

## SECTION 3 MATERIALS

### 3-1 INTRODUCTION.

Table 3-1 is a listing of materials currently in use in the Tool Control Program. Procure through the normal supply system except for items which no NSN has been established.

These items must be open purchased through a local outlet. Unit requirements are computed from the container allowance codes and number of aircraft assigned.

Table 3-1. Materials

Nomenclature	Part No.	National Stock Number NSN
Tool Cabinet, Repair "F"	6SE00570-1	9Q 5140-00-124-5644
Tool Cabinet, Repair "G"	6SE00570-2	9Q 5140-00-124-5693
Toobox, Portable Briefcase, Style "A"	6SE01085	9Q 5140-01-154-3870
Toobox, Portable Three Panel, Small " B" *	6SE01086	9Q 5140-01-154-3868
Tier, Small	6SE01088	No NSN/Do Not Order
Tier, Large	6SE01089	No NSN/Do Not Order
Toobox, Portable Three Panel, Large "C"	6SE01087	9Q 5140-01-154-3869
Retainer, Tool, 1/4" (18" length)**	4SE00566-1	9Q 5140-00-124-5718
Retainer, Tool, 3/8" (18" length)**	4SE00566-2	9Q 5140-00-124-5613
Frame/Caster Assembly, Tool Cabinet	5SE00702-1	9Q 5140-00-124-5634
Clip, Socket Wrench - 1/4" Drive	A-271 (55719)	9Z 5340-00-124-5273
Clip, Socket Wrench - 3/8" Drive	A-272 (55719)	9Z 5340-00-124-5274
Clip, Socket Wrench - 1/2" Drive	A-273 (55719)	9Z 5340-00-124-5275

\* Box will come with appropriate tier

\*\* Cut to required length

Table 3-1. Materials (Con't.)

Nomenclature	Part No.	National Stock Number NSN
Clip, Socket Wrench - 3/4" Drive	A-274A (55719)	9Z 5340-00-124-5276
Clip, Socket Wrench - 1/2" Drive	A-273 (55719)	9Z 5340-00-124-5275
Clip, Spring Tension, 1" to 1-7/8" Cap., Nickel Plated	2-B	9Z 5340-00-847-0102
Clip, Spring Tension, 5/8" to 1-1/4" Cap., Nickel Plated	1-B	9Z 5340-00-801-7545
Clip, Spring Tension, 5/16" to 3/4" Cap., Nickel Plated	O-B	9Z 5340-00-584-9400
Clip, Spring Tension, 7/8" to 1-1/4" Cap., Nickel Plated	88	9Z 5340-01-005-3118
Clip, Spring Tension, 9/16" to 7/8" Cap., Nickel Plated	68	9Z 5340-00-329-2136
Clip, Spring Tension, 5/16" to 9/16" Cap., Nickel Plated	48	9Z 5340-00-854-6701
Clip, Spring Tension, 3/16" to 3/8" Cap., Nickel Plated	28	9Z 5340-00-835-3638
Screw, Self-tapping, #6, 3/8"	FSS107	9Q 5305-00-969-6914
Screw, Self-tapping, #6, 1/2"	MS24617-11	9Q 5305-00-883-0633
Screw, Self-tapping, #6, 5/8"	MS24617-12	9Z 5305-00-883-0635
Rubber Sheet, Cellular 24" x 24" x 1" Sheet	MIL-R-6130	9G 9320-00-526-6900
Herculite (Pouch Material)	MIL-C-43006 (81349)	9D 8305-00-926-1587
Tape Fastener, Hook, 1"	MIL-F-21840	9D 8315-00-106-5973
Tape Fastener, Pile, 1"	MIL-F-21840	9D 8315-00-106-5974
Adhesive, Scotch Grip 847	847	9Q 8040-01-033-7507
Plastic Sheet, PVC, 1/8" x 24" x 24"	L-P-535	9G 9330-01-305-1012

\* Box will come with appropriate tier

\*\* Cut to required length

## SECTION 4

### CONTAINER DESCRIPTIONS AND TYPICAL USES

#### 4-1 CONTAINER TYPES AND UTILIZATION.

- a. The Pouch is locally fabricated from canvas, nylon, or herculite material and may be equipped with a belt loop or strap. The belt pouch will usually carry ten to twelve tools. A flap secured with Velcro tape keeps tools from falling out. Figure 4-1 shows a typical layout and Figure 4-2 shows the pouch in the closed position.
- b. The Toolbox, Portable Briefcase, Style "A", Part No. 6SE01085 shown in Figure 4-3, has two panels each measuring 11-1/2 by 18 inches. Approximately 30 tools can be mounted with retainer, spring clips, or a combination thereof. This container of tools is used primarily by troubleshooters in making adjustments and performing minor maintenance tasks.
- c. Toolbox, Portable Three Panel, Small "B", Part No. 6SE01086 shown in Figure 4-4, with small tier Part No. 6SE01088 has two door panels measuring 12 by 18 inches and a center section three level tiered insert. This box will hold approximately 70 tools and is used to accomplish tasks such as component replacement. The layout drawings of this box have the vertical and horizontal panels shown in the same plane for simplification.
- d. Toolbox, Portable Three Panel, Large "C", Part No. 6SE01087 shown in Figure 4-4, with large tier Part No. 6SE01089 is of the same basic design as the small box except larger. The approximate outside dimension is to be 17 by 22 by 8 inches. This box will hold about 100 tools of average size. It is used on more extensive aircraft maintenance tasks such as engine changes. In some cases this container can be used as a shop box. As with the small box, the layout drawings show all vertical and horizontal surfaces in one plane. These are designated panels A through J (less I).
- e. Tool Cabinet, Repair "F", Part No. 6SE00570-1 shown in Figure 4-5, is two feet square with doors closed. The doors are three inches deep and the center section is nine inches deep. It has a two level tier in the center section, a five-inch high tier and a shelf in each door. The layout drawings have been extended in height in order to show the horizontal surfaces of the tiers and the shelves. This cabinet can be made portable by the use of a frame and caster assembly. This cabinet is typically used as a shop box and holds tools for the more complex maintenance tasks.
- f. Tool Cabinet, Repair "G", Part No. 6SE00570-2 shown in Figure 4-5, is the same basic design as the small cabinet except larger. This cabinet is three feet square and with the doors closed is one foot thick. It is used as a shop box and may be mounted on a wall or bench. As with the "F" cabinet the layout drawings have been extended in height in order to show the horizontal surfaces of the tiers and the door shelves.
- g. Rollaround, Twenty Drawer, KRL7003 (55719) has outer dimensions of approximately 73 by 29 by 41 inches. The top left drawer is 49-1/4 by 27 by 3-3/4 inches. Beneath it, in the left column are three drawers that are 14-3/4 by 27 by 1-3/4 inches. The left column also have one drawer that is 14-3/4 by 27 by 4 inches and one that is 14-3/4 by 27 by 10-5/8 inches. That last drawer has a tote tray that is 14-3/4 by 10 by 3-1/4 inches. The center column is also under the first drawer described. It has three drawers that are 30-1/2 by 27 by 1-3/4 inches, two drawers that are 30-1/2 by 27 by 4 inches, and one drawer that is 30-1/2 by 27 by 6-1/4 inches. The right column has five drawers that are 14-3/4 by 27 by 1-3/4 inches, two drawers that are 14-3/4 by 27 by 4 inches and one that is 6-1/4 inches.
- h. Rollaround, Seven Drawer KRA2007 (55719), shown in Figure 4-7, has drawers approximately 21 by 18 inches. The top two drawers are 1-13/32 inches high; the next four drawers are 3-19/32 inches high, and the bottom drawer is 7-21/32 inches high. The outside dimensions are approximately 27 by 20 by 38 inches. This box will hold approximately 220 tools.

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- i. Rollaround, Seven Drawer 5140-01-474-5089, shown in Figure 4-8, has drawers approximately 31 by 22 inches. The top three drawers are 1-3/4 inches high; the next three drawers are 4 inches high, and the bottom drawer is 6-1/4 inches high. The outside dimensions are approximately 36 by 24 by 40 inches. This box will hold approximately 220 tools.

