

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

SHOP EQUIPMENT, CANVAS AND GLASS

(NSN 4940-00-209-6239)

INSTALLATION IN ONE 280 MAINTENANCE SHELTER

(NSN 4940-00-919-8409)

OR

ONE ISO-2-1 MAINTENANCE SHELTER

(NSN 5411-01-124-1377)

WARNING
All electrically powered tools and equipment must be grounded prior to use.

TECHNICAL BULLETIN

No. 9-4940-302-30

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, DC, 14 September 1984

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Reporting Errors and Recommending Improvements

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This bulletin supersedes TB 9-4940-302-30, dated 24 January 1968.

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Section I. INTRODUCTION

1. General

a. The instructions contained in this bulletin are in three sections. Section I is an introduction and contains general information for the entire bulletin. Section II is to be used as a guide for installation of canvas and glass shop equipment (NSN 4940-00-209-6239) in one 280 maintenance shelter, unit 1 (NSN 4940-00-919-8409). Section III is to be used as a guide for installation of canvas and glass shop equipment (NSN 4940-00-209-6239) in one ISO-2-1 maintenance shelter, unit 2 (NSN 5411-01-124-1377).

b. Slight variations to the installation instructions may be made at the discretion of the officer in charge.

c. Complete lists of items contained in these shelters are found in SC 4940-95-CL-A63.

d. Personnel performing this installation should have a practical knowledge of electricity.

e. Items not mentioned in this bulletin, that may be components of this shop, may be stowed in storage cabinets and drawers or secured in such a manner as to avoid damage in transit.

f. All dimensions, fastener sizes, and hardware sizes are in inches.

g. When entering the shelter, curbside is at right and roadside is at left.

2. Warnings and Cautions

WARNING

All electrically powered tools and equipment must be grounded prior to use.

CAUTION

Special care should be exercised during instal-

lation to avoid damage to electrical connectors, wiring, or electrical equipment.

To preserve its waterproof characteristics, precautions should be taken not to puncture the outer skin when drilling holes into floor and walls of the shelter.

The ISO-2-1 shelter must be level prior to expanding the sides. The expanded portion of the shelter must be level to allow wall, roof and floor locks to engage. No equipment shall be moved onto expanded floor until shelter is level.

3. Location of Equipment

a. Location of equipment installed or stowed in the 280 shelter is shown in figures 1 thru 7.

(1) Refer to table 1 for hardware required for installation.

(2) Refer to table 3 for components to be mounted.

(3) Refer to table 4 for components to be fabricated.

b. Location of equipment installed or stowed in the ISO-2-1 shelter is shown in figures 8 thru 18.

(1) Refer to table 2 for hardware required for installation.

(2) Refer to table 3 for components to be mounted.

(3) Refer to table 5 for components to be fabricated.

c. Refer to table 6 for standard conversion chart.

3. Location of Equipment--Continued

Table 1. Mounting Hardware, 280 Shelter

MS/part no.	Size and description	Qty	Application
MS16992-520	5/16-in. Hex Head Lag Bolt x 1.00 L	4	Support angles to storage cabinets
MS20601-MP6W2	3/16-in. Blind Rivet	2	Strap loop
MS27130-A23	#10-24 UNC Blind Rivet Nut	8	First aid kit, fire extinguisher, strap loop
MS27130-S45	5/16-18 UNC Blind Rivet Nut	16	Industrial sewing machine table legs to floor, storage cabinets
MS27183-10	9/32-in. Flat Washer	8	Brackets to industrial sewing machine table legs
MS35190-275	#10-24 UNC-2A Countersunk Head Machine Screw x 1.00 L	8	Strap loop, first aid kit, fire extinguisher
MS35338-44	1/4-in. Lockwasher	8	Brackets to industrial sewing machine table legs
MS35338-45	5/16-in. Lockwasher	20	Storage cabinets, support angle, 14-in. bed and 30-in. bed industrial sewing machines
MS35492-76	#10 Flat Head Wood Screw x 3/4 L	2	Strap loop for electrical power cable assembly
MS35492-78	#10 Flat Head Wood Screw x 1.00 L	4	Strap loops for portable electric belt sander
MS51939-3	Strap Loop	5	Electrical power cable assembly, portable electric belt sander, portable tool box

3. Location of Equipment--Continued

Table 1. Mounting Hardware, 280 Shelter--Continued

MS/part no.	Size and description	Qty	Application
MS51967-2	1/4-20 UNC-2B Hex Nut	8	Brackets to industrial sewing machine table legs
MS90725-18	1/4-20 UNC-2A Hex Head Capscrew x 3.00 L	8	Brackets to industrial sewing machine table legs
MS90725-34	5/16-18 UNC-2A Hex Head Capscrew x 1.00 L	8	Storage cabinets, support angle
MS90725-36	5/16-18 UNC-2A Hex Head Capscrew x 1-1/4 L	8	14-in. bed and 30-in. bed industrial sewing machines
7550588-6	12.00-in. Retaining Strap	1	Electrical power cable assembly
7550588-8	30.00-in. Retaining Strap	2	Portable tool box, portable electric belt sander
7550588-9	66.00-in. Retaining Strap	2	Folding legs tables to 30-in. bed industrial sewing machine

Table 2. Mounting Hardware, ISO-2-1 Shelter

MS/part no.	Size and description	Qty	Application
MS16992-520	5/16-in. Hex Head Lag Bolt x 1.00 L	4	Support angles
MS20601-MP6W2	3/16-in. Blind Rivet	2	Strap loop
MS35190-272	#10-24 UNC-2A Countersunk Head Machine Screw x 5/8 L	6	First aid kit, fire extingisher
MS35338-45	5/16-in. Lockwasher	20	Support angles, storage cabinets, shoulder eyebolts

3. Location of Equipment--Continued

Table 2. Mounting Hardware, ISO-2-1 Shelter--Continued

MS/part no.	Size and description	Qty	Application
MS35338-46	3/8-in. Lockwasher	32	Casters and rigid casters to 14-in. bed and 30-in. bed industrial sewing machines
MS35492-78	#10 Flat Head Wood Screw x 1.00 L	4	Strap loops
MS51937-2	5/16-18 UNC-2A Shoulder Eyebolt x 2-7/8 L	9	14-in. bed and 30-in. bed industrial sewing machines, portable tool box
MS51939-3	Strap Loop	3	Portable electric belt sander, portable tool box
MS51967-5	5/16-18 UNC-2B Hex Nut	9	Shoulder eyebolts
MS51967-8	3/8-16 UNC-2B Hex Nut	32	Casters and rigid casters to 14-in. bed and 30-in. bed industrial sewing machines
MS90725-32	5/16-18 UNC-2A Hex Head Capscrew x 3/4 L	5	Storage cabinet, support angles
MS90725-34	5/16-18 UNC-2A Hex Head Capscrew x 1.00 L	2	Storage cabinets
MS90725-60	3/8-16 UNC-2A Hex Head Capscrew x 1.00 L	32	Casters and rigid casters to 14-in. bed and 30-in. bed industrial sewing machines
7550588-4	36.00-in. Retaining Strap	8	14-in. bed and 30-in. bed industrial sewing machines
7550588-5	24.00-in. Retaining Strap	1	Electrical power cable assembly
7550588-8	30.00-in. Retaining Strap	2	Portable electric belt sander, portable tool box

3. Location of Equipment--Continued

Table 2. Mounting Hardware, ISO-2-1 Shelter--Continued

MS/part no.	Size and description	Qty	Application
7550588-9	66.00-in. Retaining Strap	2	Folding legs tables
11021187	Caster, Swivel Lock and Wheel Brake	4	14-in. bed and 30-in. bed industrial sewing machines
11021188	Rigid Caster	4	14-in. bed and 30-in. bed industrial sewing machines
11021235-1	5/16-18 UNC Blind Rivet Nut	9	Eyebolts, storage cabinets
11021235-3	5/16-18 UNC Blind Rivet Nut	2	Storage cabinets
11021235-5	#10-24 UNC Blind Rivet Nut	6	Fire extinguisher, first aid kit

Table 3. Components to be Mounted, 280 Shelter and ISO-2-1 Shelter

NSN	Qty*	Description	Figure no.
7125-00-330-0130	2	CABINET, STORAGE	2-4-5-9-11
6150-00-682-3460	1	CABLE ASSEMBLY, POWER, ELECTRICAL	2-9-13
4210-00-555-8837	1	EXTINGUISHER, FIRE, MONOBROMOTRI FLUORO-METHANE	2-4-11
6545-00-922-1200	1	FIRST AID KIT, GENERAL PURPOSE	2-4-11
5210-00-819-7589	1	RULE, GLAZIER'S	2-9
5130-00-596-9725	1	SANDER, BELT, ELECTRIC, PORTABLE	2-5-9-11
3530-00-892-4630	1	SEWING MACHINE, INDUSTRIAL: 14-in. bed	2-5-9-13-14

*The equipment quantity listed is for one shelter.

3. Location of Equipment--Continued

Table 3. Components to be Mounted, 280 Shelter and ISO-2-1 Shelter--Continued

NSN	Qty*	Description	Figure no.
3530-00-892-4652	1	SEWING MACHINE, INDUSTRIAL: 30-in. bed	2-4-9-13-15
7195-00-357-7480	2	TABLE, FOLDING LEGS	2-4-9-13-15
5140-00-315-2758	1	TOOL BOX, PORTABLE	2-4-9-11

*The equipment quantity listed is for one shelter.

Table 4. Components to be Fabricated, 280 Shelter

Size	Qty	Description	Figure no.
2.00 X 3.50 X 2.50	8	BRACKET-7551851	2-5-7
25.00 X 1.25 X 1.25	2	SUPPORT ANGLE-11021151-4	6

Table 5. Components to be Fabricated, ISO-2-1 Shelter

Size	Qty	Description	Figure no.
5.00 X 5.50 X 0.19	8	ADAPTER PLATE-11021189	16-17
25.00 X 1.25 X 1.25	2	SUPPORT ANGLE-11021151-4	6

Section II. INSTALLATION IN 280 SHELTER

4. Installation

NOTE

Hand blind riveter (5120-00-679-6523) is used for installing blind rivet nuts in floor and walls of the 280 shelter. Hand blind riveter (5120-00-357-6065) is used for installing blind rivets (MS20601). Install blind rivet nuts in accordance with MIL-N-47187.

Position storage cabinets, 14-in. bed and 30-in. bed industrial sewing machines, first aid kit, and fire extinguisher as shown in figures 2, 4, and 5. Use equipment mounting holes as template for location of blind rivet nuts. Positions may be varied to drill into structural members in fixed floor.

a. Follow steps (1) and (2) below for installing blind rivet nuts in the 280 shelter, unit 1.

(1) Mark and drill eight 0.25-in. diameter holes in floor and walls of shelter in accordance with figures 3 and 4. Install eight #10 blind rivet nuts (MS27130-A23).

(2) Mark and drill sixteen 0.41-in. diameter holes in floor and walls in accordance with figures 3, 4, and 5. Install sixteen 5/16-in. blind rivet nuts (MS27130-S45).

b. Install a strap loop (MS51939-3) in floor using two #10 x 1-in. counter-sunk head machine screws (MS35190-275) in accordance with figures 2 and 3.

Fabricate two support angles (11021151-4) in accordance with figure 6.

d. Fabricate eight brackets (7551851) in accordance with figure 7.

Follow steps (1) thru (16) below for equipment installation in the 280 shelter, unit 1.

(1) Position storage cabinet (7125-00-330-0130) in left front corner in accordance with figure 2. Mark and drill two 0.34-in. diameter holes through storage cabinet bottom plate. Locate holes at the two corners allowing for minimum required clearance for 5/16-in. hex head capscrews. Secure storage cabinet to floor-mounted blind rivet nuts using two 5/16-in. lockwashers (MS35338-45) and two 5/16- x 1-in. hex head capscrews (MS90725-34).

