INCH-POUND
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SUPERSEDING
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PURCHASE DESCRIPTION

CARRIERS, COMMAND POST, LIGHT TRACKED: M577, M577A1, M577A2, AND M577A3; AND CARRIERS, COMMAND POST SYSTEM, STANDARDIZED INTEGRATED: M1068 AND M1068A3; PROCESSING FOR STORAGE AND SHIPMENT OF

This purchase description is approved for use by the U.S. Army Tank-automotive and Armaments Command, Department of the Army, and is available for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This purchase description covers the processing for storage and shipment of the M577, M577A1, M577A2, and M577A3 Light Tracked, Command Post Carrier and the M1068 and M1068A3 Standardized Integrated, Command Post System Carrier (see 6.1).

1.2 Classification. Processing is classified in the following levels:

Level A	- Maximum military protection. Level A is the processing required for the protection of vehicle during shipment, handling, and storage exceeding 90 days from date of actual processing. This level does not provide for driveaway capability. It does provide for domestic or overseas shipment, including open deck loading.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: U.S. Army Tank-automotive and Armaments Command, ATTN: AMSTA-TR-E/BLUE, Warren, MI 48397-5000, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document, or by letter.

AMSC N/A AREA PACK

Level B	- Minimum military protection. Level B is the limited processing required for the protection of vehicle during shipment, handling, and storage not to exceed 90 days from date of actual processing. This level provides for driveaway capability, when specified, and domestic or overseas shipment (excluding open deck loading).

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this purchase description. This section does not include documents cited in other sections of this purchase description or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirement documents cited in sections 3 and 4 of this purchase description, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications and standards. The following specifications and standards form a part of this purchase description to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DoDISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

FEDERAL

A-A-203	- Paper, Kraft, Untreated.
A-A-208	- Ink, Marking, Stencil, Opaque (Porous and Non-Porous Surfaces).
A-A-374	- Sodium Bicarbonate, Technical.
A-A-883	- Tape, Pressure-Sensitive Adhesive, Masking.
A-A-1800	- Varnish, Oil: Spar
A-A-52506	- Clamps, Hose.
A-A-52518	- Tire, Pneumatic: Retread and Repair Materials.
A-A-62546	- Hose, Performed: Semi-Flexible, Reinforced.
A-A-52624	- Antifreeze, Multi-Engine Type
A-A-55057	- Panels, Wood/Wood Based; Construction and Decorative.
L-P-378	- Plastic Sheet and Strip, Polyolefin.
O-S-801	- Sulfuric Acid, Electrolyte (for Storage Batteries).

P-D-220	- Detergent, General Purpose.
TT-E-529	- Enamel, Alkyd, Semigloss, Low VOC Content.
UU-T-81	- Tags, Shipping and Stock.
VV-L-800	- Lubricating Oil, General Purpose, Preservative (Water-Displacing, Low Temperature).
MMM-A-179	- Adhesive: Paper-Label.
PPP-B-601	- Boxes, Wood, Cleated-Plywood.
PPP-B-621	- Boxes, Wood, Nailed and Lock-Corner.
PPP-C-1752	- Cushioning Material, Packaging, Polyethylene Foam.

DEPARTMENT OF DEFENSE

MIL-B-117	- Bags, Sleeves and Tubing.
MIL-B-121	- Barrier Material, Greaseproofed, Waterproofed, Flexible.
MIL-C-450	- Coating Compound, Bituminous Solvent Type, Black (for Ammunition).
MIL-C-5501	- Caps and Plugs, Protective, Dust and Moisture Seal, General Specification for.
MIL-C-5501/7	- Caps and Plugs, Protective, Dust and Moisture Seal (Cap-Plug, General Purpose).
MIL-B-11188	- Batteries, Storage: Lead Acid, General Specification for (Metric).
MIL-PRF-16173	- Corrosion Preventive Compound, Solvent Cutback, Cold-Application.
MIL-D-16791	- Detergents, General Purpose (Liquid, Nonionic).
MIL-L-21260	- Lubricating Oil, Internal Combustion Engine, Preservative and Break-In.
MIL-T-22085	- Tapes, Pressure-Sensitive, Adhesive, Preservation and Sealing.
MIL-B-22191	- Barrier Materials, Transparent, Flexible, Heat-Sealable.
MIL-T-37402	- Tester, Antifreeze Solutions.
MIL-P-46002	- Preservative Oil, Contact and Volatile Corrosion-Inhibited.
MIL-H-46170	- Hydraulic Fluid, Rust Inhibited, Fire Resistant Synthetic Hydrocarbon Base.
MIL-T-50036	- Talc, Technical, T1 and T3.
MIL-P-52905	- Paint, Camouflage, Removable.
MIL-A-53009	- Additive, Antifreeze Extender, Liquid Cooling Systems.
MIL-D-81298	- Dye, Liquid for the Detection of Leaks in Aircraft Fuel Systems.

