

DEPARTMENT OF THE ARMY TECHNICAL BULLETIN

SHOP EQUIPMENT, MACHINE SHOP,

ORGANIZATIONAL MAINTENANCE

(NSN 4940-00-209-6238)

INSTALLATION IN ONE 280 MAINTENANCE SHELTER

(NSN 4940-00-919-8409)

AND

ONE ISO-2-1 MAINTENANCE SHELTER

(NSN 5411-01-124-1377)

HEADQUARTERS, DEPARTMENT OF THE ARMY

September 1984

WARNING

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

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*This bulletin supersedes TB 4-4940-321-30, 29 January 1968.

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Section I. INTRODUCTION

1. General

a. The instructions contained in this bulletin are in three sections. Section I contains the introduction, warnings and cautions, and general instructions. Section II is a guide for installation of machine shop equipment (NSN 4940-00-209-6238) in one 280 shelter, unit 1 (NSN 4940-00-9198409) (fig. 1). Section III is a guide for installation of machine shop equipment (NSN 4940-00-209-6238) in one ISO-2-1 shelter, unit 2 (NSN 5411-01124-1377) (fig. 22).

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

c. Complete list of items contained in this shop is found in SC 4940-95-CLA62.

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

e. Items not mentioned in this bulletin, that may be components of this shop, may be stowed in 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 shop, curbside is at right and roadside is at left.

h. Level ISO-2-1 shelter before expanding sides.

2. Warnings and Cautions

WARNING

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

CAUTION

Special care should be exercised to avoid damage to electrical connectors, wiring, or electrical equipment.

To preserve waterproof characteristics, precautions should be taken not to puncture the outer skin when drilling holes in walls or floor of shop. Coat underside of vehicle body with coating compound (UNDERCOATING TT-C-520, NSN 803000-221-1834) where mounting hardware projects through floor.

Unit 2, 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 will be moved onto expanded floor until shelter is level.

3. Location of Equipment

a. Location of equipment to be installed or stowed in the 280 shelter is referenced in figures 2 thru 21 and 42 thru 46.

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

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

(3) Refer to table 5 for electrical components to be mounted.

(4) Refer to table 6 for components to be fabricated.

3. Location of Equipment--Continued

b. Location of equipment to be installed or stowed in the ISO-2-1 shelter is referenced in figures 23 thru 41.

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

(2) Refer to table 4 for components to be mounted.

(3) Refer to table 7 for components to be fabricated.

c. Refer to table 8 for standard conversion chart.

Table 1. Mounting Hardware, 280 Shelter

MS/part no	Size and description	Qty	Application
AN970-3	#10 Flat Washer	12	Strap loops, MGDS attachment
MS3367-1	6.30-in Tiedown Strap	3	Electrical installation
MS24667-43	5/16-18 UNC-2A Countersunk Cap-socket Head Machine Screw x 1-1/2 L	12	Lathe mounting plate
MS27130-A44	5/16-18 UNC Blind Rivet Nut	14	Front and door end walls
MS27183-12	11/32-in. Flat Washer	22	Storage cabinets to bench supports, shelves
MS27183-14	13/32-in. Flat Washer	3	Upright drilling machine
MS27183-18	17/32-in. Flat Washer	12	Engine lathe, machinist's vise
MS35190-278	#10-24 UNC-2A Countersunk Head Machine Screw x 1-3/4 L	12	MGDS attachment, strap loops
MS35190-309	5/16-18 UNC-2A Countersunk Head Machine Screw x 1-3/4 L	12	Table tops to bench supports
MS35190-310	5/16-18 UNC-2A Countersunk Head Machine Screw x 2.00 L	6	Table support angles to table tops
MS35206-264	#10-24 UNC-2A Pan Head Machine Screw x 5/8 L	4	Fire extinguisher bracket
MS35338-43	#10 Lockwasher	16	Strap loops, I1GDS attachment, fire extinguisher

MS/part no	Size and description	Qty	Application
MS35338-45	5/16-in Lockwasher	57	Storage cabinets to bench supports, shelf supports, table tops, right and left wall angles, shelves, utility grinding machine, table support angles
MS35338-46	3/8-in Lockwasher	9	Upright drilling machine, engine lathe angles
MS35338-48	1/2-in Lockwasher	8	Machinist's vise, engine lathe
MS35649-202	#10-24 IJNC-2B Hex Nut	16	Fire extinguisher, MGDS attachment, strap loops
MS51937-2	5/16-18 UNC-2A Shoulder Eyebolt	4	MCDS attachment x 2-31/32 L
MS51939-3	Strap Loop	6	Tool kit, MGDS attachment
MS51967-5	5/16-18 UNC-2B Hex Nut	35	Utility grinding machine, storage cabinets to bench supports, eyebolts, table tops, MGDS attachment
MS51967-8	3/8-16 UNC-2B Hex Nut	9	Upright drilling machine, engine lathe angles
MS51967-14	1/2-13 UNC-2B Hex Nut	4	Machinist's vise
MS90725-32	5/16-18 UNC-2A Hex Head Capscrew x 3/4 L	22	Bench supports, storage cabinets to bench supports, shelves

3. Location of Equipment--Continued

Table 1. Mounting Hardware, 280 Shelter--Continued

MS/part no	Size and description	Qty	Application
MS90725-34	5/16-18 UNC-2A Hex Head Capscrew x 1.00 L	14	Table support angles, engine lathe angles, shelf supports
MS90725-40	5/16-18 UNC-2A Hex Head Capscrew x 2.00 L	3	Utility grinding machine
MS90725-60	3/8-16 UNC-2A Hex Head Capscrew x 1.00 L	6	Engine lathe angles
MS90725-73	3/8-16 UNC-2A Hex Head Capscrew x 3-3/4 L	3	Upright drilling machine
MS90725-119	1/2-13 UNC-2A Hex Head Capscrew x 3.00 L	8	Machinist's vise, engine lathe
7550588-3	48.00-in. Retaining Strap	8	Hand reamer set, level and plumb, wash pan, safety can, die and tap set, pipe threading set
7550588-5	24.00-in. Retaining Strap	4	Tool kit, extension lights, power cable assemblies
7550588-6	12.00-in. Retaining Strap	1	Pinch bar
7550588-7	92.00-in Retaining Strap	4	MCDS attachment
11021235-1	5/16-18 UNC Blind Rivet Nut	6	Floor
11021235-3	5/16-18 UNC Blind Rivet Nut	12	Floor

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

MS/part no	Size and description	Qty	Application
MS24667-54	3/8-16 UNC-2A Countersunk Cap-socket Head Machine Screw x 1-1/2 L	12	Lathe mounting plate

3. Location of Equipment--Continued

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

MS/part no	Size and description	Qty	Application
MS27183-11	5/16-in Flat Washer	21	Table support angles, utility grinding machine, shelves
MS27183-13	3/8-in. Flat Washer	3	Upright drilling machine
MS27183-17	1/2-in. Flat Washer	4	Machinist's vise
MS27183-18	17/32-in. Flat Washer	4	Engine lathe
MS35190-271	#10-24 UNC-2A Countersunk Head Machine Screw x 1/2 L	34	Strap loops, first aid kit, fire extinguisher
MS35190-309	5/16-18 UNC-2A Countersunk Head Machine Screw x 1-3/4 L	8	Table tops
MS35338-45	5/16-in. Lockwasher	62	Table support angles, table top, work table, shelves, cabinet roller base assembly, storage cabinets, utility grinding machine
MS35338-46	3/8-in. Lockwasher	3	Upright drilling machine
MS35338-48	1/2-in. Lockwasher	8	Machinist's vise, engine lathe
MS51939-3	Strap Loop	14	Wall mounted strap loops
MS51967-5	5/16-18 UNC-2B Hex Nut	29	Table tops, table support angles, shelves, utility grinding machine
MS51967-8	3/8-16 UNC-2B Hex Nut	3	Upright drilling machine
MS51967-14	1/2-13 UNC-2B Hex Nut	4	Machinist's vise

3. Location of Equipment--Continued

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

MS/part no.	Size and description	Qty	Application
MS90725-32	5/16-18 UNC-2A Hex Head Capscrew x 3/4 L	14	Storage cabinets, shelves, work table
MS90725-33	5/16-18 UNC-2A Hex Head Capscrew x 7/8 L	27	Table support angles to walls, storage cabinets, cabinet roller base assembly
MS90725-34	5/16-18 UNC-2A Hex Head Capscrew x 1.00 L	2	Table support angle
MS90725-41	5/16-18 UNC-2A Hex Head Capscrew x 2-1/4 L	11	Table support angles, utility grinding machine
MS90725-67	3/8-16 UNC-2A Hex Head Capscrew x 2-1/4 L	3	Upright drilling machine
MS90725-119	1/2-13 UNC-2A Hex Head Capscrew x 3.00 L	8	Machinist's vise, engine lathe
7550588-1	72.00-in. Retaining Strap	2	Micrometer caliper set, counterbore set, surface plate
7550588-2	60.00-in. Retaining Strap	8	Table top with storage cabinet, die and tap sets, level and plumb, hand reamer set, pinch bar, surface plate
7550588-3	48.00-in. Retaining Strap	2	Safety can, wash pan, power cable assemblies
7550588-7	92.00-in. Retaining Strap	6	Work table, MGDS attachment, pipe threading set, tool kit
11021235-1	5/16-18 UNC Blind Rivet Nut	21	Table support angles, storage cabinets, work table
11021235-2	3/8-16 UNC Blind Rivet Nut	4	Lathe mounting plate

3. Location of Equipment--Continued

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

MS/part no	Size and description	Qty	Application
11021235-3	5/16-18 UNC Blind Rivet Nut	12	Storage cabinets
11021235-4	3/8-16 UNC Blind Rivet Nut	8	Lathe mounting plate
11021235-5	#10-24 UNC Blind Rivet Nut	34	Strap loops, first aid kit, fire extinguisher

Table 3. Components to be Mounted, 280 Shelter

NSN	Qty	Description	Figure no.
5120-00-224-1384	1	BAR, PINCH	10
7125-00-999-1123	3	CABINET, SMALL PARTS STORAGE: 20 drawers	4-5
7125-00-999-1121	1	CABINET, SMALL PARTS STORAGE: 30 drawers	5
6150-00-682-3460	2	CABLE ASSEMBLY, POWER, ELECTRICAL	10
5136-00-357-7504	1	DIE AND TAP SET, THREAD CUTTING: 88-pc	4
3413-00-165-4136	1	DRILLING MACHINE, UPRIGHT	2
4210-00-555-8837	1	EXTINGUISHER, FIRE, MONOBROMOTRIFLUOROMETHANE	8-10
6545-00-922-1200	1	FIRST AID KIT, GENERAL PURPOSE	10
3415-00-517-7754	1	GRINDING MACHINE, UTILITY	2
3416-01-030-8195	1	LATHE, ENGINE	4-5- 10
5210-00-239-0892	1	LEVEL AND PLUMB	4
6230-00-729-9259	2	LIGHT, EXTENSION	10
3460-00-840-1010	1	MILLING - GRINDING - DRILLING - SLOTING ATTACHMENT (MGDS)	2

3. Location of Equipment--Continued

Table 3. Components to be Mounted, 280 Shelter--Continued

NSN	Qty	Description	Figure' no.
4940-00-795-3595	1	PAN, WASH	5
5110-00-357-6858	1	REAMER SET, HAND	2-4
7240-00-222-3084	1	SAFETY CAN	5
5180-00-357-7514	1	THREADING SET, PIPE	4
5180-00-699-5273	1	TOOL KIT, GENERAL MECHANIC	2-5
3460-00-277-3504	1	WISE, MACHINE TABLE	2
5120-00-293-1439	1	WISE, MACHINIST'S	2

Table 4. Components to be Mounted, ISO-2-1 Shelter

NSN	Qty	Description	Figure no.
5120-00-224-1384	1	BAR, PINCH	23-30
7125-00-999-1123	3	CABINET, SMLALL PARTS STORAGE: 20 drawers	25-27-30
7125-00-999-1121	2	CABINET, SMALL PARTS STORAGE: 30 drawers	23-25
6150-00-682-3460	2	CABLE ASSEMBLY, POWER, ELECTRICAL	25
5120-00-554-7134	1	CALIPER SET, MICRO9ETER, OUTSIDE	27
5133-00-378-3813	1	COUNTERBORE SET	27
5136-00-357-7494	1	DIE AND TAP SET, THREAD CUTTING: 82-pc	27
5136-00-357-7506	1	DIE AND TAP SET, THREAD CUTTING: 40-pc	27
5136-00-357-7504	1	DIE AND TAP SET, THREAD CUTTING: 88-pc	27

3. Location of Equipment--Continued

Table 4. Components to be Mounted, ISO-2-1 Shelter--Continued

NSN	Qty	Description	Figure no.
3413-00-165-4136	1	DRILLING MACHINE, UPRIGHT	23
4210-00-555-8837	1	EXTINGUISHER, FIRE, MONBROMOTRIFLUOROMETHANE	27
6545-00-922-1200	1	FIRST AID KIT, GENERAL PURPOSE	25
3415-00-517-7754	1	GRINDING MACHINE, UTILITY	23
3416-01-030-8195	1	LATHE, ENGINE	23
5210-00-239-0892	1	LEVEL AND PLUMB	27
6230-00-729-9259	2	LIGHT, EXTENSION	27
3460-00-840-1010	1	MILLING - GRINDING - DRILLING - SLOTING ATTACHMENT (MODS)	23-25
4940-00-795-3595	1	PAN, WASH	25
5220-00-516-3647	1	PLATE, SURFACE	27
5110-00-357-6858	1	REAMER SET, HAND	23-30
7240-00-222-3084	1	SAFETY CAN	25
4910-00-543-7772	1	TABLE, WORK, AUTOMOTIVE MAINTENANCE	23-27- 30
5180-00-357-7514	1	THREADING SET, PIPE	23
5180-00-699-5273	1	TOOL KIT, GENERAL MECHANIC	23-27- 30
3460-00-277-3504	1	WISE, MACHINE TABLE	23
5120-00-293-1439	1	WISE, MACHINIST'S	23

3. Location of Equipment--Continued

Table 5. Electrical Components to be Mounted, 280 Shelter

Part No. or NSN	Qty	Figure Description	no.
5935-01-038-7401	1	RECEPTACLE-GROUNDED: 2 pole, 3 wire, 250 V, 30 amp, locking (W-C-596/77-1)	43-44
5975-00-504-7672	1	COVER JUNCTION BOX, SINGLE: type VIII, style 58 (W-J-800)	44
5935-01-036-5166	1	CONNECTOR, PLUG: straight, grounding, 2 pole, 3 wire, 30 amp, 250 V, 50/60 Hz (W-C-596/78-1)	45
6145-00-295-0855	12 ft	CORD, FLEXIBLE: type S06CF3/1OSRNJG (J-C-580) 0.69 dia cord	45-46
APPLETON 15233	1	BOX CONNECTOR: type 1, class 4, style M, strain relief type, for 0.69 dia cord (W-F-406)	45
3M "HYFLEX" NO 212 OR EQUAL	4	SPLICE CONDUCTOR: Type III, class 1, kind CU, style G, grade A, size 2 (W-S-610)	43
MS21333-41	4	CLAMP, LOOP-STEEL, PLAIN	46
6145-00-990-2999	AR*	WIRE: #10 AWG (J-C-30) black, THW-06-C-E-1/10-T-UJ-O	43-44
6145-00-990-3000	AR	WIRE: #10 AWG (J-C-30) white, THW-06-C-E-1/10-T-UJ-9	43-44
6145-00-904-3811	AR	WIRE: #12 AWG (J-C-30) green, THW-06-C-E-1/12-T-UJ-5	43-44

*As required

3. Location of Equipment--Continued

Table 6. Components to be Fabricated, 280 Shelter

Part No	Qty	Description	Figure no.
7551819	1	Lathe Mounting Plate	4-5-10-12
7551820	1	Right Wall Angle	5-10-13
7551821	1	Left Wall Angle	4-10-13
7551822	1	Left Brace	4-10-14
7551823	1	Right Brace	5-10-14
7551824	1	Right Side Table Top	2-10-15
7551825	1	Left Side Table Top (Notched)	2-10-15
7551826	1	Right Side Table Support Angle	9-10-16
7551827	1	Left Side Table Support Angle	9-10-15
7551828	1	Rear Right Side Bench Support	4-17
7551829	1	Rear Left Side Bench Support	5-18
7551830	1	Front Right Side Bench Support	4-17
7551831	1	Front Left Side Bench Support	5-18
7551832	3	Shelf	4-5-19
7551834	3	Shelf Support	9-10- 20

3. Location of Equipment--Continued

Table 7. Components to be Fabricated, ISO-2-1 Shelter

Part No	Qty	Description	Figure no.
11021199	1	Lathe Mounting Plate	23-24-31
11021200	2	Table Top	23-25-27-32
11021201	1	Shelf	33
11021202	1	Shelf	34
11021203	2	Cabinet Roller Base Assembly	36 thru 41
11021203-1	4	Angle	38
11021203-2	4	Angle	37
11021203-3	4	Angle	37
11021203-4	8	Gusset	38
11021203-5	4	Pad Assembly (used with MS90725-61, 3/8-16 UNC-2A Hex Head Capscrew x 1-1/8 L)	'39
11021203-6	16	Spacer	38
11021204	8	Wheel	40
11021205	8	Axle	40
11021208	5	Support Angle	23-25- 35
11021214	16	Bearing	40
11021215	4	insert	41

Section II. INSTALLATION IN 280 SHELTER

4. Installation

6 and 10 before reinstalling the front panel assembly.

NOTE

Hand blind riveter (5120-00679-6523) is used for installing blind rivet nuts in floors and walls. Install blind rivet nuts in accordance with the technical manual supplied with the hand blind riveter.

Position floor, table, and lathe mounted components as shown in figures 2 thru 11. Use the equipment mounting holes as templates for location of blind rivet nuts. Positions may be varied to drill into structural members in the floor.

a. Install blind rivet nuts in 280 shelter, unit 1 as follows:

(1) Mark and drill eighteen 0.41 in. diameter holes in floor and install six 5/16-in. blind rivet nuts (110212351) and twelve 5/16-in. blind rivet nuts (11021235-3) in accordance with figure 3.

(2) Mark and drill ten 0.41-in. diameter holes in door end wall and install ten 5/16-in. blind rivet nuts (MS27130-A44) in accordance with figure 8.

NOTE

Installation of blind rivet nuts in front wall requires removal of front panel assembly. Proceed with modification of front panel assembly by relocating the components on the front panel assembly and reusing the supplied fasteners in accordance with figures

(3) Remove ground rod, hanger and bracket (fig. 10). Remove front panel assembly; mark and drill four 0.41-in. diameter holes in front wall and install four 5/16-in. blind rivet nuts (MS27130-A44) in accordance with figure 7. Install front panel assembly.

b. Follow steps (1) thru (23) below for equipment installation in 280 shelter, unit 1.

(1) Fabricate lathe mounting plate (7551819) in accordance with figure 12. Position lathe mounting plate (7551819) on front end of shelter floor (fig. 2). Secure in place, using twelve 5/16x 1-1/2-in. countersunk cap-socket head machine screws (MS2466743).

(2) Fabricate right wall angle (7551820) and left wall angle (7551821) in accordance with figure 13. Fabricate left brace (7551822) and right brace (7551823) in accordance with figure 14. Position and secure right wall angle (7551820) and left wall angle (7551821) to front wall, using four 5/16x 1-in. hex head capscrews (MS90725-34) and four 5/16-in. lockwashers (MS35338-45) in accordance with figures 4, 5, and 10. Screw engine lathe leveling screws flush with bottom of engine lathe (3416-01-030-8195). Position engine lathe on lathe mounting plate, and using the lathe leveling screws as a template, mark and tap four holes for fasteners (fig. 12). Secure, using four 1/2 x 3-in. hex head capscrews (MS90725-119), four 1/2-in. lockwashers (MS35338-48), and four 17/32-in. flat washers (MS27183-18). (It may be necessary to drill four 0.50-in. diameter holes in floor to allow 1/2x 3in. hex head capscrews to seat properly.) Secure left brace (7551822) and right brace (7551823) to right and left wall angles, using two 3/8 x 1-in. hex head capscrews (MS90725-60), two 3/8-in. lockwashers (MS35338-46), and two 3/8in. hex nuts (MS51967-8) in

4. Installation--Continued

accordance with figures 4, 5, and 10. Using left and right braces as templates, mark and drill two 0.41-in. diameter holes into each end of engine lathe cabinet. Secure left and right braces to engine lathe cabinet, using four 3/8-x 1-in. hex head capscrews (MS90725-60), four 3/8-in. lockwashers (MS35338-46), and four 3/8-in. hex nuts (MS51967-8).

(3) Fabricate rest of components listed in table 6 in accordance with figures 15 thru 20. Position three shelf supports (7551834) on rear wall in accordance with figure 9. Secure, using six 5/16x 1-in. hex head capscrews (MS90725-34) and six 5/16-in. lockwashers (MS35338-45).

(4) Position right side table support angle (7551826) on right rear wall; position left side table support angle (7551827) on left rear wall in accordance with figures 9 and 10. Secure, using four 5/16x 1-in. hex head capscrews (MS90725-34) and four 5/16-in. lockwashers (MS35338-45) (two each angle).

(5) Position 30-drawer storage cabinet (7125-00-999-1121) and three 20-drawer storage cabinets (7125-00999-1123) in accordance with figures 4 and 5. Position four bench supports (7551828, 7551829, 7551830, and 7551831) in accordance with figures 4 and 5 over installed blind rivet nuts in accordance with figure 3. Secure bench supports to floor, using twelve 5/16x 3/4-in. hex head capscrews (MS90725-32), twelve 11/32-in. flat washers (MS27183-12), and twelve 5/16-in. lockwashers (MS3533845).

CAUTION

Be sure storage cabinet drawers adjacent to hole locations are removed before drilling.

(6) Using the installed bench supports as templates, mark and drill

ten 0.34-in. diameter holes through the adjacent walls of the storage cabinets.

(7) Position three shelves (7551832) in accordance with figures 4 and 5. Hook one end of each shelf between wall-mounted shelf supports (7551834) and wall; secure other end to bench supports and storage cabinets, using six 5/16x 3/4-in. hex head capscrews (MS90725-32), six 11/32-in. flat washers (MS27183-12), six 5/16-in. lockwashers (MS35338-45), and six 5/16-in. hex nuts (MS51967-5). Secure just the bench supports to cabinets, using four 5/16x 3/4-in. hex head capscrews (MS90725-32), four 11/32-in. flat washers (MS27183-12), four 5/16-in. lockwashers (MS35338-45), and four 5/16-in. hex nuts (MS51967-5).

(8) Position right side table top (7551824) and left side table top (7551825), with notched end on left side of 280 shelter, on top of bench supports and table support angles in accordance with figures 2 and 10. Using the holes in top flange of installed bench supports as templates, mark and drill eighteen 0.34-in. diameter holes through table tops and countersink the holes in accordance with figure 15. Secure table tops to bench supports, using twelve 5/16x 13/4-in. countersunk head machine screws (MS35190-309). Secure table tops to table support angles, using six 5/16x 2-in. countersunk head machine screws (MS35190-310), eighteen 5/16-in. lockwashers (MS35338-45), and eighteen 5/16-in. hex nuts (MS51967-5).

(9) Position base of upright drilling machine (3413-00-165-4136) flush with left end of right side table top in accordance with figure 2. Using base of upright drilling machine as a template, mark and drill three 0.41-in. diameter holes through right side table top and storage cabinet. Secure, using three 3/8x 3-3/4-in. hex head capscrews (MS90725-73), three 13/32-in. flat washers (MS27183-14), three 3/8

4. Installation--Continued

in. lockwashers (MS35338-46), and three 3/8-in. hex nuts (MS51967-8).

(10) Secure machine table vise (3460-00-277-3504) to base of upright drilling machine, using furnished tee bolts and nuts (fig. 2).

(11) Position utility grinding machine (3415-00-517-7754) on right side table top in accordance with figure 2. Using base of utility grinding machine as a template, mark and drill three 0.34-in. diameter holes through right side table top and storage cabinet. Secure utility grinding machine, using three 5/16x 2-in. hex head capscrews (MS90725-40), three 5/16-in. lockwashers (MS35338-45), and three 5/16-in. hex nuts (MS51967-5).

(12) Position hand reamer set (5110-00-357-6858) on right rear corner of right side table top (7551824) in accordance with figures 2 and 4. Secure, using two 48-in. retaining straps (7550588-3) wrapped around hand reamer set and right side table top.

NOTE

When installing machinist's vise, install capscrews from underside with flat washers on both top and bottom and hex nuts and lockwashers on top.

(13) Position machinist's vise (5120-00-293-1439) on left side table top (7551825) in accordance with figure 2. Using base of machinist's vise as a template, mark and drill four 0.56-in. diameter holes through left side table top and storage cabinet. Secure machinist's vise to left side table top, using four 1/2 x 3-in. hex head capscrews (MS90725-119), eight 17/32-in. flat washers (MS27183-18), four 1/2-in. lockwashers (MS35338-48), and four 1/2-in. hex nuts (MS51967-14).

(14) Position tool kit (5180-00699-5273) on left side table top (fig. 2). Locate two strap loops (MS51939-3) 1.00 inch from each end of tool kit and in line with handles in accordance with figure 2. Using strap loops as templates, mark and drill four 0.22-in. diameter holes through left side table top and storage cabinet. Secure strap loops, using four #10 x 1-3/4-in. countersunk head machine screws (MS35190278), four #10 flat washers (AN970-3), four #10 lockwashers (MS35338-43), and four #10 hex nuts (MS35649-202). Secure tool kit, using two 24-in. retaining straps (7550588-5) (fig. 5).

(15) Position level and plumb (5120-00-239-0892) on top of pipe threading set (5180-00-357-7514) and place on top shelf in accordance with figure 4. Secure with two 48-in. retaining straps (7550588-3).

(16) Position 88-piece die and tap set (5136-00-357-7504) on lower shelf on right side of 280 shelter in accordance with figure 4. Secure with two 48-in. retaining straps (75505883).

(17) Place safety can (7240-00222-3084) in wash pan (4940-00-7953595) and position on shelf (7551832) in accordance with figure 5. Secure with two 48-in. retaining straps (75505883). (Pass one retaining strap through handle of safety can.)

(18) Coil cords of two extension lights (6230-00-729-9259) around hooks on left side of front panel assembly. Coil two power cable assemblies (615000-682-3460) on right side of front panel assembly in accordance with figure 10. Secure with two 24-in. retaining straps (7550588-5).

(19) Reassemble ground rod, hanger, and bracket (previously removed from front panel assembly) on the right rear wall as shown in figure 10, using

4. Installation--Continued

existing screws. Install ground rod and secure in hanger and bracket.

(20) Position pinch bar (5120-00224-1384) inside door to right by shelf support (7551834). (See figure 10.). Secure pinch bar, using a 12-in. retaining strap (7550588-6). Pass the retaining strap around the shelf support.

(21) Position mounting bracket of fire extinguisher (4210-00-555-8837) on existing rear right wall sheet metal bracket in accordance with figure 8. Mark and drill four 0.22-in. diameter holes through both brackets being careful not to puncture the inner wall, in accordance with figure 8. Secure fire extinguisher bracket, using four #10 x 5/8-in. pan head machine screws (MS35206-264), four #10 lockwashers (MS35338-43), and four #10 hex nuts (MS35649-202). Install fire extinguisher in mounting bracket (fig. 10).

(22) Position first aid kit (6545-00-922-1200) in existing holder on rear wall in accordance with figure 10.