(2) Using support angle (11021151-4) as a template, mark and drill two 0.19-in. diameter pilot holes, 2-1/2 inches from each end of support angle, into storage cabinet top in accordance with figure 2. Position support angle and secure to wall-mounted blind rivet nuts using two 5/16-in. lockwashers (MS35338-45) and two 5/16- x 1-in. hex head capscrews (MS90725-34). Secure support angle to storage cabinet using two 5/16-in. lockwashers (MS35338-45) and two 5/16- x 1-in. hex head lag bolts (MS16992-520).

CAUTION

Remove storage cabinet drawers adjacent to hole locations before drilling.

(3) Using strap loop (MS51939-3) as a template, mark and drill two 0.19-in. diameter holes in metal side of storage cabinet in accordance with figures 2 and 4. Secure strap loop to storage cabinet using two 3/16-in. blind rivets (MS20601-MP6W2).

4. Installation--Continued

(4) Position portable tool box (5140-00-315-2758) in accordance with figures 2 and 4 and secure to storage cabinet and floor-mounted strap loop using a 30-in. retaining strap (7550588-8).

(5) Position 14-in. bed industrial sewing machine (3530-00-892-4630) in front right corner of 280 shelter in accordance with figures 2 and 5. Using bracket (7551851) as a template with the 2-1/2-in. leg on the floor, mark and drill four 0.28-in. diameter holes through industrial sewing machine table legs, one hole for each leg.

(6) Secure four brackets (7551851) to 14-in. bed industrial sewing machine table legs in accordance with figures 2 and 5, using four 1/4- x 3-in. hex head capscrews (MS90725-18), four 9/32-in. flat washers (MS27183-10), four 1/4-in. lockwashers (MS35338-44), and four 1/4-in. hex nuts (MS51967-2).

(7) Secure 14-in. bed industrial sewing machine table to floor-mounted blind rivet nuts using four 5/16-in. lockwashers (MS35338-45) and four 5/16- x 1-1/4-in. hex head capscrews (MS90725-36).

(8) Position 30-in. bed industrial sewing machine (3530-00-892-4652) on left side of shelter in accordance with figures 2 and 4. Repeat steps (5), (6), and (7) for mounting 30-in. bed industrial sewing machine to floor-mounted blind rivet nuts using four brackets (7551851), four 1/4- x 3-in. hex head capscrews (MS90725-18), four 9/32-in. flat washers (MS27183-10), four 1/4-in. lockwashers (MS35338-44), four 1/4-in. hex nuts (MS51967-2), four 5/16-in. lockwashers (MS35338-45), and four 5/16- x 1-1/4-in. hex head capscrews (MS90725-36).

(9) Position a storage cabinet (7125-00-330-0130) in right rear corner in accordance with figure 2, with front

drawers facing front of shelter.

Repeat steps (1) and (2) for mounting storage cabinets to floor-mounted blind rivet nuts using a support angle (11021151-4), six 5/16-in. lockwashers (MS35338-45), four 5/16- x 1-in. hex head capscrews (MS90725-34), and two 5/16-in. hex head lag bolts (MS16992-520).

(10) Using two strap loops (MS51939-3) as a template, mark and drill four 0.09-in. diameter pilot holes in storage cabinet top in accordance with figure 2. Secure two strap loops to the storage cabinet top using four #10 x 1-in. flat head wood screws (MS35492-78).

(11) Secure portable electric belt sander (5130-00-596-9725) to storage cabinet using a 30-in. retaining strap (7550588-8) in accordance with figures 2 and 5.

(12) Using a strap loop (MS51939-3) as a template, mark and drill two 0.09-in. diameter pilot holes on the rear end of the 30-in. bed industrial sewing machine table in accordance with figures 2 and 4. Secure strap loop using two #10 x 3/4-in. flat head wood screws (MS35492-76).

(13) Secure electrical power cable assembly (6150-00-682-3460) to 30-in. bed industrial sewing machine using a 12-in. retaining strap (7550588-6) in accordance with figure 2.

(14) Position two folding legs tables (7195-00-357-7480) on edge and lengthwise with tabletops facing each other, in accordance with figures 2 and 4. Place glazier's rule (5210-00-819-7589) between tabletops. Secure folding legs tables to 30-in. bed industrial sewing machine table legs using two 66-in. retaining straps (7550588-9).

(15) Position mounting bracket of fire extinguisher (4210-00-555-8837) on left wall in accordance with figures 2 and 4. Mark and drill three 0.22-in. diameter holes in bracket and position

4. Installation--Continued

over installed blind rivet nuts. Secure mounting bracket to wall using three #10 x 1-in. countersunk head machine screws (MS35190-275). Install fire extinguisher in mounting bracket.

(16) Before installing first aid kit (6545-00-922-1200), remove contents

and mark and drill three 0.22-in. diameter holes in back of case. Position first aid kit over installed blind rivet nuts in accordance with figures 2 and 4. Secure to wall using three #10 x 1-in. countersunk head machine screws (MS35190-275). Install contents of first aid kit.

Section III. INSTALLATION IN ISO-2-1 SHELTER

5. Installation

NOTE

Hand blind riveter (5120-00-679-6523) is used to install blind rivet nuts in floor and walls of ISO-2-1 shelter. Hand blind riveter (5120-00-357-6065) is used for installing blind rivets (MS20601). Install blind rivet nuts in accordance with MIL-N-47187.

Position storage cabinets, 14-in. bed and 30-in. bed industrial sewing machines, first aid kit, and fire extinguisher as shown in figures 9, 11, 13, 14, and 15. Use the equipment mounting holes as template for location of blind rivet nuts. Positions may be varied to drill into structural members in fixed floor.

Follow steps (1) and (2) for installing blind rivet nuts in the ISO-2-1 shelter, unit 2.

CAUTION

After installing blind rivet nuts, potting compound (8040-01-102-2098) must have a curing time of 24 to 48 hours before using any threaded fasteners.

(1) Mark and drill six 0.25-in. diameter holes in right side wall, in accordance with figure 11, to a depth of 1.00-in. maximum. Inject potting compound as required and install six #10 blind rivet nuts (11021235-5).

(2) Mark and drill eleven 0.41-in. diameter holes in fixed floor and right side wall in accordance with figures 10 and 12 to a depth of 1.50 in. maximum. Inject potting compound as required and install nine 5/16-in. blind rivet nuts (11021235-1) in accordance with figures 10 and 12. Install two 5/16-in. blind rivet nuts (11021235-3) in accordance with figure 10.

b. Install nine 5/16- x 2-7/8-in. shoulder eyebolts (MS51937-2) in blind rivet nuts marked "A" and "B" in floor in accordance with figures 9, 10, and 13 and secure with nine 5/16-in. lock-washers (MS35338-45) and nine 5/16-in. hex nuts (MS51967-5).

NOTE

Eighteen 5/16-in. blind rivet nuts exist in the floor of the ISO-2-1 shelter, five of which are used for component installation (marked "A" in figure 10).

5. Installation--Continued

Fabricate two support angles (11021151-4) in accordance with figure 6.

Fabricate eight adapter plates (11021189) in accordance with figure 16. Using the welding instructions in accordance with figure 17, position and weld one adapter plate to each 2-inch square tubing table leg of the 14-in. bed and 30-in. bed industrial sewing machines.

Secure four casters (11021187) (two on front end of each industrial sewing machine) and four rigid casters (11021188) (two on rear end of each industrial sewing machine (see fig. 18)), using thirty-two 3/8- x 1-in. hex head capscrews (MS90725-60), thirty-two 3/8-in. lockwashers (MS35338-46), and thirty-two 3/8-in. hex nuts (MS51967-8), in accordance with figure 13.

Follow steps (1) thru (11) below for equipment installation in the ISO-2-1 shelter, unit 2.

(1) Position two storage cabinets (7125-00-330-0130) on right side of shelter in accordance with figures 9 and 11. Mark and drill three 0.34-in. diameter holes through storage cabinet bottoms (two holes in storage cabinet closest to front end). Locate holes at the edges allowing for minimum required clearance for 5/16-in. hex head capscrews. Secure storage cabinets to floor using three 5/16-in. lockwashers (MS35338-45), two 5/16- x 1-in. hex head capscrews (MS90725-34) used with the two 5/16-in. floor-mounted blind rivet nuts, and one 5/16- x 3/4-in. hex head capscrew (MS90725-32) in accordance with figure 10.

(2) Position two support angles (11021151-4) against right side wall and on top of the two storage cabinets in accordance with figure 9. Using support angles as templates, mark and drill four 0.19-in. diameter pilot holes, 2-1/2-in. from each end of the

support angles, into storage cabinet tops, two holes per storage cabinet top. Reposition two support angles and secure to wall-mounted blind rivet nuts using four 5/16-in. lockwashers (MS35338-45) and four 5/16- x 3/4-in. hex head capscrews (MS90725-32). Secure support angles to storage cabinet tops using four 5/16-in. lockwashers (MS35338-45) and four 5/16- x 1-in. hex head lag bolts (MS16992-520).

CAUTION

Remove storage cabinet drawers adjacent to hole locations before drilling.

(3) Drill two 0.19-in. diameter holes in metal side of storage cabinet in accordance with figure 11. Secure a strap loop (MS51939-3) to storage cabinet using two 3/16-in. blind rivets (MS20601-MP6W2).

(4) Position and secure portable tool box (5140-00-315-2758) to storage cabinet and floor-mounted eyebolt using a 30-in. retaining strap (7550588-8) in accordance with figures 9 and 11.

(5) Using a strap loop (MS51939-3) as a template, mark and drill four 0.09-in. diameter pilot holes in storage cabinet top in accordance with figure 9 and secure two strap loops to storage cabinet top using four #10 x 1-in. flat head wood screws (MS35492-78). Secure portable electric belt sander (5130-00-596-9725) to storage cabinet using a 30-in. retaining strap (7550588-8) in accordance with figures 9 and 11.

(6) Position 14-in. bed industrial sewing machine (3530-00-892-4630) in front left corner in accordance with figure 9. Secure to floor using four 3/6-in. retaining straps (7550588-4), passed through floor-mounted eyebolts and wrapped around table legs, in accordance with figures 9 and 13.

(7) Secure electrical power cable assembly (6150-00-682-3460) to lower shelf of 14-in. bed industrial sewing

5. Installation--Continued

machine using a 24-in. retaining strap (7550588-5) in accordance with figures 9 and 13.

(8) Position 30-in. bed industrial sewing machine (3530-00-892-4652) in rear left corner in accordance with figure 9. Secure to floor using four 36-in. retaining straps (7550588-4), passed through floor-mounted eyebolts and wrapped around table legs, in accordance with figures 9 and 13. Apply wheel brakes and swivel locks at this time on previously installed casters (11021187).

(9) Position two folding legs tables (7195-00-357-7480) lengthwise on edge of 30-in. bed industrial sewing machine, in accordance with figures 9 and 13, with tabletops facing each other. Place glazier's rule (5210-00-819-7589) between tabletops. Secure folding legs tables to 30-in. bed industrial sewing machine table legs using two 66-in. retaining straps (7550588-9).

(10) Position mounting bracket of fire extinguisher (4210-00-555-8837) on rear right wall in accordance with figure 11. Mark and drill three 0.22-

in. diameter holes in bracket. Position over installed blind rivet nuts in accordance with figure 11. Secure mounting bracket to wall-mounted blind rivet nuts using three #10 x 5/8-in. countersunk head machine screws (MS35190-272). Install fire extinguisher in mounting bracket.

(11) Before installing first aid kit (6545-00-922-1200), remove contents and drill three 0.22-in. diameter holes in back of case. Position first aid kit in location shown in figure 11 over installed blind rivet nuts. Secure to wall using three #10 x 5/8-in. countersunk head machine screws (MS35190-272). Install contents of the first aid kit.