### 4-2 **CONTAINER AND TOOL MARKING.**

For ease of identification, all tool control containers and tools shall be marked to identify the organization code, work center code, and container number. For example, a container belonging to Fighter Squadron Twenty-One, Power Plants 2 Box, would be marked PA1-110-2. If there are more than one of the same type container, they would be marked PA1-110-2-1 and PA1-110-2-2, etc.

### **WARNING**

Do not etch or machine any tool made of beryllium alloy. Machining of beryllium tool will cause dust or fumes, which is a respiratory health hazard.

Many of the non-magnetic and non-sparking tools are made with beryllium alloys. Marking of these tools shall be on non-beryllium areas of the tool, i.e. screwdriver handle. If no such area exists, these tools shall not be etched. They will be accounted for on the toolbox inventory with the statement that the tool is not etched.

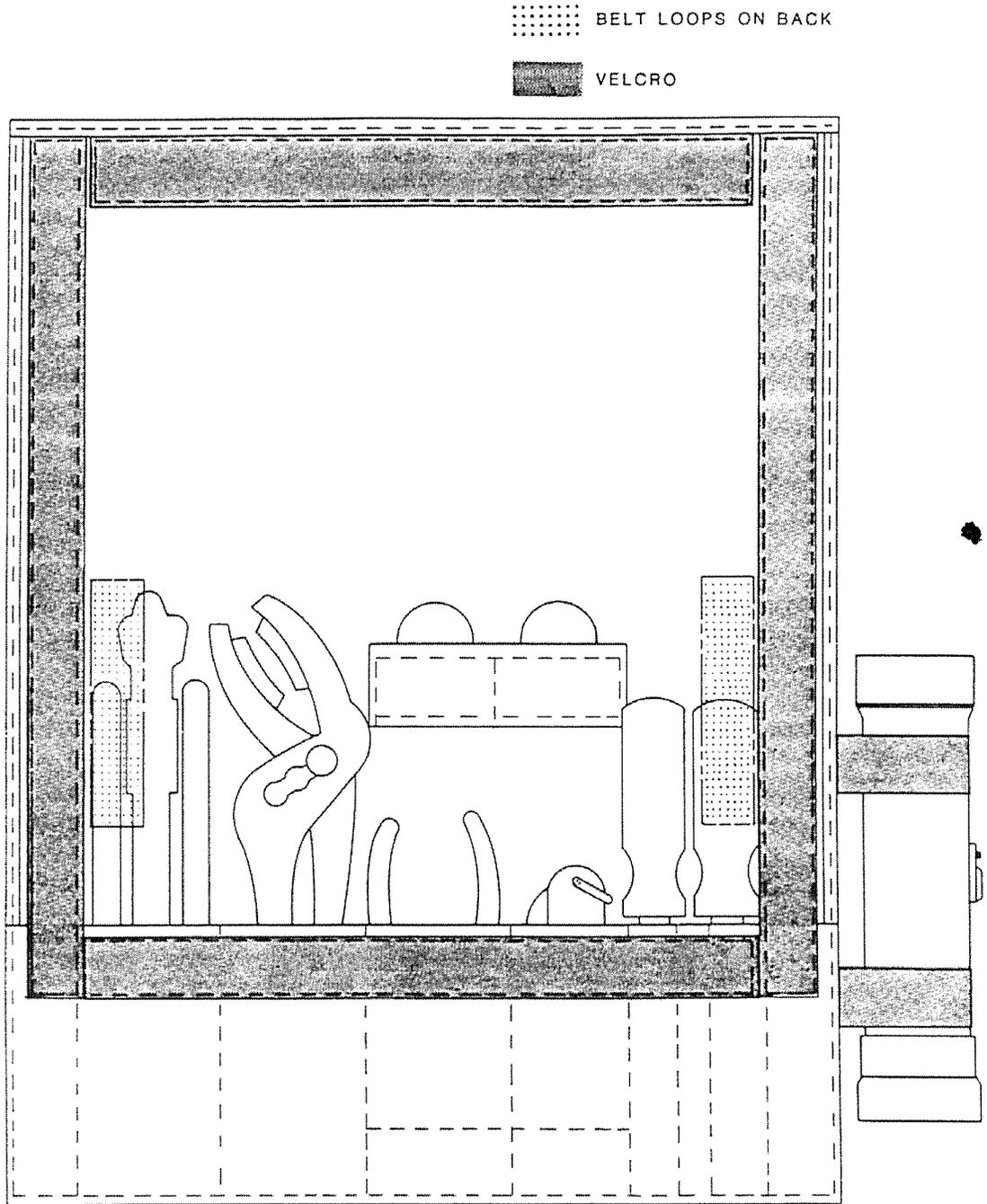


Figure 4-1. Tool Pouch Layout (Typical)

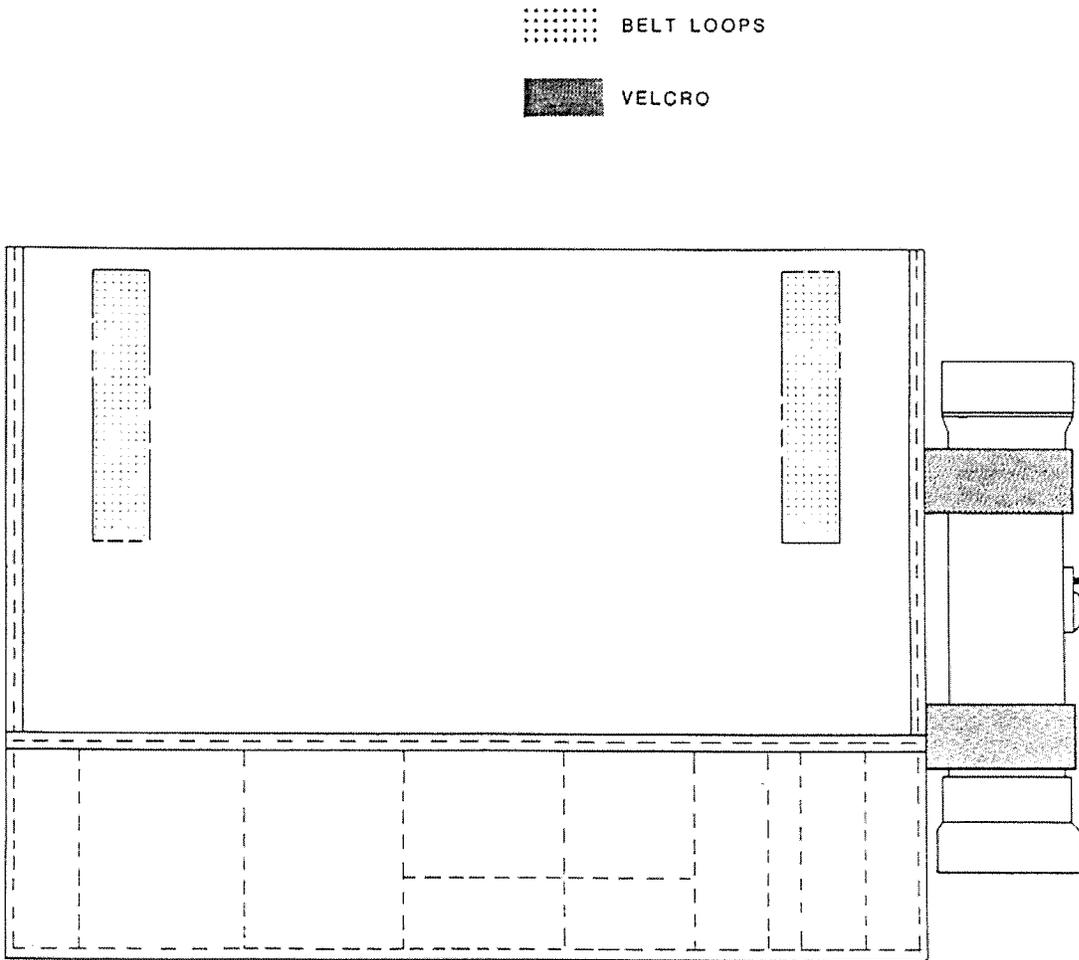


Figure 4-2. Tool Pouch Closed (Typical)