(23) Position MGDS attachment (3460-00-840-1010) on floor in accordance with figure 2. Using strap loop (MS51939-3) as a template, mark and drill eight 0.22-in. diameter holes through top of box as shown in figure 21. Secure four strap loops (MS519393), using eight #10 x 1-3/4-in. countersunk head machine screws (MS35190-278), eight #10 flat washers (AN970-3), eight #10 lockwashers (MS35338-43), and eight #10 hex nuts (MS35649-202). Install four 5/16x 2-31/32-in. shoulder eyebolts (MS51937-2) and four 5/16-in. hex nuts (MS51967-5) into floor on left and right side of aisle as shown in figures 4, 5, and 11. Secure MGDS attachment with four 92-in. retaining straps (7550588-7) laced through shoulder eyebolts and strap loops in accordance with figure 2.

c. Follow steps (1) thru (9) below for electrical component installation in 280 shelter, unit 1.

WARNING

Electrical power to shelter should be disconnected during the installation of wiring modifications. Install temporary lighting connected to an outside power source.

(1) Remove three fluorescent lighting tubes on left side of shelter and store in a protected location.

(2) Remove cover from power distribution panel (fig. 42) and retain screws.

(3) Remove raceway cover clips and pry out cover sections under three fluorescent lighting tubes. Leave fluorescent lighting tube holders in place.

NOTE

In order to remove some of the raceway cover clips, it may be necessary to loosen retaining screws on fluorescent ballast covers.

(4) Disconnect wires no. 36 (BR), 41 (GY), 46 (WH), and 51 (G) from existing duplex receptacle marked J7J8. Dead end wires by installing four splice conductors (wire nuts) (3M "HYFLEX" No. 212) on ends of the four wires. Install a tiedown strap (MS33671) around main wire harness bundle in area just before receptacle wiring branches off. Fold back the dead-ended wires under wire clip existing in raceway in accordance with figure 43.

(5) Remove and discard the duplex receptacle and cover from raceway,

4. Installation--Continued

saving the mounting screws for later usage.

(6) Bundle together no. 10 AWG black wire (6145-00-990-2999), no. 10 AWG white wire (6145-00-990-3000), and no. 12 AWG green wire (6145-00-9043811) (all type THW, stranded, approximately 12 feet long) (fig. 43). Secure wires together, using twelve tiedown straps (MS3367-1) positioned approximately 12 inches apart (fig. 43). Pull wire bundle into raceway from power distribution panel to enclosure where duplex receptacle was removed. Terminate the three wires by connecting to receptacle (5935-01-038-7401) as shown in figures 44 and 45. Install receptacle (5935-01-038-7401) and junction box cover (5975-00-504-7672), using mounting screws from the duplex receptacle.

(7) Remove existing circuit breaker installed in position 11 of power distribution panel. (See figure

44.) Replace with a 40-amp single pole circuit breaker. Connect new wiring to circuit breaker, indicator lamp, neutral buss, and the ground buss as shown in wiring diagram, figure 44.

(8) Install cover on power distribution panel . Install raceway covers and raceway cover clips; and install fluorescent lighting tubes removed in step (1).

(9) Fabricate 12-ft flexible cord (6145-00-295-0855) as shown in figure 45. Install flexible cord on shelter wall behind engine lathe as shown in figure 46. Secure with four loop clamps (MS21333-41) installed with existing screws. Connect flexible cord to cabinet of engine lathe with box connector (Appleton 15233) (fig. 45); terminate wiring in accordance with engine lathe manufacturer's instructions.

Section III. INSTALLATION IN ISO-2-1 SHELTER

5. Installation

NOTE

Hand blind riveter (5120-00679-6523) is used for installing blind rivet nuts in accordance with MIL-N-47187.

Position floor mounted storage cabinets, support angles, work table, lathe mounting plate, first aid kit, and fire extinguisher as shown in figures 23 thru 28 and 30. Use the equipment mounting holes as templates for location of blind rivet nuts. Positions may be varied to drill into structural members in the fixed floor.

a. Install blind rivet nuts in ISO-2-1 shelter, unit 2 as follows:

CAUTION

Potting compound, MMM-A-132, TYPE 1, CLASS 3 (8040-01102-2098), (after installing blind rivet nuts) must have a curing time of 24 to 48 hours before using any threaded fasteners.

(1) Mark and drill thirty-four 0.25-in. diameter holes in right and left wall to a maximum depth of 1.00 inch in accordance with figures 26 and 28. Inject potting compound as required and install thirty-four #10 blind rivet nuts (11021235-5).

(2) Mark and drill thirty-three 0.41-in. diameter holes to a maximum depth of 1.50 inches in right wall, fixed floor, deployed floor, and left deployed wall in accordance with figures 24, 26, 29, and 30. Inject

5. Installation--Continued

potting compound as required and install twelve 5/16-in. blind rivet nuts (11021235-3) in accordance with figure 24. Install twenty-one 5/16-in. blind rivet nuts (11021235-1) in accordance with figures 26, 29, and 30.

(3) Mark and drill twelve 0.50-in. diameter holes to a maximum depth of 1.50 inches in fixed floor in accordance with figure 24. Inject potting compound as required and install four 3/8-in. blind rivet nuts (11021235-2) and eight 3/8-in. blind rivet nuts (11021235-4).

b. Install strap loops in ISO-2-1 shelter, unit 2 as follows: Secure fourteen strap loops (MS51939-3) to right and left walls in accordance with figures 25 and 27, using twenty-eight #10 x 1/2-in. countersunk head machine screws (MS35190-271).

c. Follow steps (1) thru (26) below for equipment installation in ISO-2-1 shelter, unit 2.

(1) Fabricate lathe mounting plate (11021199) in accordance with figure 31. Position lathe mounting plate on front end of floor in accordance with figure 23 over installed blind rivet nuts in accordance with figure 24. Secure lathe mounting plate to floor, using twelve 3/8x 1-1/2-in. countersunk cap-socket head machine screws (MS24667-54). Adjust lathe leveling screws until they are flush with bottom edge of engine lathe base. Position engine lathe (3416-01-0308195) on lathe mounting plate and, using the lathe leveling screws as a template, mark and tap four holes for fasteners (fig. 31). Secure, using four 1/2x 3-in. hex head capscrews (MS90725-119), four 17/32-in. flat washers (MS27183-18), and four 1/2-in. lockwashers (MS35338-48). Clearance holes, 0.53-in. diameter, may have to be drilled into floor if the mounting screws (lathe) project below floor level (fig. 31).

(2) Mark and drill four 0.34-in. diameter holes in bottom plate of 30-drawer storage cabinet (7125-00-9991121). Locate at the four corners allowing for minimum required clearance for 5/16-in. hex head capscrews. Position 30-drawer storage cabinet against front right wall in accordance with figure 23 and over installed blind rivet nuts in accordance with figure 24. Secure to floor, using four 5/16x 7/8-in. hex head capscrews (MS9072533) and four 5/16-in. lockwashers (MS35338-45).

(3) Fabricate three support angles (11021208) in accordance with figure 35. Position support angle on top of 30-drawer storage cabinet and against the wall in accordance with figure 23 so that the two 0.34-in. diameter holes are on 30-drawer storage cabinet top surface and positioned over installed blind rivet nuts in accordance with figure 26. Secure support angle on wall above installed 30-drawer storage cabinet, using three 5/16x 7/8-in. hex head capscrews (MS90725-33) and three 5/16-in. lockwashers (MS3533845). Using support angle as a template, mark and drill two 0.34-in. diameter holes through top of 30-drawer storage cabinet. Secure support angle to 30-drawer storage cabinet top, using two 5/16x 1-in. hex head capscrews (MS90725-34), two 5/16-in. flat washers (MS27183-11), two 5/16-in. lockwashers (MS35338-45), and two 5/16-in. hex nuts (MS51967-5).

(4) Mark and drill four 0.34-in. diameter holes each in the bottom plate of 30-drawer storage cabinet (7125-00999-1121) and 20-drawer storage cabinet (7125-00-999-1123). Locate at the four corners allowing for minimum clearance for 5/16-in. hex head capscrews. Position storage cabinets in accordance with figure 25 and over installed blind rivet nuts in accordance with figure 24. Secure to floor, using eight 5/16x 7/8-in. hex head capscrews (MS90725

5. Installation--Continued

33) and eight 5/16-in. lockwashers (MS35338-45).

(5) Fabricate table top (11021200) in accordance with figure 32. Position table top on top of two previously installed storage cabinets in accordance with figure 25. Position two support angles (11021208) on top of table top and against the wall in accordance with figures 23 and 25 so that the two 0.34-in. diameter holes are on table top surface and positioned over installed blind rivet nuts in accordance with figure 26. Secure support angles (11021208) to right wall, using six 5/16x 7/8-in. hex head capscrews (MS90725-33) and six 5/16-in. lockwashers (MS35338-45). Using table top and support angles as templates, mark and drill eight 0.34-in. diameter holes through storage cabinet and table top. Secure support angles to table top, using four 5/16x 2-1/4-in. hex head capscrews (MS9072541), four 5/16-in. flat washers (MS2718311), four 5/16-in. lockwashers (MS3533845), and four 5/16-in. hex nuts (MS519675). Secure table top to storage cabinets, using four 5/16x 1-3/4-in. countersunk head machine screws (MS35190-309), four 5/16-in. lockwashers (MS35338-45), and four 5/16-in. hex nuts (MS51967-5).

CAUTION

Be sure storage cabinet drawers adjacent to hole locations are removed before drilling.

(6) Fabricate shelf (11021201) in accordance with figure 33. Position shelf between two storage cabinets in accordance with figure 25. Using shelf mounting holes as a template, mark and drill four 0.34-in. diameter holes in storage cabinet side walls. Secure shelf to storage cabinets, using four 5/16x 3/4-in. hex head capscrews (MS90725-32), four 5/16-in. flat washers (MS27183-11), four 5/16-in. lockwashers (MS35338-45), and four 5/16-in. hex nuts (MS51967-5).

(7) Position pipe threading set (5180-00-357-7514) against front right corner wall in accordance with figure 23. Secure to wall, using a 92-in. retaining strap (7550588-7).

(8) Remove contents of first aid kit (6545-00-922-1200). Mark and drill three 0.22-in. diameter holes in back of first aid kit. Position in location shown in figure 25 over installed blind rivet nuts in accordance with figure 26. Secure first aid kit to wall, using three #10 x 1/2-in. countersunk head machine screws (MS35190-271). Install contents of first aid kit.

(9) Position MGDS attachment (3460-00-840-1010) against rear right corner wall in accordance with figures 23 and 25. Secure to wall, using two 92-in. retaining straps (7550588-7) linked together.

(10) Position wash pan (4940-00795-3595) on shelf (11021201) in accordance with figure 25. Position safety can (7240-00-222-3084) inside wash pan. Wrap two power cable assemblies (6150-00-682-3460) around bottom of wash pan. Secure to shelf using two 48-in. retaining straps (7550588-3), one of which will pass through safety can handle.

(11) Position upright drilling machine (3413-00-165-4136) on table top in accordance with figure 23. Using base of upright drilling machine as a template, mark and drill three 0.41-in. diameter holes through table and storage cabinet tops. Secure to table top, using three 3/8x 2-1/4-in. hex head capscrews (MS90725-67), three 3/8-in. flat washers (MS27183-13), three 3/8-in. lockwashers (MS35338-46), and three 3/8-in. hex nuts (MS51967-8).

(12) Position machine table vise (3460-00-277-3504) on upright drilling

5. Installation--Continued

machine (3413-00-165-4136) in accordance with figure 23. Secure machine table vise to upright drilling machine, using furnished tee bolts and nuts.

(13) Position utility grinding machine (3415-00-517-7754) on rear end of table top in accordance with figure 23. Using base of utility grinding machine as a template, mark and drill three 0.34-in. diameter holes through table and storage cabinet tops. Secure to table top, using three 5/16x 21/4-in. hex head capscrews (MS9072541), three 5/16-in. flat washers (MS2718311), three 5/16-in. lockwashers (MS3533845), and three 5/16-in. hex nuts (MS519675).

(14) Position work table (4910-00543-7772) against front left wall in accordance with figure 23. Mark and drill six 0.41-in. diameter holes in legs of work table (fig. 30), used for mounting work table in deployed mode. Secure each end of work table to wall in accordance with figures 23 and 27, using two 92-in. retaining straps (7550588-7).

(15) Position tool kit (5180-00699-5273) on top of work table in accordance with figures 23 and 27. Secure to wall, using a 92-in. retaining strap (7550588-7).

(16) Position mounting bracket of fire extinguisher (4210-00-555-8837) on front left corner wall in accordance with figure 27. Mark and drill three 0.22-in. diameter holes in mounting bracket. Position over installed blind rivet nuts in accordance with figure 28. Secure mounting bracket to wall, using three #10 x 1/2-in. countersunk head machine screws (MS35190-271). Install fire extinguisher in mounting bracket.

(17) Position micrometer caliper set (5120-00-554-7134) and counterbore set (5133-00-378-3813) on

shelf of work table in accordance with figure 27. Secure micrometer caliper set and counterbore set, using a 72-in. retaining strap (7550588-1).

(18) Position surface plate (522000-516-3647) on lower table shelf in accordance with figure 27. Secure, using a 72-in. retaining strap (75505881). Position two extension lights (6230-00-729-9259) on lower table shelf in accordance with figure 27. Wrap extension light cords around center post of table to secure.

(19) Fabricate two cabinet roller base assemblies (11021203) in accordance with figures 36 thru 41. Fabricate shelf (11021202) in accordance with figure 34. Fabricate table top (11021200) in accordance with figure 32. Fabricate two support angles (11021208) in accordance with figure 35.

(20) Mark and drill four 0.62-in. diameter clearance holes in bottom of two 20-drawer storage cabinets (712500-999-1123) (two holes per storage cabinet) in accordance with figure 27. Holes in storage cabinet bottoms must align with four inserts (11021215) located on cabinet roller base assemblies (11021203) (two inserts per cabinet roller base assembly). See figure 36.

(21) Position two 20-drawer storage cabinets (7125-00-999-1123) in two cabinet roller base assemblies (11021203). Position table top (11021200) on top surface of two 20-drawer storage cabinets against rear left wall in accordance with figures 23 and 27. Using table top as a template, mark and drill four 0.34-in. diameter holes through storage cabinet tops. Secure front edge of table top to 20-drawer storage cabinets, using four 5/16x 13/4-in. countersunk head machine screws (MS35190-309), four 5/16-in. lockwashers (MS35338-45), and four 5/16-in. hex nuts (MS51967-5).

5. Installation--Continued

(22) Position two support angles (11021208) on table top surface and against the wall in accordance with figure 23 so that the two 0.34-in. diameter holes are on table top. Using support angles as templates, mark and drill four 0.34-in. diameter holes through table top and storage cabinets. Secure, using four 5/16x 2-1/4-in. hex head capscrews (MS90725-41), four 5/16-in. flat washers (MS27183-11), four 5/16-in. lockwashers (MS35338-45), and four 5/16-in. hex nuts (MS51967-5). Secure table top, with two 20-drawer storage cabinets attached, to rear left wall, using four 60-in. retaining straps (7550588-2) (two retaining straps linked together for each 20-drawer storage cabinet) (fig. 27).

CAUTION

Be sure storage cabinet drawers adjacent to hole locations are removed before drilling.

(23) Position shelf (11021202) between two 20-drawer storage cabinets; using shelf as a template, mark and drill four 0.34-in. diameter holes in cabinet sides in accordance with figure 27. Secure the shelf, using four 5/16x 3/4-in. hex head capscrews (MS9072532), four 5/16-in. flat washers (MS2718311), four 5/16-in. lockwashers (MS3533845), and four 5/16-in. hex nuts (MS519675).

(24) Position 88-piece die and tap set (5136-00-357-7504), 82-piece die and tap set (5136-00-357-7494), 40-piece die and tap set (5136-00-3577506), and level and plumb (5210-00239-0892) on shelf (11021202) in accordance with figure 27. Secure, using two 60-in. retaining straps (7550588-2).

(25) Position hand reamer set (5110-00-357-6858) and pinch bar (512000-224-1384) on table top in accordance with figure 23. Secure, using two 60-in. retaining straps (7550588-2).

(26) Position machinist's vise (5120-00-293-1439) on table top in accordance with figure 23. Using base of machinist's vise as a template, mark and drill four 0.56-in. diameter holes through table top. Secure machinist's vise, using four 1/2x 3-in. hex head capscrews (MS90725-119), four 1/2-in. flat washers (MS27183-17), four 1/2-in. lockwashers (MS35338-48), and four 1/2-in. hex nuts (MS51967-14).

d. Follow steps (1) thru (4) below for location of equipment when ISO-2-1 shelter is deployed.

NOTE

Hardware used for steps (1) and (2) is stored in a drawer of the cabinet roller assembly.

(1) Position work table (4910-00543-7772) against deployed left side wall and align with floor mounted blind rivet nuts in accordance with figure 30. Secure to floor, using six 5/16x 3/4-in. hex head capscrews (MS90725-32) and six 5/16-in. lockwashers (MS3538.845).

(2) Position two 20-drawer storage cabinets and cabinet roller assembly against rear deployed left side wall in accordance with figure 30, so that holes in mounted support angles are aligned with wall mounted blind rivet nuts in accordance with figure 28. Secure to wall, using six 5/16x 7/8-in. hex head capscrews (MS90725-33) and six 5/16-in. lockwashers (MS35338-45).

(3) Adjust four pad assemblies (11021203-5) so they press against floor.

(4) Position tool kit' (5180-00699-5273), pinch bar (5120-00-2241384), and hand reamer set (5110-00357-6858) on deployed floor in accordance with figure 30.

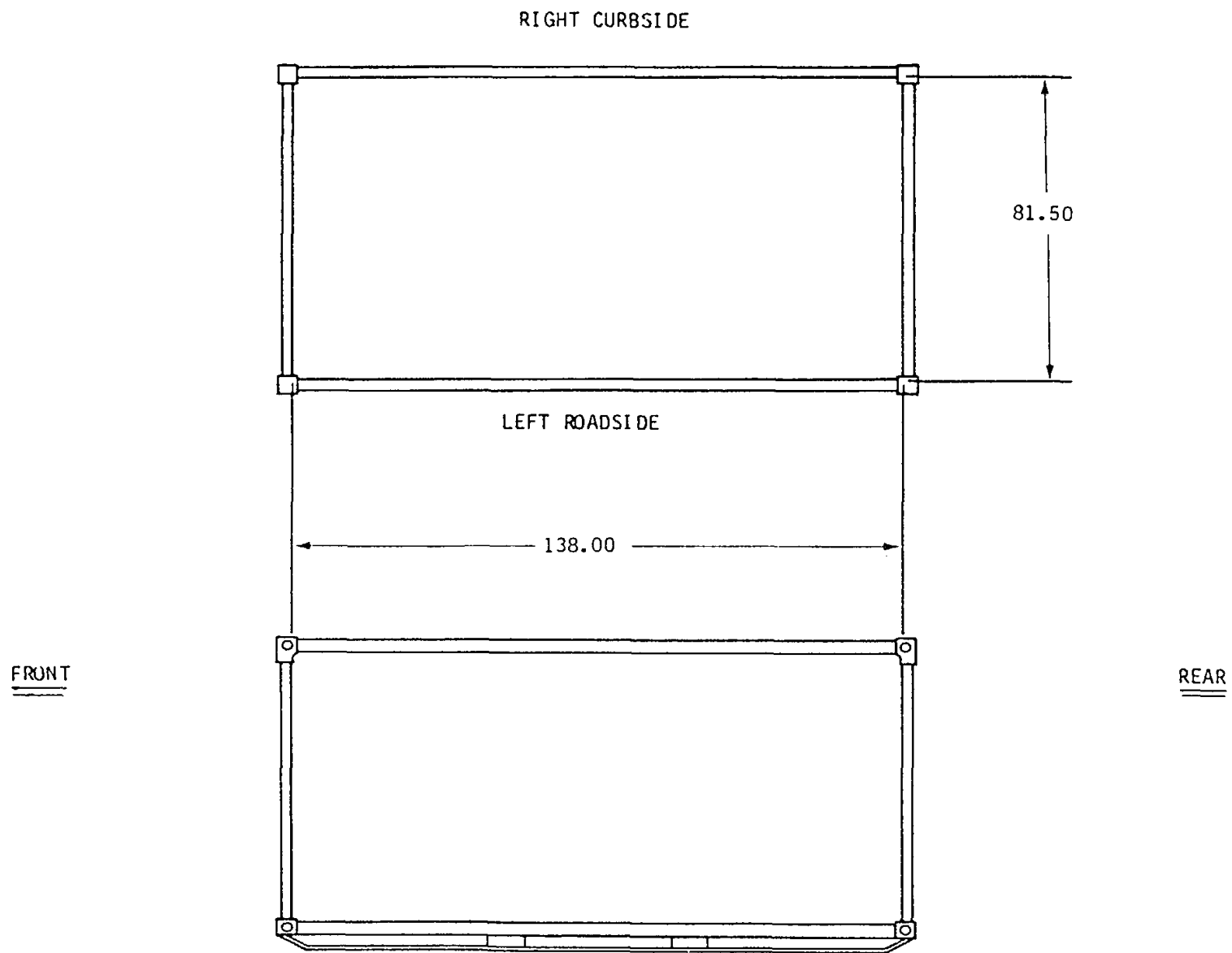


Figure 1. 280 shelter, unit 1.

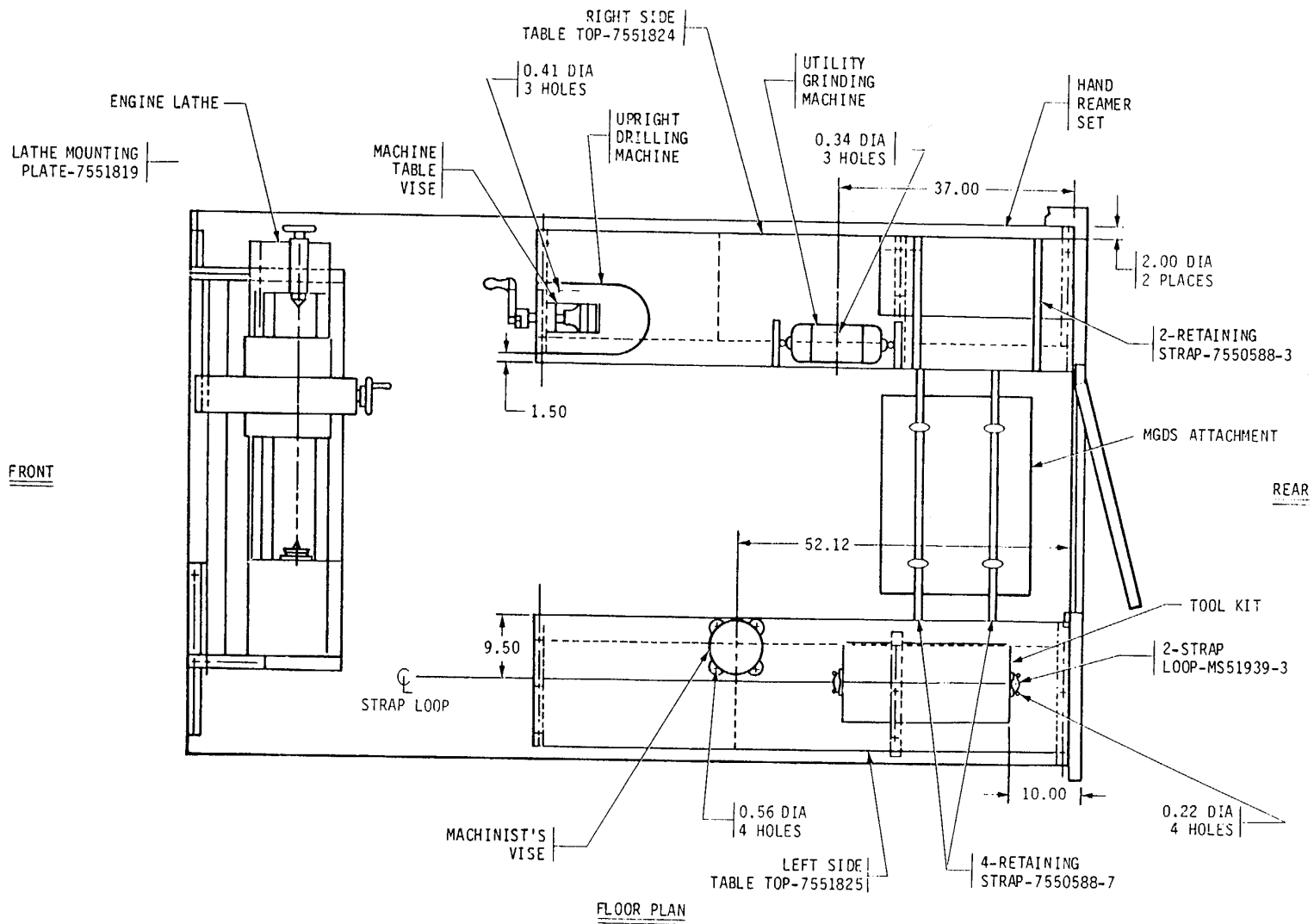


Figure 2. Components to be mounted, unit 1, 280, floor plan.

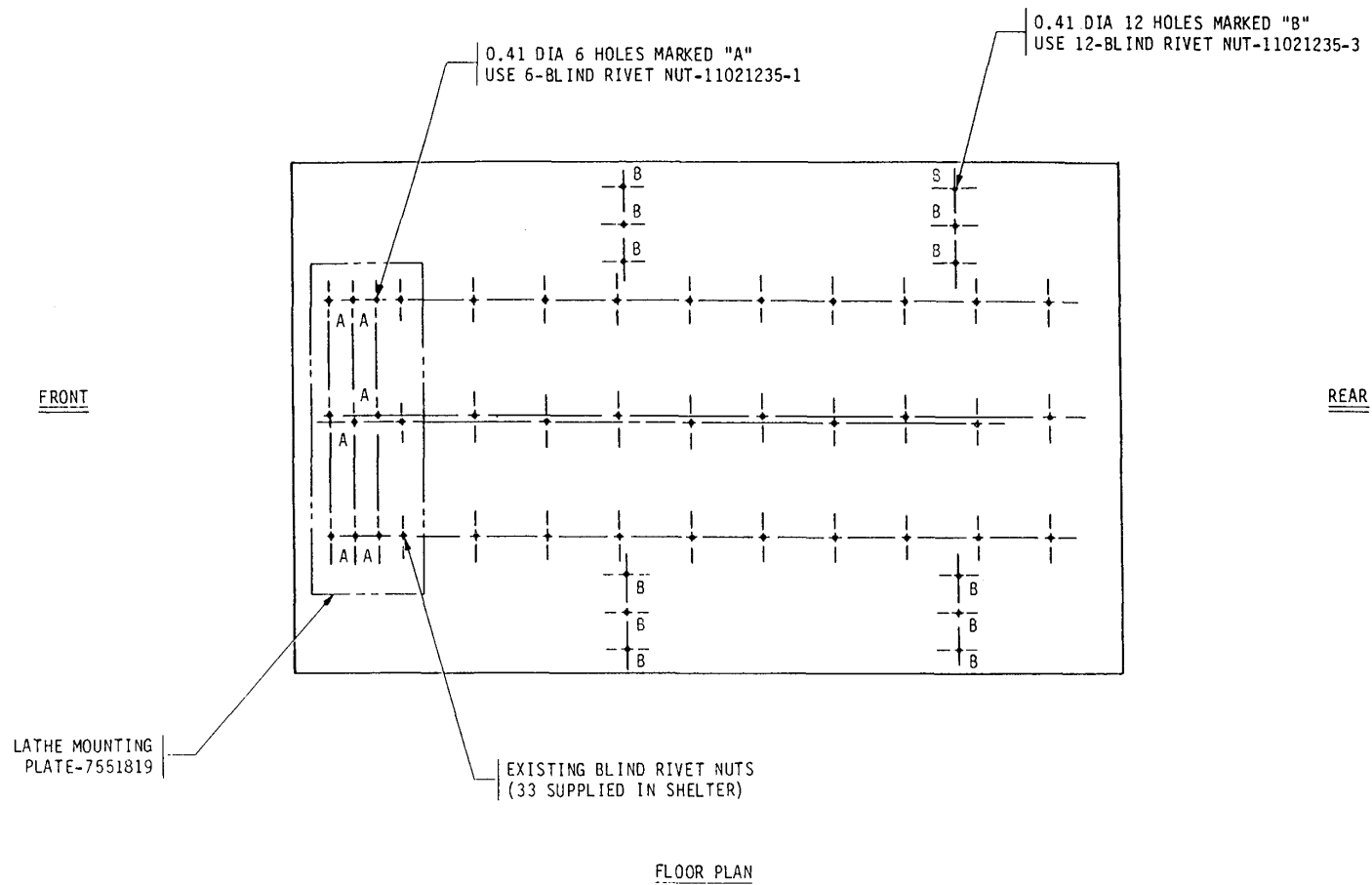


Figure 3. Dimensions for blind rivet nut installation in floor, unit 1, 280.