Follow steps (1) and (2) below for location of equipment when ISO-2-1 shelter is deployed.

(1) Locate 14-in. bed industrial sewing machine (3530-00-892-4630) in accordance with figure 14.

(2) Locate two folding legs tables (7195-00-357-7480) and 30-in. bed industrial sewing machine (3530-00-892-4652) in accordance with figure 15. Apply wheel brakes and swivel locks on casters (11021187).

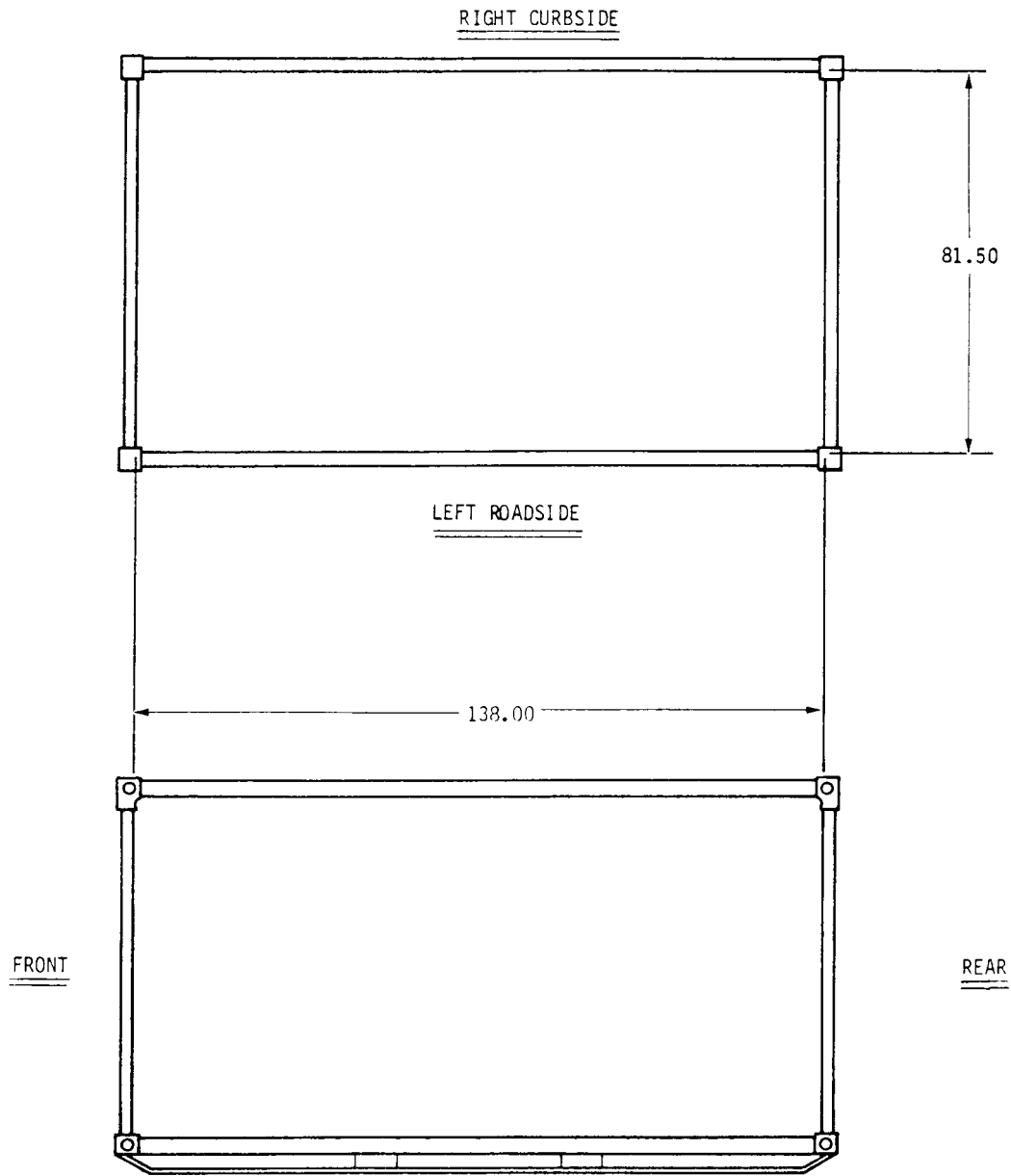


Figure 1. 280 Maintenance Shelter, Unit 1.

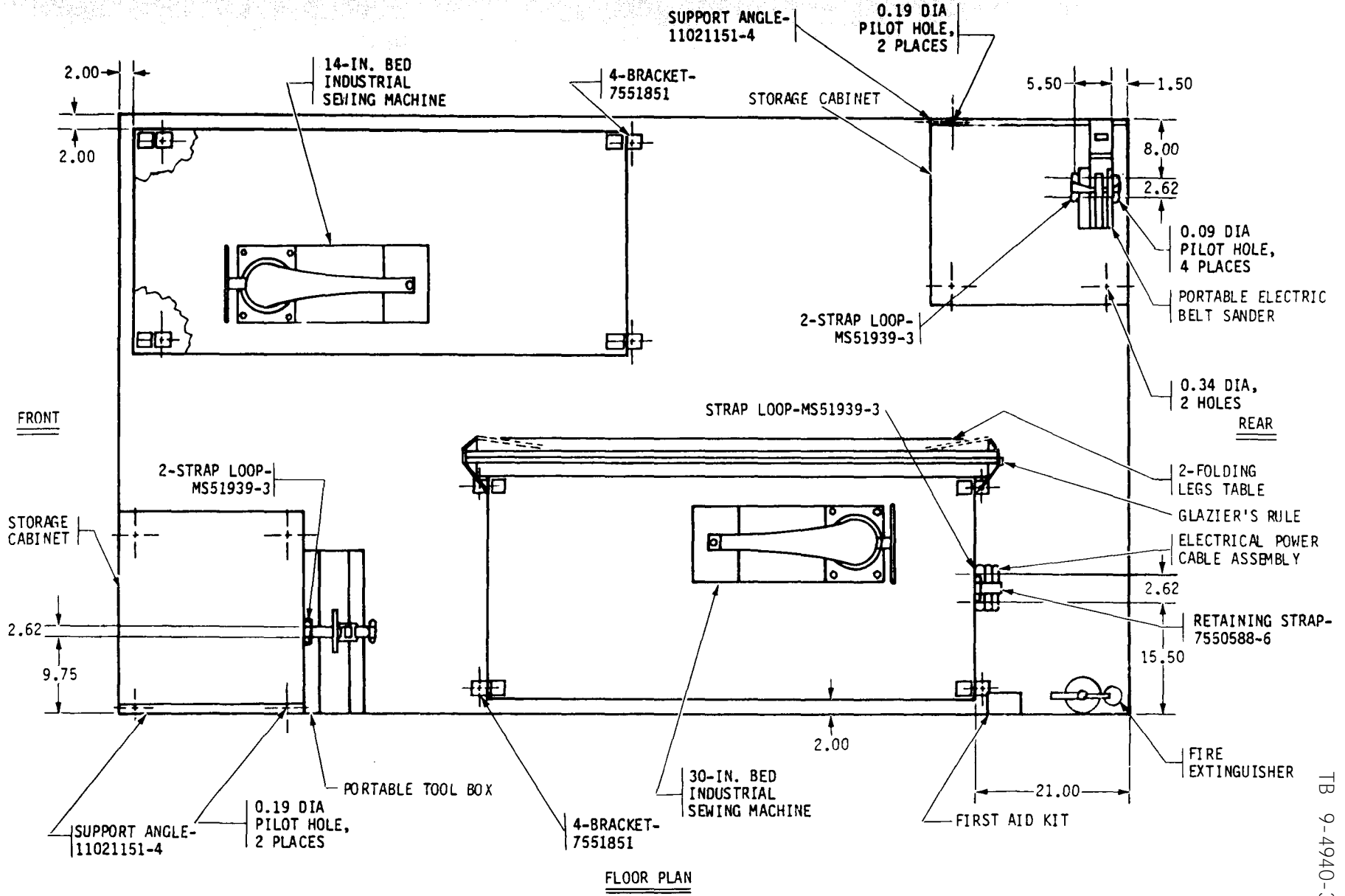


Figure 2. Components to be Mounted, Unit 1, 280, Floor Plan.

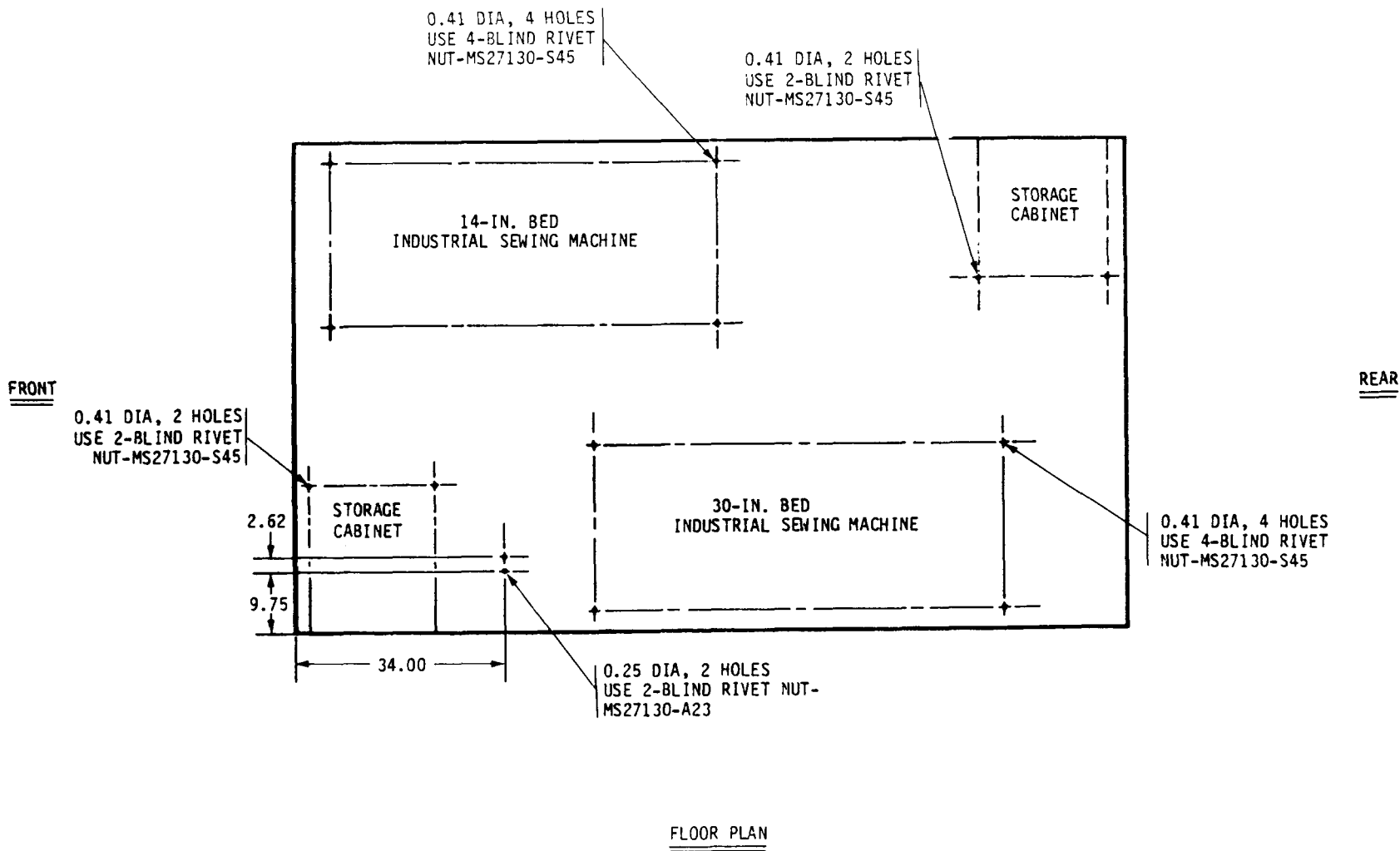


Figure 3. Hole Dimensions for Mounting Holes and Strap Loops, Unit 1, 280.