STANDARDS

DEPARTMENT OF DEFENSE

MIL-STD-129	- Marking for Shipment and Storage (Part 1 of 4 Parts).
MIL-STD-2073-1	- Military Packaging, Standard Practice for.
MS27040	- Nut, Plain, Square-Steel, Cadmium Plated.
MS27183	- Washer, Flat (Round, Steel, Cadmium Plated) General Purpose.
MS35751	- Bolt, Square Neck, Round Head (Carriage), Steel, Cadmium or Zinc Plated, UNC-2A.

(Unless otherwise indicated, copies of the above specifications and standards are available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

2.2.2 Other Government documents. The following other Government documents form a part of this specification to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation (see 6.2).

DEPARTMENT OF TRANSPORTATION (DoT)

Federal Motor Carrier Safety Regulations (FMCSR)

(Application for copies should be addressed to the Department of Transportation, Bureau of Motor Carrier Safety, Washington, DC 20590.)

Hazardous Materials Regulations.

(Application for copies should be addressed to the Department of Transportation, Hazardous Materials Regulations Board, Washington, DC 20590.)

2.3 Non-Government publications. The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI O1	- Industrial Wire Cloth.

(Application for copies should be addressed to the American National Standards Institute, 11 West 42nd Street, New York, NY 10036.)

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A228/A228M	- Steel Wire, Music Spring Quality, Standard Specification for (DoD Adopted).
ASTM D1974	- Closing, Sealing, and Reinforcing Fiberboard Boxes, Standard Practice for Methods of (DoD Adopted).
ASTM D3953	- Strapping, Flat Steel and Seals, Standard Specification for (DoD Adopted).
ASTM D4675	- Selection and Use of Flat Strapping Materials, Standard Guide for (DoD Adopted).
ASTM D5118/D5118M	- Fabrication of Fiberboard Shipping Boxes, Standard Practice for (DoD Adopted).
ASTM D5330	- Pressure-Sensitive Tape for Packaging, Filament-Reinforced, Standard Specification for (DoD Adopted).
ASTM D5486	- Pressure-Sensitive Tape for Packaging, Box Closure, and Sealing, Standard Specification for (DoD Adopted).

(Application for copies should be addressed to the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

ASSOCIATION OF AMERICAN RAILROADS PUBLICATIONS

Section No. 1	- General Rules Governing Loading of Commodities on Open Top Cars.
Section No. 6	- Rules Governing the Loading of Department of Defense Material on Open Top Cars.

(Application for copies should be addressed to the Association of American Railroads, 59 East Van Buren, Chicago, Illinois 60605.)

2.4 Order of precedence. In the event of a conflict between the text of this document and the references cited herein, the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 First article. When specified (see 6.2), a sample shall be subjected to first article inspection in accordance with 4.2.

3.2 Materials. Materials shall be as specified herein and in referenced specifications and drawings. Materials shall be free from all defects and imperfections that might affect the serviceability and appearance of the finished product (see 4.4.1).

3.2.1 Recycled, recovered, or environmentally preferable materials. Recycled, recovered, or environmentally preferable materials should be used to the maximum extent possible provided that the material meets or exceeds the operational and maintenance requirements, and promotes economically advantageous life cycle costs (see 4.4.1 and 6.5.1).

3.3 Level A. When specified (see 6.2), level A processing shall be used to process vehicles.

3.3.1 Government furnished equipment (GFE). Unless previously accomplished, GFE (other than installed) shall be packaged, packed, and marked in accordance with the individual document for the specific item. GFE shall be stowed with basic issue items (BII).

3.3.2 Preservatives and atomized spray equipment. When atomized spraying of preservative oils is specified, compressed air supply lines shall be equipped with moisture separators every 50 feet or fraction thereof.

3.3.3 Processing records. Records of vehicle processing shall be maintained and shall be readily available for review by Government representatives.

3.3.4 Disassembly. Projecting parts whose removal will accomplish desired cube reduction and parts susceptible to damage and pilferage shall be removed from the vehicle. Removed bolts, nuts, screws, pins and washers shall be placed in one of the mating parts and secured. Bare metal surfaces of removed parts shall be preserved, packaged, and packed in accordance with MIL-STD-2073-1, identified and stowed securely with the vehicle.

3.3.4.1 Matchmarking. Parts removed from the vehicle shall be matchmarked when necessary to facilitate reassembly. Matchmarking information shall be put on cloth shipping tags conforming to type A of UU-T-81, or on metal tags using waterproof ink or paint, and attached to mating parts. The marked cloth shipping tags shall be waterproofed with varnish conforming to A-A-1800 or adhesive conforming to MMM-A-179.

3.3.5 Record forms. Two copies of DA Form 2258 shall be completed with information that includes preservation accomplished and depreservation instructions. The Equipment Log Book Binder and one copy of DA Form 2258 (see 6.4) shall be placed in a bag conforming to type I, class B, style 2, 6 mils of MIL-B-117; the bag shall be closed by heat sealing and securely attached in the driver's compartment of vehicle. The other copy of DA Form 2258 shall be waterproofed with adhesive conforming to MMM-A-179, or sealed in a plastic bag, and securely attached in a conspicuous location on the exterior of the vehicle.