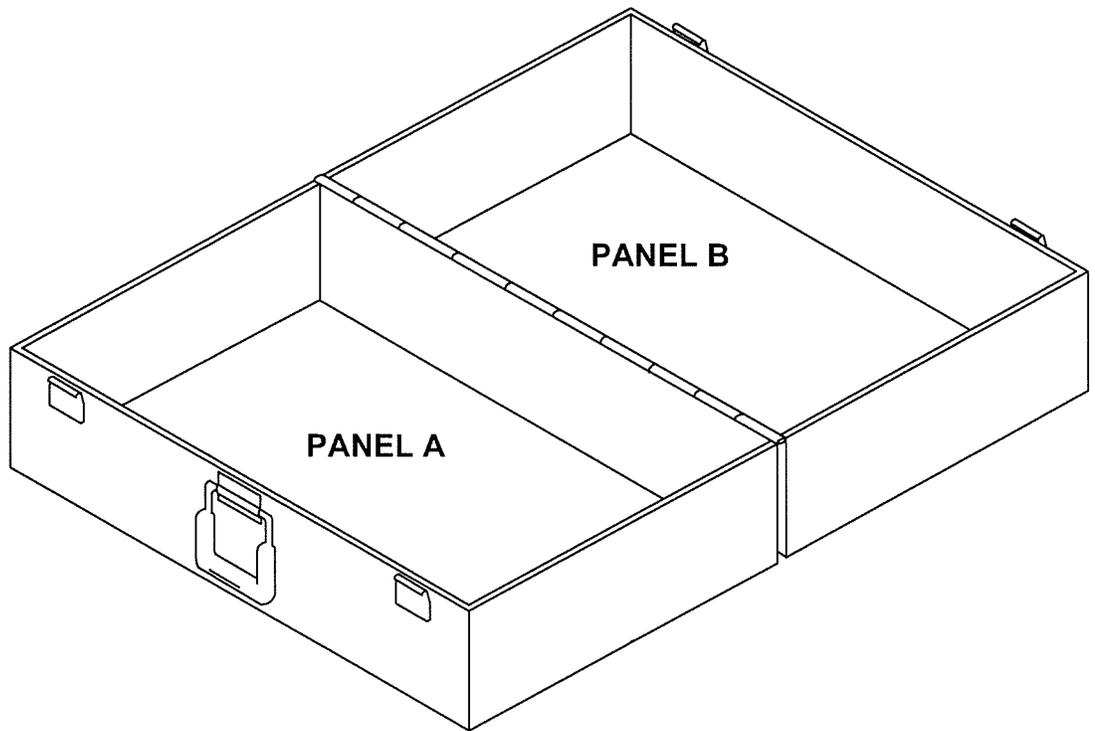


Figure 4-3. Toolbox, Portable Briefcase, Style "A"

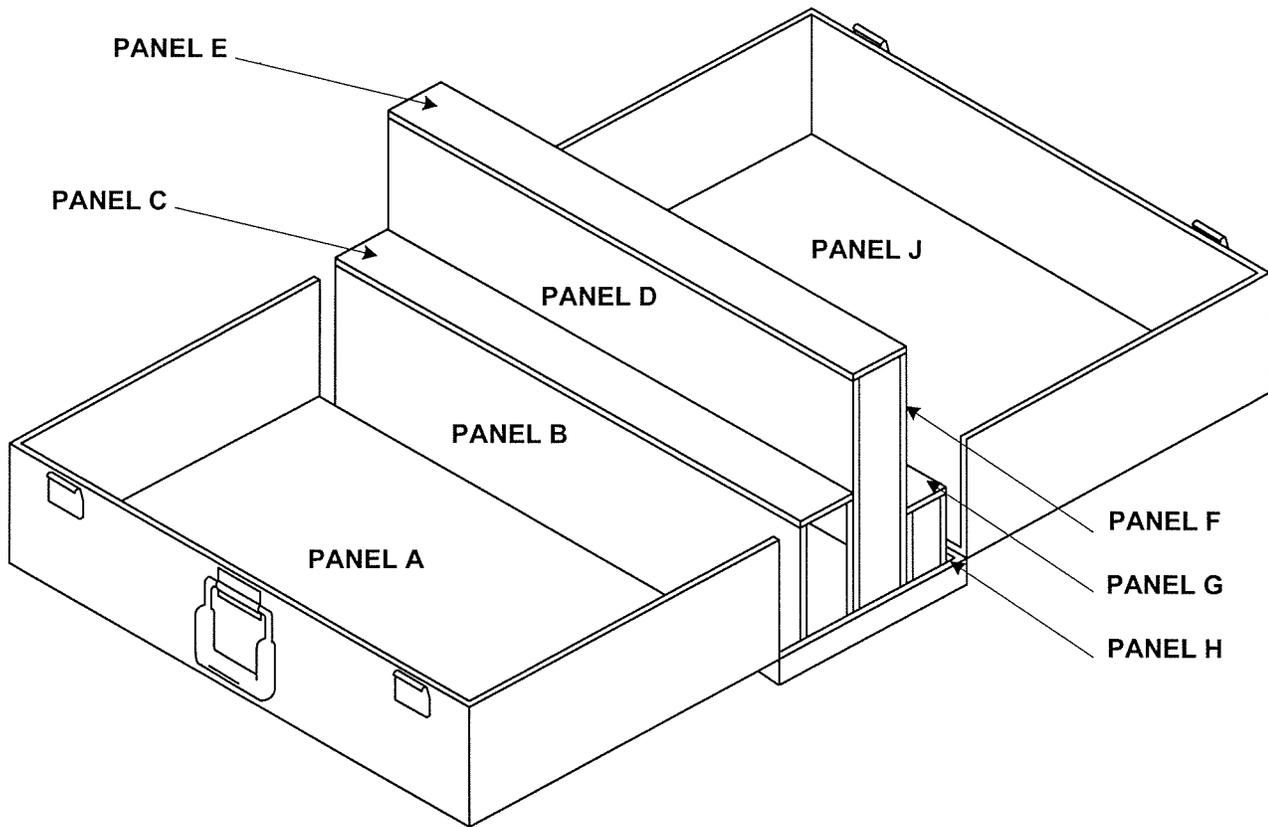


Figure 4-4. Toolbox, Portable Three Panel, Small "B" and Large "C"