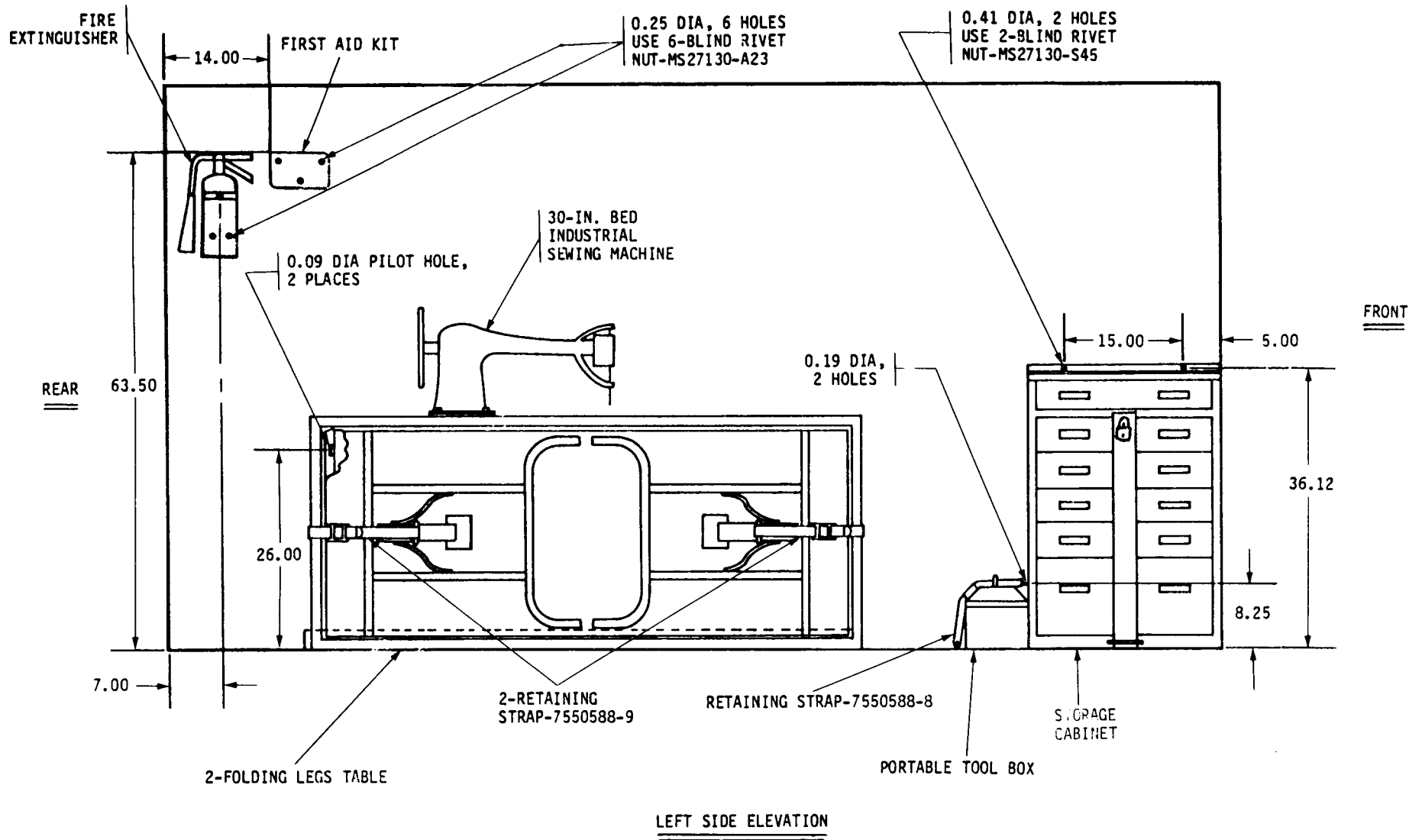


Figure 4. Components to be Mounted, Unit 1, 280, Left Side Elevation.

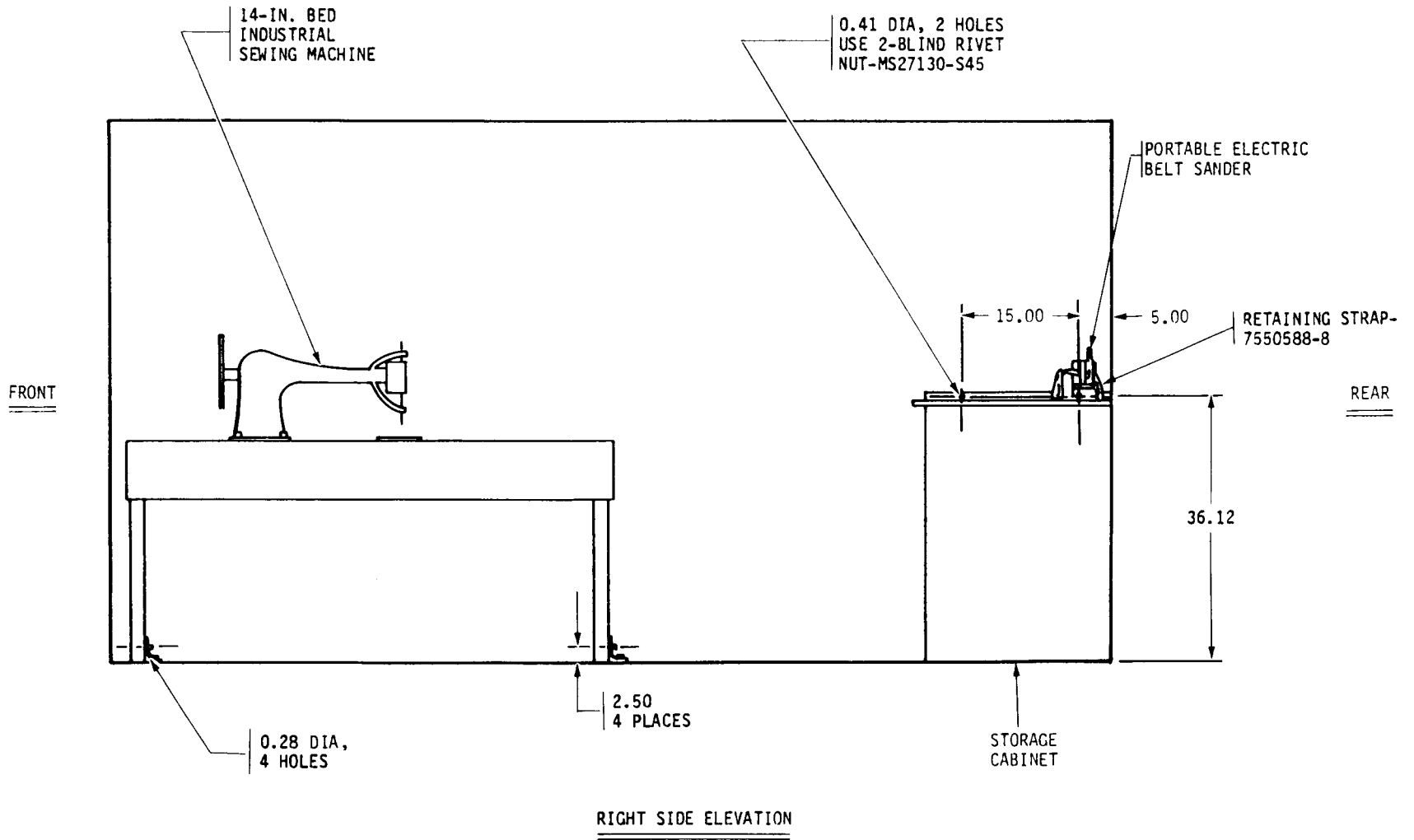


Figure 5. Components to be Mounted, Unit 1, 280, Right Side Elevation.

NOTES:

1. STEEL ANGLE PER QQ-S-741.
2. REMOVE BURRS AND BREAK ALL SHARP EDGES.
3. HOLES TO BE LOCATED AT ASSEMBLY.
4. PRIME WITH PRIMER, MIL-P-14553; FINISH WITH FOREST GREEN ENAMEL IAW MIL-E-52798 (AIR DRY).

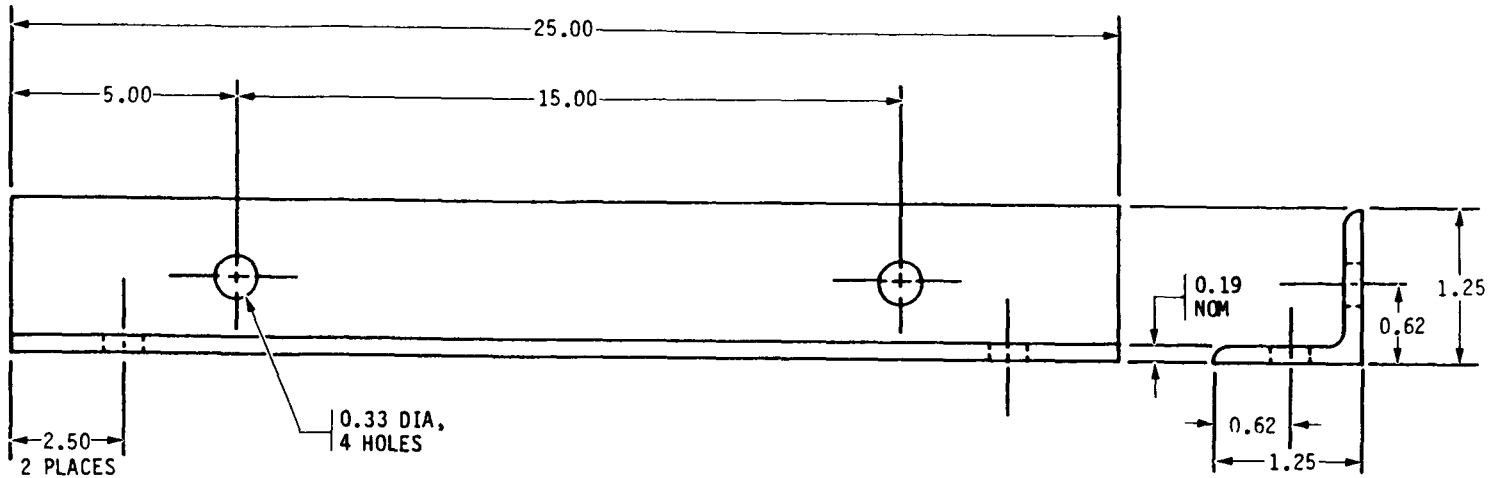
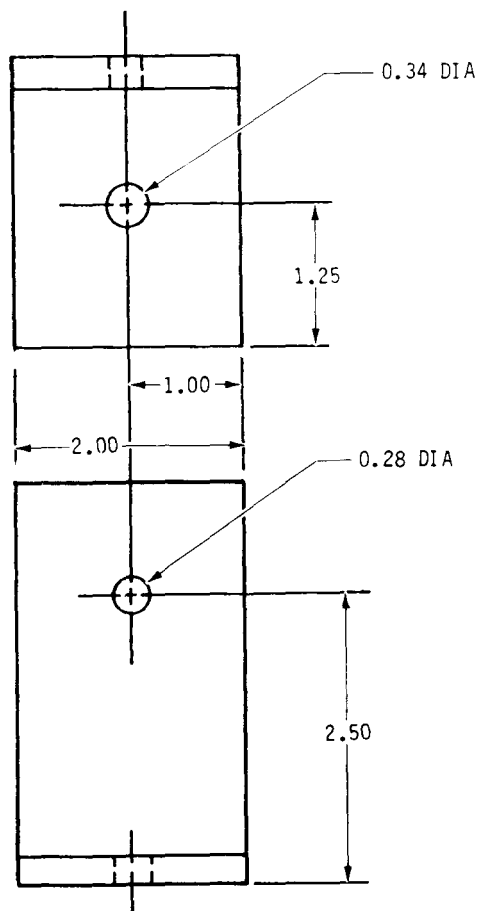


Figure 6. Dimensions for Support Angle-11021151-4, Unit 1, 280, and Unit 2, ISO-2-1.