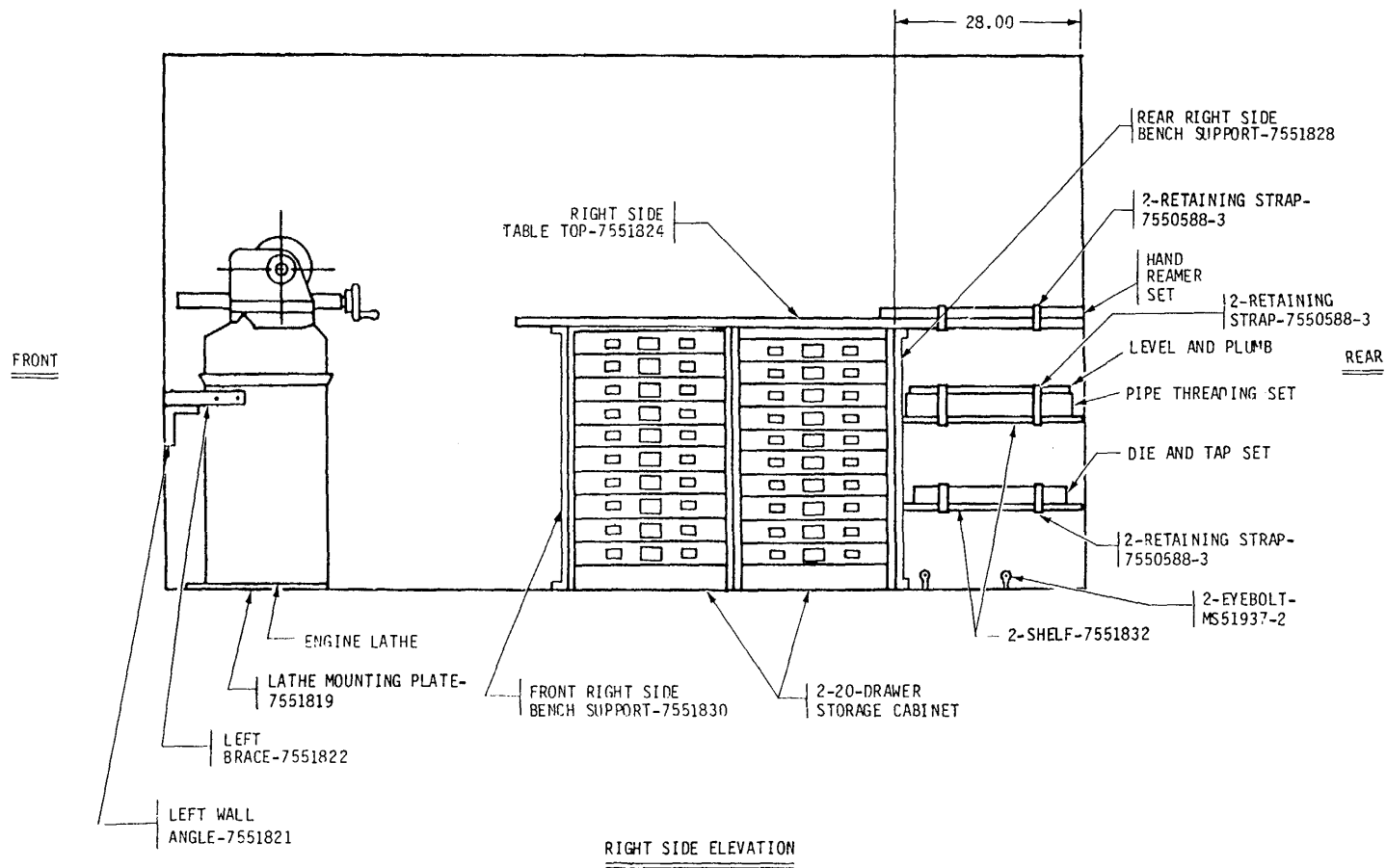


Figure 4. Components to be mounted, unit 1, 280, right side elevation.

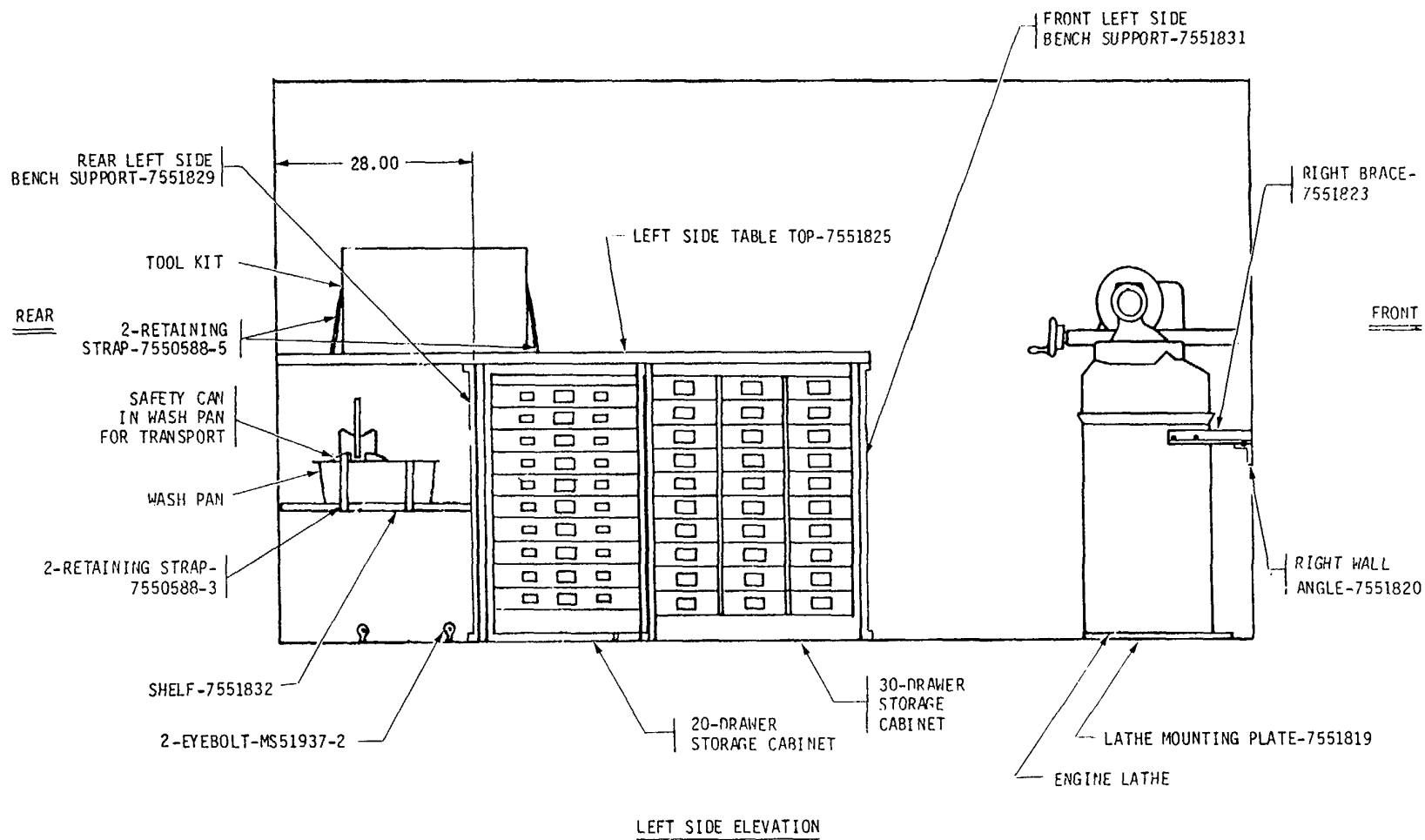


Figure 5. Components to be mounted, unit 1, 280, left side elevation.

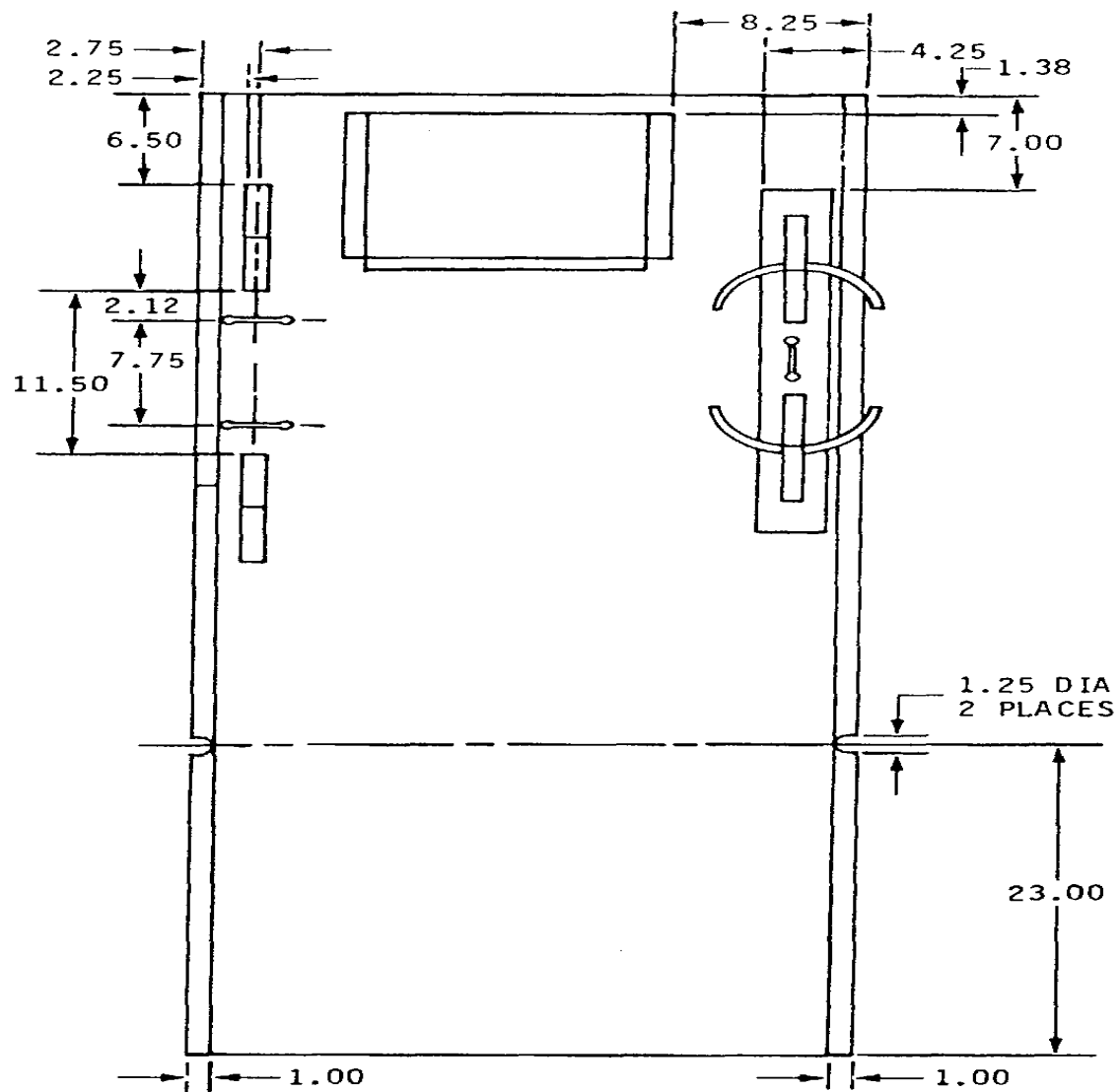


Figure 6. Location of relocated components of modified front panel assembly, unit 1, 280.

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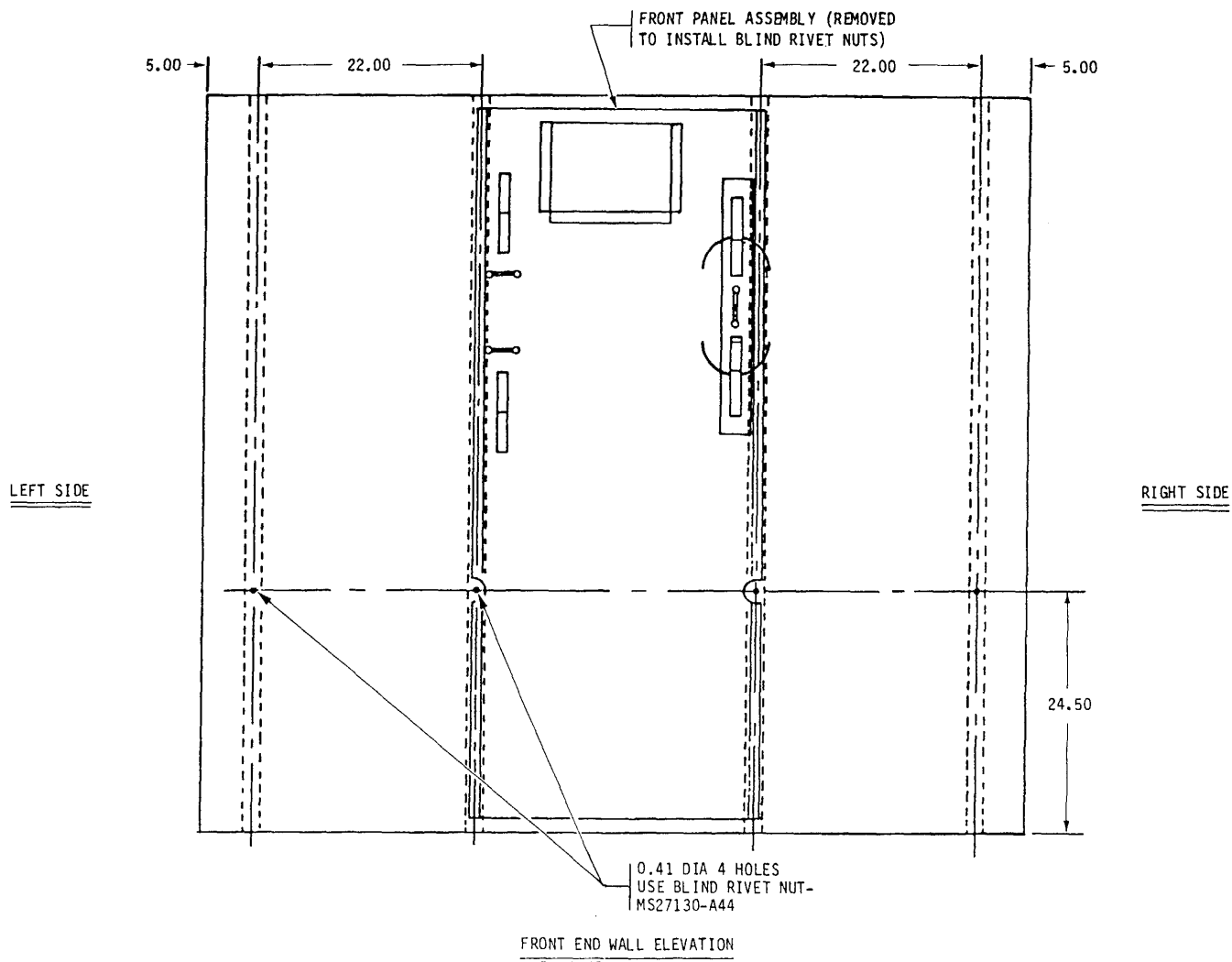


Figure 7. Blind rivet nut installation in front end wall, unit 1, 280.

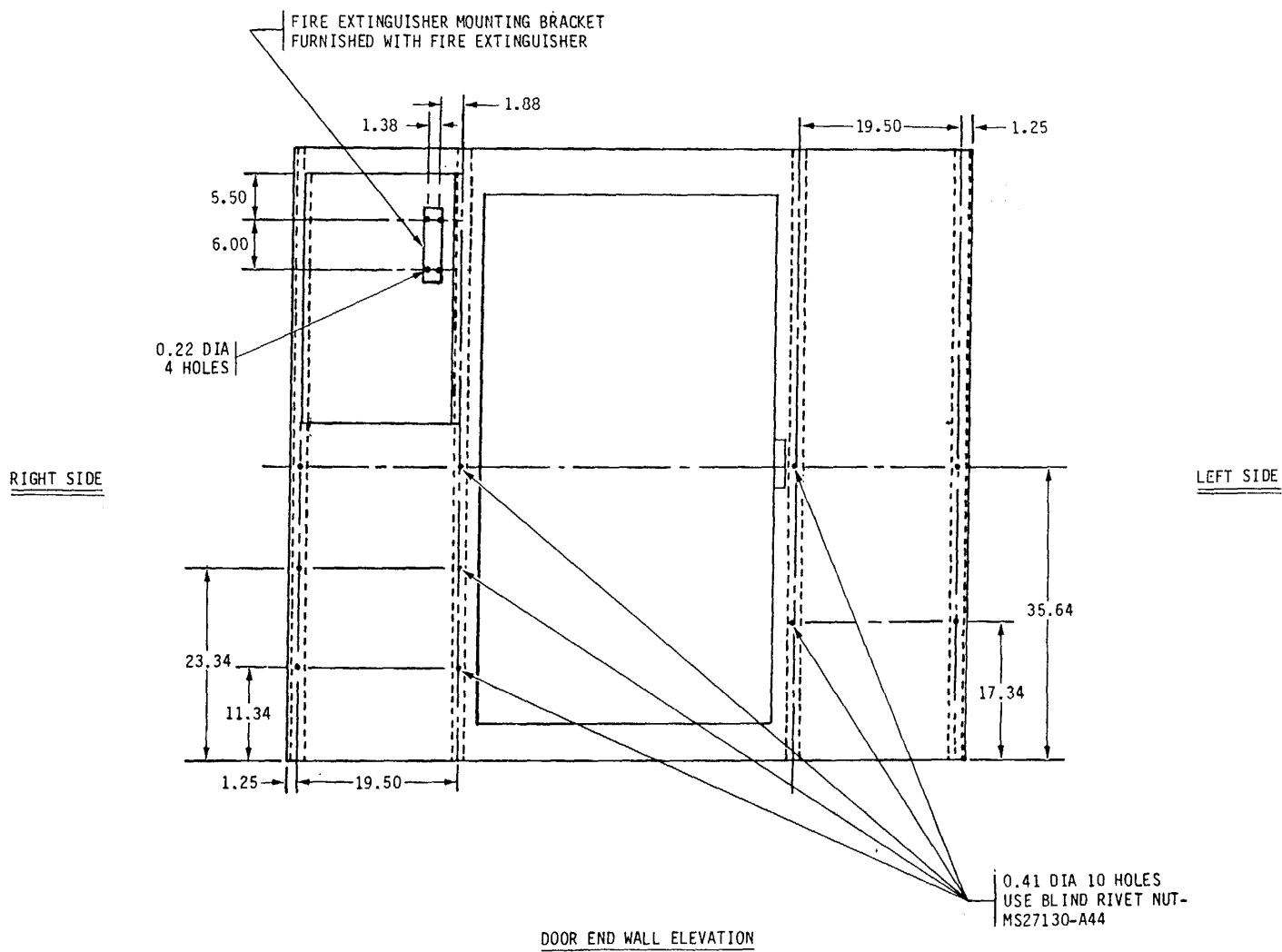


Figure 8. Blind rivet nut installation in door end wall, unit 1, 280.

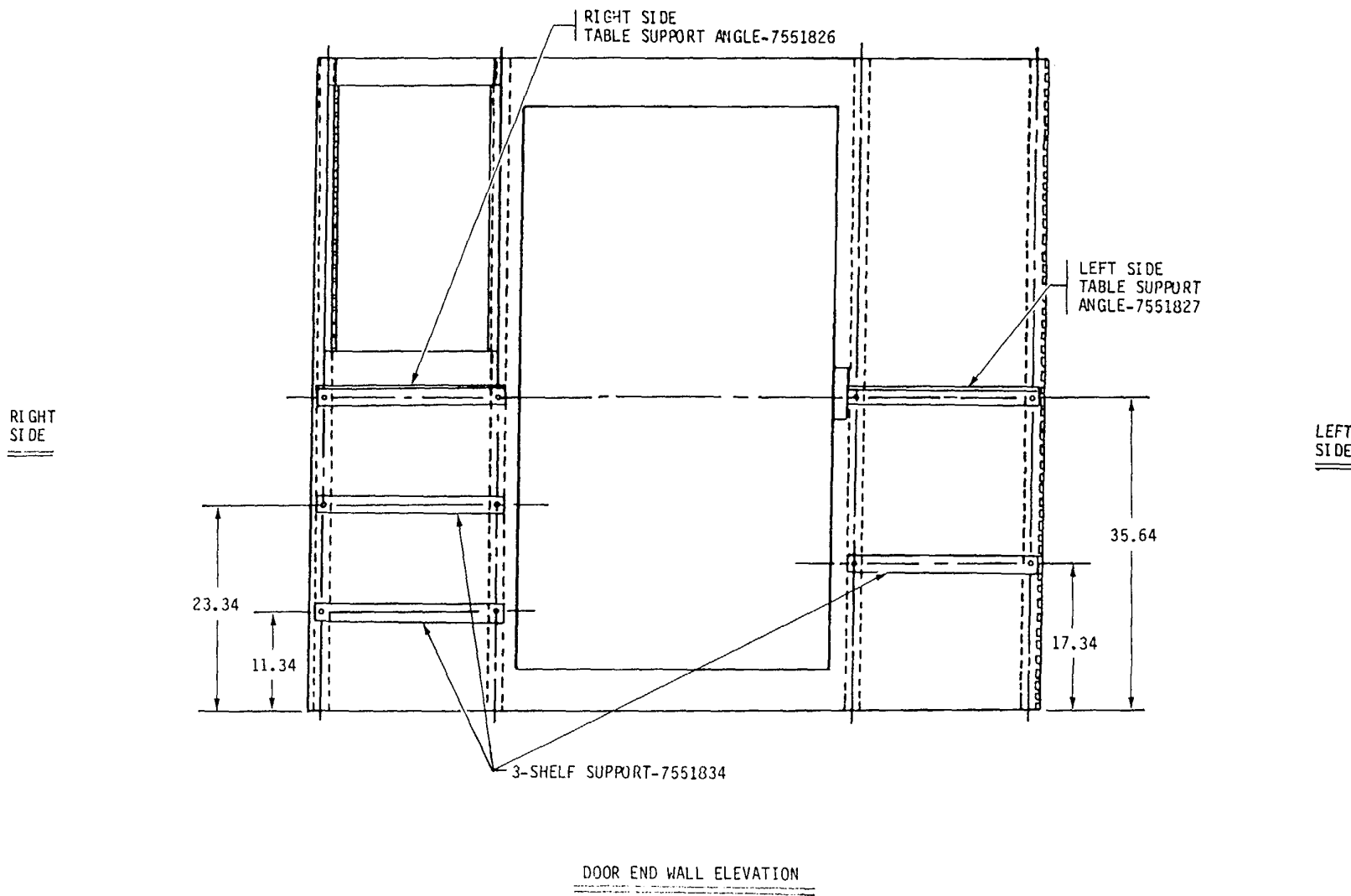


Figure 9. Shelf support and table support angle installation on door end wall, unit 1, 280.

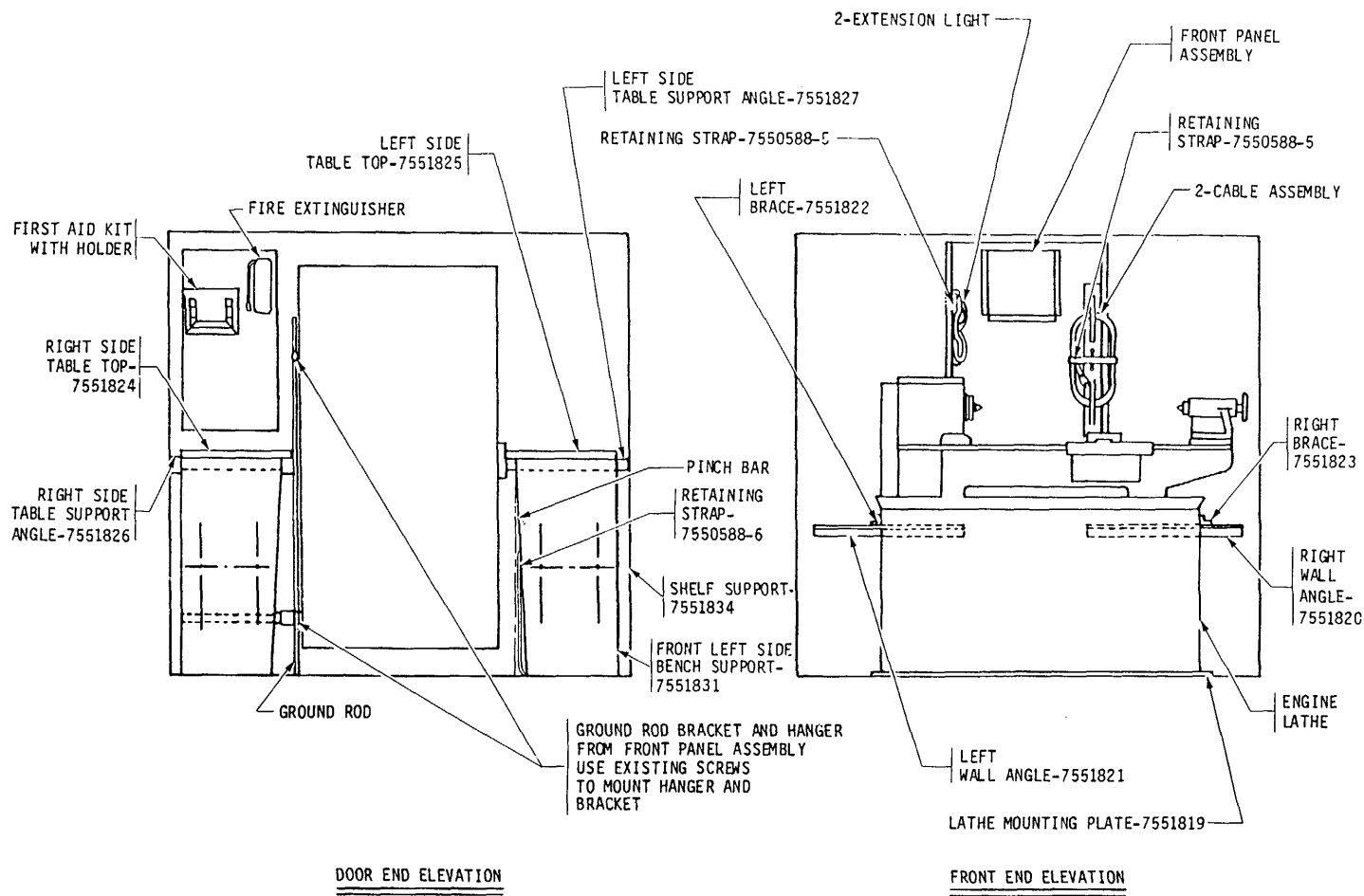


Figure 10. Components to be mounted, door and front end elevations, unit 1, 280.