3.3.6 Cleaning and drying (see 4.4.2.1).

3.3.6.1 Interior of vehicle. Interior surfaces of vehicle shall be cleaned with a solution of detergent conforming to P-D-220, or type I of MIL-D-16791, and water. Solution temperature shall not exceed 210°F, and pressure shall not exceed 5 pounds per square inch, measured 4 inches (in.) from the nozzle. After cleaning, surfaces shall be rinsed with clean water and dried. Care shall be taken during cleaning and rinsing operations to assure that no solution or water enters instruments, connections, or other components susceptible to water damage. Solution or water shall not accumulate and remain in cavities that cannot be drained. Vehicles with decals, markers, straps, and floor plates installed shall only be hand cleaned with a solution of P-D-220, or type I of MIL-D-16791, and water to prevent damage to these components. Cleaned surfaces shall be hand rinsed and dried.

3.3.6.1.1 Cleaning and drying of battery supports and retainers. Battery supports and retainers shall be cleaned with a solution of 0.5 pounds of sodium bicarbonate conforming to A-A-374 per gallon of water. After cleaning, surfaces shall be flushed with clean water, then thoroughly dried. Dried surfaces shall then be preserved in accordance with 3.3.7.2.

3.3.6.1.2 Cleaning and drying of backrests and seats. The backrest and seat cushions shall be cleaned with a solution of detergent conforming to P-D-220, or type I of MIL-D-16791, in warm water. After cleaning, the cushions shall be wiped with cloths saturated with clean water to remove cleaning solution. Care shall be taken not to saturate the cushions with cleaning solution or water. After rinsing, the cushions shall be dried, then protected in accordance with 3.3.8.3.

3.3.6.2 Exterior of vehicle. The exterior of vehicle shall be cleaned using solution of detergent conforming to P-D-220, or type I of MIL-D-16791, in warm water or steam. Cleaning shall remove all foreign matter. After cleaning, surfaces shall be rinsed with clean water or steam and thoroughly dried. Care shall be taken to avoid entry of water or steam into the driver's or engine compartments.

3.3.7 Preservation.

3.3.7.1 Relubrication. If the vehicle has been operated more than 75 miles since lubrication, or after the vehicle has been cleaned in accordance with 3.3.6.2, the vehicle shall be relubricated using materials conforming to drawings, specifications or lubrication order applicable to the vehicle. All exposed oil can points such as, but not limited to, levers, locking levers, locking bars, locking pins, pintle pins, hinge pins, hinge strikers, wing nuts, door locks, hand-operated locking knobs, latches, linkage, and threaded ends of yokes and related clevis pins shall be coated with lubricant conforming to VV-L-800. Excess lubricant shall be removed after coating.

3.3.7.2 Preservation of battery supports and retainers. Top battery supports and retainers shall be preserved with compound conforming to MIL-C-450.

3.3.7.3 Transmission, transfer assembly, control differential, and final drives. The transmission shall contain lubricating oil conforming to grade 10 of MIL-L-21260 filled to operating level. The transfer assembly, control differential, and final drives shall contain lubricating oil conforming to grade 10 or 30, as annotated with type and grade of lubricant used (see 3.3.5).

3.3.7.4 Cooling system. As specified (see 6.2), the cooling system shall be protected by one of the following procedures (see 4.4.2.2):

a. For shipment to, and storage in, areas where the temperature drops below - 40°F, systems shall be protected as specified in 3.3.7.4.3.
b. For shipment and storage within the bounds of 30 degrees north latitude and 20 degrees south latitude, except continental United States, systems shall be protected as specified in 3.3.7.4.2.
c. For all other shipments, cooling systems shall be protected as specified in 3.3.7.4.1.

NOTE: DA Form 2258 (see 3.3.5) shall be completed to indicate coolant used.

3.3.7.4.1 Water and antifreeze procedure. The cooling system shall be filled to operating level with a clean solution consisting of equal parts by volume of antifreeze (ethylene glycol) conforming to A-A-52624 and water. The engine shall be operated until a temperature has been reached that causes the thermostat to open to assure complete mixing and even distribution of the antifreeze solution. A warning tag, bearing the information “COOLING SYSTEM FILLED WITH WATER AND ANTIFREEZE SOLUTION (ETHYLENE GLYCOL) IN EQUAL PARTS BY VOLUME - DO NOT DRAIN”, shall be securely attached to the radiator filler neck.

3.3.7.4.2 Water and corrosion inhibitor procedure. The cooling system shall be filled with clear water up to, but not including, the radiator upper tank. A corrosion inhibitor conforming to MIL-A-53009 shall be added in the proportion of 5 ounces of the inhibitor for each 10 quarts of water. The inhibitor shall be dissolved in 2 quarts of warm water and poured into the radiator while the engine is idling. More water shall be added, if necessary, to fill the radiator to operating level. A warning tag, bearing the information "COOLING SYSTEM DOES NOT CONTAIN ANTIFREEZE - FILLED WITH WATER AND INHIBITOR", shall be securely attached to the radiator filler neck.

3.3.7.4.3 Antifreeze compound procedure. The cooling system shall be filled to operating level with antifreeze compound conforming to A-A-52624. The compound shall be used without dilution. A warning tag, bearing the information "COOLING SYSTEM FILLED WITH ANTIFREEZE (ARCTIC-TYPE) - DO NOT DRAIN", shall be securely attached to the radiator filler neck.