NOTES:

1. ALUMINUM ALLOY ANGLE, 6061-T6,
PER QQ-A-200/8.
2. REMOVE BURRS AND BREAK ALL
SHARP EDGES.

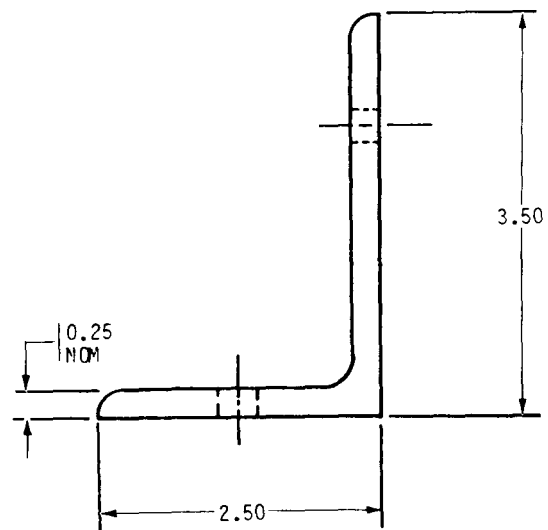


Figure 7. Dimensions for Bracket-7551851, Unit 1, 280.

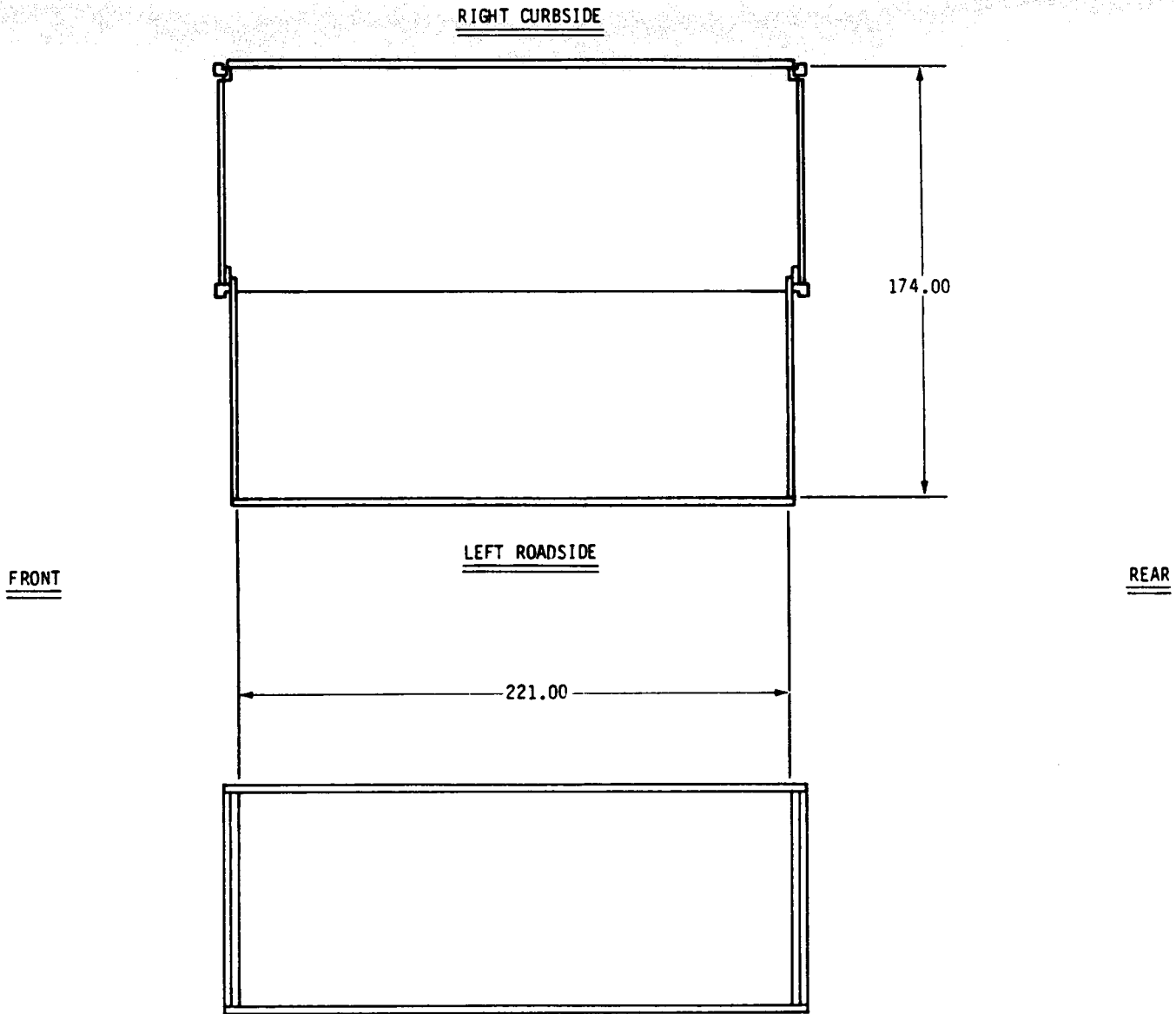


Figure 8. ISO-2-1 Maintenance Shelter, Unit 2.

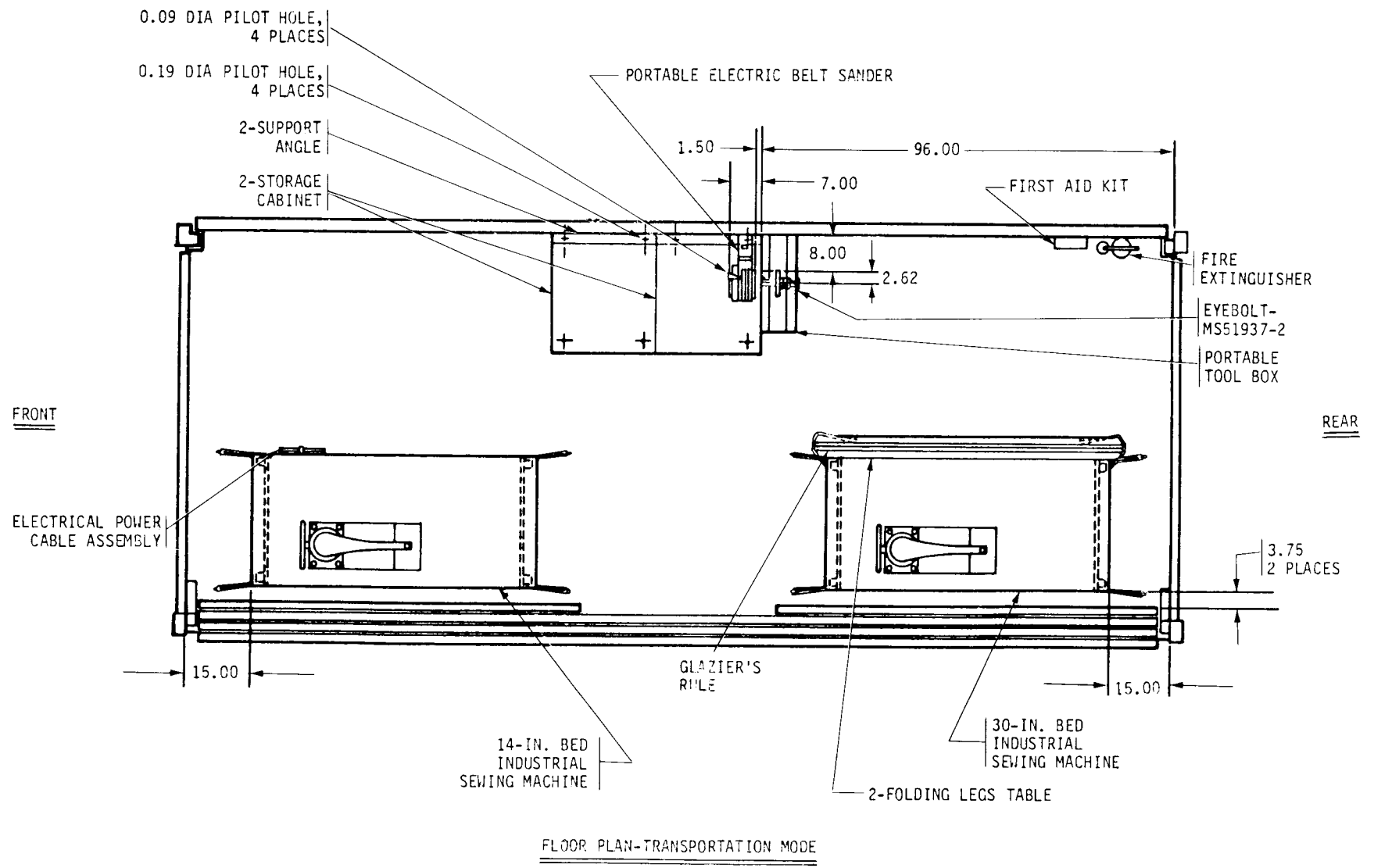


Figure 9. Components to be Mounted, Floor Plan, Unit 2, ISO-2-1.