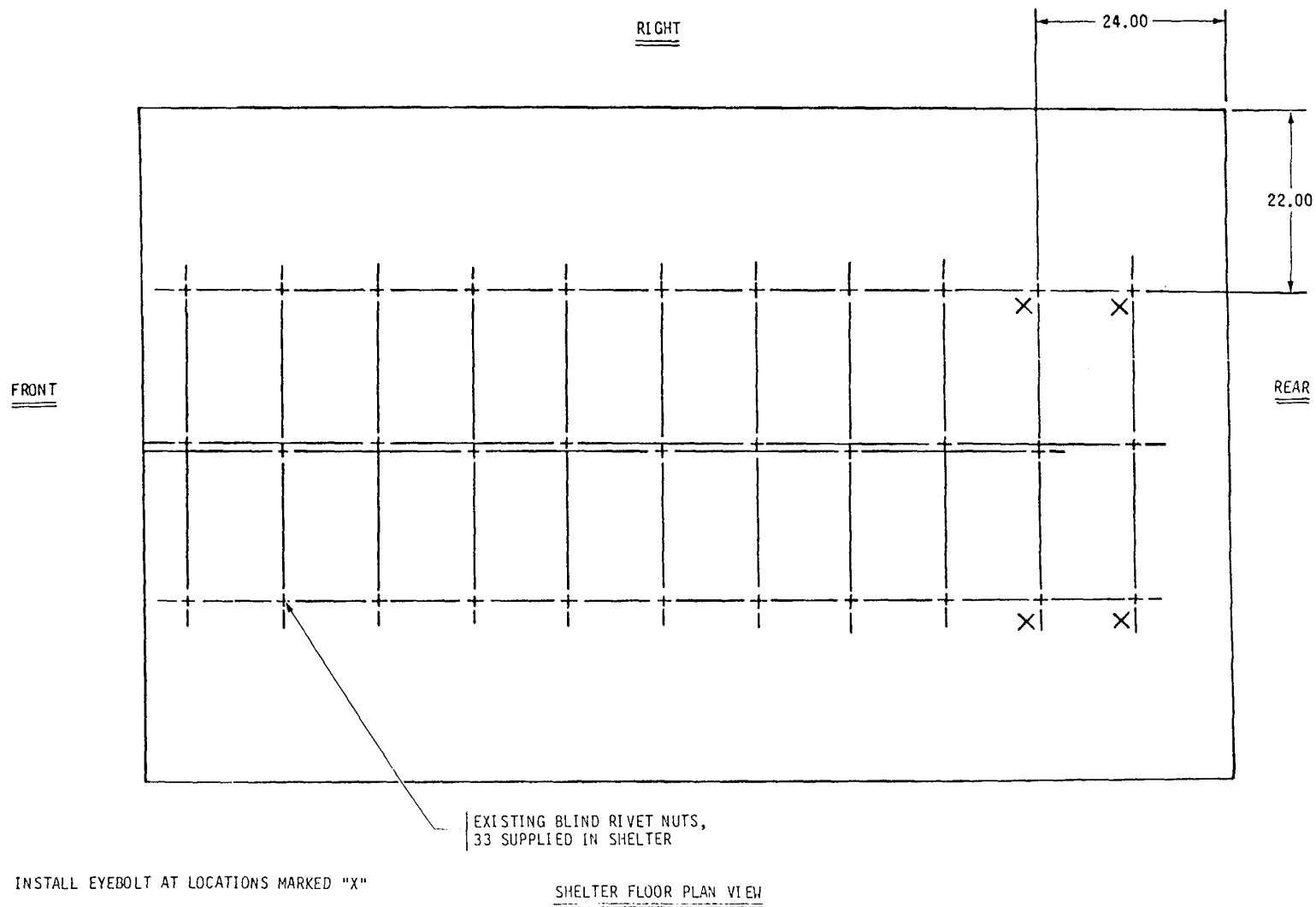


Figure 11. Eyebolt installation, unit 1, 280.

NOTES:

1. ALUMINUM PLATE-5086-H32
PER QQ-A-250/7.
2. DEBURR HOLES AND BREAK
ALL SHARP EDGES.
3. HOLES MARKED "X" ON
LATHE MOUNTING PLATE
SHOULD BE ALINED WITH
EXISTING FLOOR MOUNTED
BLIND RIVET NUTS. VERIFY
BEFORE DRILLING THE OTHER
SIX COUNTERSUNK HOLES.

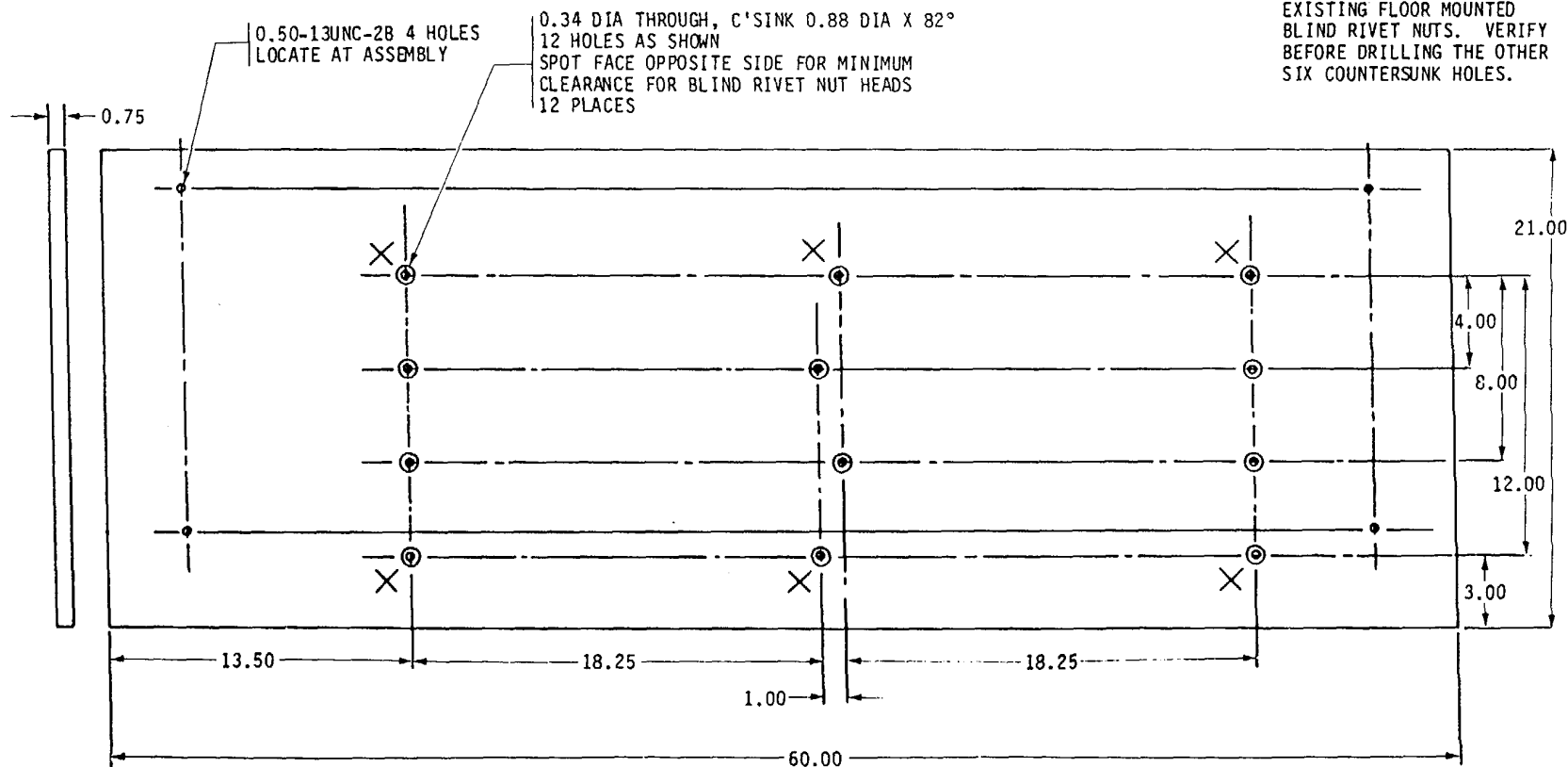
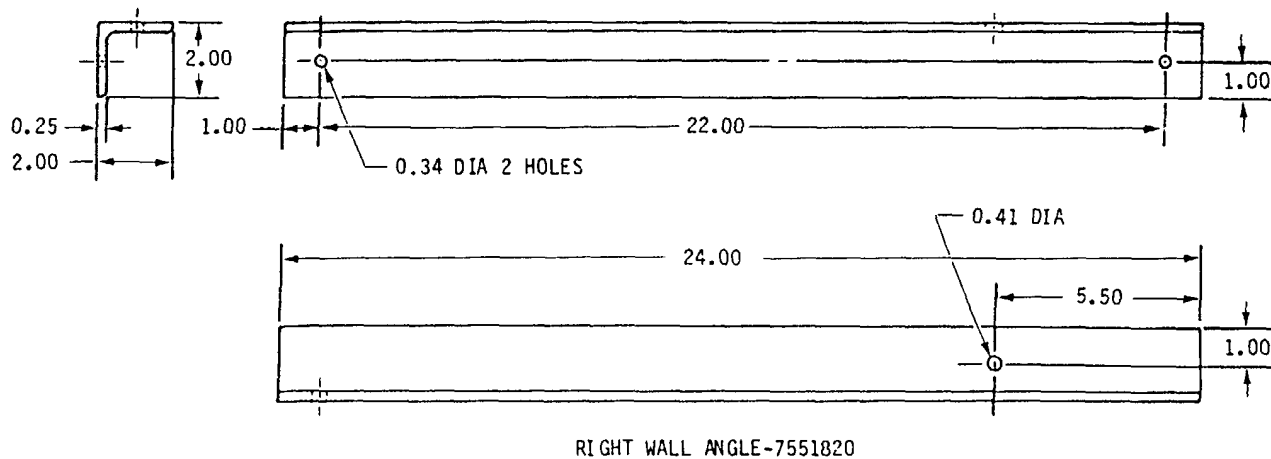


Figure 12. Dimensions for lathe mounting plate, 7551819, unit 1, 280.



NOTES:

1. ALUMINUM ALLOY ANGLE-6061-0 PER QQ-A-200/8.
2. REMOVE BURRS AND BREAK ALL SHARP EDGES.

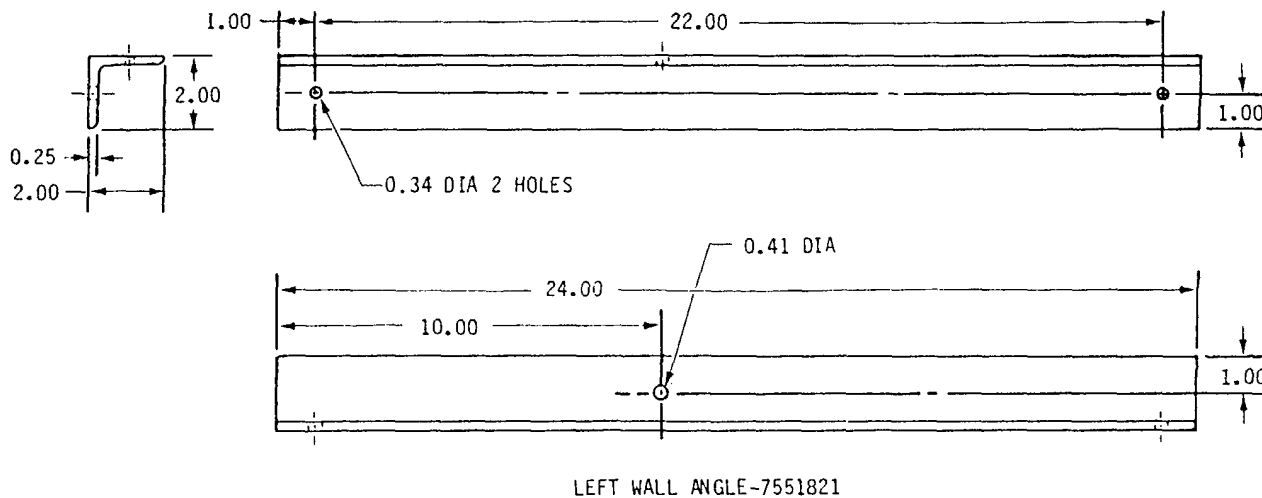
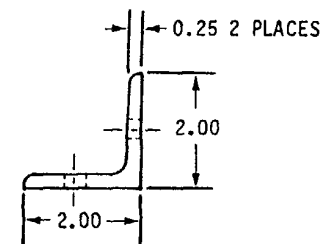
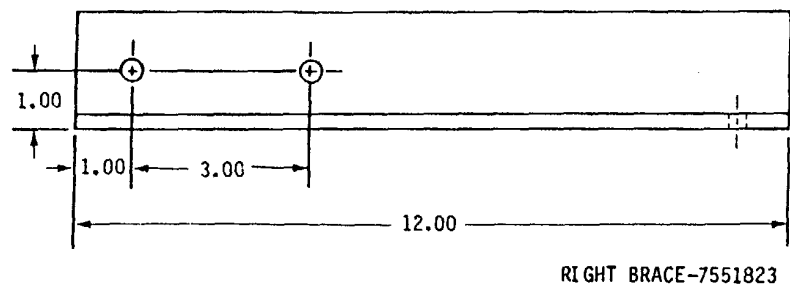
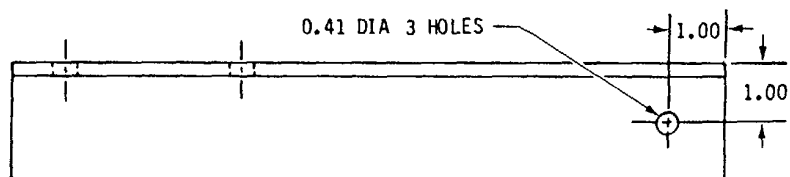
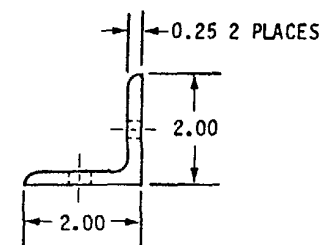
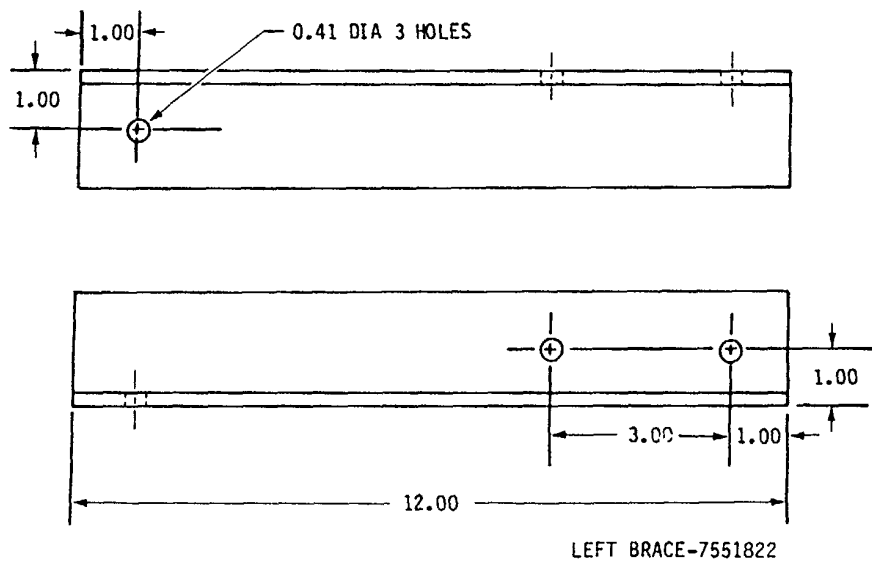


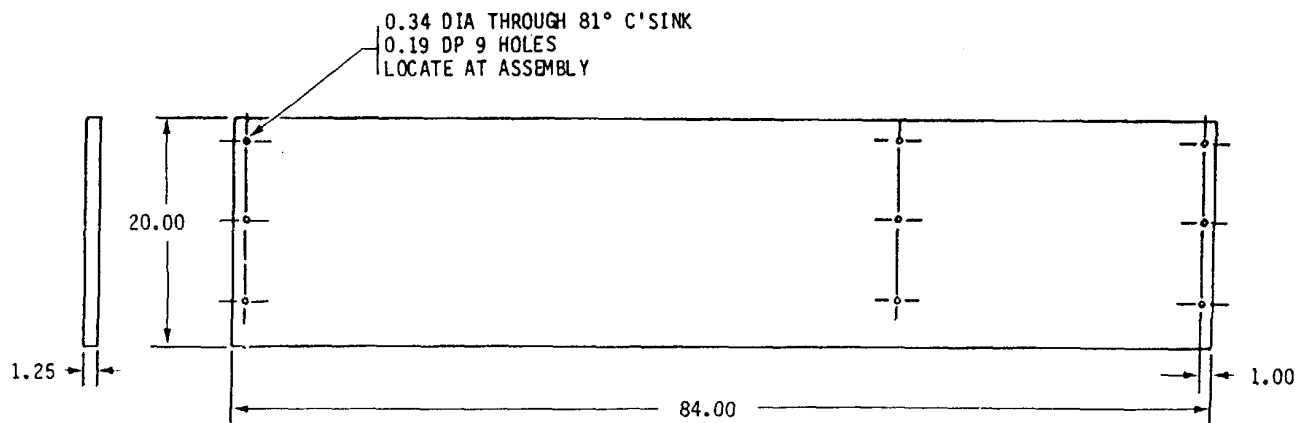
Figure 13. Dimensions for right and left wall angles, 7551820 and 7551821, unit 1, 280.



NOTES:

1. ALUMINUM ALLOY ANGLE-6061-0 PER QQ-A-200/8.
2. REMOVE BURRS AND BREAK ALL SHARP EDGES.

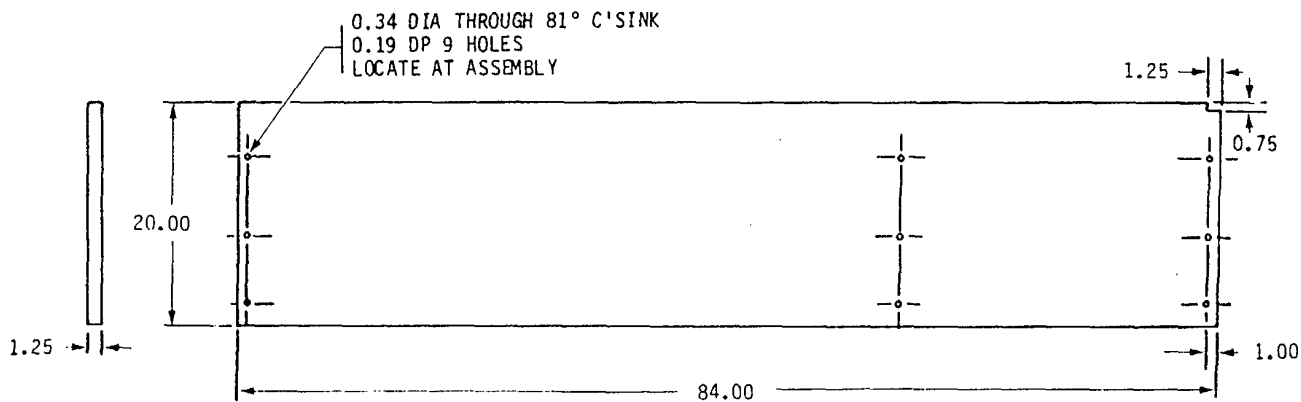
Figure 14. Dimensions for left and right braces, 7551822 and 7551823, unit 1, 280.



RIGHT SIDE TABLE TOP-7551824

NOTES:

1. MATERIAL - BENELEX.
2. REMOVE BURRS AND BREAK ALL SHARP EDGES.

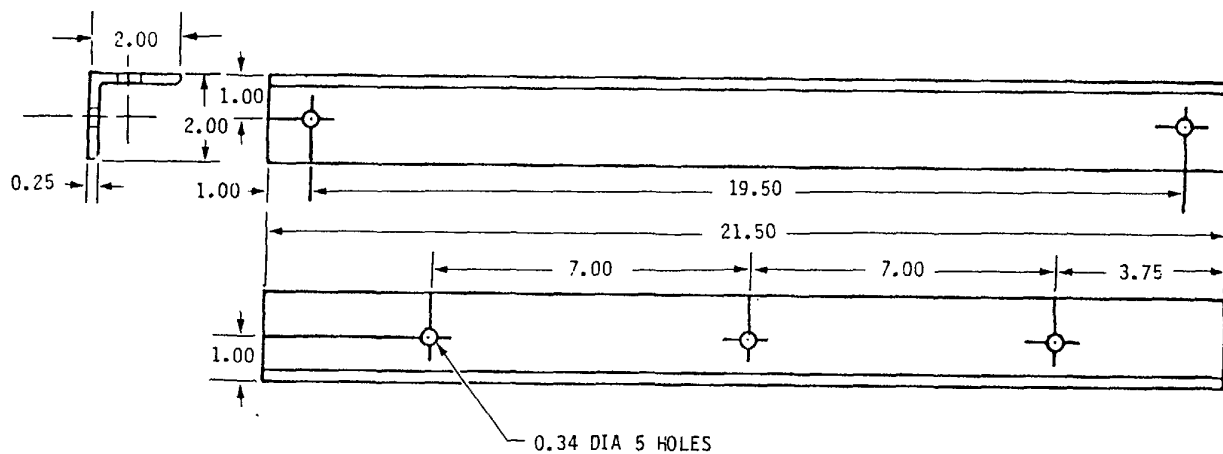


LEFT SIDE TABLE TOP-7551825

NOTES:

1. MATERIAL - BENELEX.
2. REMOVE BURRS AND BREAK ALL SHARP EDGES.

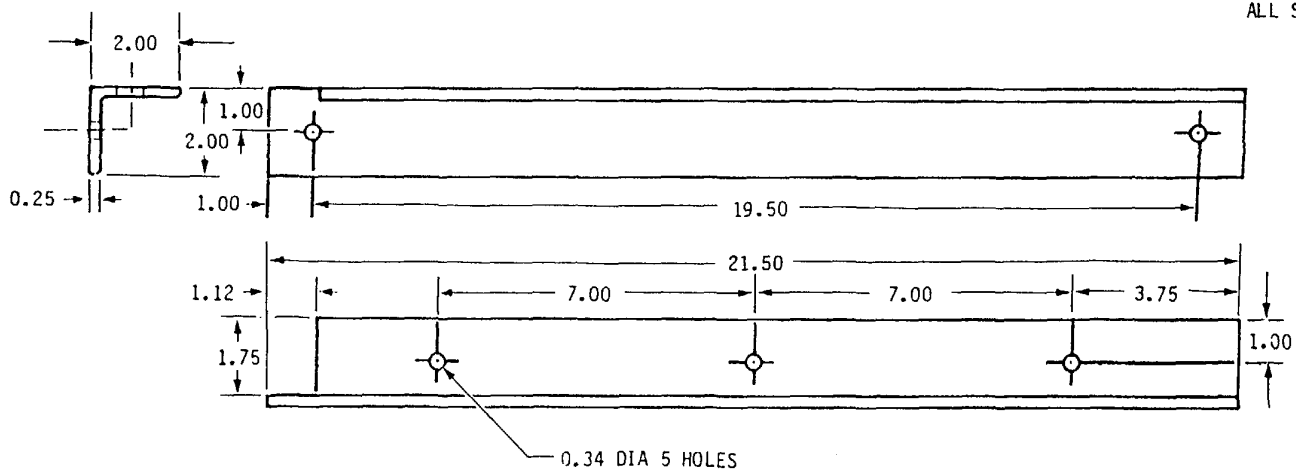
Figure 15. Dimensions for right side and left side table tops, 7551824 and 7551825, unit 1, 280.



RIGHT SIDE TABLE SUPPORT ANGLE-7551826

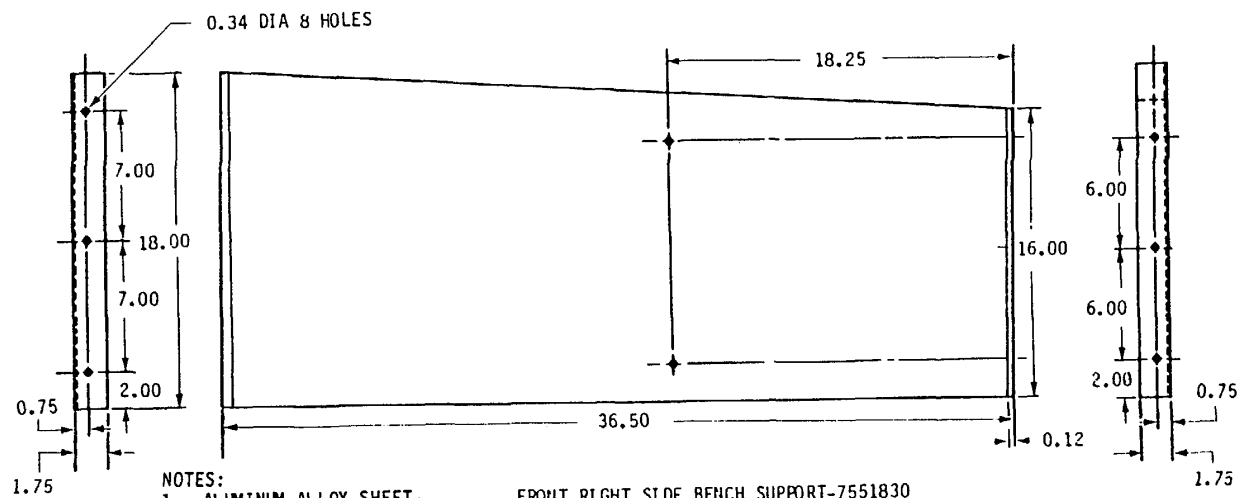
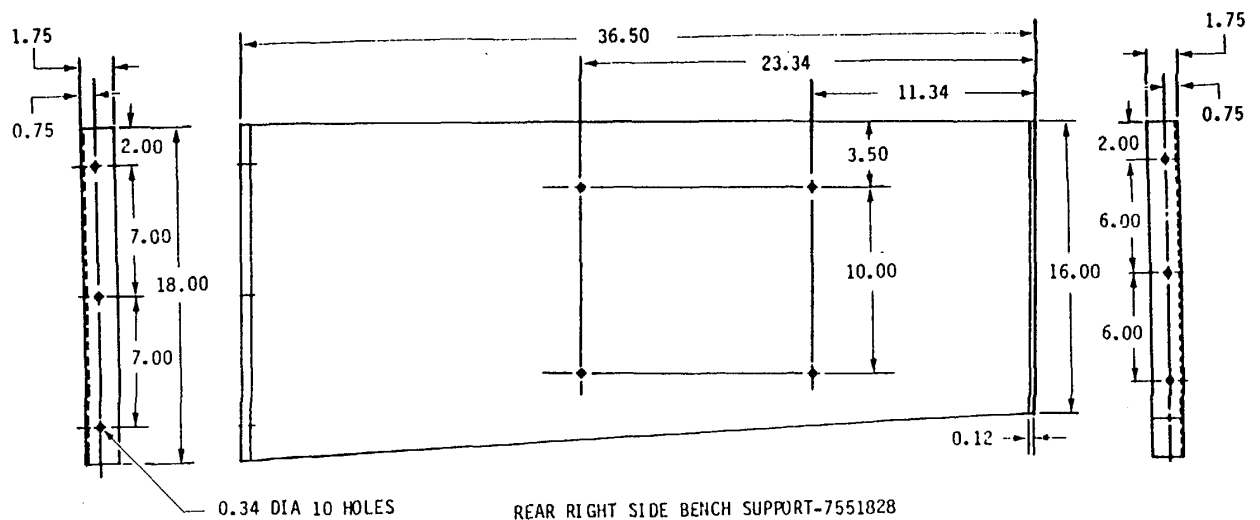
NOTES:

1. ALUMINUM ALLOY ANGLE-6061-0' PER QQ-A-200/8.
2. REMOVE BURRS AND BREAK ALL SHARP EDGES.



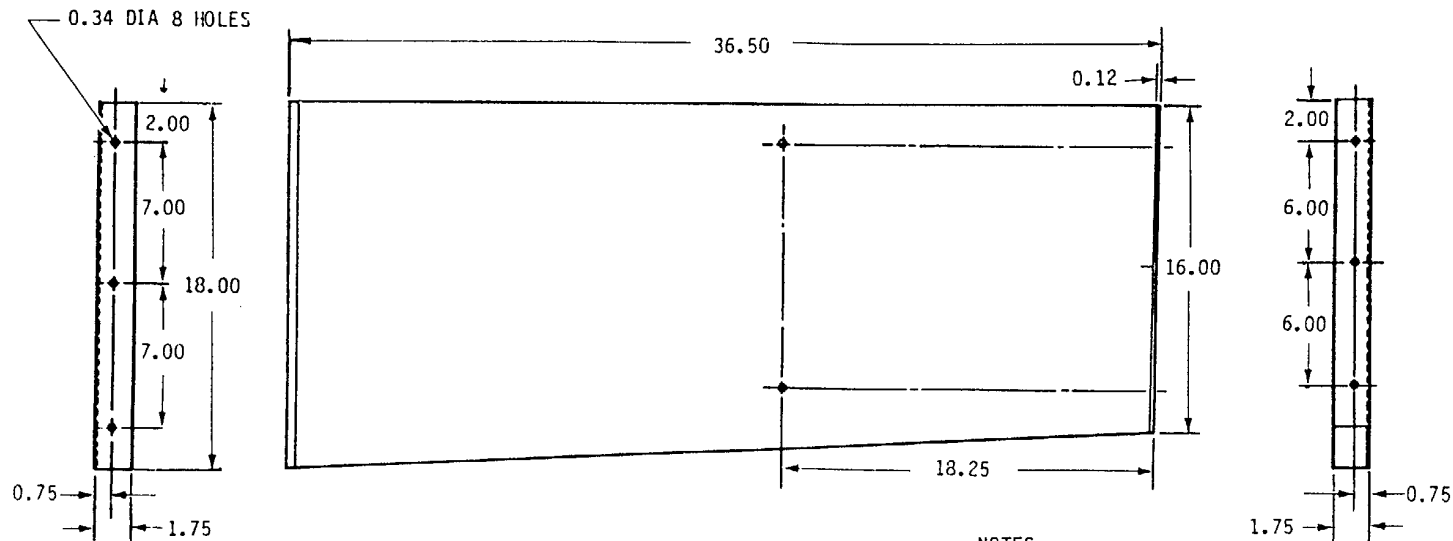
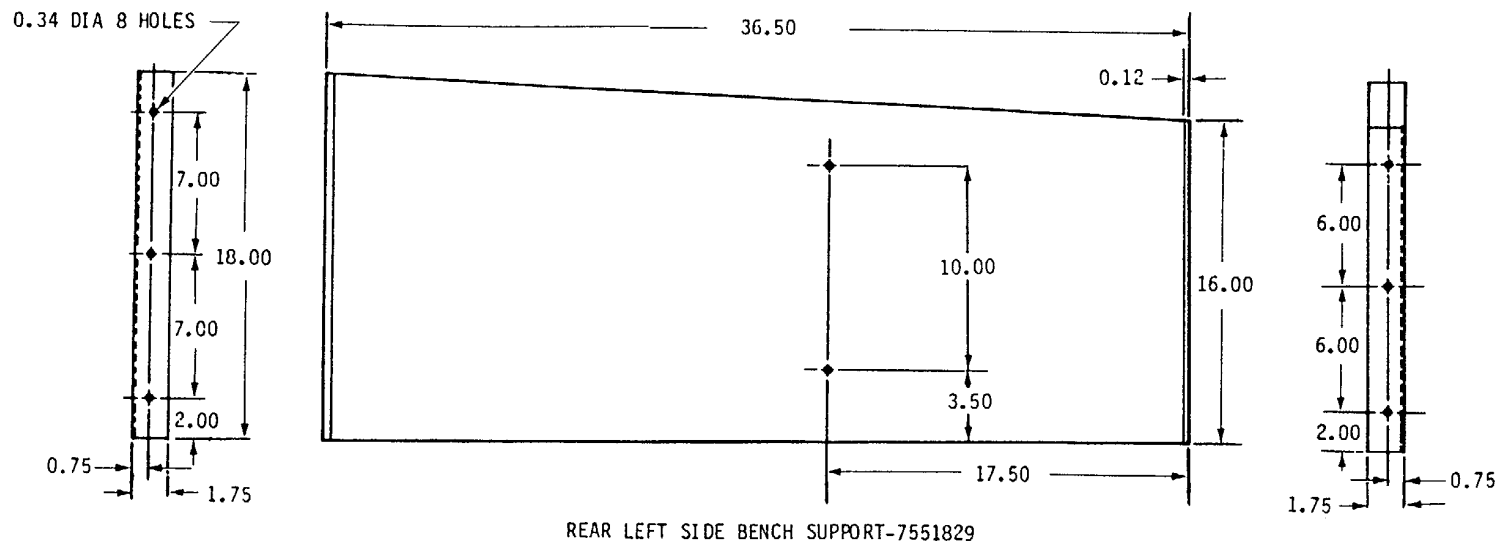
LEFT SIDE TABLE SUPPORT ANGLE-7551827

Figure 16. Dimensions for right side and left side table support angles, 7551826 and 7551827, unit 1, 280.



- NOTES:
1. ALUMINUM ALLOY SHEET-5052-0 PER QQ-A-250/8.
 2. REMOVE BURRS AND BREAK ALL SHARP EDGES.

Figure 17. Dimensions for rear right side and front right side bench supports, 7551828 and 7551830, unit 1, 280.

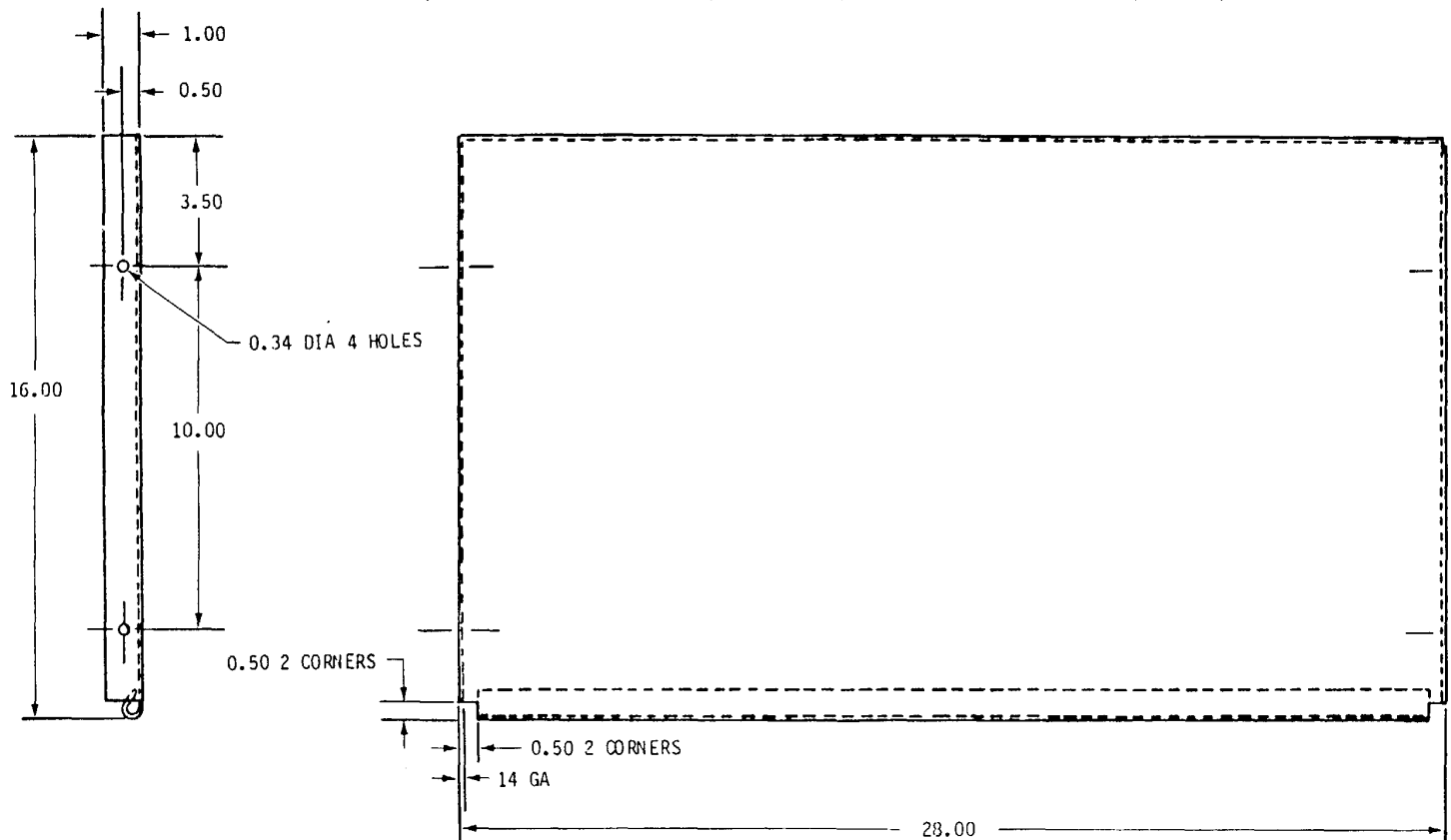


- NOTES:
1. ALUMINUM ALLOY SHEET-5052-0 PER QQ-A-250/8.
 2. REMOVE BURRS AND BREAK ALL SHARP EDGES.

Figure 18. Dimensions for rear left side and front left side bench supports, 7551829 and 7551831, unit 1, 280.

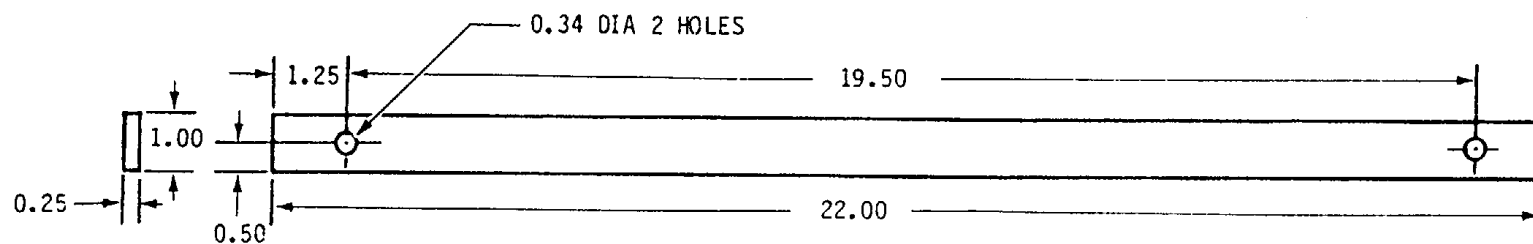
NOTES:

1. STEEL SHEET PER QQ-S-700.
2. REMOVE BURRS AND BREAK ALL SHARP EDGES.
3. PAINT, USING PRIMER MIL-P-14553, AND ENAMEL, FOREST GREEN MIL-E-52799 (AIR DRY).



SHELF-7551832

Figure 19. Dimensions for shelf, 7551832, unit 1, 280.



SHELF SUPPORT-7551834

NOTES:

1. ALUMINUM ALLOY BAR-
6061-0 PER QQ-A-225/8.
2. REMOVE BURRS AND BREAK
ALL SHARP EDGES.

Figure 20. Dimensions for shelf support, 7551834, unit 1, 280.

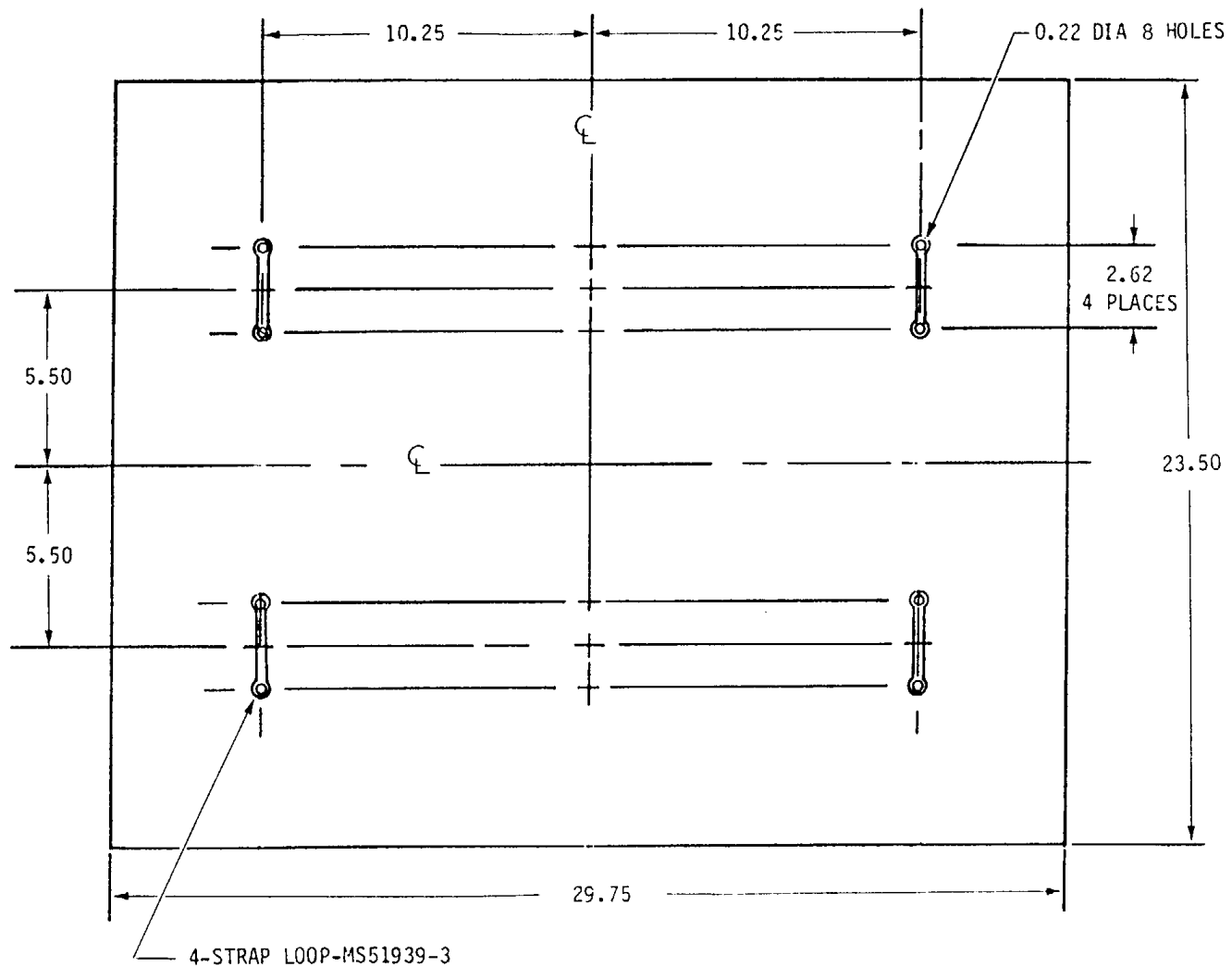


Figure 21. Strap loop location for MGDS attachment, unit 1, 280.

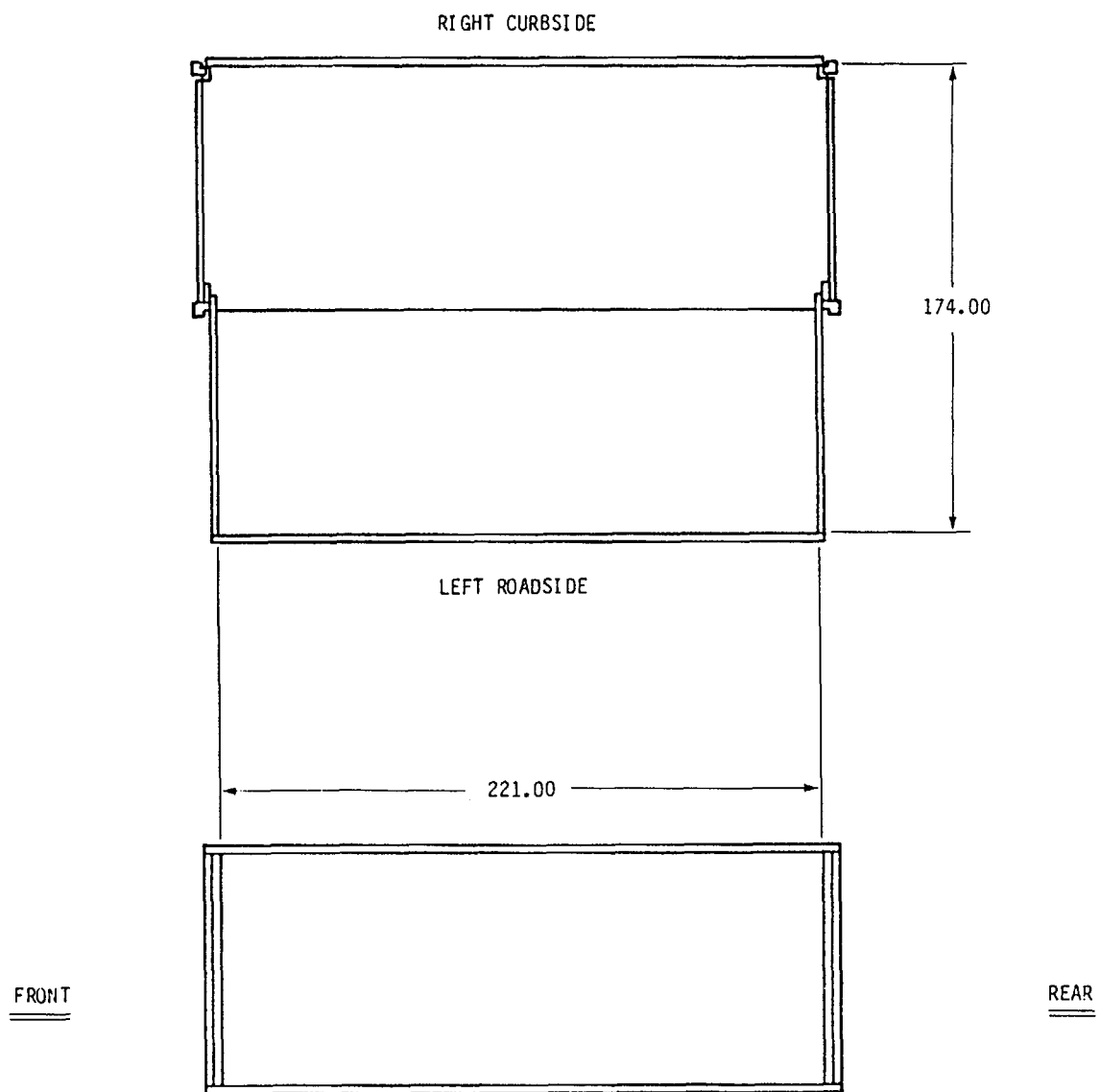


Figure 22. ISO-2-1 shelter, unit 2.

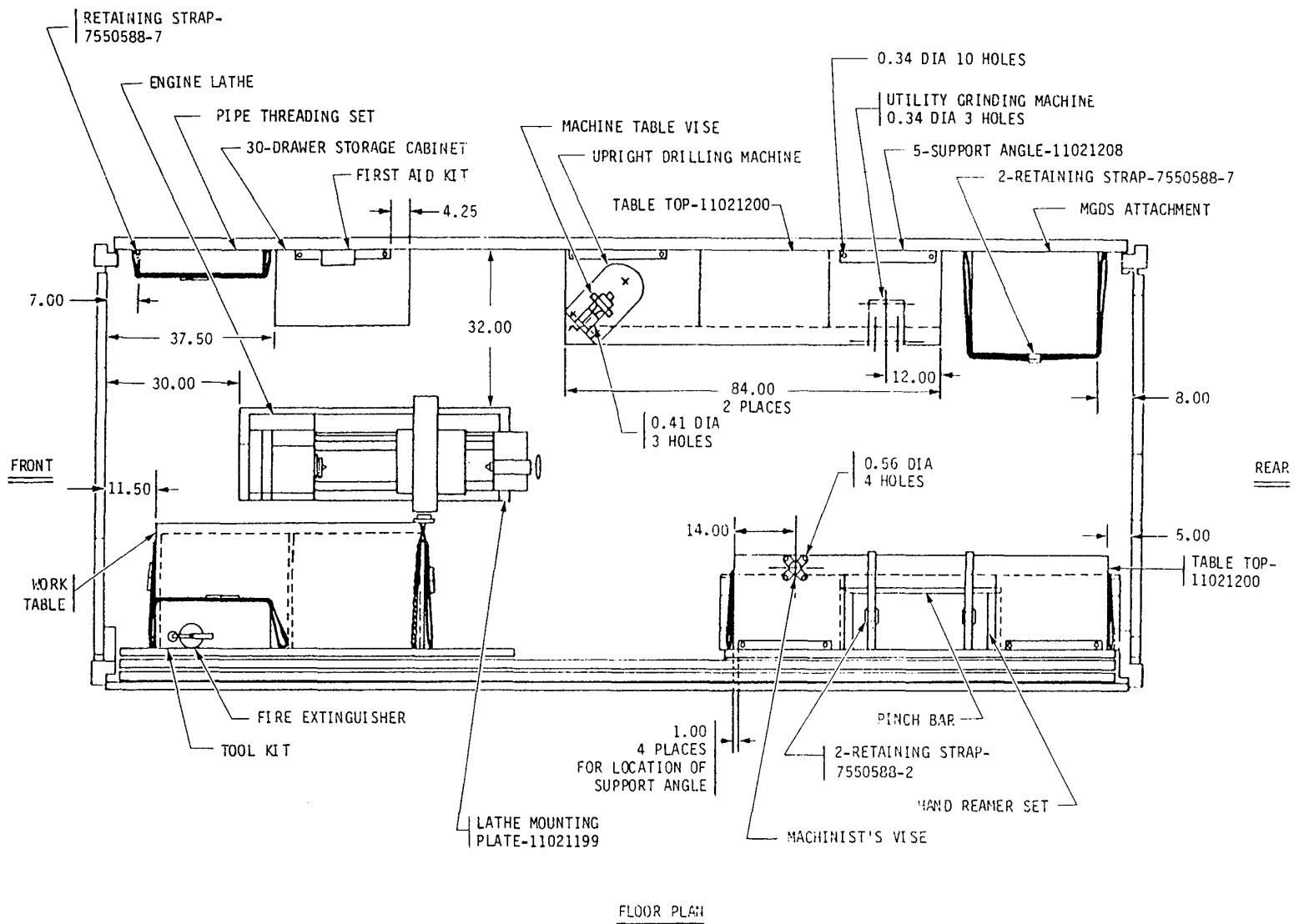


Figure 23. Components to be mounted, unit 2, ISO-2-1, floor plan.

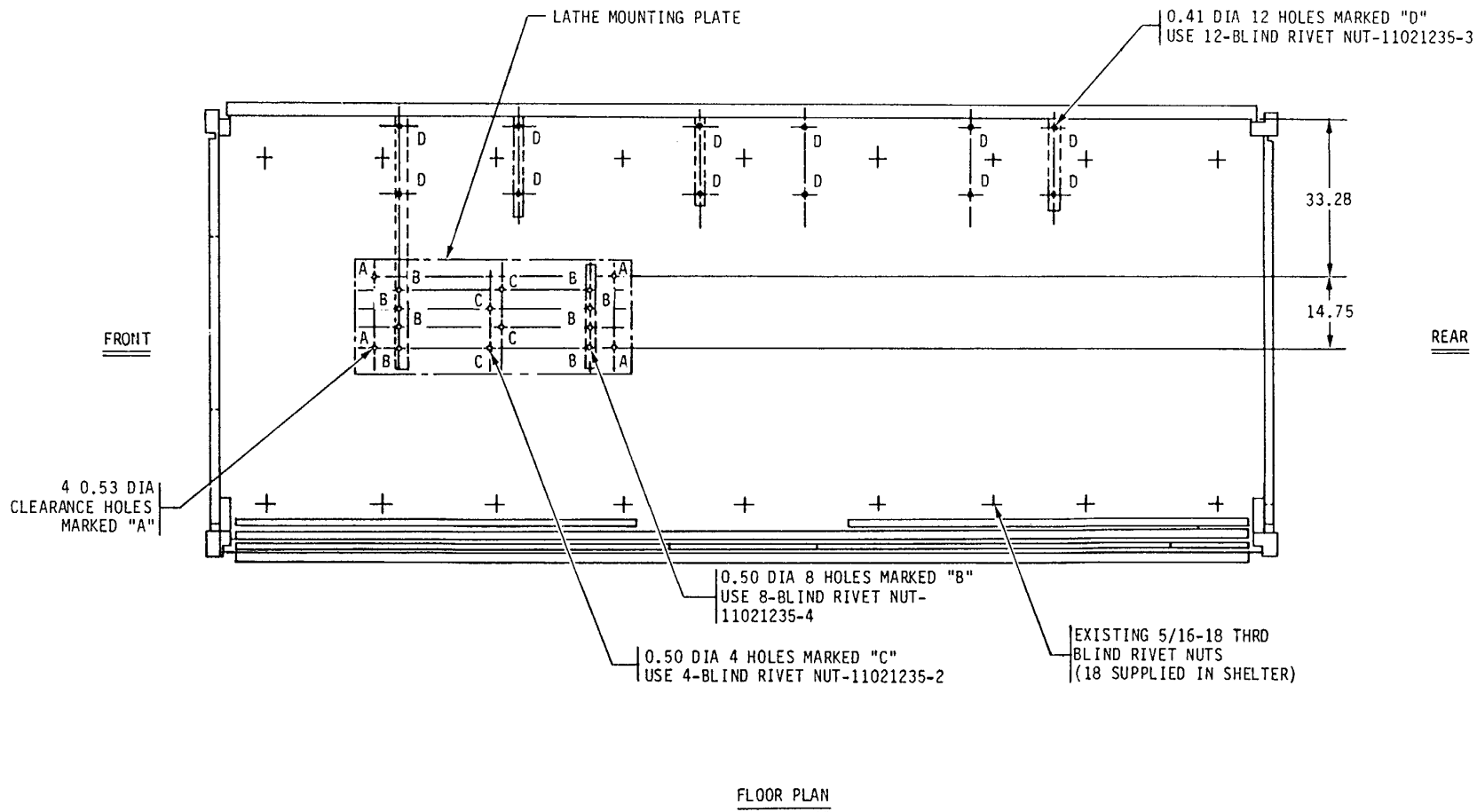


Figure 24. Dimensions for blind rivet nut installation in floor, unit 2, ISO-2-1.