3.3.7.5 Engine crankcase preservation. The crankcase shall be filled to operating level with lubricating oil conforming to MIL-L-21260 of the seasonal grade specified in the applicable drawing, specification, or lubrication order. DA Form 2258 shall be annotated with type and grade of lubricant used.

3.3.7.6 Compression ignition engine. Compression ignition engine preservation shall be in accordance with 3.3.7.6.1 through 3.3.7.6.5 in an uninterrupted sequence and the following two exceptions:

a. Engines without turbochargers, process per all paragraphs with the exception of 3.3.7.6.4.
b. Engines with turbochargers, process per all paragraphs with the exception of 3.3.7.6.3.

3.3.7.6.1 Initial conditions. Prior to processing, engine shall be cooled to assure that the cylinder head temperature, measured at the injector nozzle flange surface of all cylinders, is not more than 100°F. Cooling shall be accomplished by induced air currents, circulation of engine coolant, or by waiting the period of time required to arrive at the above specified temperature. When the ambient temperature exceeds 100°F, the engine shall be cooled to ambient temperature (see 4.4.2.4).

3.3.7.6.2 Fuel system and combustion chamber preservation. A portable auxiliary container with a filtering device and regulator valve shall be filled with preservative oil conforming to grade 1 of MIL-P-46002 to which has been added an oil-soluble red dye conforming to MIL-D-81298, in a concentration sufficient to impart a marked coloring to the oil. The following procedure shall be completed:

a. Position container to allow gravity feed to the engine. Shut off fuel supply system from the fuel tank. Disconnect the fuel pump supply line between the primary fuel filter and the fuel pump at the filter end. Connect this line to the auxiliary container containing preservative oil.
b. Disconnect vehicle fuel return line at quick disconnect coupling. Connect a transparent plastic fuel line to the engine end of the disconnected fuel return line. Place the other end of transparent fuel line into a recovery container to collect the return oil.
c. Disconnect the air cleaner hose between the air cleaner and engine intake at the air cleaner outlet. Place an air restrictor boot over the engine intake to completely shut off the supply of air to the engine. (The air restrictor boot shown in figure 1 has proven satisfactory for engine preservation.)
d. Place the engine fuel control to the "ON" position. Open the regulator valve on the auxiliary container. Crank the engine with the starter (NOTE: Engine may fire for approximately 5 seconds) for not less than 30 seconds and not greater than 45 seconds. If the red-colored preservative oil is not observed within the 30- to 45-second period, rest the starter for a period of 3 minutes and repeat the cranking procedure.

CAUTION: Special precautions shall be taken to assure that the time limits specified are not exceeded. Damage to the starter solenoid or hydrostatic lock may result.

Close the regulator valve on the auxiliary container and disconnect it from the fuel pump supply line. Reconnect the fuel pump supply line to the primary filter. Remove the transparent fuel line, and reconnect the vehicle fuel return line at the quick disconnect coupling. Turn on the vehicle fuel supply system. Remove the air restrictor boot and reinstall the hose to the air cleaner (see 4.4.2.4).

3.3.7.6.3 Preservation through air intake and exhaust system, without turbocharger. Atomize 1 ounce of preservative oil conforming to grade 1 of MIL-P-46002 into the exhaust opening. Seal the opening with tape conforming to type IV of MIL-T-22085. Disconnect the hose at the air intake and atomize 1 ounce of preservative oil conforming to grade 1 of MIL-P-46002 into the intake manifold. Seal the opening with tape conforming to type IV of MIL-T-22085 (see 4.4.2.4).

3.3.7.6.4 Preservation through air intake and exhaust system, with turbocharger. Atomize 1 ounce of preservative oil conforming to grade 1 of MIL-P-46002 into the external exhaust opening. Seal the opening with tape conforming to type IV of MIL-T-22085. Remove the exhaust tube between the turbocharger and left exhaust manifold. Atomize 1 ounce of preservative oil conforming to grade 1 of MIL-P-46002 into the left exhaust manifold. Then atomize 2 ounces of grade 1 of MIL-P-46002 into the right exhaust manifold and the bottom of

turbocharger through the left opening in the bottom of turbocharger. Replace the left exhaust tube. Disconnect the air cleaner hose at the turbocharger inlet, and atomize 1 ounce of grade 1 of MIL-P-46002 into the turbocharger. Seal the opening with tape conforming to type IV of MIL-T-22085 (see 4.4.2.4).

3.3.7.6.5 Preservation through oil level gage rod opening. Remove the oil level gage rod and atomize 6 ounces of preservative oil conforming to grade 1 of MIL-P-46002 into the crankcase through the gage rod opening. An extension of sufficient length to permit the nozzle to be within the crankcase (but not submerged in the crankcase oil) shall be used. Reinstall the gage rod. All openings to engine interior, oil gage rod, oil filter cap, and crankcase breathers shall be sealed with tape conforming to type IV of MIL-T-22085.