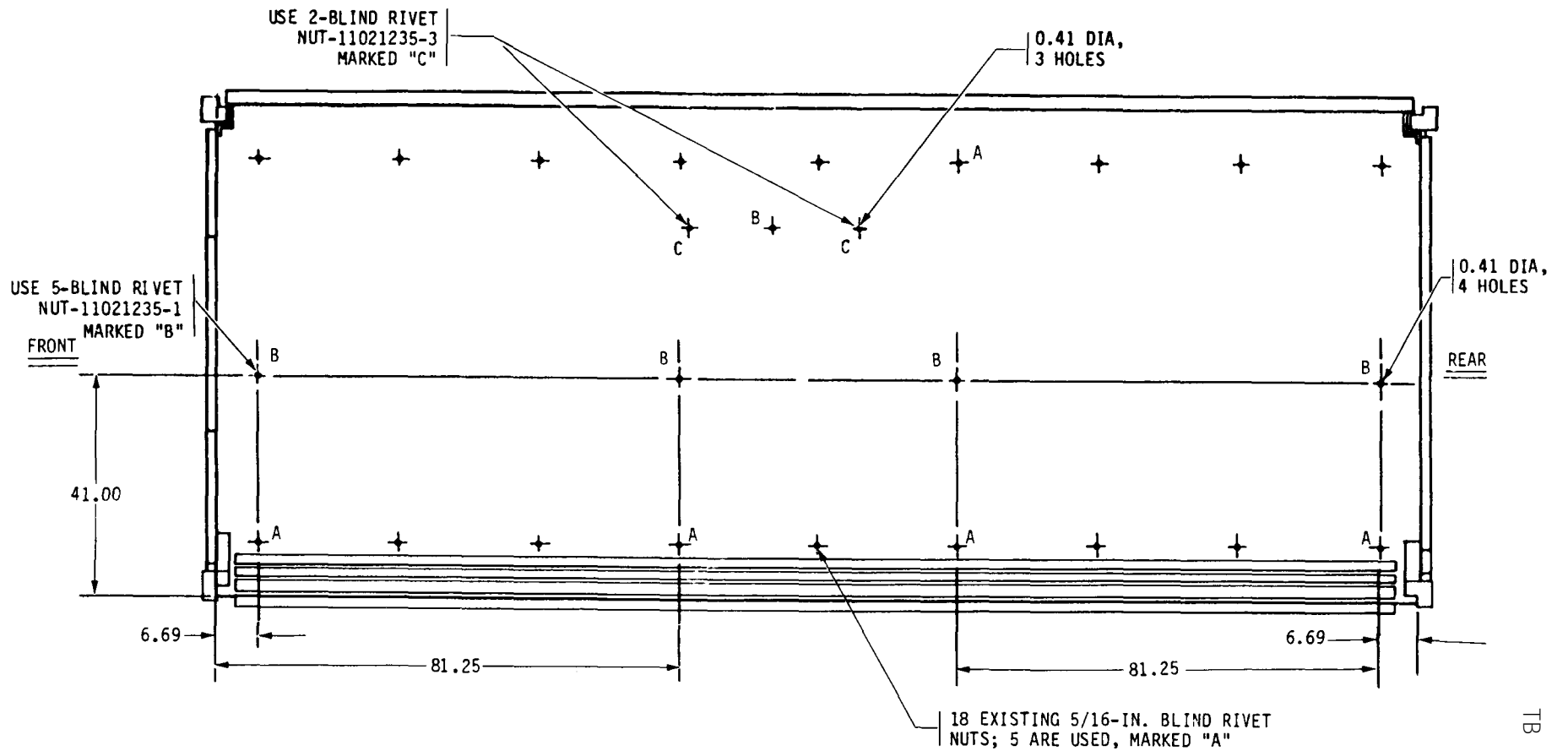


Figure 10. Dimensions for Blind Rivet Nuts, Floor Plan, Fixed Floor, Unit 2, ISO-2-1.

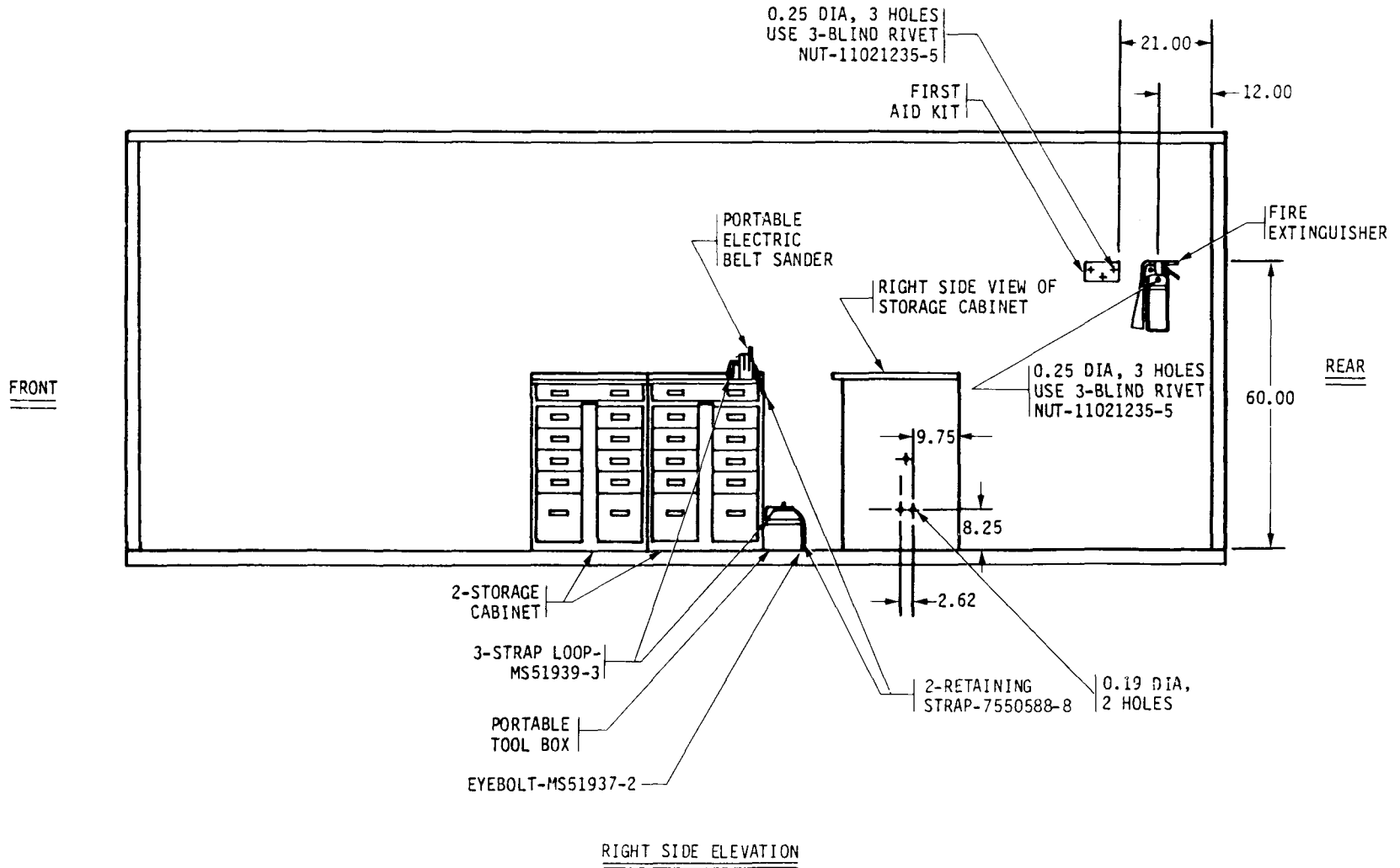
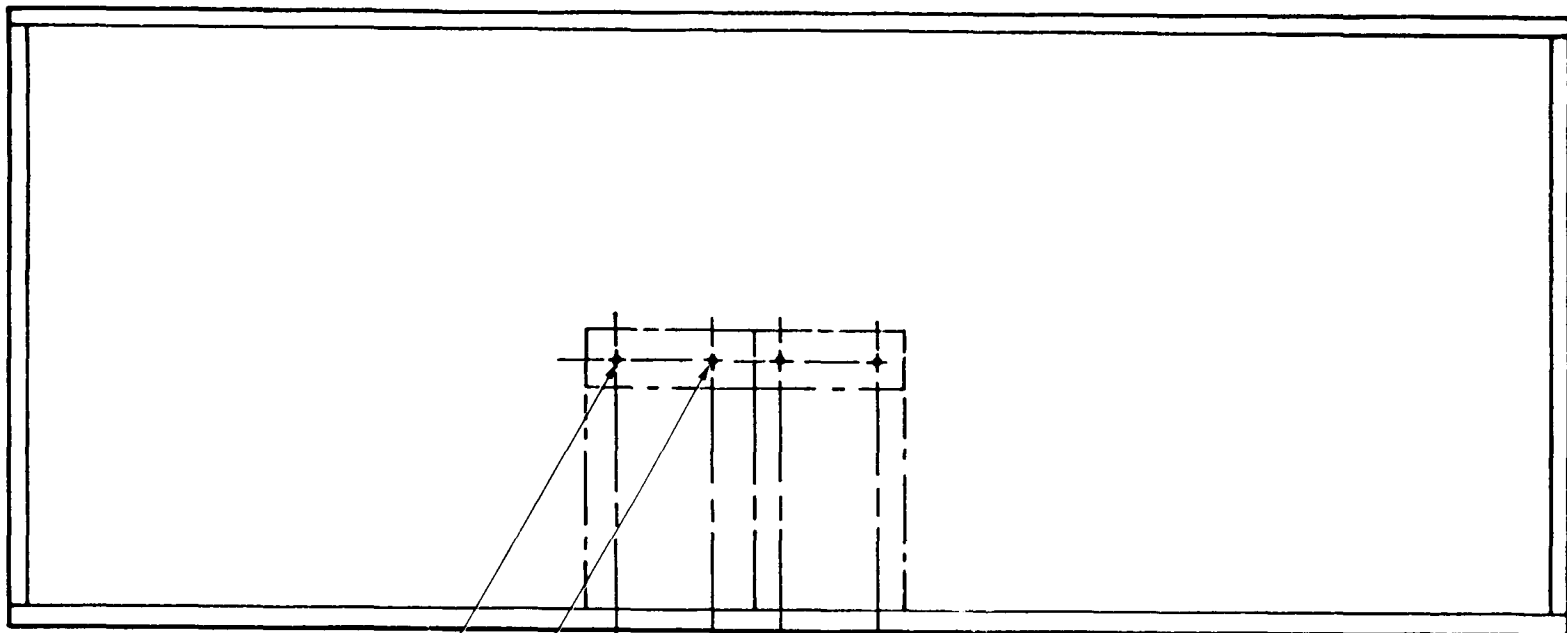


Figure 11. Components to be Mounted, Unit 2, ISO-2-1, Right Side Elevation.

FRONT

REAR



0.41 DIA,
4 HOLES

15.00 15.00

4-BLIND RIVET
NUT-11021235-1

RIGHT SIDE WALL

Figure 12. Dimensions for Blind Rivet Nuts, Unit 2, ISO-2-1, Right Side Wall.