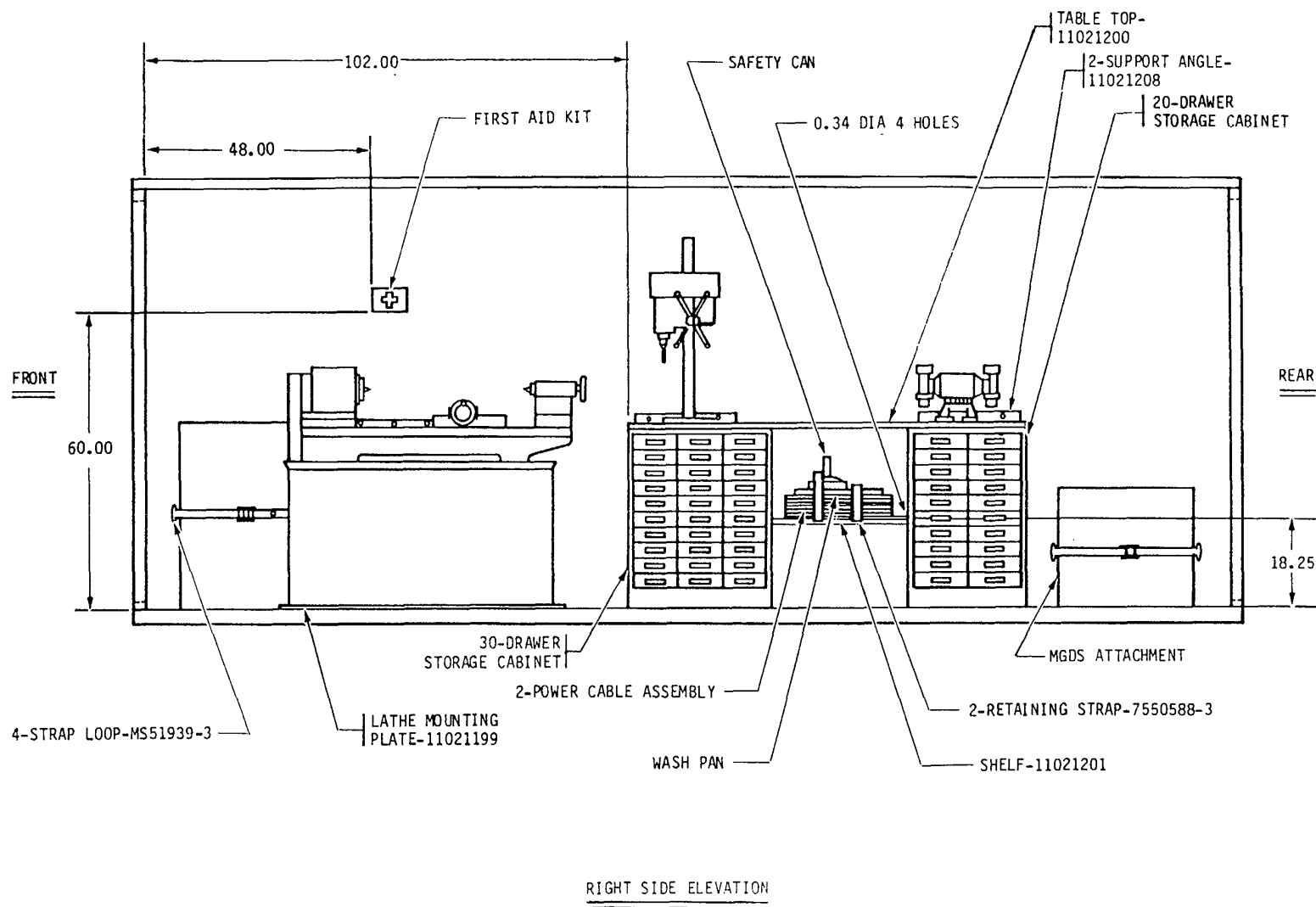
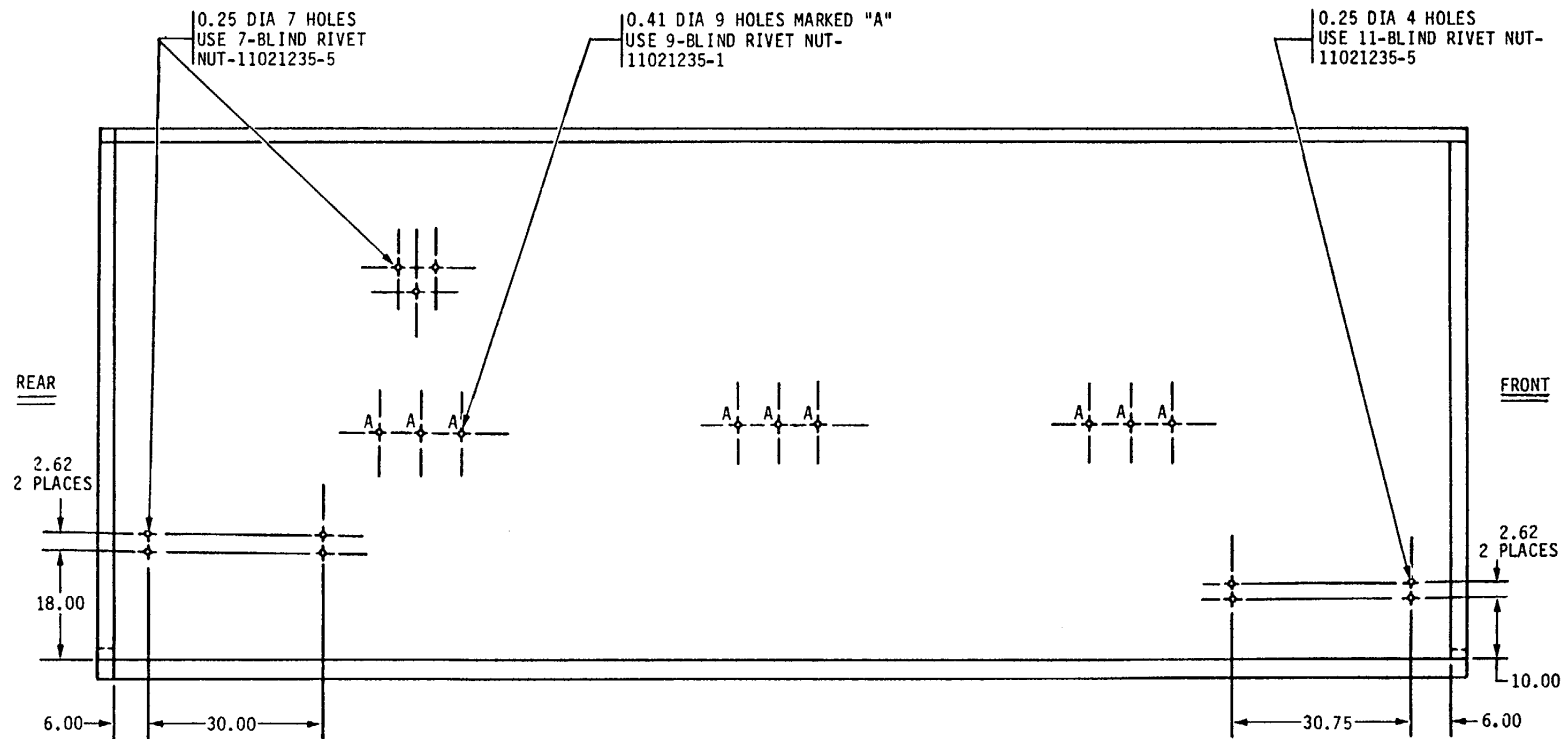


Figure 25. Components to be mounted, unit 2, ISO-2-1, right side elevation.



RIGHT SIDE WALL ELEVATION

Figure 26. Dimensions for blind rivet nut installation in right side wall, unit 2, ISO-2-1.

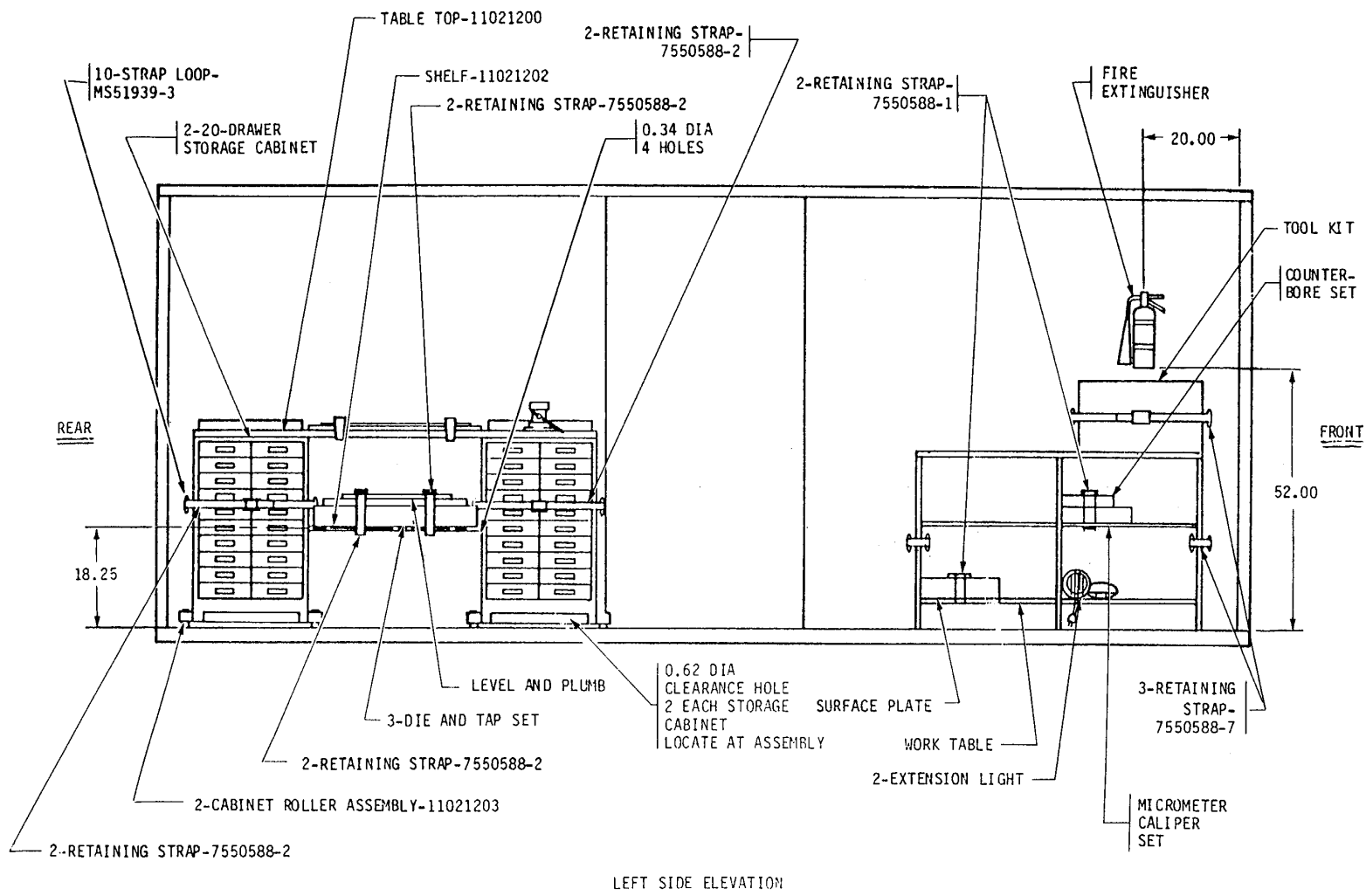


Figure 27. Components to be mounted, unit 2, ISO-2-1, left side elevation.

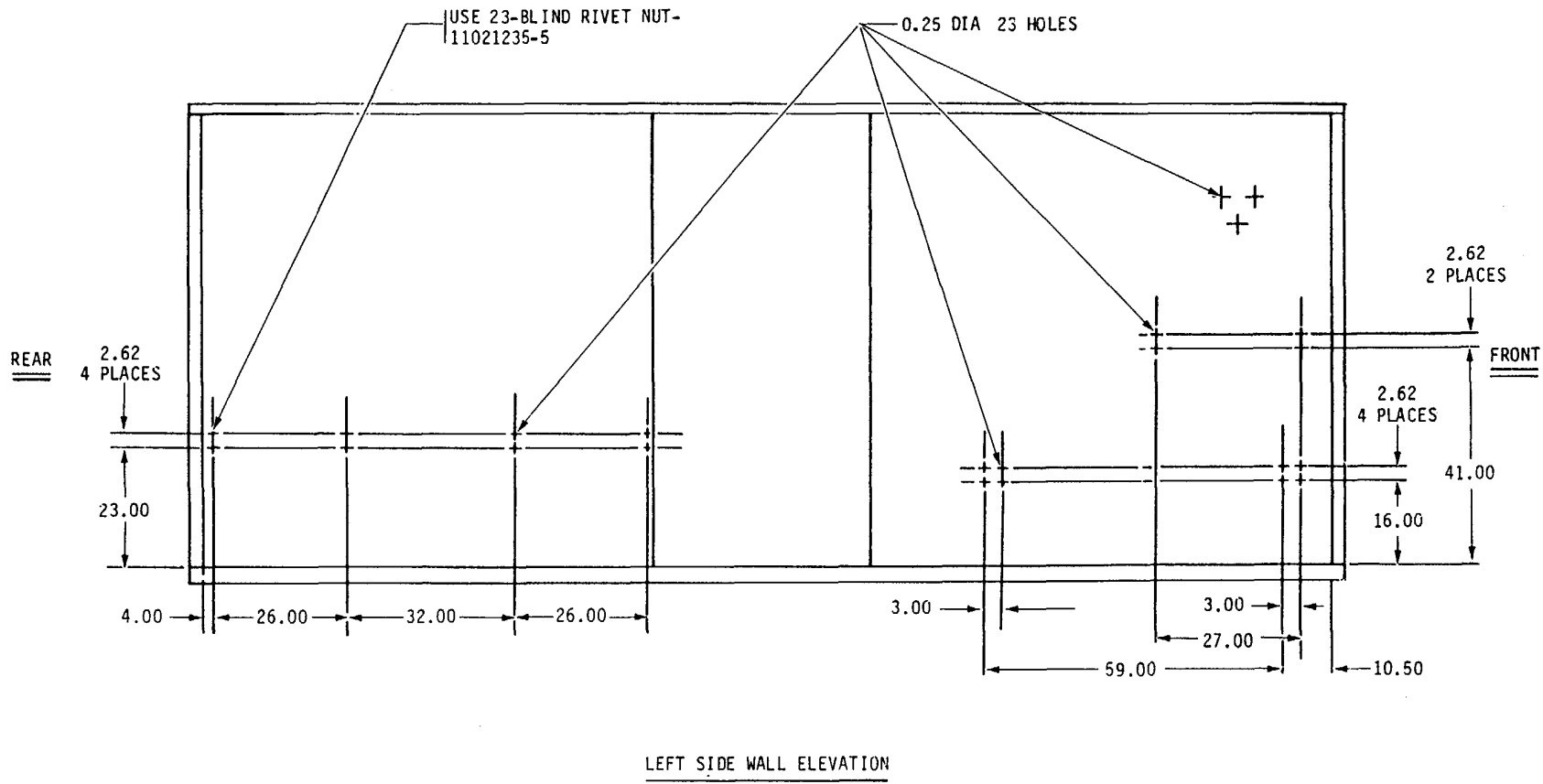


Figure 28. Dimensions for blind rivet nut installation in left side wall, unit 2, ISO-2-1.

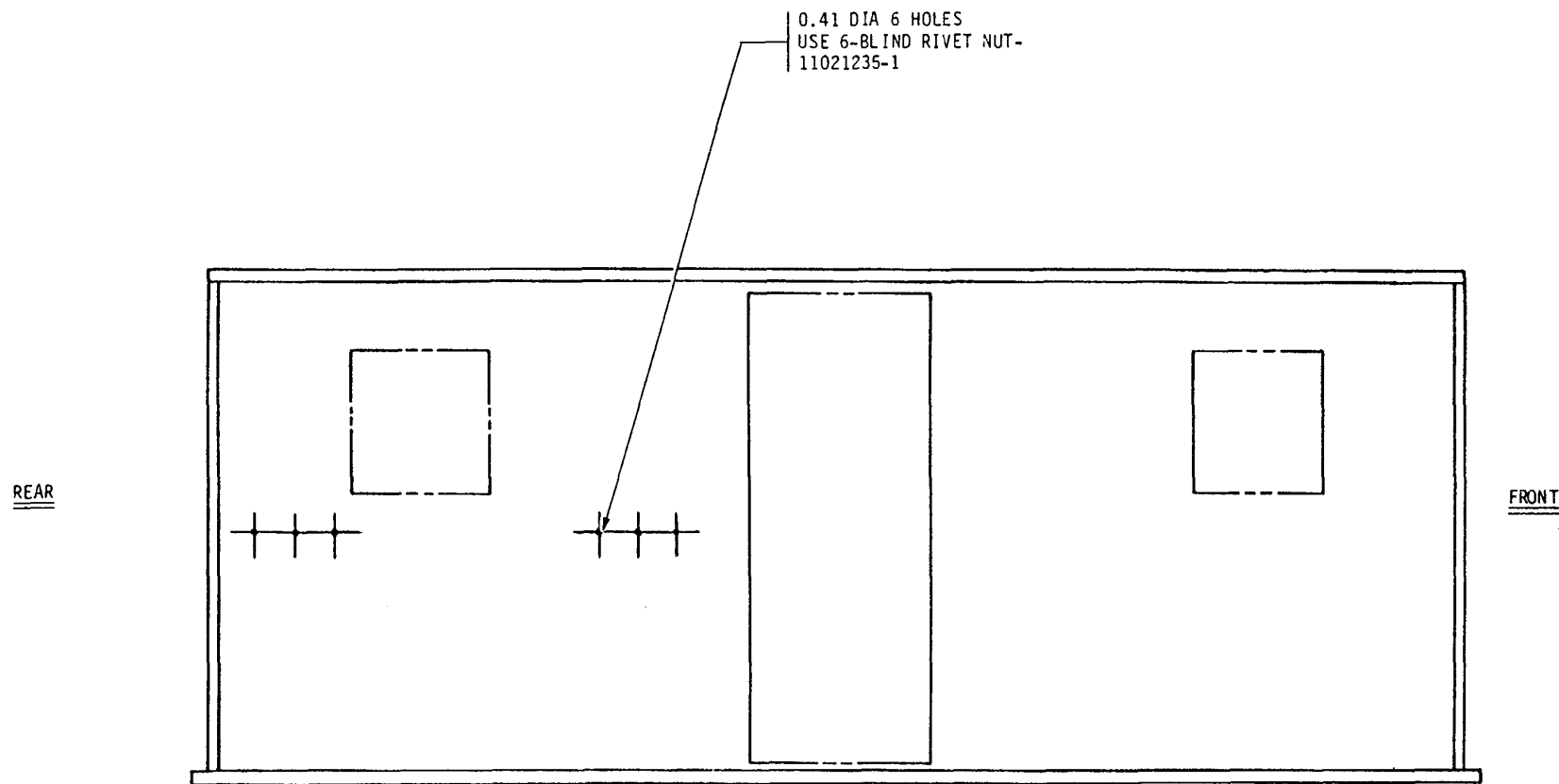


Figure 29. Dimensions for blind rivet nut installation in deployed left wall, unit 2, ISO-2-1.

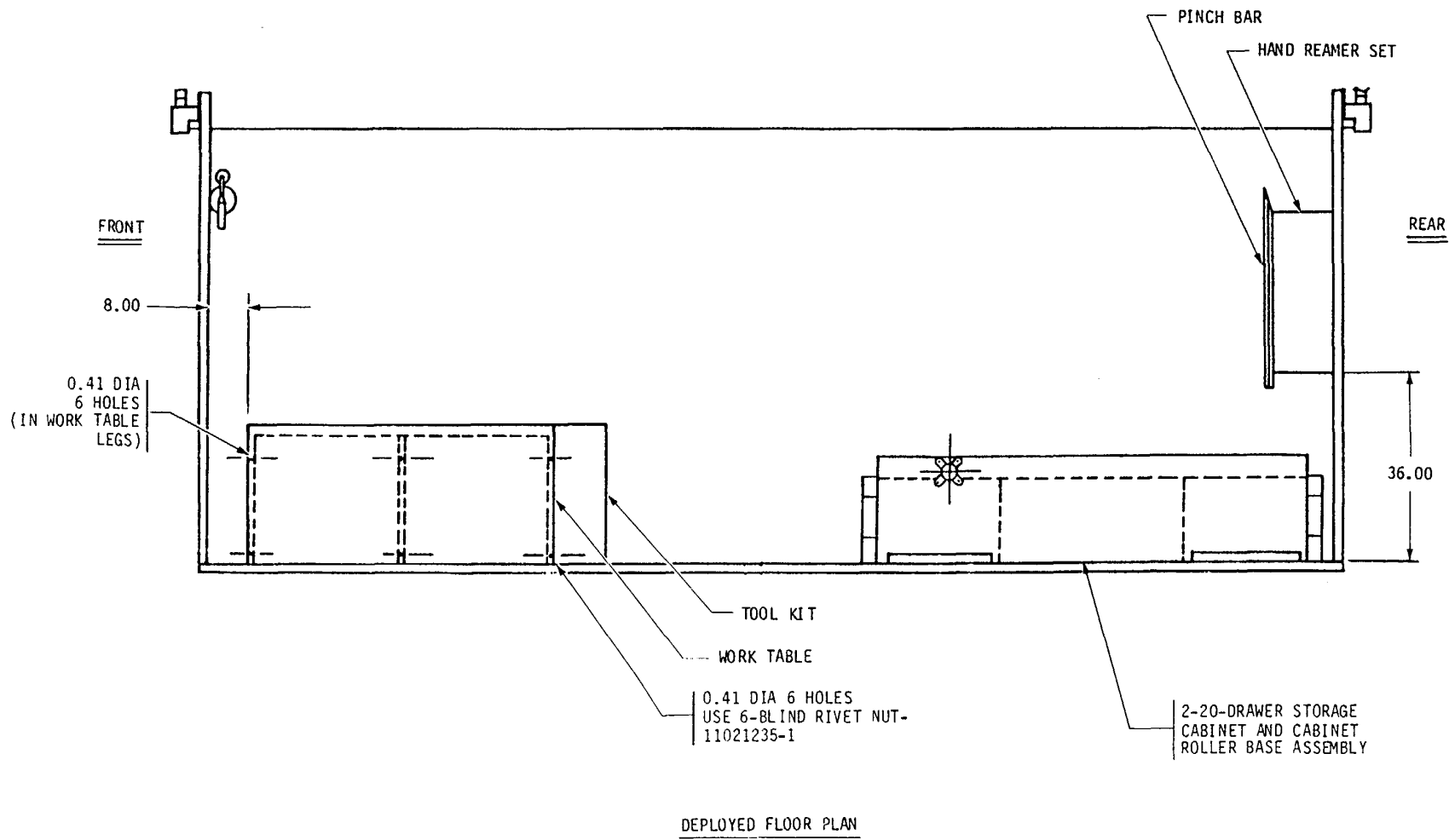


Figure 30. Location of blind rivet nuts and components, deployed floor, unit 2, ISO-2-1.

- NOTES:
 1. ALUMINUM ALLOY PLATE, 5086-H32 PER QQ-A-250/7.
 2. REMOVE BURRS AND BREAK ALL SHARP EDGES.

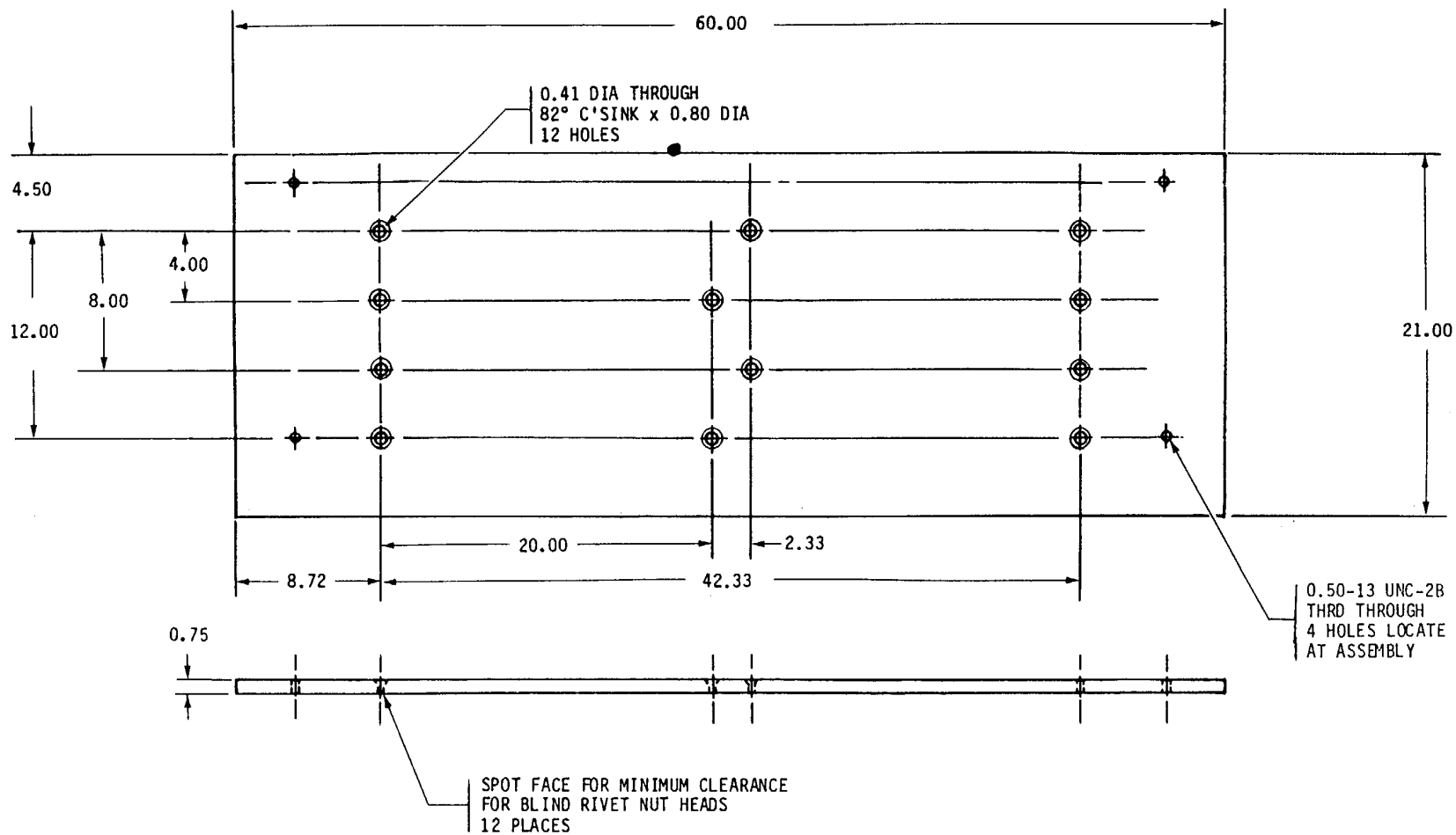


Figure 31. Dimensions for lathe mounting plate, 11021199, unit 2, ISO-2-1.