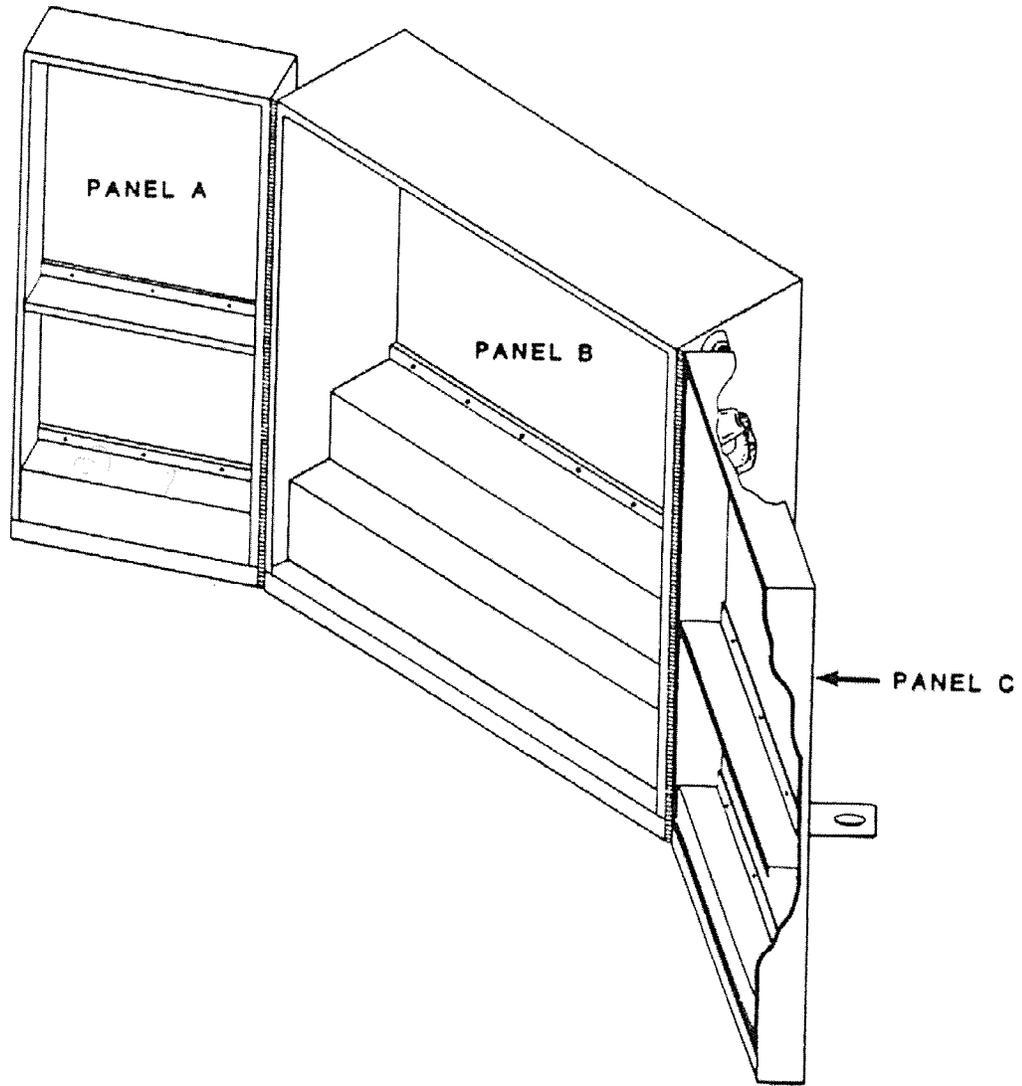


Figure 4-5. Tool Cabinet, Repair "F" and "G"

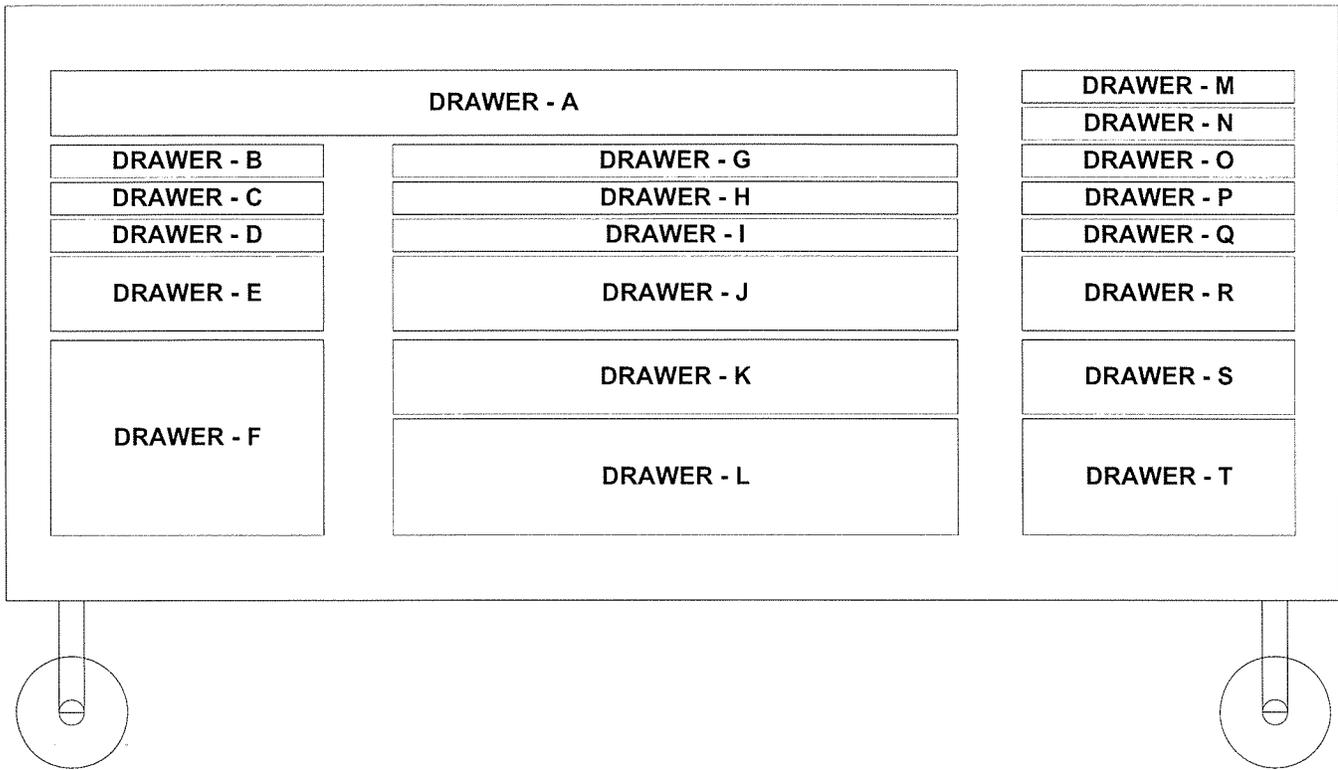


Figure 4-6. Rollaround, Twenty Drawer, KRL7003 (55719)