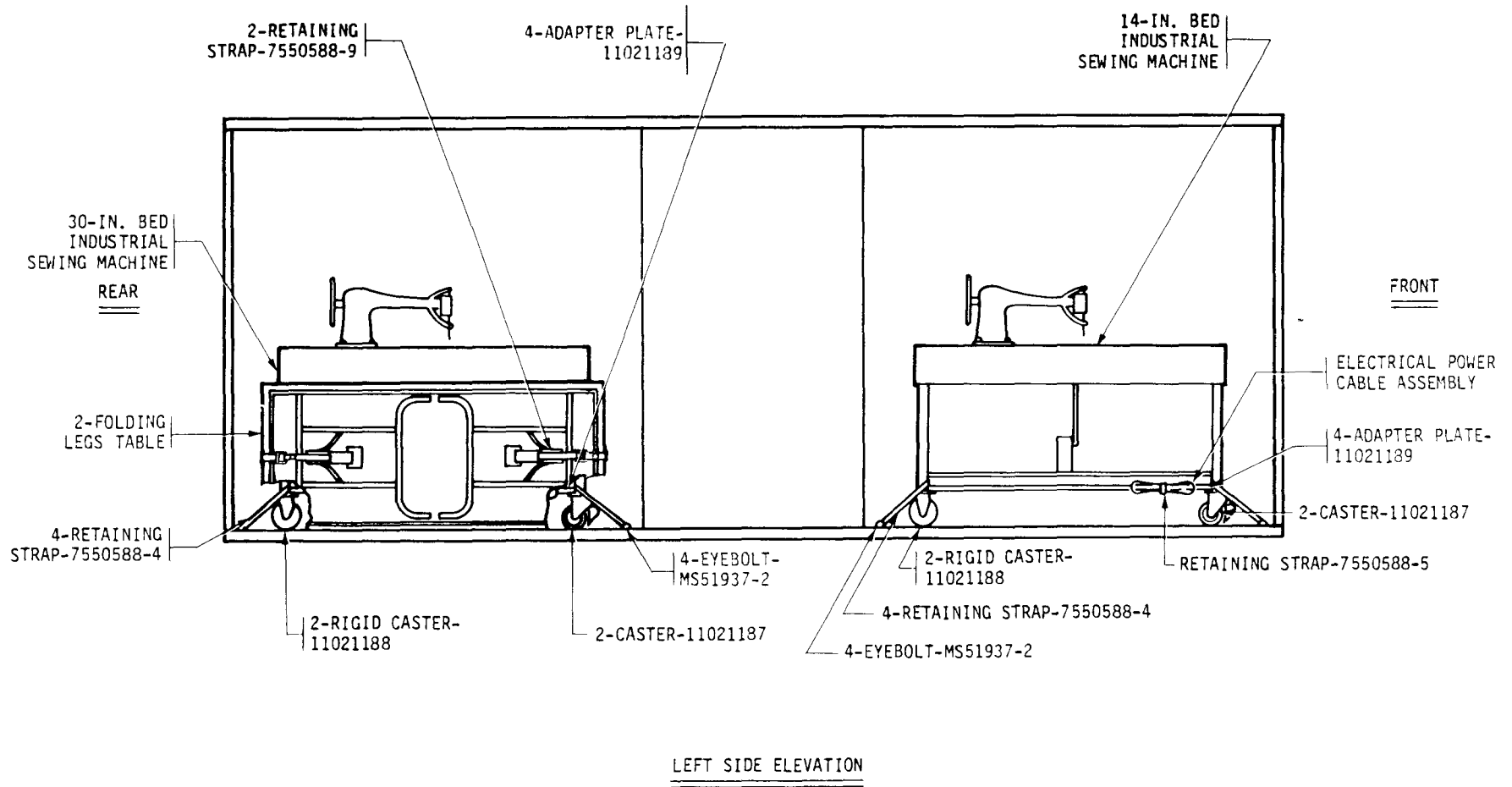
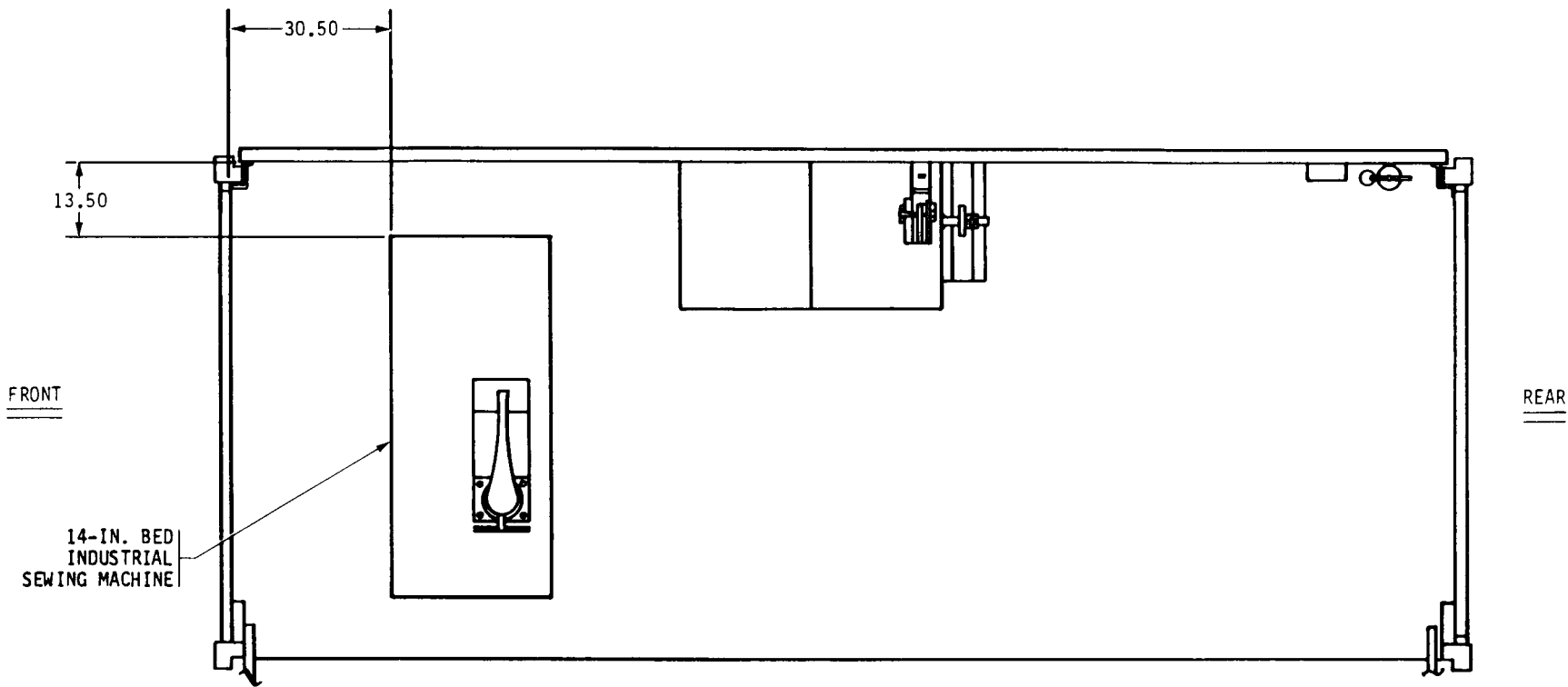


Figure 13. Components to be Mounted, Unit 2, ISO-2-1, Left Side Elevation.



FLOOR PLAN, FIXED FLOOR, DEPLOYED MODE

Figure 14. Location of 14-in. Bed Industrial Sewing Machine, Fixed Floor, Deployed Mode, Unit 2, ISO-2-1.

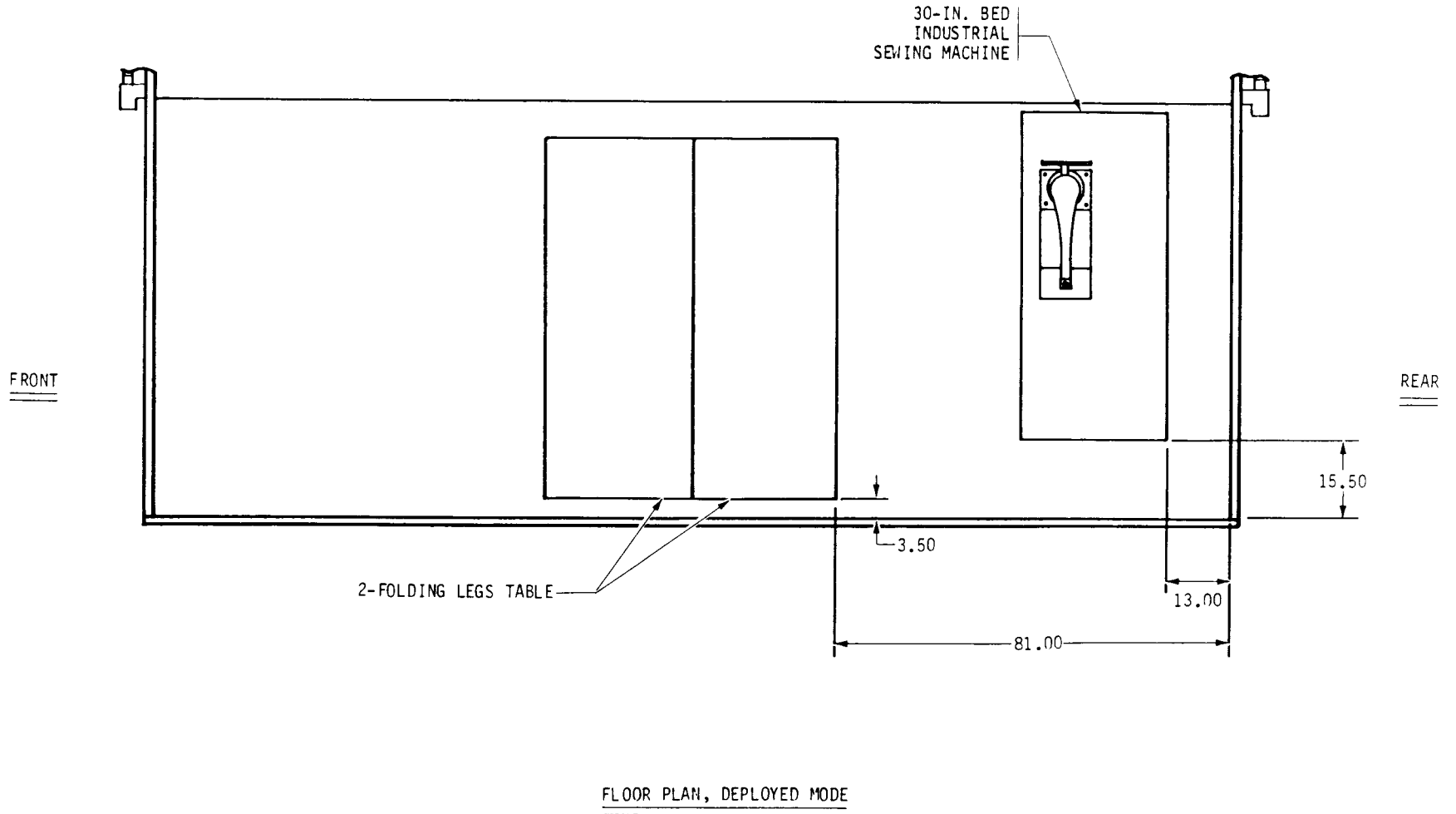
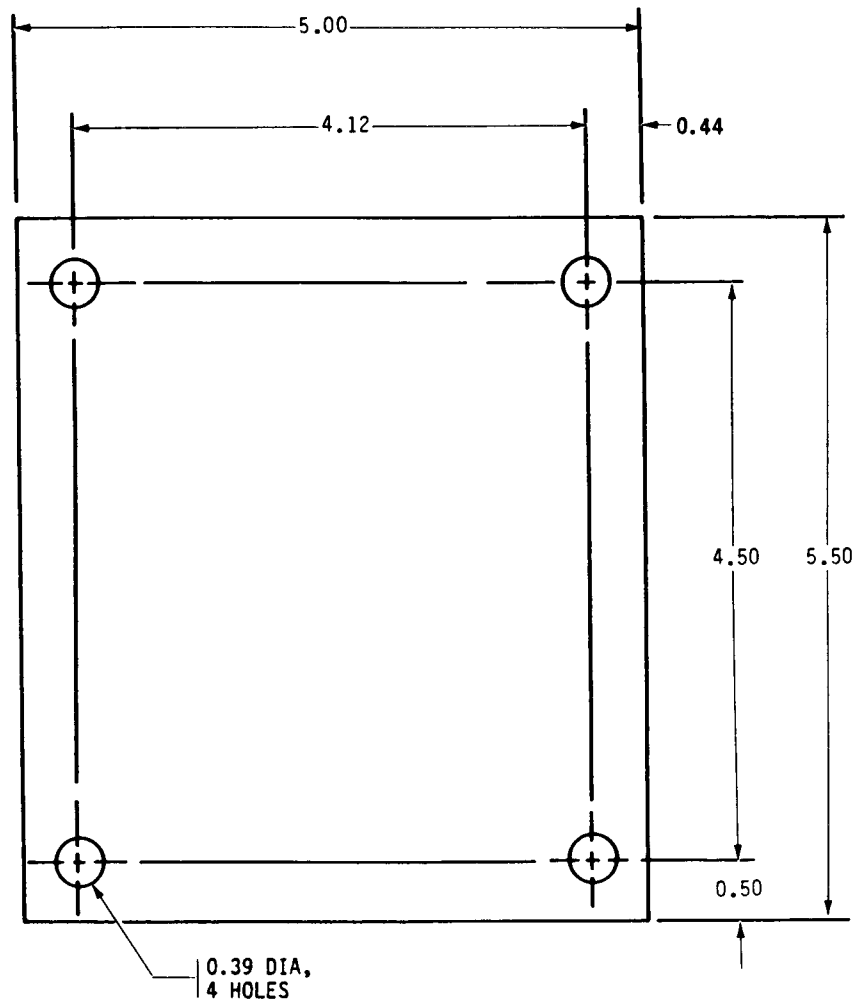


Figure 15. Location of Components, Deployed Mode, Unit 2, ISO-2-1.



