establish the length of the locking bar for the application and drill and tap it per Figures 5 and 6.
4. Locate the door catch per Figure 5 or 6 to satisfy the application.
5. Assemble the door hardware per the door hardware instruction sheet.

**Note** — Dimensions shown in parentheses are in millimeters.

# DOOR HARDWARE INSTALLATION

## Large Enclosures (Catalog Numbers 1494V-L3 and 1494V-LL3)



1. The door hardware handle must be located below the operating handle. It can be installed between the sets of flange drillings as shown in Figure 7 only when the operating handle is located in the top location.
2. All door hole diameters and the remaining hole locations are as shown on the door hardware instruction sheet, Publication 1494V-5.5.
3. Establish the length of the locking bar for the application and drill and tap it per the door hardware instruction sheet, Publication 1494V-5.5.
4. Locate the door catch per Figure 7 to satisfy the application.
5. Assemble the door hardware per the door hardware instruction sheet.

**Note**

Dimensions shown in parentheses are in millimeters.



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