WARNING TAG:

A red warning tag, bearing the information "ENGINE PRESERVED WITH VCI - DO NOT CRANK" and "BEFORE CRANKING, REMOVE TAPE FROM ALL SEALED AREAS (EXHAUST, AIR INTAKE or TURBOCHARGER INLET, OIL GAGE ROD, OIL FILLER CAP AND CRANKCASE BREATHERS)", shall be placed in a conspicuous location within the driver's compartment.

DA Form 2258 shall be annotated to show the engine is preserved with grade 1 of MIL-P-46002 (see 4.4.2.4).

3.3.7.6.6 Preservation through flywheel housing. Two ounces of preservative oil conforming to grade 1 of MIL-P-46002 shall be atomized into the flywheel housing (see 4.4.2.4).

3.3.7.7 Personnel and engine compartment heaters and lines. Personnel and engine compartment heaters shall have the fuel supply shut off valve, located at the inlet side of fuel filters, turned to the "off" position. The main fuel supply line to the heaters shall be disconnected at a point closest to shut off valves. Fuel from the fuel lines shall be allowed to drain. Ends of disconnected fuel lines and shut off valves shall be sealed with plastic plugs/caps conforming to MIL-C-5501 or with tape conforming to type II of MIL-T-22085. The external exhaust stack shall have the opening sealed with tape conforming to type II of MIL-T-22085. A plastic plug/cap conforming to MIL-C-5501 may be used. Four warning tags, each bearing the information "HEATER FUEL LINES DISCONNECTED AND SEALED. PRIOR TO PLACING PERSONNEL OR ENGINE HEATERS IN OPERATION, REMOVE PLUGS/CAPS OR TAPE FROM FUEL LINES, EXHAUST STACK AND SHUT OFF VALVES. OPERATE HEATER FUEL PUMP AND DRAIN A MINIMUM OF ONE QUART OF FUEL THROUGH THE FUEL LINES INTO A PORTABLE CONTAINER. RECONNECT HEATER FUEL LINES.", shall be prepared. One tag each shall be secured to the personnel and engine heater operating switches and one each to the personnel and engine heaters.

3.3.7.8 Fuel tank preservation. The fuel tank shall be drained to the maximum extent possible. The fuel tank cap and filler screen shall be removed and coated with lubricating oil conforming to grade 30 of MIL-L-21260. The contractor shall maintain a written procedure used to ascertain the amount of residual fuel. The tank cap and filler screen shall be reinstalled (see 4.4.2.3).

3.3.7.8.1 Fuel tank security. After processing the fuel tank as specified in 3.3.7.8, the armored fuel cap shall be secured with the combat lock.

3.3.7.9 Ramp lift assembly. All unpainted metal surfaces of the ramp lift assembly, excluding cylinder rod, shall be coated with preservative conforming to grade 4 of MIL-PRF-16173.

3.3.7.9.1 Ramp hydraulic reservoir. The ramp hydraulic reservoir shall be filled with hydraulic fluid conforming to type I of MIL-H-46170.

3.3.7.10 Hatches and doors. Rubber seals around hatches and doors shall be coated with powdered talc conforming to type IV, class C of A-A-52518, or talc conforming to MIL-T-50036. For shipment, hatches and doors shall be closed and locked from the inside, except the driver's hatch. The driver's hatch shall be closed and secured from the outside with a bolt having a nut drawn up tight and exposed threads peened over to prevent easy removal, or a bolt having a nut drawn up tight with the nut tack welded to the bolt, or with a Government-issued padlock. For storage, hatches and doors shall be locked from the inside, except the ramp door which shall be secured in the open position for ventilation.

3.3.7.11 Ventilation.

3.3.7.11.1 Engine compartment access plate, gasket, and drain plugs. The engine compartment access plate, gasket, and attaching hardware shall be removed for ventilation. A screen conforming to figure 2 shall be installed in access plate opening and secured with four of the existing mounting screws and washers. The two forward MS drain plugs and the rear bilge drain plug shall be removed for drainage. A screen conforming to figure 3 shall be installed in rear bilge opening and held in place with a retainer spring conforming to figure 4. Bare metal surfaces of drain plugs shall be preserved with compound conforming to grade 4 of MIL-PRF-16173. The plate, gasket, and preserved drain plugs shall be packaged as specified in 3.3.8.7. The information “REMOVE SCREEN, INSTALL ACCESS PLATE, GASKET, AND FRONT AND REAR DRAIN PLUGS BEFORE VEHICLE OPERATION” shall be stenciled on the exterior of the vehicle using white or yellow paint conforming to MIL-P-52905. Stenciling shall be in characters not less than 0.75 in. high.

3.3.7.11.2 Engine compartment access panels. One engine compartment panel in the crew compartment shall be removed and stowed securely in the crew compartment. A warning tag, bearing the information "ENGINE COMPARTMENT PANEL REMOVED: LOWER RAMP OR OPEN HATCHES WHEN OPERATING ENGINE", shall be attached in a conspicuous location within the driver's compartment.

3.3.7.12 Miscellaneous preservation. Except as otherwise specified herein, all exposed, unpainted, metal surfaces on the exterior of the vehicle, except the track shoes, shall be coated with compound conforming to grade 1 of MIL-PRF-16173. All exposed, unpainted, unplated, metal surfaces on the interior of the vehicle shall be coated with compound conforming to grade 4 of MIL-PRF-16173.