- NOTES:
1. STEEL PLATE, ALLOY 1015-1020, PER QQ-S-626.
 2. REMOVE BURRS AND BREAK ALL SHARP EDGES.

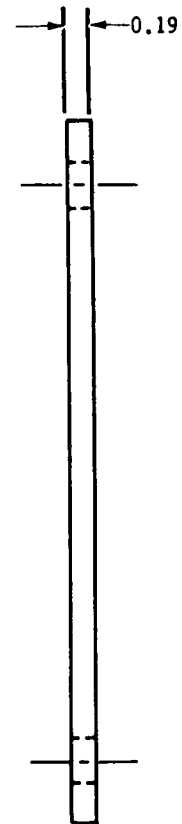


Figure 16. Dimensions for Adapter Plate-11021189, Unit 2, ISO-2-1.

NOTES:

1. METAL--ARC-WELD FOR LOW STRESSED JOINTS IAW MIL-STD 1261, CLASS 1.
2. REMOVE BURRS AND BREAK ALL SHARP EDGES.
3. AFTER WELDING, PAINT WITH PRIMER, MIL-P-14553; FINISH WITH FOREST GREEN ENAMEL IAW MIL-E-52798 (AIR DRY).

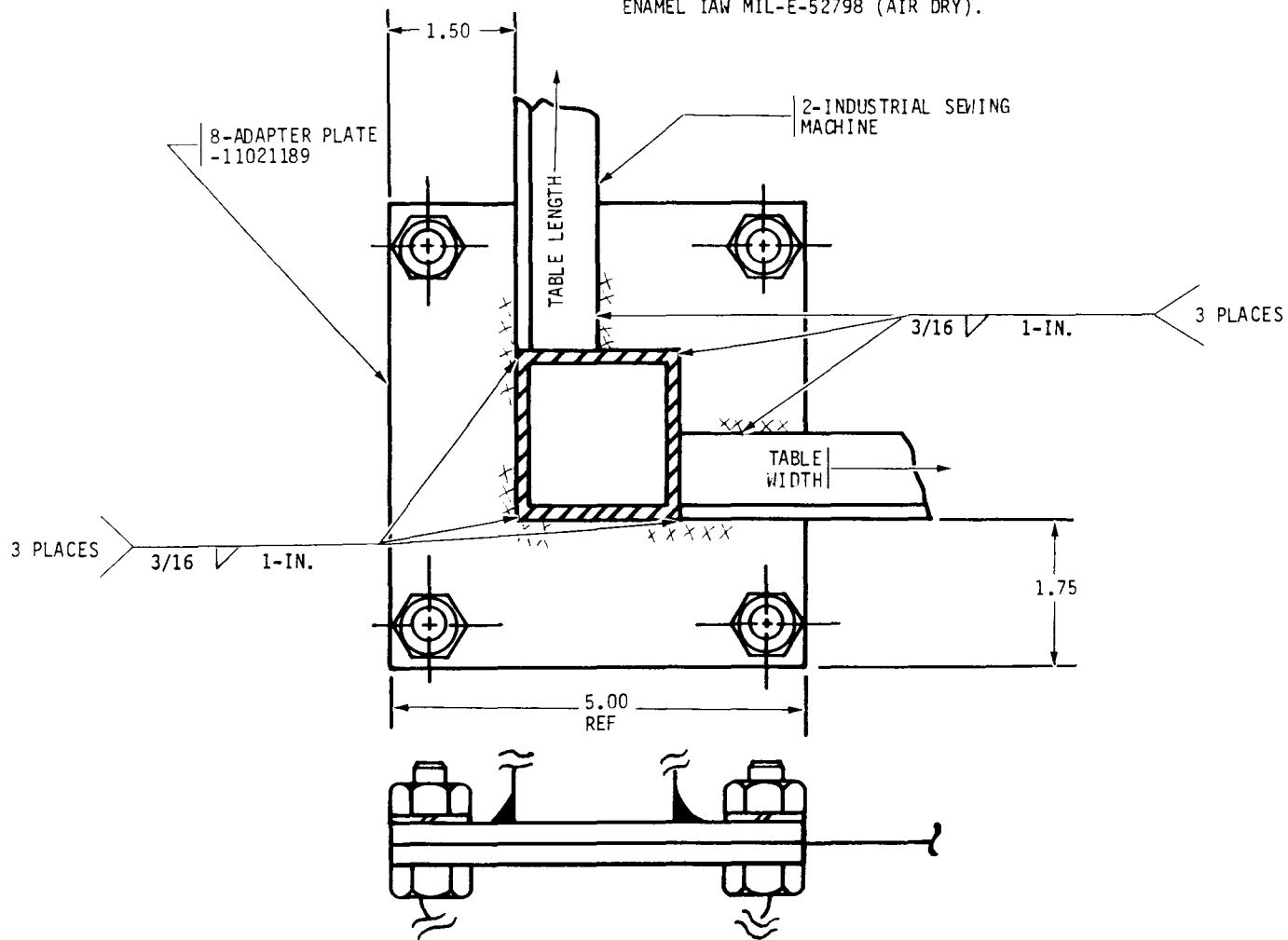
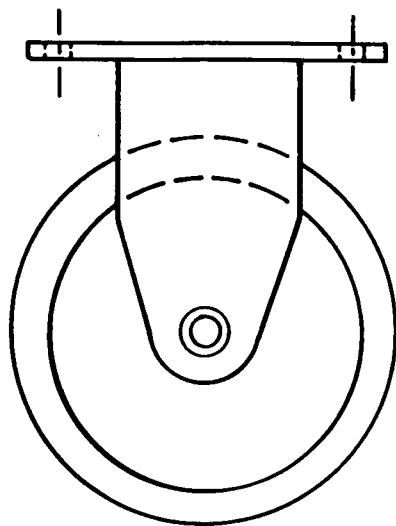
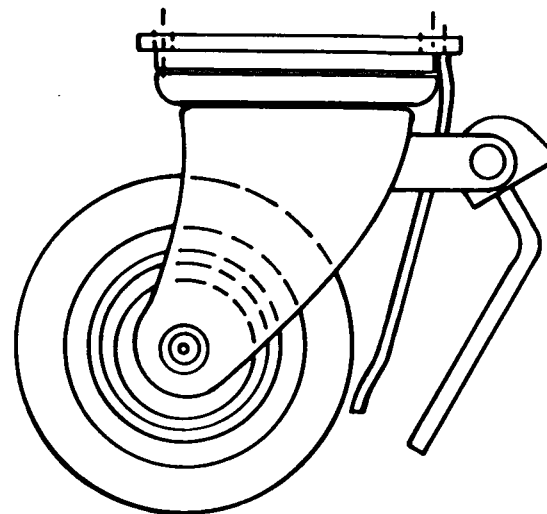


Figure 17. Welding Instructions for Adapter Plate-11021189, Unit 2, ISO-2-1.



RIGID CASTER-11021188



CASTER-11021187

Figure 18. Side Elevations of Casters (11021187) and Rigid Casters (11021188), Unit 2, ISO-2-1.

Table 6. Standard Conversion Chart

Nomi nal si ze	Deci mal si ze	Nomi nal si ze	Deci mal si ze
1/16	0.06	35/64	0.55
5/64	0.08	9/16	0.56
3/32	0.09	37/64	0.58
7/64	0.11	19/32	0.59
1/8	0.12	39/64	0.61
9/64	0.14	5/8	0.62
5/32	0.16	41/64	0.64
11/64	0.17	21/32	0.66
3/16	0.19	43/64	0.67
13/64	0.20	11/16	0.69
7/32	0.22	45/64	0.70
15/64	0.23	23/32	0.72
1/4	0.25	47/64	0.73
17/64	0.27	3/4	0.75
9/32	0.28	49/64	0.77
19/64	0.30	25/32	0.78
5/16	0.31	51/64	0.80
21/64	0.33	13/16	0.81
11/32	0.34	53/64	0.83
23/64	0.36	27/32	0.84
3/8	0.38	55/64	0.86
25/64	0.39	7/8	0.88
13/32	0.41	57/64	0.89
27/64	0.42	29/32	0.91
7/16	0.44	59/64	0.92
29/64	0.45	15/16	0.94
15/32	0.47	61/64	0.95
31/64	0.48	31/32	0.97
1/2	0.50	63/64	0.98
33/64	0.52	1	1.00
17/32	0.53		

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The Metric System and Equivalents

Linear Measure

1 centimeter = 10 millimeters = .39 inch
 1 decimeter = 10 centimeters = 3.94 inches
 1 meter = 10 decimeters = 39.37 inches
 1 dekameter = 10 meters = 32.8 feet
 1 hectometer = 10 dekameters = 328.08 feet
 1 kilometer = 10 hectometers = 3,280.8 feet

Weights

1 centigram = 10 milligrams = .15 grain
 1 decigram = 10 centigrams = 1.54 grains
 1 gram = 10 decigrams = .035 ounce
 1 dekagram = 10 grams = .35 ounce
 1 hectogram = 10 dekagrams = 3.52 ounces
 1 kilogram = 10 hectograms = 2.2 pounds
 1 quintal = 100 kilograms = 220.46 pounds
 1 metric ton = 10 quintals = 1.1 short tons

Liquid Measure

1 centiliter = 10 milliliters = .34 fl. ounce
 1 deciliter = 10 centiliters = 3.38 fl. ounces
 1 liter = 10 deciliters = 33.81 fl. ounces
 1 dekaliter = 10 liters = 2.64 gallons
 1 hectoliter = 10 dekaliters = 26.42 gallons
 1 kiloliter = 10 hectoliters = 264.18 gallons

Square Measure

1 sq. centimeter = 100 sq. millimeters = .155 sq. inch
 1 sq. decimeter = 100 sq. centimeters = 15.5 sq. inches
 1 sq. meter (centare) = 100 sq. decimeters = 10.76 sq. feet
 1 sq. dekameter (are) = 100 sq. meters = 1,076.4 sq. feet
 1 sq. hectometer (hectare) = 100 sq. dekameters = 2.47 acres
 1 sq. kilometer = 100 sq. hectometers = .386 sq. mile

Cubic Measure

1 cu. centimeter = 1000 cu. millimeters = .06 cu. inch
 1 cu. decimeter = 1000 cu. centimeters = 61.02 cu. inches
 1 cu. meter = 1000 cu. decimeters = 35.31 cu. feet

Approximate Conversion Factors

To change	To	Multiply by	To change	To	Multiply by
inches	centimeters	2.540	ounce-inches	newton-meters	.007062
feet	meters	.305	centimeters	inches	.394
yards	meters	.914	meters	feet	3.280
miles	kilometers	1.609	meters	yards	1.094
square inches	square centimeters	6.451	kilometers	miles	.621
square feet	square meters	.093	square centimeters	square inches	.155
square yards	square meters	.836	square meters	square feet	10.764
square miles	square kilometers	2.590	square meters	square yards	1.196
acres	square hectometers	.405	square kilometers	square miles	.386
cubic feet	cubic meters	.028	square hectometers	acres	2.471
cubic yards	cubic meters	.765	cubic meters	cubic feet	35.315
fluid ounces	milliliters	29.573	cubic meters	cubic yards	1.308
pints	liters	.473	milliliters	fluid ounces	.034
quarts	liters	.946	liters	pints	2.113
gallons	liters	3.785	liters	quarts	1.057
ounces	grams	28.349	liters	gallons	.264
pounds	kilograms	.454	grams	ounces	.035
short tons	metric tons	.907	kilograms	pounds	2.205
pound-feet	newton-meters	1.356	metric tons	short tons	1.102
pound-inches	newton-meters	.11296			

Temperature (Exact)

°F Fahrenheit temperature 5/9 (after subtracting 32) Celsius temperature °C

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