NOTES:

1. MATERIAL-BENELEX, MASONITE CORP.
2. REMOVE BURRS AND BREAK ALL SHARP EDGES.

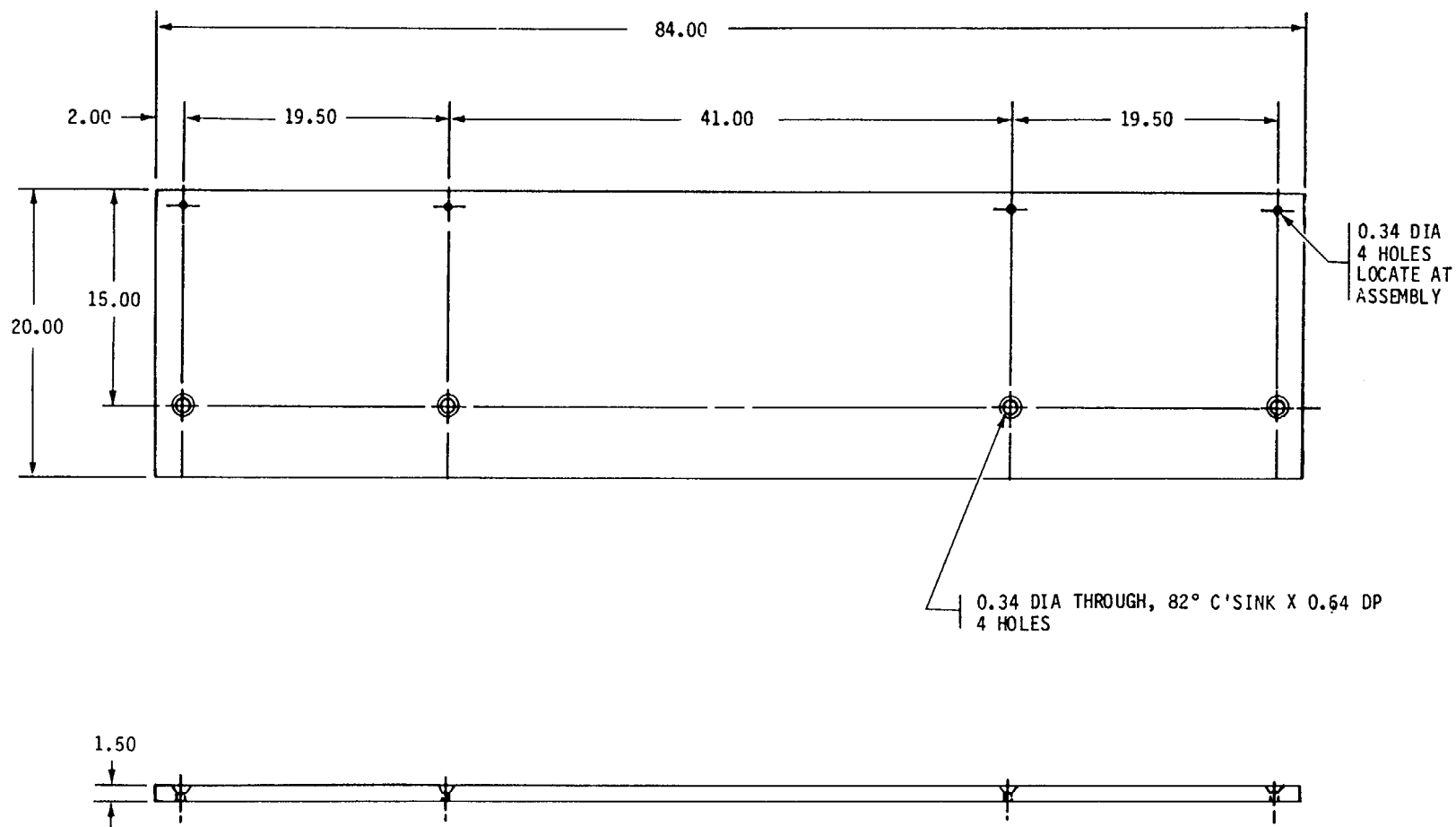


Figure 32. Dimensions for table top, 11021200, unit 2, ISO-2-1.

NOTES:

1. STEEL SHEET PER QQ-S-700.
2. REMOVE BURRS AND BREAK ALL SHARP EDGES.
3. PAINT, USING PRIMER-MIL-P-14553 AND ENAMEL, FOREST GREEN MIL-E-52799 (AIR DRY).

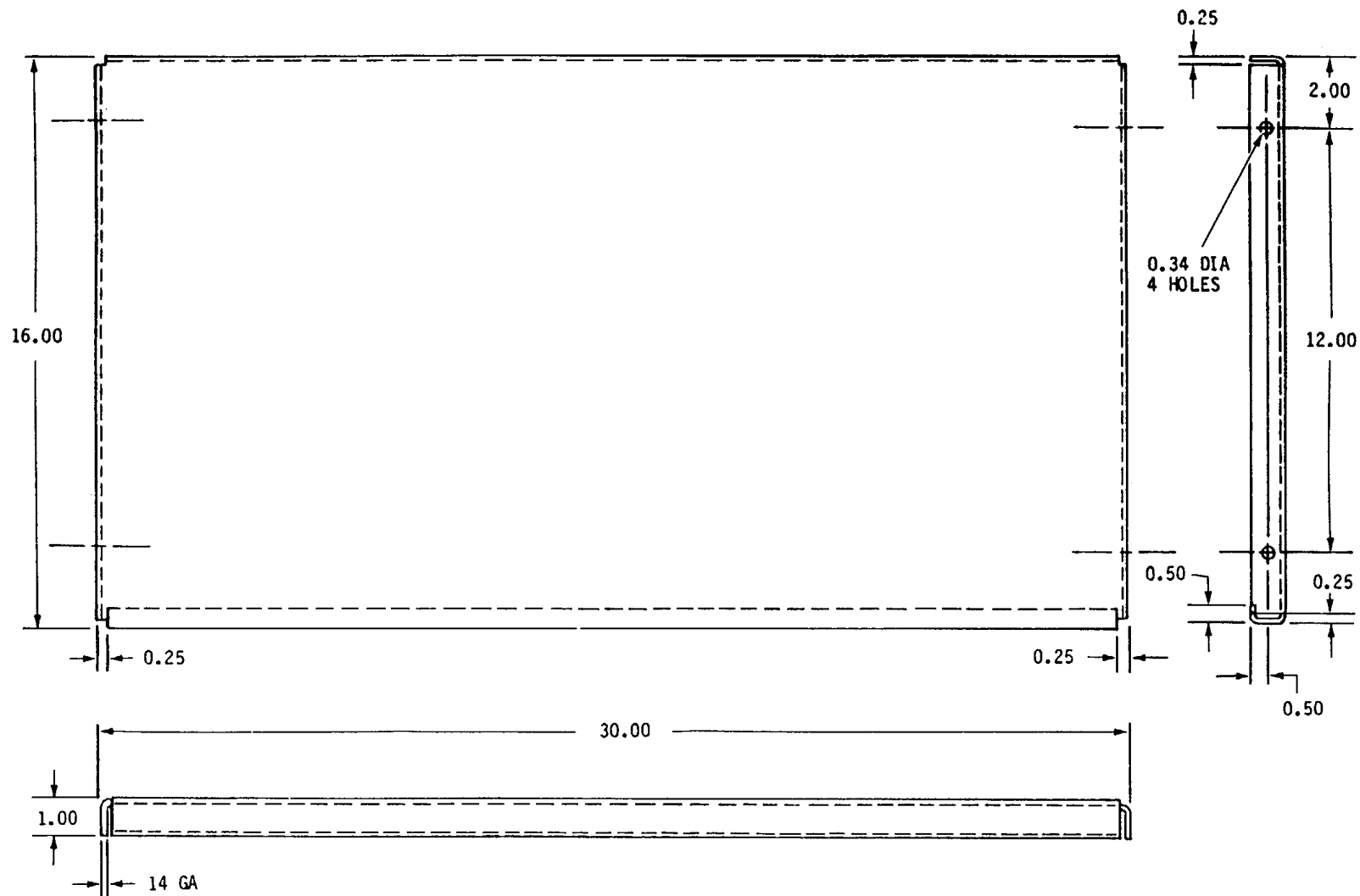


Figure 33. Dimensions for shelf, 11021201, unit 2, IS0-2-1.

NOTES:

1. STEEL SHEET PER QQ-S-700.
2. REMOVE BURRS AND BREAK ALL SHARP EDGES.
3. PAINT, USING PRIMER-MIL-P-14553 AND ENAMEL, FOREST GREEN MIL-E-52799 (AIR DRY).

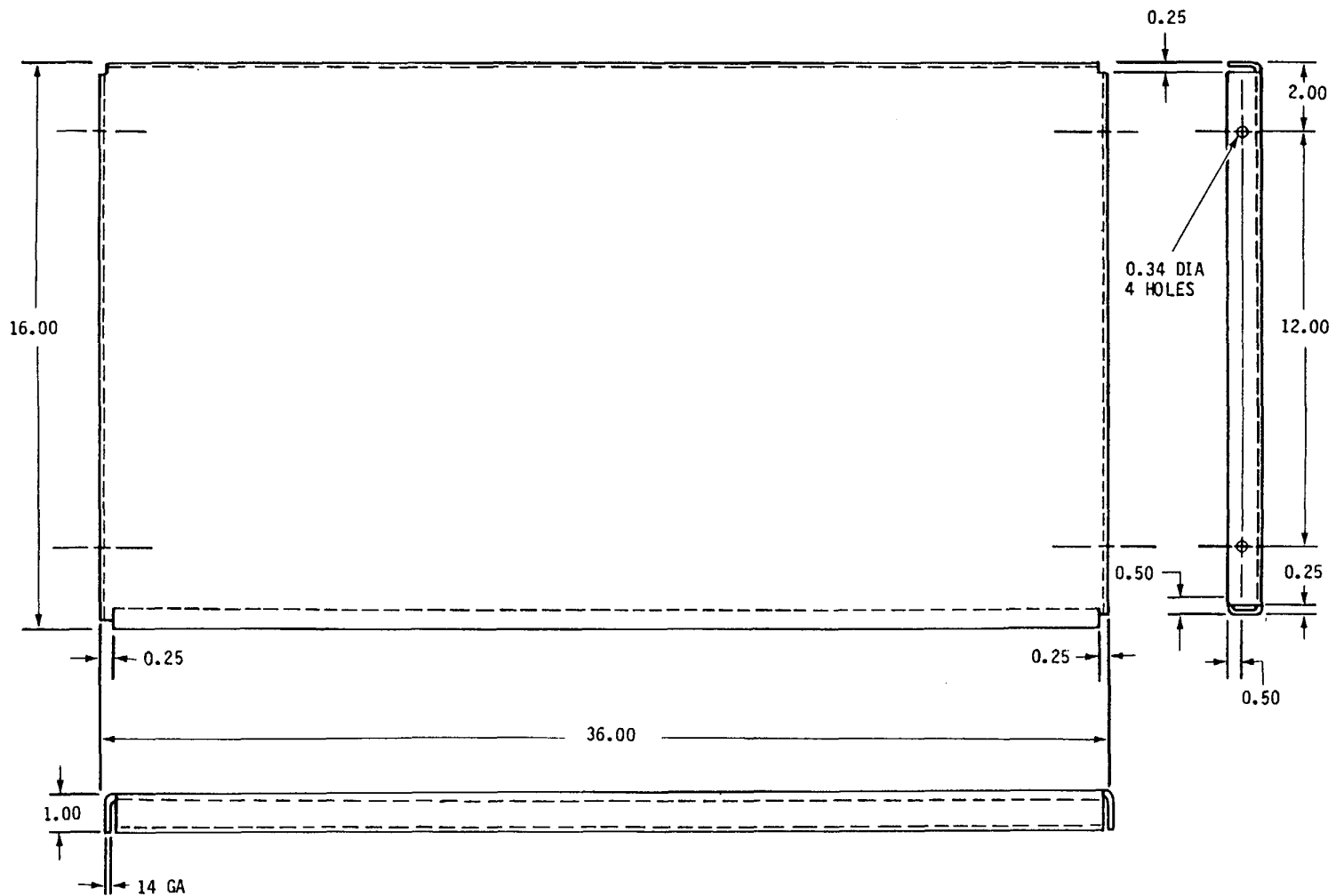


Figure 34. Dimensions for shelf, 11021202, unit 2, ISO-2-1.

NOTES:

1. ALUMINUM ALLOY ANGLE-6061-0 PER QQ-A-200/8.
2. REMOVE BURRS AND BREAK ALL SHARP EDGES.

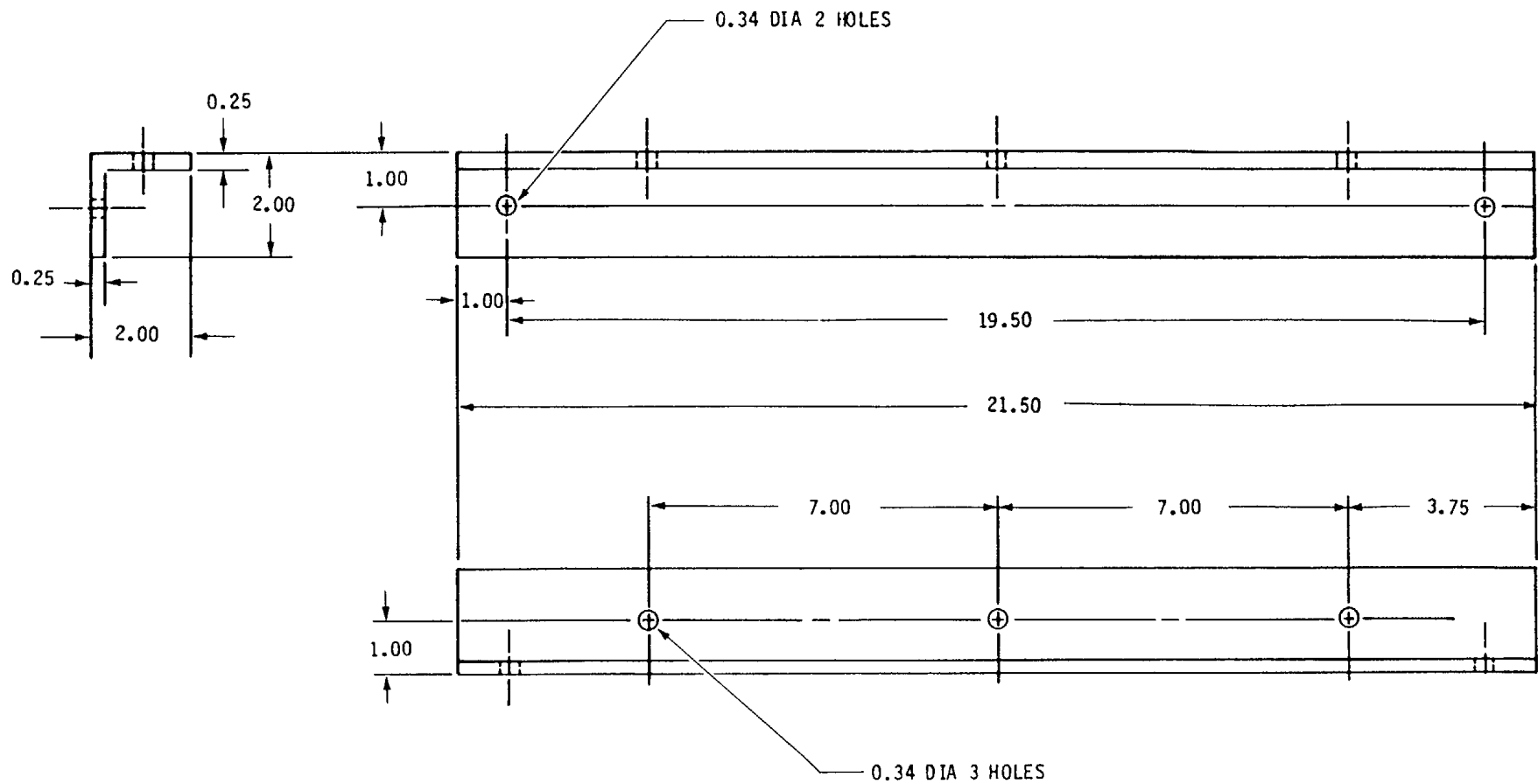


Figure 35. Dimensions for support angle, 11021208, unit 2, IS0-2-1.

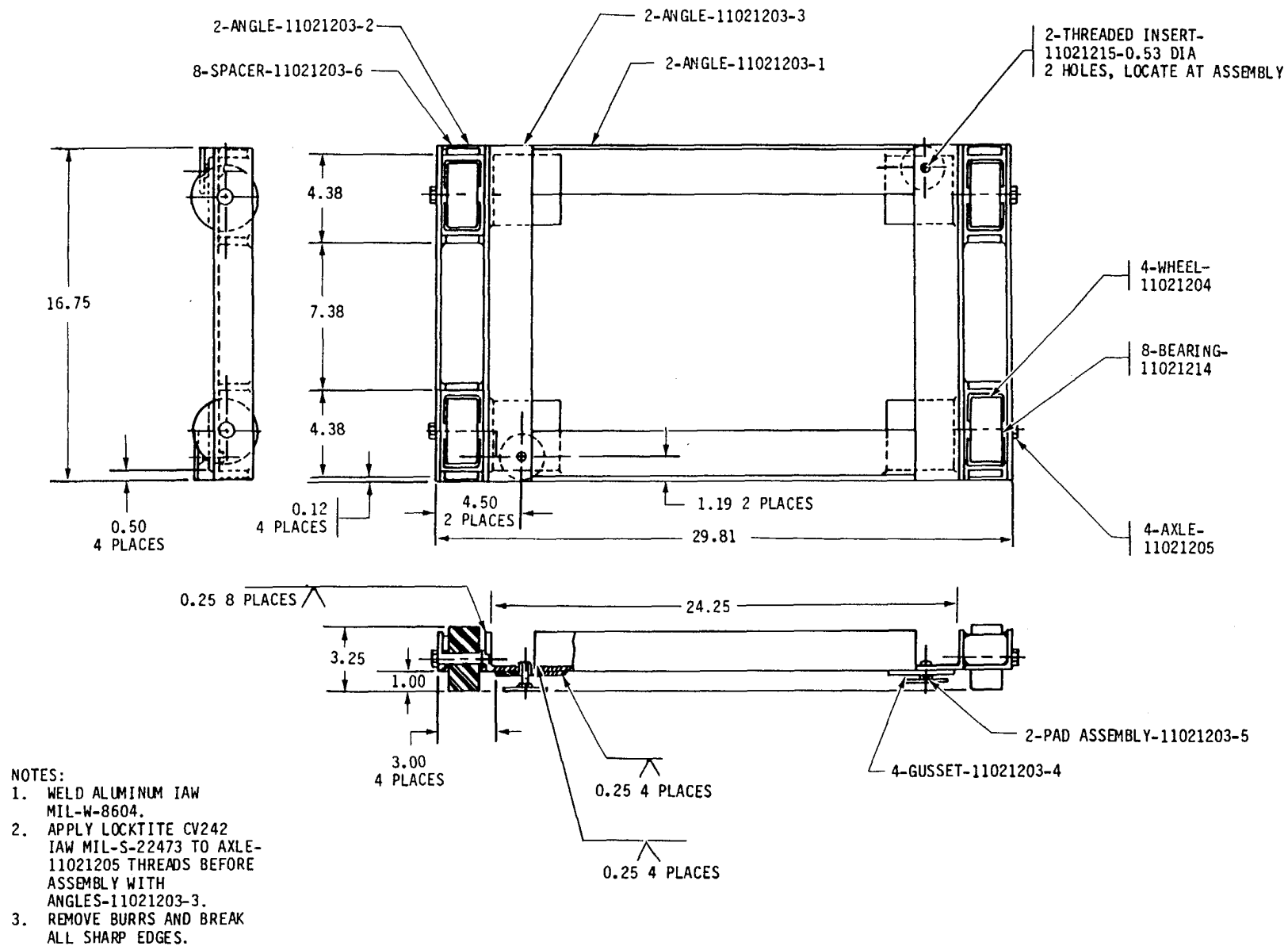
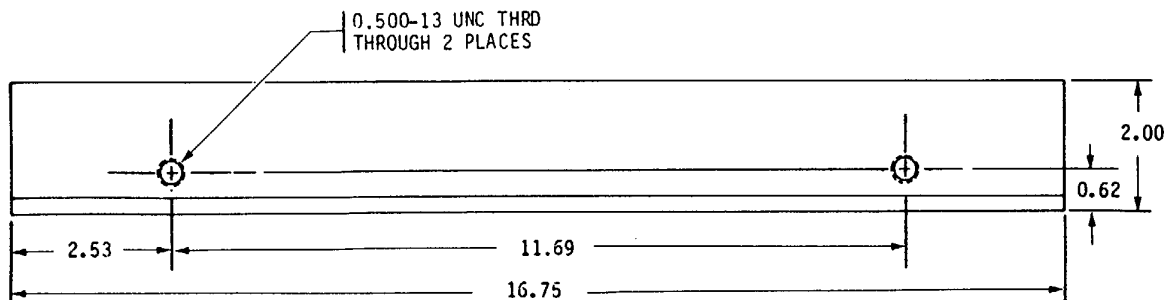
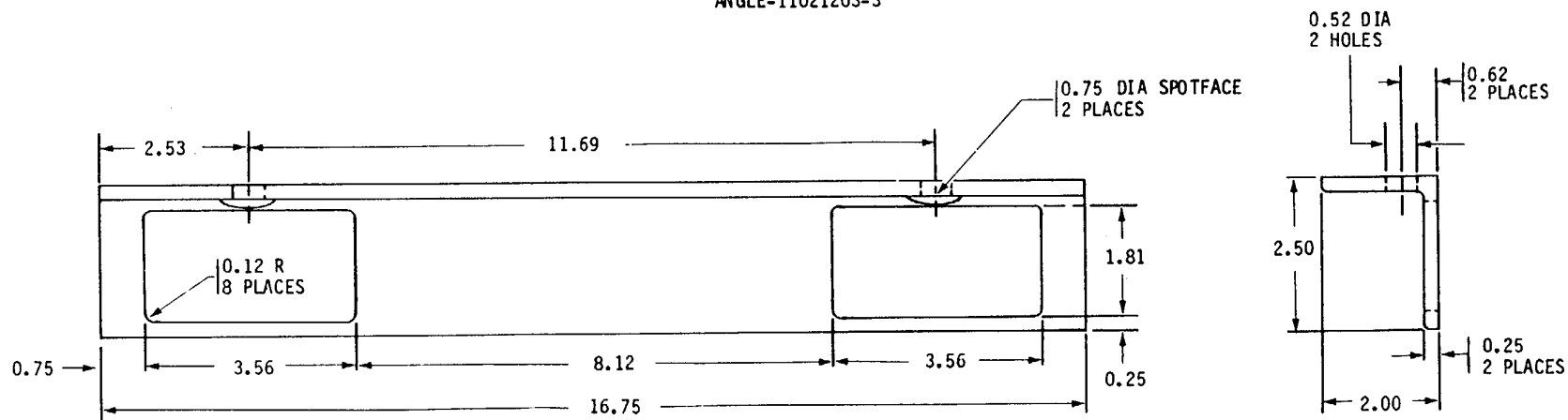


Figure 36. Dimensions for cabinet roller assembly, 11021203, unit 2, ISO-2-1.

- NOTES:
 1. ALUMINUM ALLOY ANGLE-
 6061-0 PER QQ-A-200/8.
 2. REMOVE BURRS AND BREAK
 ALL SHARP EDGES.



ANGLE-11021203-3

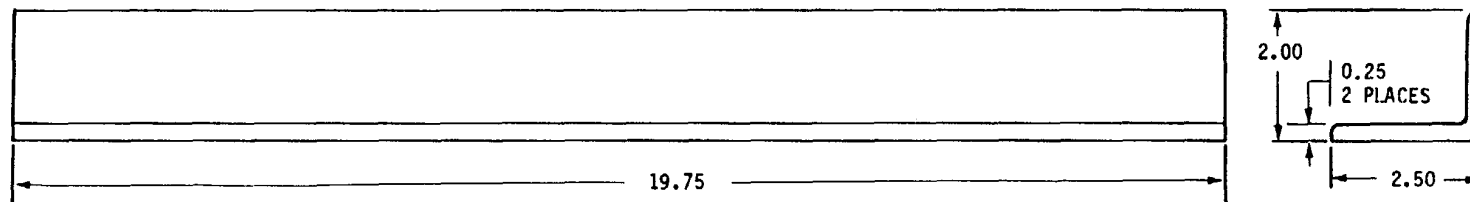


ANGLE-11021203-2

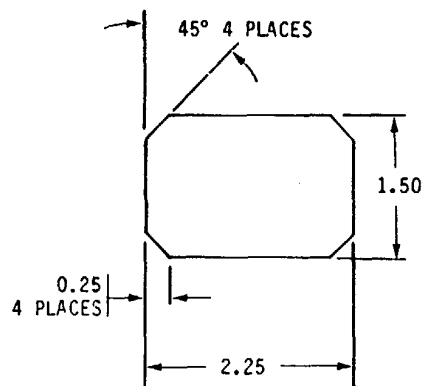
Figure 37. Dimensions for angles, 11021203-2 and 11021203-3, unit 2, ISO-2-1.

NOTES:

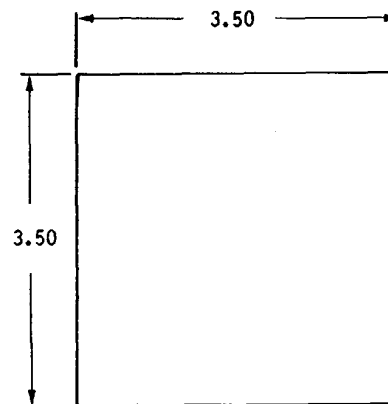
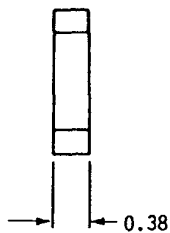
1. ALUMINUM ALLOY ANGLE-6061-0 PER QQ-A-200/8.
2. REMOVE BURRS AND BREAK ALL SHARP EDGES.



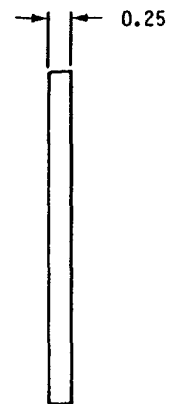
ANGLE-11021203-1



SPACER-11021203-6



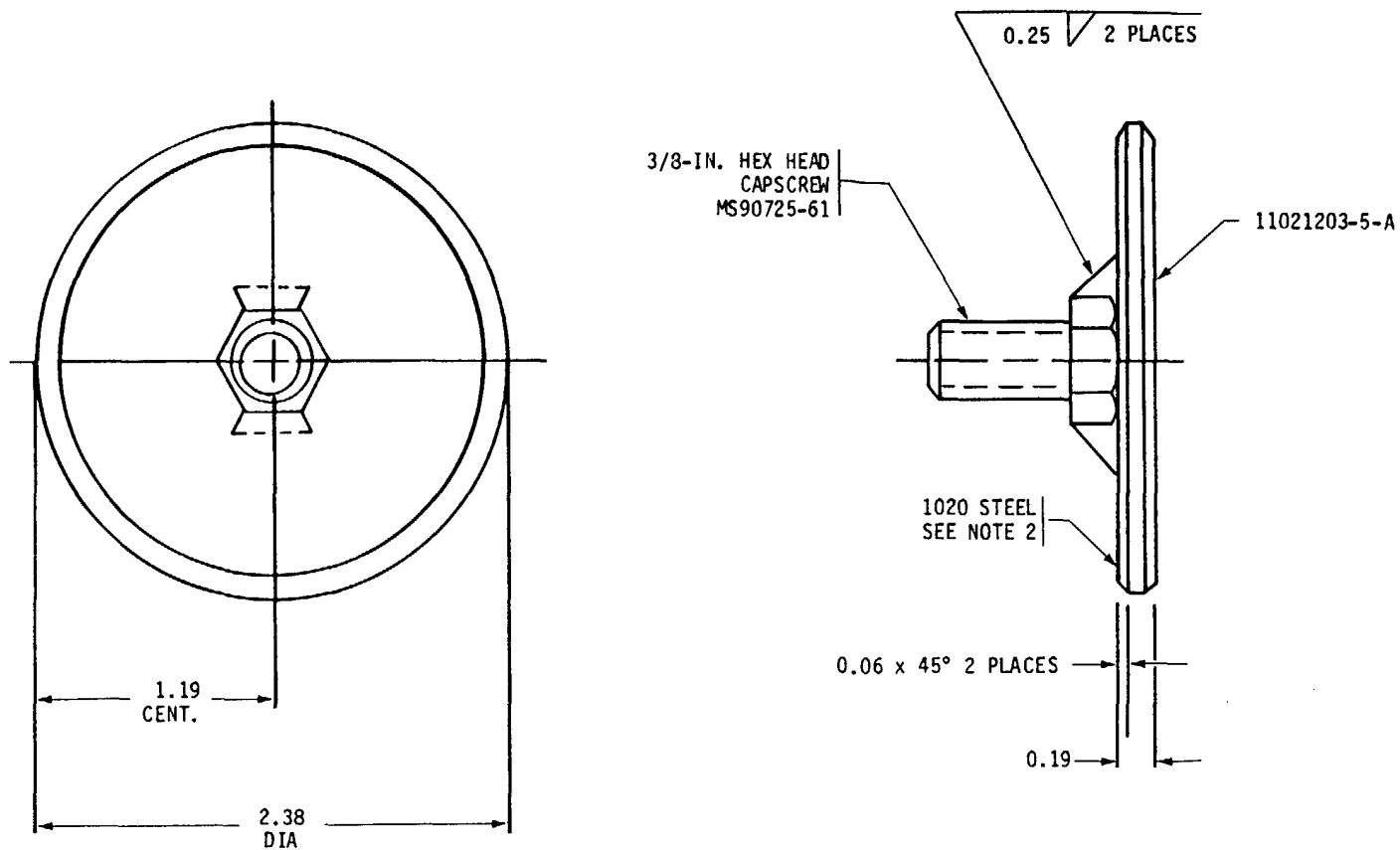
GUSSET-11021203-4



NOTES:

1. ALUMINUM ALLOY PLATE-6061-0 PER QQ-A-250/11.
2. REMOVE BURRS AND BREAK ALL SHARP EDGES.

Figure 38. Dimensions for angle, gusset, and spacer, 11021203-1, 11021203-4, and 11021203-6, unit 2, ISO-2-1.