3.3.8 Packaging.

3.3.8.1 Dry charged batteries and cables. Dry charged batteries shall be installed and secured in the vehicle battery carrier. Battery cables shall be secured to the battery carrier with 0.75 in. tape conforming to type I of ASTM D5330. Battery filler cap openings shall be sealed by placing a 2 in. wide by 3 mils thick piece of film conforming to type II of MIL-B-22191 over each filler cap opening with the cap removed. The sheet shall be of sufficient length to allow it to be depressed into the opening to the same depth as the filler plug. Filler caps shall be screwed or inserted into openings to form a complete seal without damaging the sheet. If batteries have been processed in accordance with MIL-B-11188, they need not be reprocessed as above.

3.3.8.2 Electrolyte. Electrolyte shall be packaged and packed in accordance with O-S-801, except that the exterior container shall conform to PPP-B-621, class 2, or PPP-B-601, overseas type. Marking shall conform to O-S-801. The packed electrolyte shall be stowed in the same location as the BII and secured independently to permit separate removal.

3.3.8.3 Packaging of backrests and seats. Cushions of backrests and seats (see 3.3.6.1.2) shall be covered with paper conforming to A-A-203 with a basic weight of not less than 60 pounds. The paper shall be secured with tape conforming to type I of A-A-883.

3.3.8.4 Periscopes. If installed, periscopes shall be removed from the vehicle, cleaned, dried, and immediately packaged and packed in accordance with level A requirements of MIL-STD-2073-1, then securely stowed within the personnel compartment.

3.3.8.5 Fire extinguishers. Fire extinguishers shall contain 90 percent of rated full charge. All seals shall be intact. DA Form 253 shall be completed and attached securely to each extinguisher (see 6.3).

3.3.8.6 BII and COEI, M577A3, M1068A3. Unless otherwise specified (see 6.2), BII and components of end item (COEI) items shall be processed, packed, and stored as follows. If BII and COEI items are not furnished as a GFE item, BII and COEI items shall then be processed in accordance with tables I, II, 10, and IV. Methods of preservation as called out in these tables shall be in accordance with MIL-STD-2073-1. Items shall be preserved with varnish conforming to A-A-1800. Packing of items shall conform to the requirements of MIL-STD-2073-1. Stowage and securement of BII and COEI items shall be in accordance with 3.3.8.6.1.

3.3.8.6.1 Stowage and securement of BII and COEI. BII, COEI and items that have been removed from vehicle for shipment shall be identified to the pertinent vehicle by serial number. (NOTE: If vehicle has been rebuilt or revised at depot, BII, COEI and items that have been removed for shipment shall not be identified to the pertinent vehicle by serial number). BII and COEI shall be stored inside buildings, except during shipment. Packed BII, COEI and removed exterior vehicle items shall be placed within the personnel compartment of the vehicle.

(NOTE: It may be required to unsecure various items within vehicle personnel compartment to facilitate securing of BII and COEI items. Any item removed or unsecured shall be properly identified and secured within compartment in a safe manner).

Large wooden boxes shall be placed on the vehicle floor and shall be secured with 1.25 in. wide strapping conforming to type 1, heavy-duty, finish A of ASTM D3953. Selection and use of strapping shall be in accordance with ASTM D4675.

(NOTE: If BII, COEI and other containers are placed in fiberboard containers and it has been determined 1.25 in. wide strapping will cause damage to containers, strapping width shall be reduced to 0.75 in. wide.)

Strapping shall be secured to holding devices within the compartment. Additional strapping may be required if .75 in. wide strapping is used. All containers shall be secured in such a manner as to prevent any movement during transit and to prevent damage to containers or vehicle interiors. Corner protectors shall be used under all strapping. It has been determined that the area within the personnel compartment is not compatible to secure all BII, COEI or removed packaged items, therefore, a saddle similar to the one shown on figure 5 may be used. The saddle shall be installed over the trim vane. Track shroud bolts that have been removed and replaced by longer bolts shall be coated with preservative conforming to grade 4 of MIL-PRF-16173. Removed bolts shall be wrapped with barrier material conforming to type II, grade A, class 2 of MIL-B-121 and placed in a cloth bag identified with a tag. The tag shall contain the following information:

“REINSTALL TRACK SHROUD BOLTS WHEN SADDLE IS REMOVED FROM VEHICLE.”

The bag shall be secured in a conspicuous location within the driver's compartment. All containers shall be placed on the saddle in a position which will not increase the overall cube of the vehicle. Smaller wooden boxes shall be secured to the larger boxes with 0.75 in. wide strapping conforming to type 1, heavy-duty, finish A of ASTM D3953. Boxes shall then be secured to the saddle in each direction with two 1.25 in. wide strapping conforming to type 1, heavy-duty, finish A of ASTM D3953. Selection and use of strapping shall be in accordance with ASTM D4675. Corner protectors shall be used under all strapping.