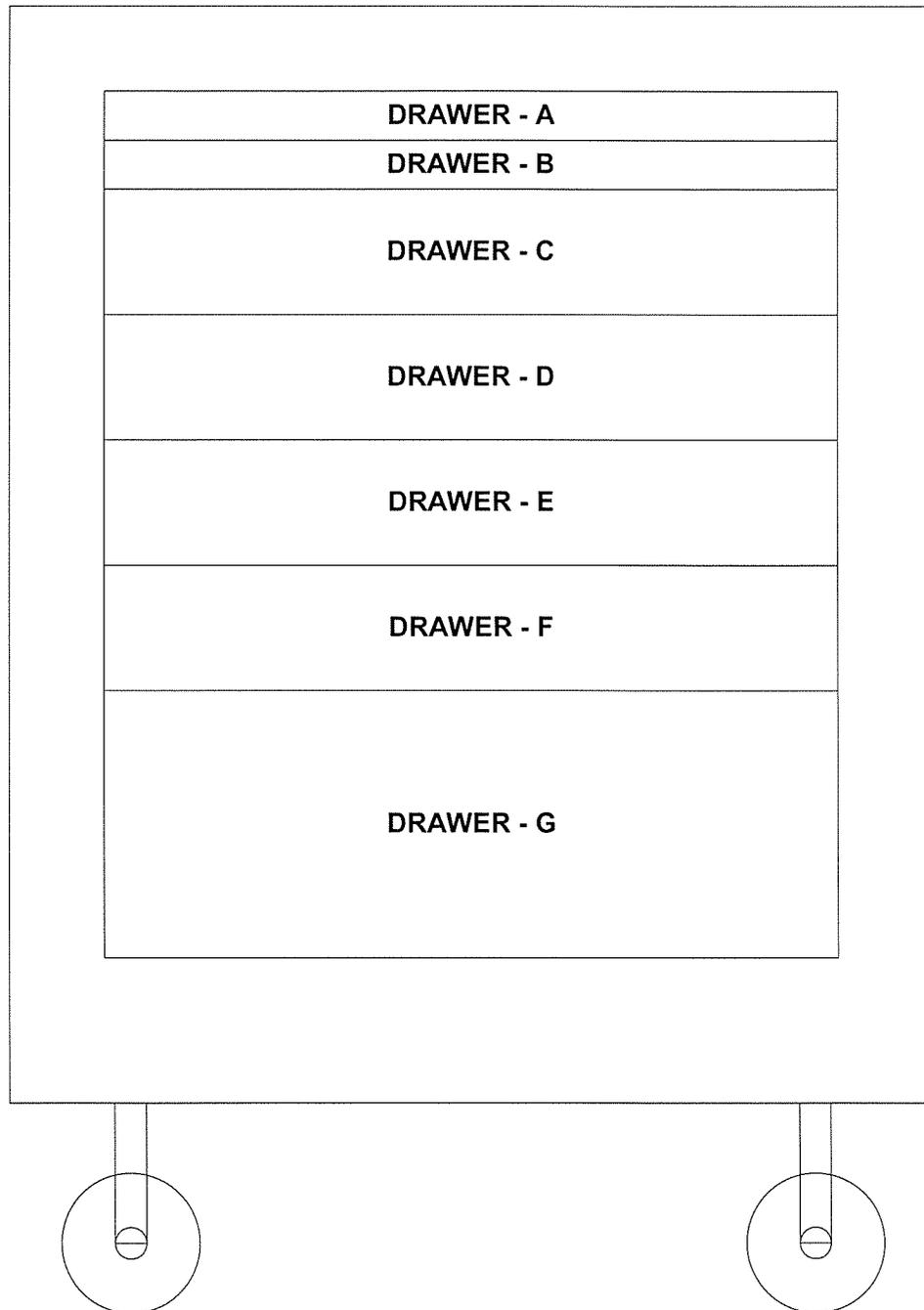


Figure 4-7. Rollaround, Seven Drawer, KRA2007(55719)

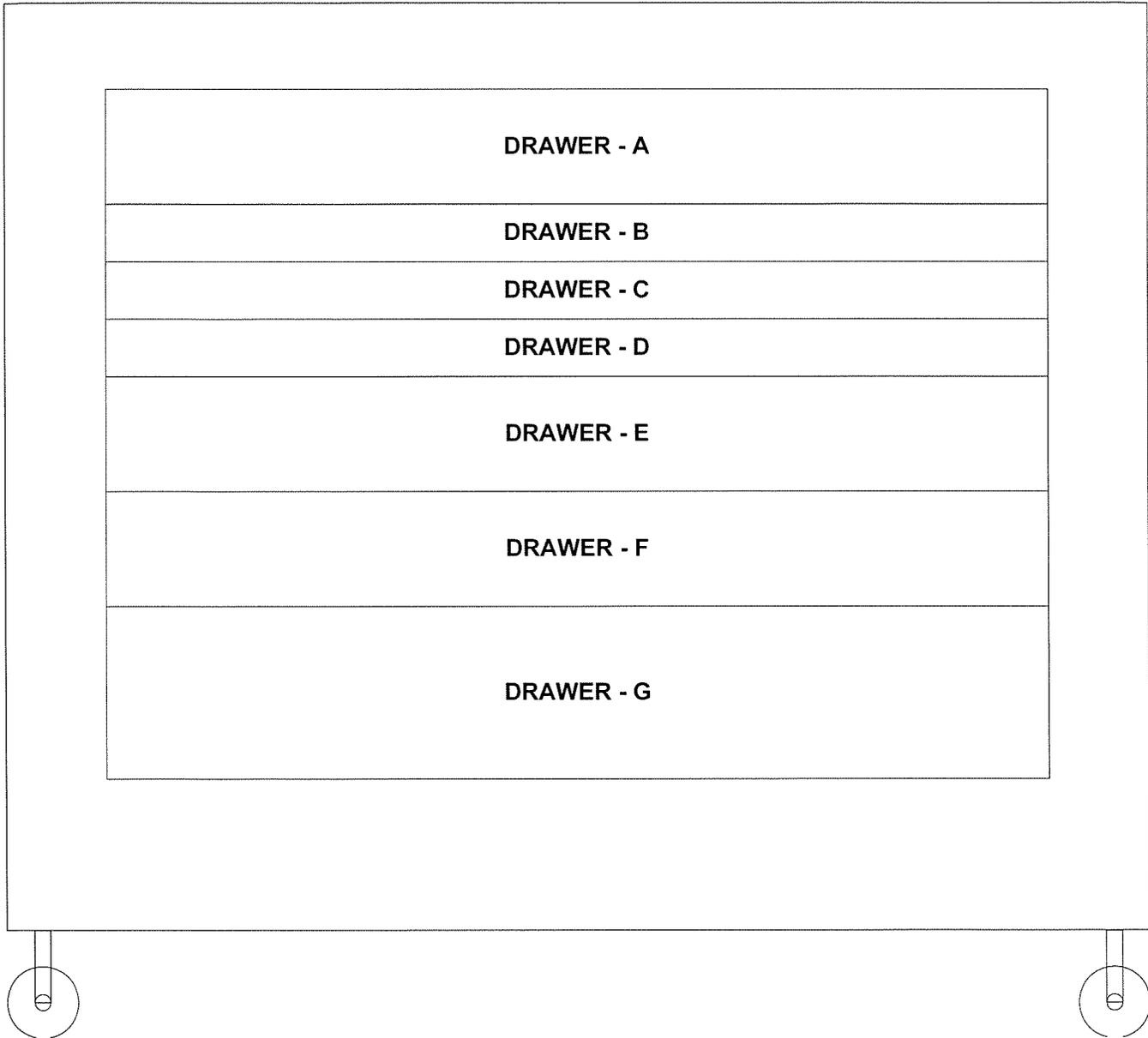


Figure 4-8. Rollaround, Seven Drawer, 5140-01-474-5089

## SECTION 5 CONTAINER HARDWARE

### 5-1 INTRODUCTION.

The mounting brackets, fittings and clips required to assemble tool containers are described and illustrated in this section. The container layouts in Section 6, and subsequent sections, show where these fittings and brackets are used. Tool inventories are also keyed to show their mounting hardware illustrated by Figures 5-1 through 5-21, or pouch Figure 4-1.

### 5-2 HARDWARE DESCRIPTION AND FABRICATION.

Drawings of the various tool holders, brackets and clips are shown in Figures 5-1 through 5-21. The spring clips, socket clips, and mounting strips are obtained through normal supply channels. The mounting strip can be cut to the desired length and drilled for mounting with screws. Other holders and brackets are locally fabricated from one-eighth inch sheet unplasticized polyvinylchloride (UPVC) material which is available from plastic supply houses and must be open purchased. These items are easily made by hand, using heat to bend or by cutting to the shape desired. Heating the UPVC is accomplished by using a heat gun (NSN 4940-00-357-1369) or by heating over an electric heater (NSN 4520-00-865-5939) along the area to be bent. When a flexible state is reached, place the plastic over the edge of a bench or table and, using a piece of 90-degree angle iron, press down and hold until the plastic cools. Applying pressure to the angle iron will give a sharper bend. In some cases it may be necessary to use blocks of wood and clamps to get the desired shape. UPVC material can be cut by deep scribing with a plastic knife or scribe and breaking, or may be sawed with a hacksaw. A tool found to be useful in cutting holes and grinding is a rotary electric tool (NSN 5130-01-014-6856), which comes as a kit.

### 5-3 HOLDER DESCRIPTION AND USES.

- a. A tool retainer (Figure 5-1) is a stock item available in two sizes, 1/4" and 3/8" openings. It is available in 18-inch lengths but may be cut to any desired length. The primary use of this item is to hold wrenches, screwdrivers, extensions, etc.

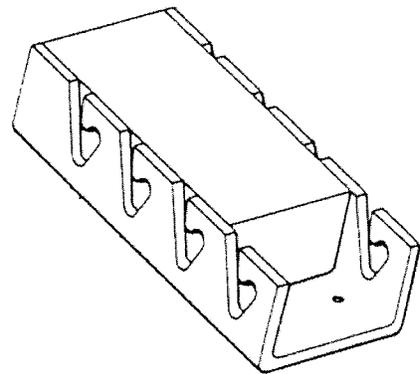


Figure 5-1. Tool Retainer

- b. The ninety-degree support (Figure 5-2) is used as a support for punches, chisels, etc. It is attached to a container tier with self-tapping screws.