NOTES:

1. WELD IAW MIL-STD-1261.
2. STEEL BAR CARBON PER ANSI/ASTM A108.
3. REMOVE BURRS AND BREAK ALL SHARP EDGES.

Figure 39. Dimensions for pad assembly, 11021203-5, unit 2, ISO-2-1.

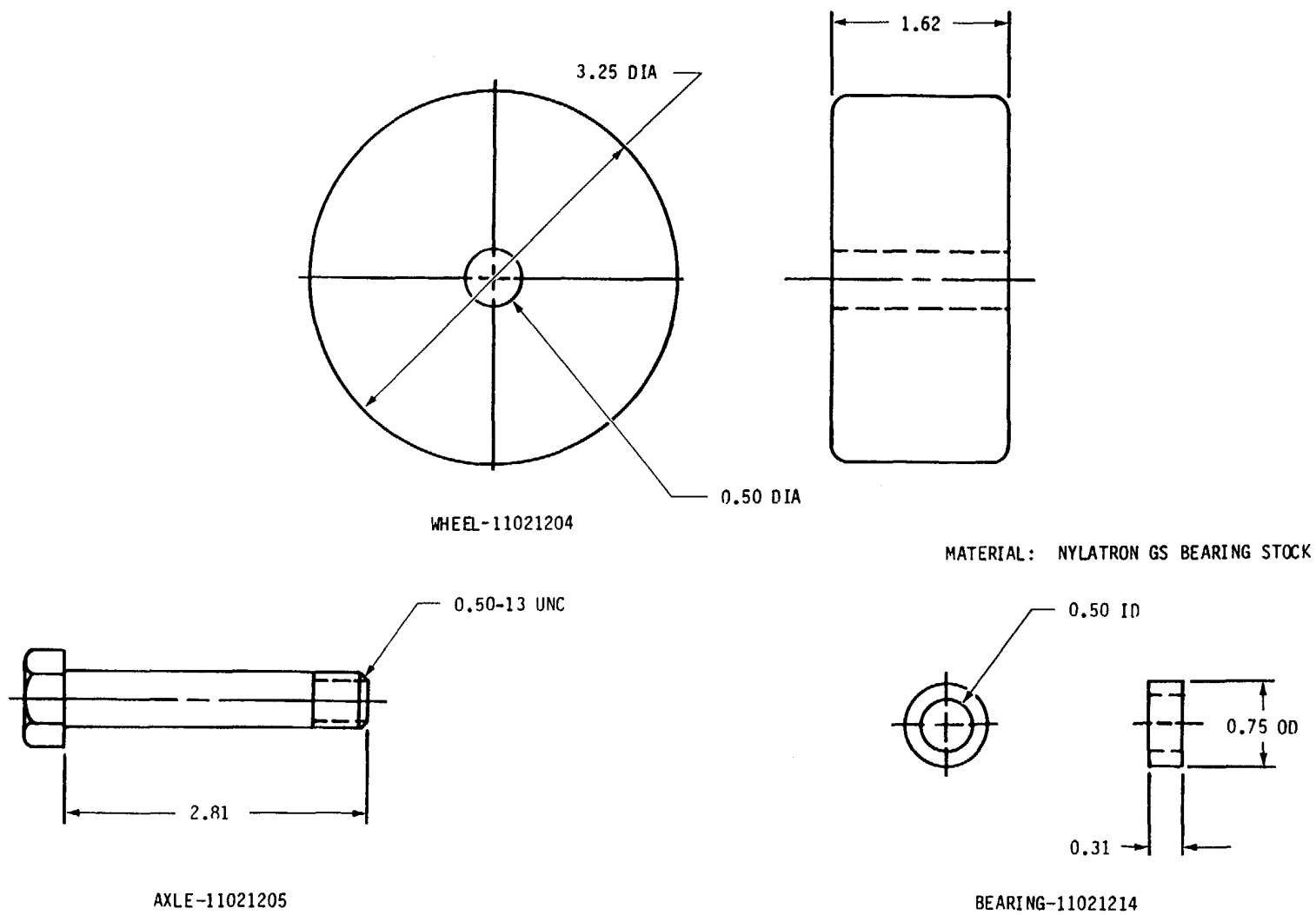


Figure 40. Dimensions for wheel, axle, and bearing, 11021204, 11021205, and 11021214, unit 2, IS0-2-1.

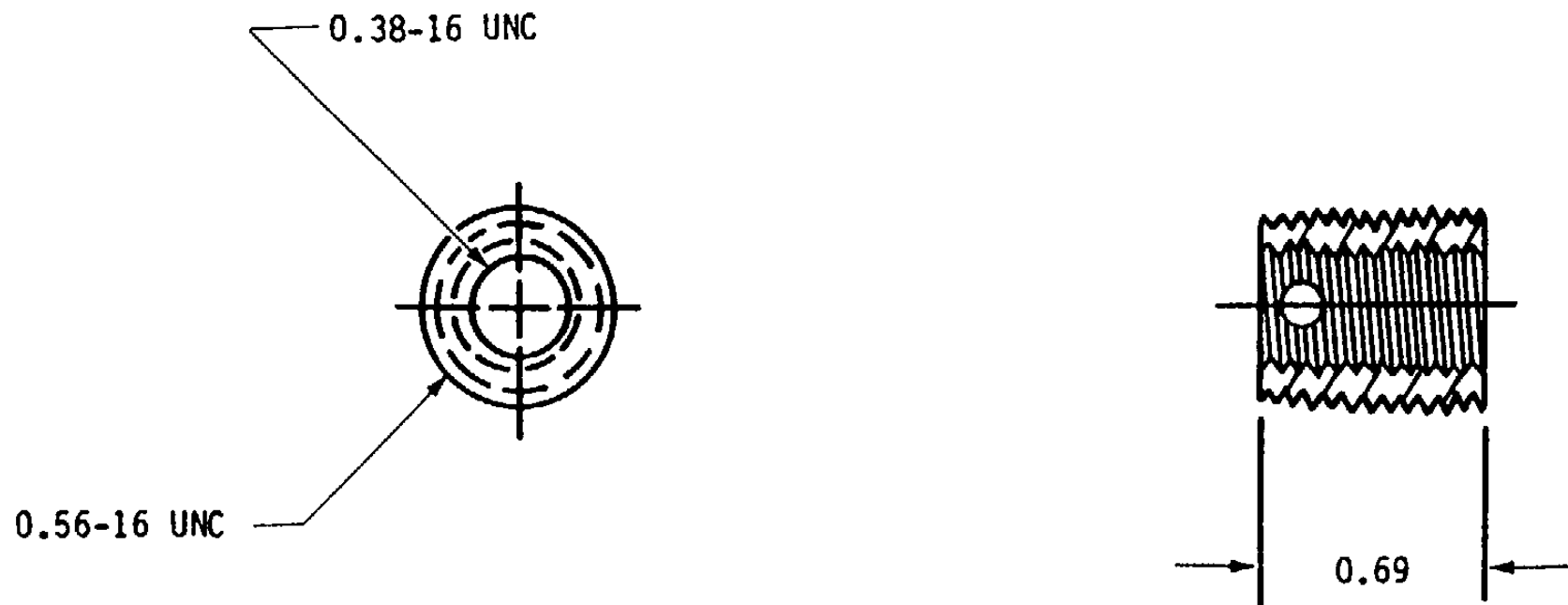


Figure 41. Dimensions for insert, 11021215, unit 2, ISO-2-1.

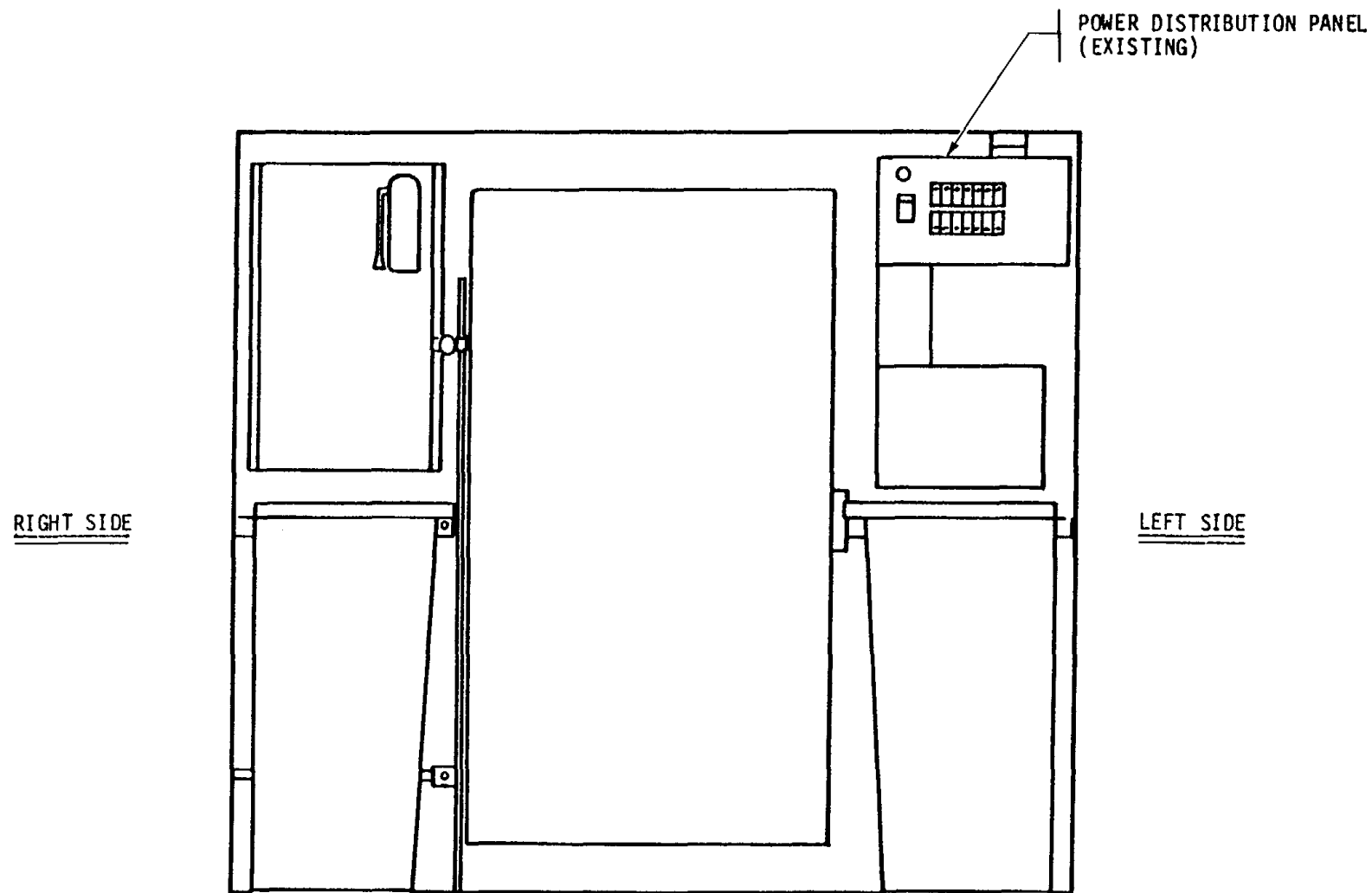


Figure 42. Location of power distribution panel, unit 1, 280.

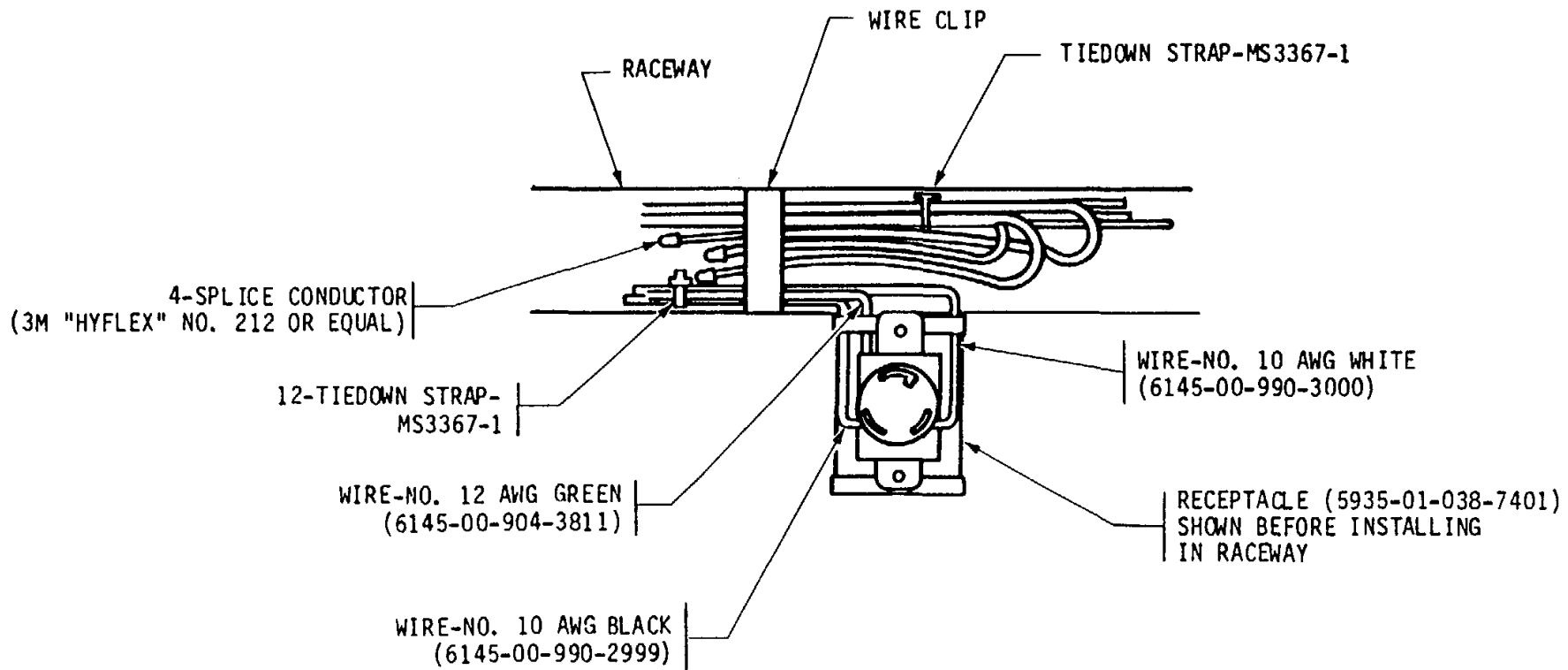


Figure 43. Electrical installation, unit 1, 280.

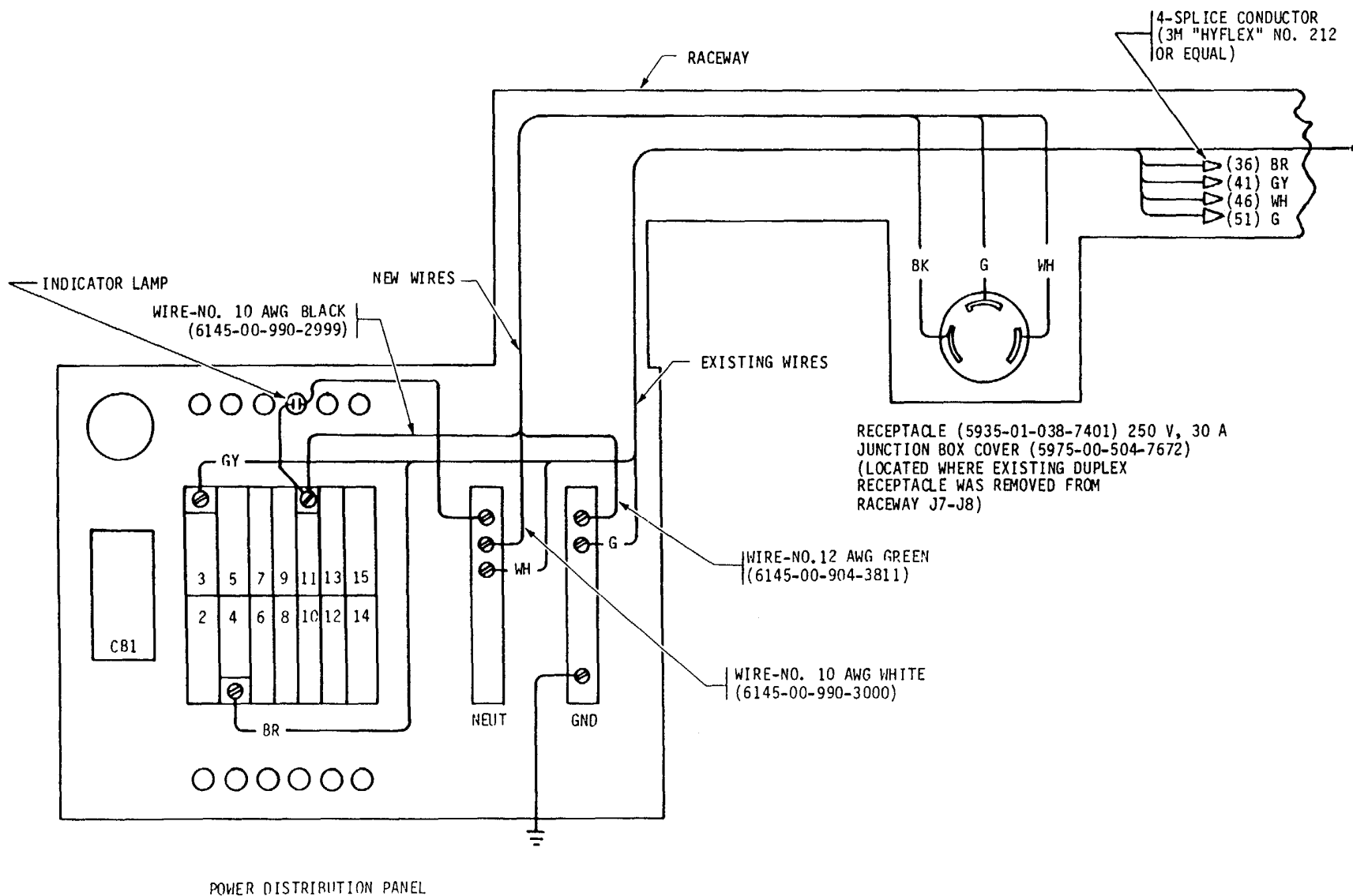


Figure 44. Wiring diagram, 7551836, unit 1, 280.

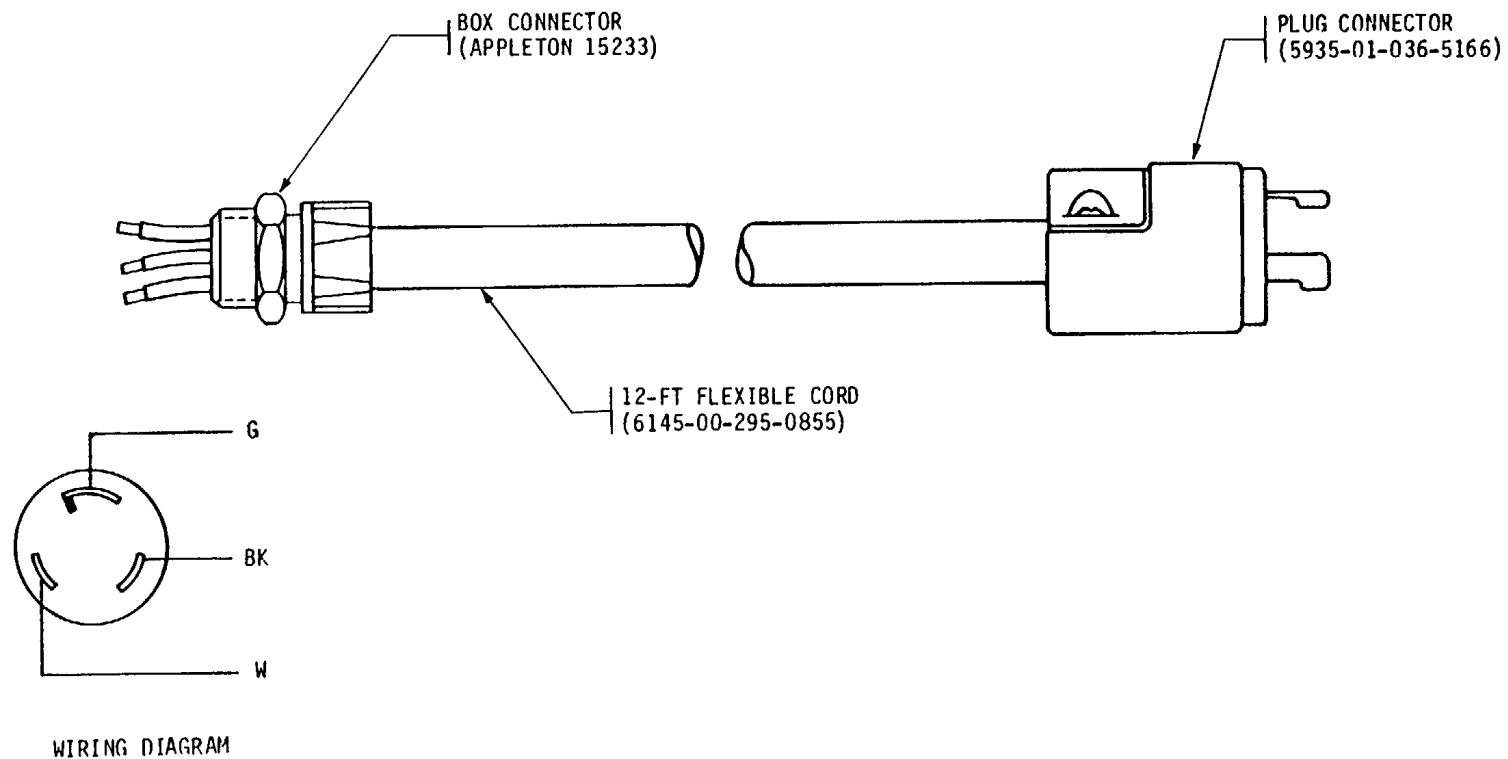


Figure 45. Dimensions for flexible cord, unit 1, 280.

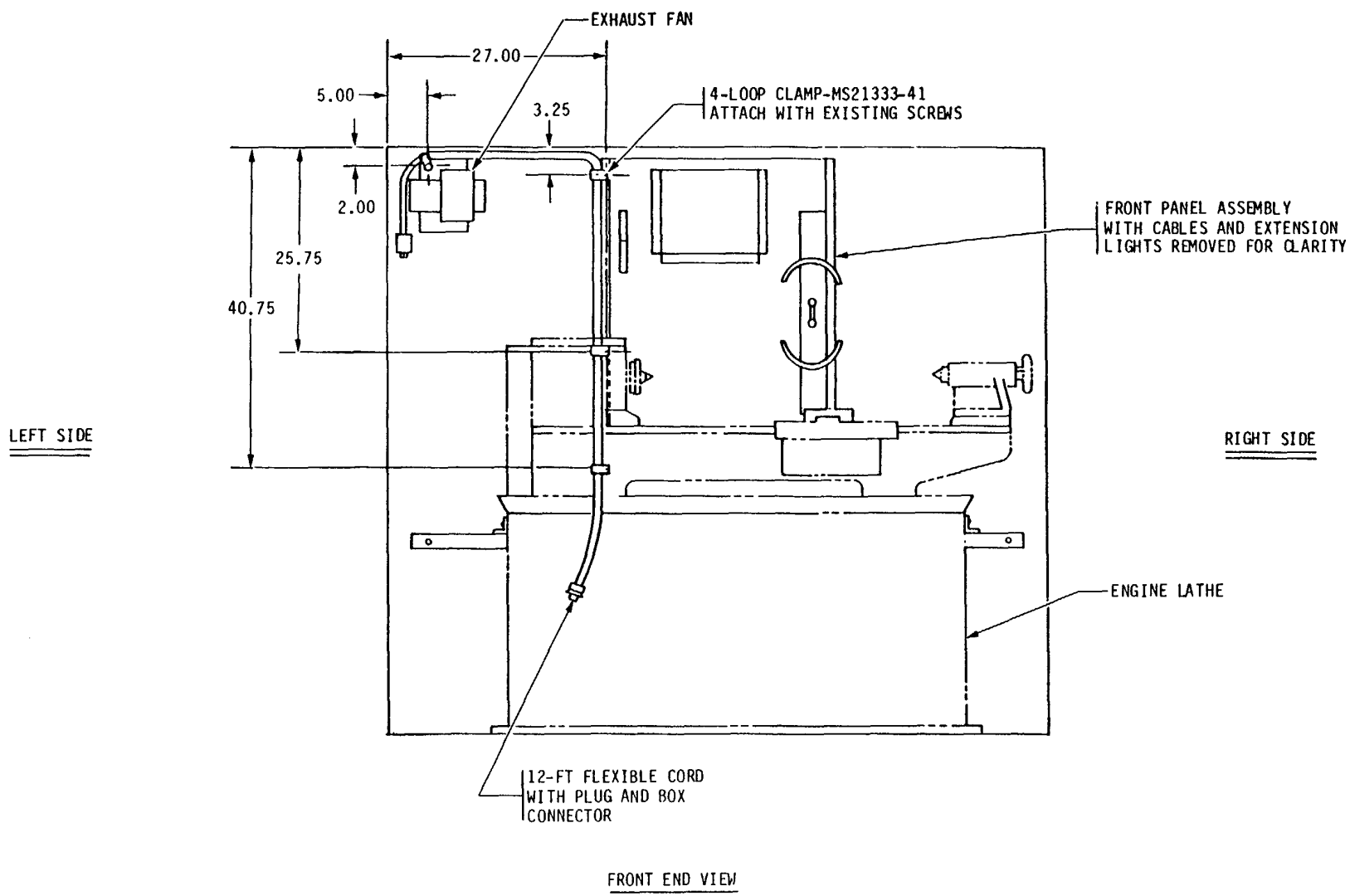


Figure 46. Flexible cord installation, unit 1, 280.

Table 8. Standard Conversion Chart

Nominal size	Decimal size	Nominal size	Decimal size
1/16	0.06	33/64	0.52
5/64	0.08	17/32	0.53
3/32	0.09	35/64	0.55
7/64	0.11	9/16	0.56
1/8	0.12	37/64	0.58
9/64	0.14	19/32	0.59
5/32	0.16	39/64	0.61
11/64	0.17	5/8	0.62
3/16	0.19	11/16	0.69
13/64	0.20	45/64	0.70
7/32	0.22	23/32	0.72
15/64	0.23	47/64	0.73
1/4	0.25	3/4	0.75
17/64	0.27	49/64	0.76
9/32	0.28	25/32	0.78
19/64	0.30	51/64	0.80
5/16	0.31	13/16	0.81
21/64	0.33	53/64	0.83
11/32	0.34	27/32	0.84
23/64	0.36	55/64	0.86
3/8	0.38	7/8	0.87
25/64	0.39	57/64	0.89
13/32	0.41	29/32	0.91
27/64	0.42	59/64	0.92
7/16	0.44	15/16	0.94
29/64	0.45	61/64	0.95
15/32	0.47	31/32	0.97
31/64	0.48	63/64	0.98
1/2	0.50	1	1.00

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