3.3.8.7 Engine compartment access plate, gasket, and drain plugs. The engine compartment access plate, gasket, and preserved drain plugs (see 3.3.7.11.1) shall be packaged in a box conforming to type CF, class Weather-Resistant of ASTM D5118/D5118M. The box shall be closed in accordance with ASTM D1974 using tape conforming to type I, class 1 of ASTM D5486, identified as to contents, and securely stowed within the personnel compartment.

3.3.8.8 Packaging of tow hooks. Tow hooks and related hardware shall be removed for shipment and packaged in a type CF, class Weather-Resistant box conforming to ASTM D5118/ D5118M. The box shall be closed in accordance with ASTM D1974 using tape conforming to type I, class 1 of ASTM D5486, identified as to contents, and securely stowed within the personnel compartment.

3.3.9 Vehicle closure.

3.3.9.1 Vehicle closure kit. Unless otherwise specified (see 6.2), each vehicle shall be provided with a vehicle protective closure kit. The closure kit shall be fabricated, assembled, and installed in accordance with Appendix A.

3.3.9.1.1 COEI box marking. If it is ascertained that the COEI container will accommodate the closure kit, box shall be marked as follows: “DO NOT DESTROY - USE FOR RETURN SHIPMENT OF VEHICLE CLOSURE KIT”. Lettering shall be 0.75 in. high in a contrasting color of enamel conforming to TT-E-529.

3.4 Level B. When level B processing is specified (see 6.2), vehicles shall be processed in the same manner as specified for level A, with the following exceptions.

3.4.1 Transmission, transfer assembly, control differential, and final drives. The transmission, transfer assembly, control differential, and final drives shall contain operational lubrication as specified on applicable drawings, specifications, or lubrication order, filled to operating level. If, however, these units contain lubricating oil conforming to type I, grade 10 or 30 of MIL-L-21260, an additional amount of the same oil shall be added to attain operating level. Operating lubricants shall not be mixed with MIL-L-21260, an additional amount of the same oil shall be added to attain operating level. Operating lubricants shall not be mixed with

MIL-L-21260 except in an emergency. DA Form 2258 shall be annotated to indicate the grade of operational lubricant or preservative oil used.

3.4.2 Engine crankcase. The engine crankcase shall contain normal operation lubricant as specified in the lubrication order, filled to operational level. DA Form 2258 shall be annotated to indicate the grade of lubricant used.

3.4.3 Engine preservation. The engine shall require no preservation for level B shipment and storage.

3.4.4 Personnel heater and fuel pump. The personnel heater and fuel pump shall be in ready-to-use condition. The heater exhaust opening shall be closed with a plastic plug conforming to MIL-C-5501/7 (see figure 6), or closed with tape conforming to type V of MIL-T-22085. A warning tag, bearing the information "HEATER EXHAUST OPENINGS CLOSED, REMOVE PLUG OR TAPE BEFORE OPERATING", shall be attached to the heater controls.

3.4.5 Residual fuel. Unless otherwise specified (see 6.2), the vehicle shall be shipped without draining residual fuel from the fuel tank.

3.4.6 Backrests and seats. Cushions of backrests and seats shall not be covered. If cushions are received packaged, they shall be stowed as received in the crew compartment.

3.4.7 Vehicle closure kit. Vehicle closure kit shall not be provided for level B shipment and storage.

3.4.8 Tow hooks. Tow hooks shall be removed for overseas shipment only (see 3.3.8.8).

3.4.9 Engine compartment access panels. Engine compartment access panels in the crew compartment shall not be removed.

3.4.10 Vision block openings. Plugs conforming to PPP-C-1752, type I, class 2, 2 in. thick, shall be installed in the vision block openings (see figure 45).

3.4.11 Bilge pump outlets. Bilge pump outlets shall be closed with plastic plugs conforming to MIL-C-5501/7 (see figure 45), or closed with tape conforming to type IV of MIL-T-22085. A warning tag, bearing the information "BILGE PUMP OUTLETS CLOSED. PRIOR TO OPERATING BILGE PUMP, REMOVE PLUGS OR TAPE FROM OUTLETS", shall be secured to the bilge pump operating switch.

3.4.12 Auxiliary generator unit. If the auxiliary generator is mounted in its exterior compartment and is not provided with cover (P/N 10932720), the unit shall then be closed by means of a shroud conforming to type I of L-P-378, 8 to 10 mils thick. The top of the shroud shall be supported by 2 pieces of hardboard conforming to figure 45, detail 2, taped to each other and to the auxiliary compartments top with tape conforming to type IV of MIL-T-22085. The shroud shall be secured in place with the same tape (see figure 45).

3.5 Loading.

3.5.1 Loading flat cars. Loading of vehicles on open top railroad cars shall be in accordance with the applicable requirements of Section 1 "General Rules Governing the Loading of Commodities on Open Top Cars", and figure 87 or 87A, section 6 "Rules Governing the Loading of Department of Defense Material on Open Top Cars", publications of the Association of American Railroads.

3.5.2 Highway shipment. Loading of vehicles for shipment by haulaway and rules for shipment by driveaway or towaway shall be in accordance with Interstate Commerce Commission publication "Federal Motor Carrier Safety Regulations" and applicable military publications.