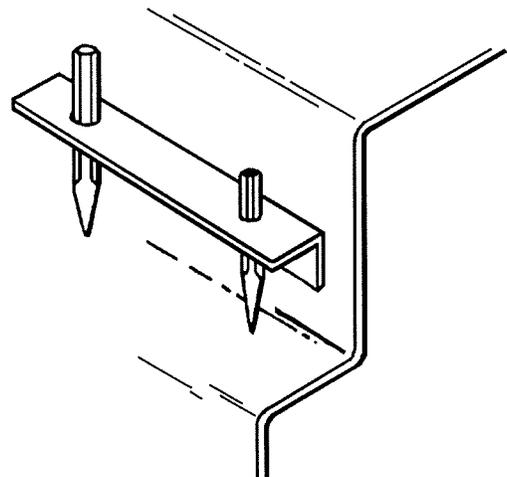


Figure 5-2. Ninety-Degree Support

- c. The grip bracket (Figure 5-3) is a strip of rubber attached with screws to provide a gripping surface to hold allen wrenches, drill bits, etc. It may be mounted in the horizontal or vertical position.

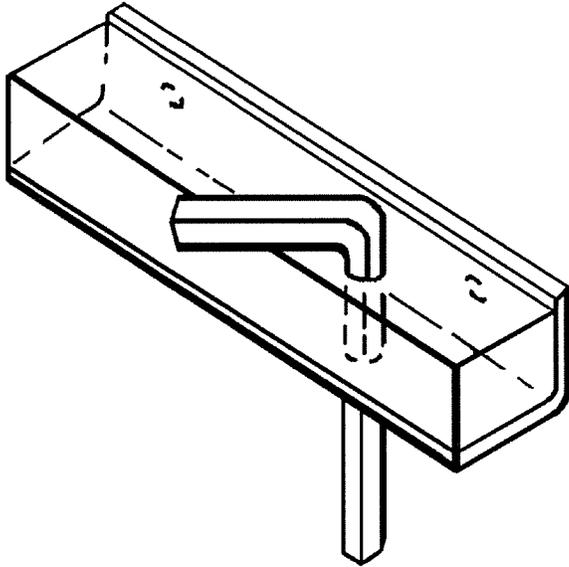


Figure 5-3. Grip Bracket

- d. A bracket type wire roll mount (Figure 5-4) uses a bolt or section of dowel for a roller and may be mounted on a vertical or horizontal surface.

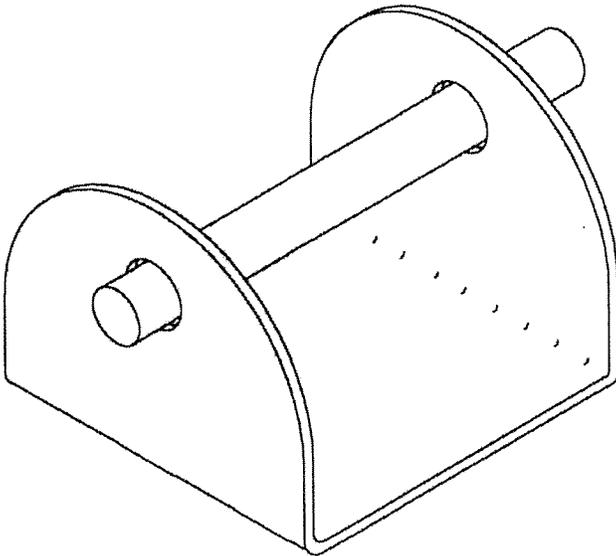


Figure 5-4. Bracket Type Wire Roll Mount

- e. Vertical wire or solder roll mounts (Figure 5-5) are made by cutting a dowel or broom handle to the appropriate length and securing from underneath with a screw.

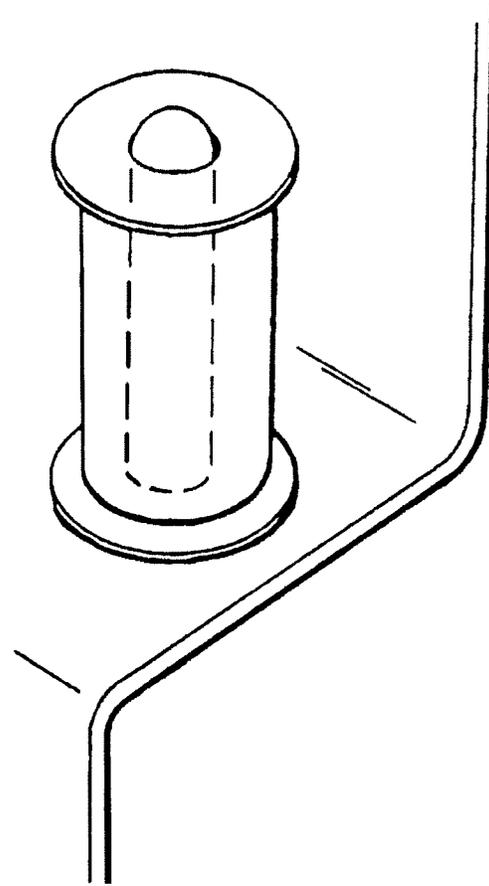


Figure 5-5. Vertical Wire Roll Mount

- f. The ninety-degree UPVC bracket used in combination with finger clips (Figure 5-6) may be cut to any desired length. It is used to mount ratchets, screwdrivers, extensions, etc. to a flat surface.

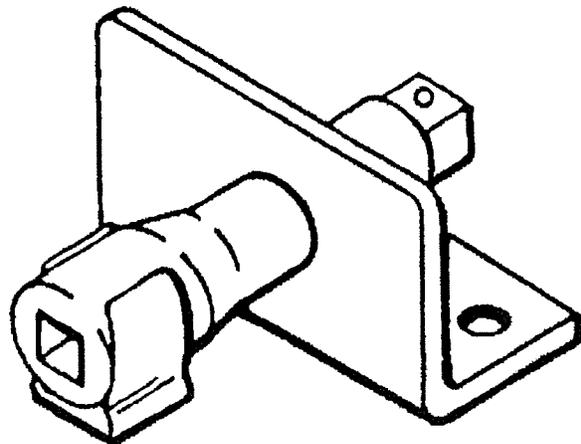


Figure 5-6. Ninety-Degree UPVC Bracket

- g. Safety goggles are secured in a goggle holder (Figure 5-7). Slight variations may be required to allow for different goggle styles.

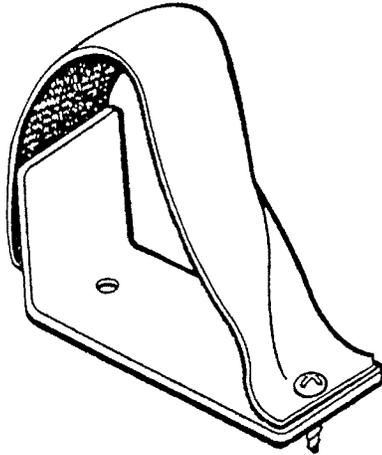


Figure 5-7. Safety Goggle Holder

- h. Hammers and mallets are stowed on hammer/mallet holder brackets (Figure 5-8) in "F" and "G" cabinets.

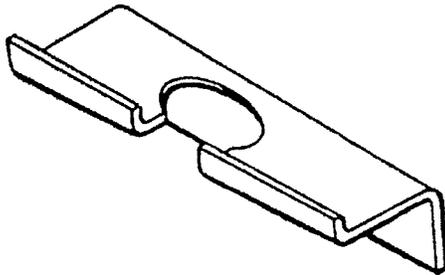


Figure 5-8. Hammer/Mallet Holder

- i. The fitted holder (Figure 5-9) is molded to the shape of the item it is intended to support. It works well on speed handles, combination wrenches, and hacksaws when mounted on vertical panel surfaces.

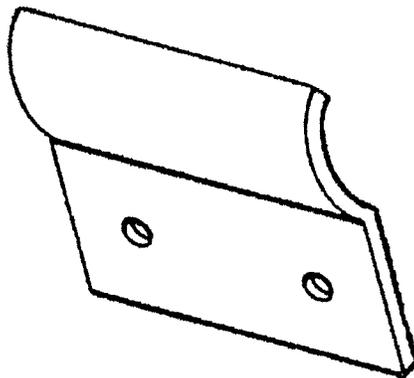


Figure 5-9. Fitted Holder

- j. A flexible item bracket (Figure 5-10) is used to mount flexible magnetic retrieving tools. This item is molded to shape and sized to fit the tool.

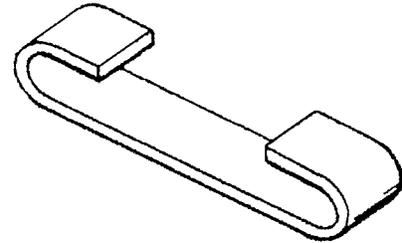


Figure 5-10. Flexible Item Bracket

- k. A cabinet angle bracket (Figure 5-11) is used to hold wrenches and other heavy items on the vertical surfaces of "F" and "G" cabinets. It also is used to hold cleco sheet metal holders in holes drilled in the angle panel.

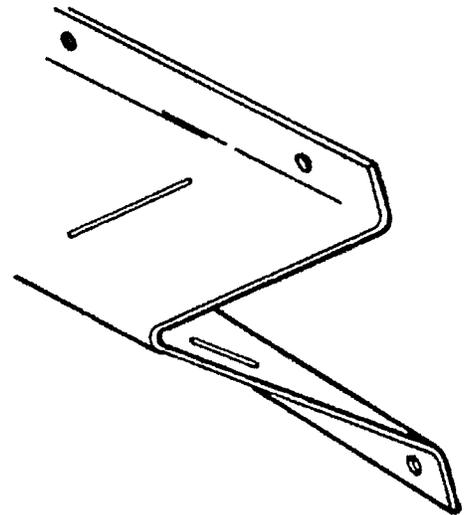


Figure 5-11. Cabinet Angle Bracket

- l. The cord holder bracket (Figure 5-12) is used to hold cords for electric drills, soldering irons, etc.

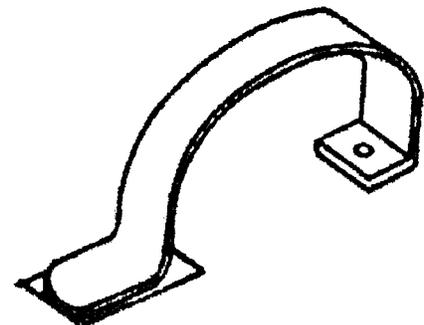


Figure 5-12. Cord Holder Bracket

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- m. The multi-purpose bracket (Figure 5-13) is used to hold magnifying glasses etc., and with modification, landing gear wrenches, oil sample bottles, etc. When mounted vertically it supports drill sets, file sets, sharpening stones, etc.

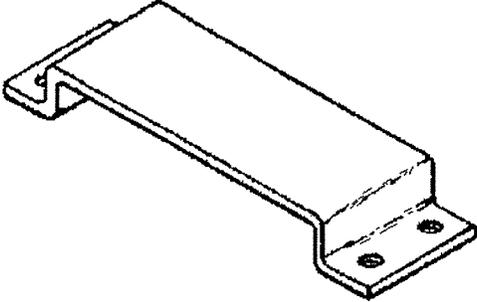


Figure 5-13. Multi-Purpose Bracket

- n. The heavy-duty bracket (Figure 5-14) provides additional strength to support heavy items such as electric drills, pneumatic drills, soldering guns, etc.

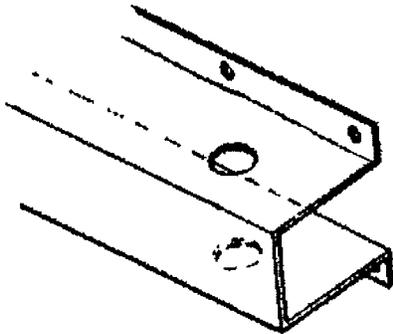


Figure 5-14. Heavy Duty Bracket

- o. Clips, Socket Wrench (Figure 5-15) are stock items and are available in 1/4, 3/8, 1/2 and 3/4 inch size. Their NSN's are listed in Section 3. The rail comes in 16-3/4 inch length and may be cut to desired lengths, drilled and mounted with screws.

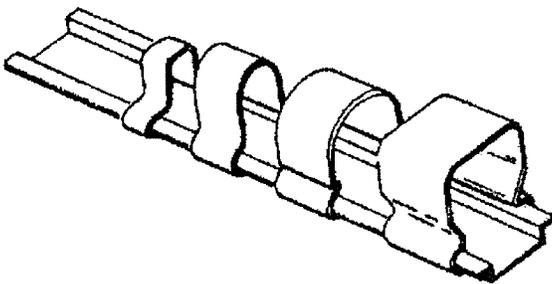


Figure 5-15. Clips, Socket Wrench

- p. Clips, Spring Tension (Figure 5-16) are stock items with their NSN's listed in Section 3. They are used in various ways throughout the system.

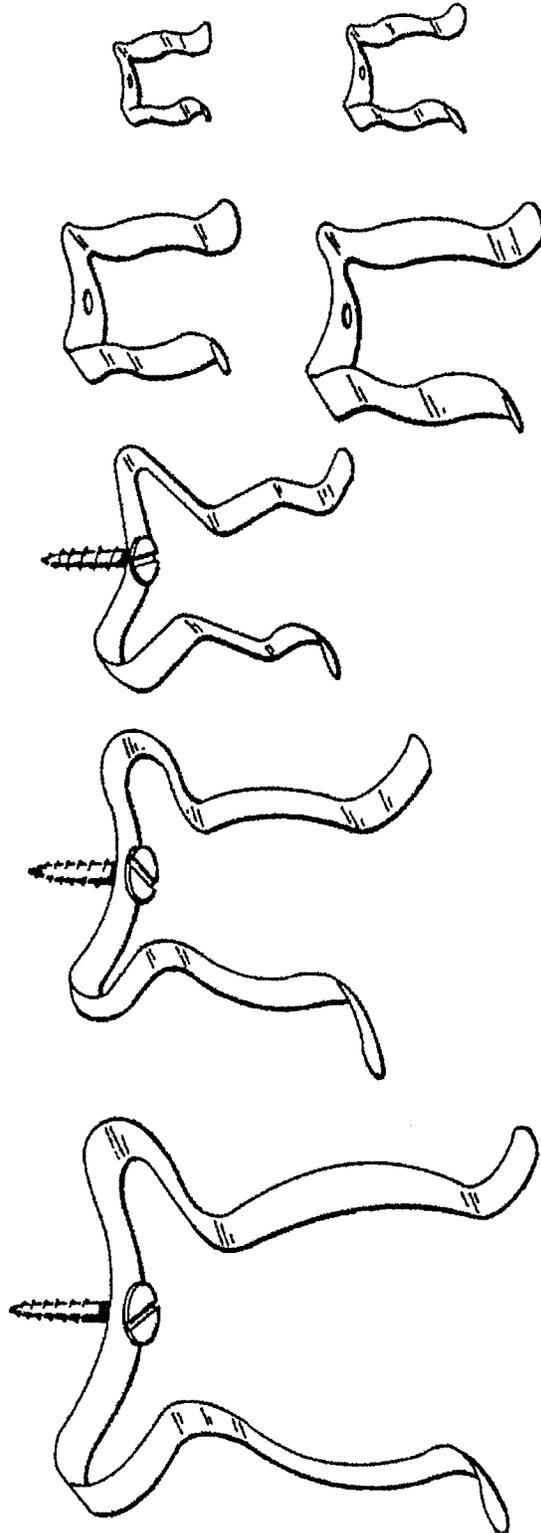


Figure 5-16. Clips, Spring Tension

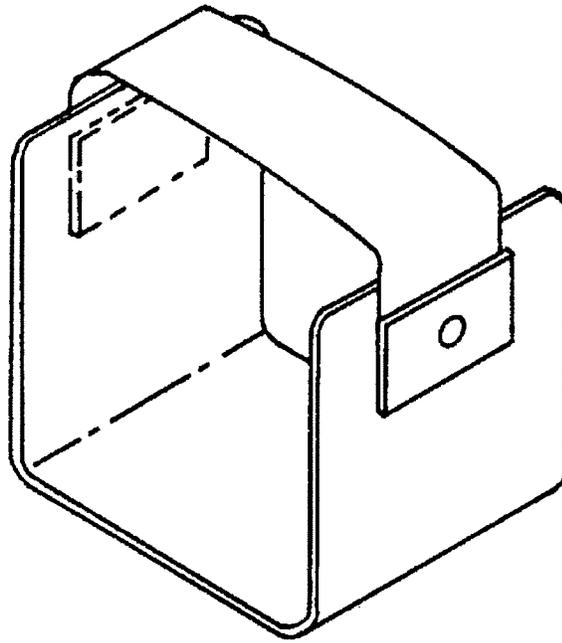


Figure 5-17. Headlamp Bracket

q. The headlamp bracket (Figure 5-17) is used to hold the headlamp and battery pack of the assembly.

r. Figure 5-18 illustrates the use of the rotary electric tool (NSN 5130-01-014-6856), which is used to cut holes of various shapes to retain tools.

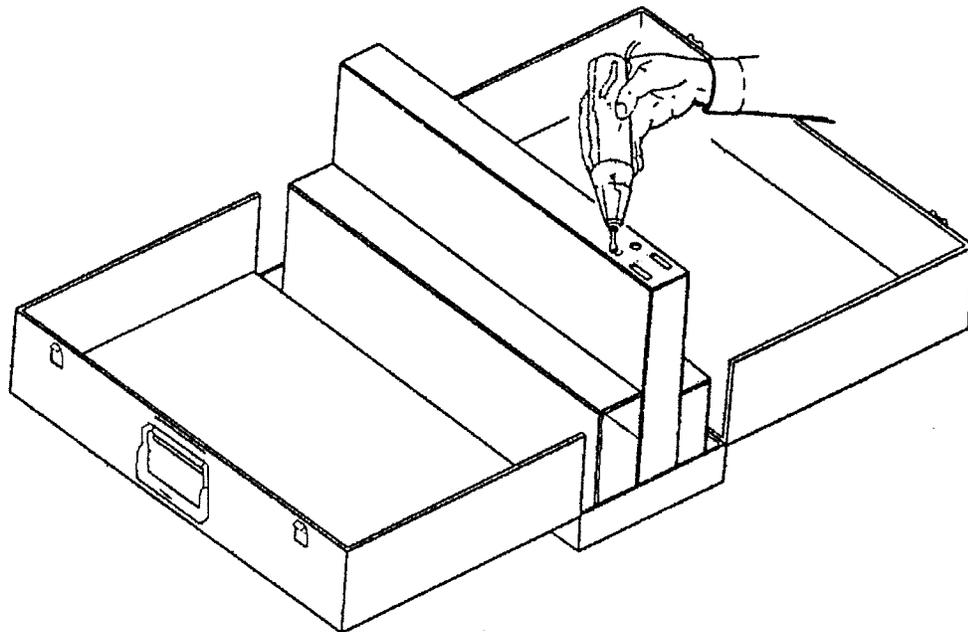


Figure 5-18. Rotary Electric Tool

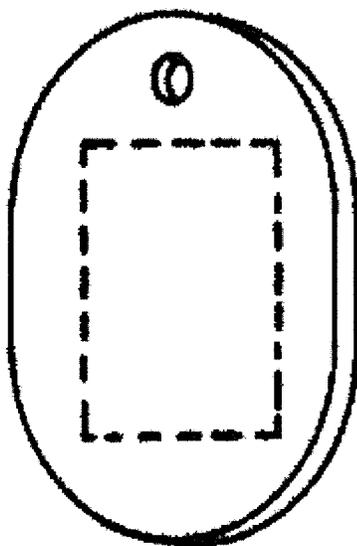


Figure 5-19. Plate, Marking, Blank, Tool

s. Plate, Marking, Blank, Tool (Figure 5-19) will be mounted using 1 inch tape fastener hook and pile secured with industrial adhesive, PN 847 (04963) (NSN 8040-01-033-7507) or equivalent.

t. The Tip holder (Figure 5-20) is cut out of rubber sheet (cellular medium) to retain Apex tips, drill bits, etc., secured with industrial adhesive PN 847 (04963) or equivalent.

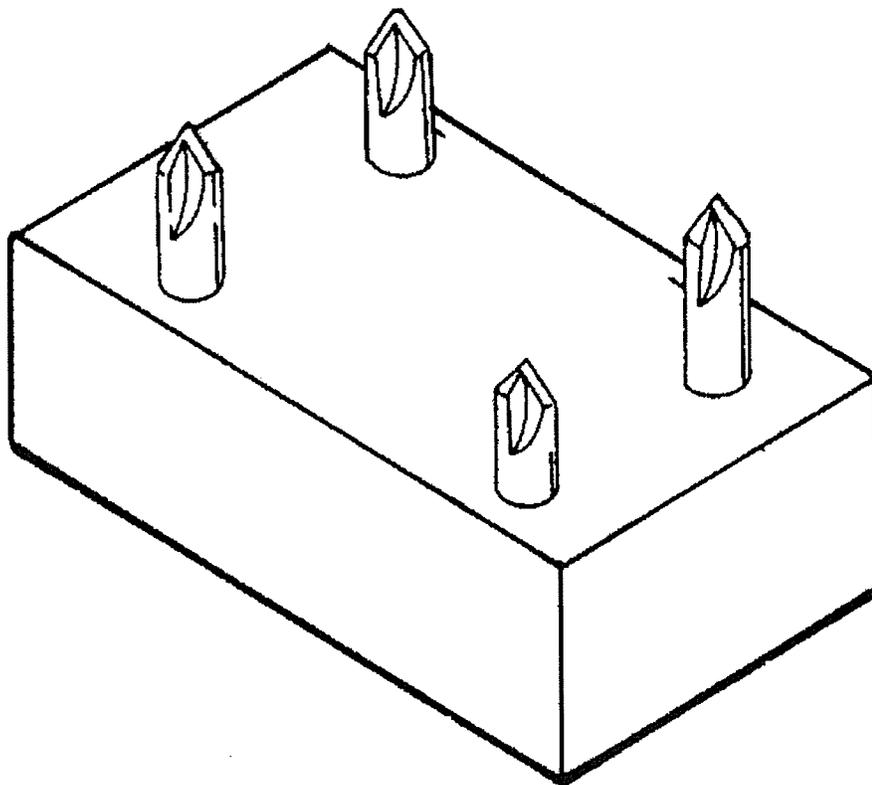


Figure 5-20. Tip Holder

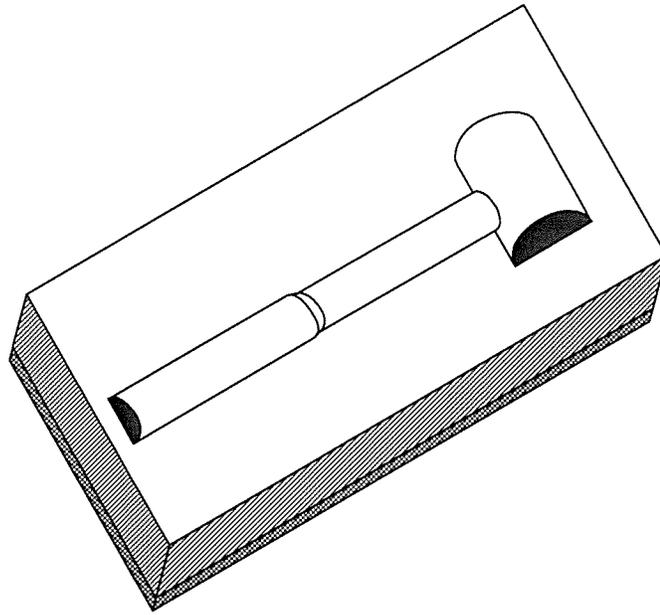


Figure 5-21. Pre-Cut Insert

- u. The Pre-Cut Insert (Figure 5-21) is a two-piece foam insert. The two-piece assembly consists of a solid foam underlay and a piece of thicker foam cut to match tool shape. These two pieces are adhered together and installed into the toolbox.