3.5.3 Reprocessing engine after loading.

3.5.3.1 Level A. If the engine is operated in connection with the moving of vehicle to the loading area or during the loading itself, the engine shall be reprocessed as specified in 3.3.7.6 through 3.3.7.6.5. The vehicle cover shall be rolled clear of the engine intake and exhaust to provide air circulation and to prevent damage to the cover. After reprocessing of engine, the vehicle cover shall be replaced in its original position.

3.5.3.2 Level B. If the engine is operated in connection with movement of vehicle for loading or unloading, there shall be no additional processing of engine.

3.6 Marking. In addition to any special marking required in the contract (see 6.2), the vehicle shall be marked in accordance with MIL-STD-129 (see 6.6).

3.6.1 Lifting points. The information "LIFT HERE" with an arrow pointing to the lifting eye shall be stenciled adjacent to each lifting eye using black ink conforming to A-A-208.

3.7 Drive-on/drive-off capability. When the vehicle is to be operated for loading or unloading (see 6.2), the following provisions shall apply:

3.7.1 Additional fuel. When specified (see 6.2), additional fuel shall be added, as required, to accomplish movement of the vehicle.

3.7.2 Batteries and electrolyte. Batteries shall be filled with electrolyte and fully charged, and battery cables shall be connected. After vehicle self-movement for loading or placement in storage, the ground cable at the battery shall be disconnected and then secured to the battery carrier with 0.75 in. tape conforming to type IV of ASTM D5330. A warning tag, bearing the information "VEHICLE PRESERVED FOR DRIVE-AWAY CONDITION. BEFORE CRANKING, CONNECT GROUND CABLE TO BATTERY TERMINAL. ENGINE AND FUEL TANKS NOT PRESERVED," shall be attached in a conspicuous location within the driver's compartment.

4. VERIFICATION

4.1 Classification of inspections. The inspection requirements specified herein are classified as follows:

a. First article inspection (see 4.2).
b. Conformance inspection (see 4.3).

4.2 First article inspection. Unless otherwise specified (see 6.2), one of the first 10 production processed vehicles shall be subjected to the inspections specified in 4.4 (see 3.1).

4.3 Production processed vehicles. Unless otherwise specified (see 6.2), all production processed vehicles shall be subjected to the inspections specified in table V and 4.4.2.1 through 4.4.2.3.

4.4 Conformance inspections.

4.4.1 Materials. Except for materials that have been inspected by the Government at source, all materials to be used in processing of vehicles shall be inspected in accordance with the material specification; or certified inspection and laboratory test reports shall be provided which show that furnished materials conform to the applicable material specification. When materials are listed on a Qualified Products List, they shall be obtained from one of the approved sources indicated.

4.4.2 Processing. Except as otherwise specified herein, vehicle processing shall be inspected to determine conformance to this specification. Inspection of processing shall include all items specified in table V and 4.4.2.1 through 4.4.2.4.

4.4.2.1 Cleaning. To determine conformance to 3.3.6.1, the interior of vehicle shall be examined for cleanliness. One vehicle each day shall be tested for cleanliness in accordance with the applicable provisions of MIL-STD-2073-1. To determine conformance with 3.3.6.2, the exterior of vehicle shall be examined for cleanliness. Surfaces on which tape is to be applied shall be examined for cleanliness before application.

4.4.2.2 Cooling system. To determine conformance to 3.3.7.4, one processed vehicle shall be selected at random from each day's production. The engine coolant shall be tested using a hydrometer-thermometer type tester, with a range of -60 to 160°F, conforming to MIL-T-37402.

4.4.2.3 Fuel tank. To determine conformance to 3.3.7.8, visual inspection of preservative application shall be accomplished.

4.4.2.4 Engine. To determine conformance to 3.3.7.6.1 through 3.3.7.6.6, the interior of engine from 1 of the first 10 production processed vehicles shall be examined for surface coverage. The engine shall be disassembled to the extent necessary to permit visual examination of all surfaces within the combustion chamber. (NOTE: The combustion chamber shall be considered as all surfaces within the cylinder, from and including the crown of the piston, to and including the surfaces of the head within the cylinder.) All surfaces within the combustion chamber shall have a “wet” coating of preservative oil such as is obtained when the item is dipped or flushed with the oil.

5. PACKAGING

This section is not applicable to this specification.

6. NOTES

(This section contains information of a general or explanatory nature, which may be helpful, but is not mandatory.)

6.1 Intended use. Vehicle processing covered by this specification is intended to protect the vehicles for storage outside of buildings, for immediate use shipment, and for domestic or overseas shipment, including carloading.

6.2 Acquisition requirements. Acquisition documents must specify the following:

a. Title, number, and date of this specification.
b. Issues of DoDISS to be cited in the solicitation, and if required, the specific issue of individual documents referenced (see 2.2).
c. If first article inspection is required (see 3.1).
d. Applicable level of processing (see 3.3 and 3.4).
e. Applicable procedure for cooling system protection (see 3.3.7.4).
f. If BII and COEI should be processed, packed, or stored other than as specified (see 3.3.8.6).
g. If vehicle closure kit is not required (see 3.3.9.1).
h. If residual fuel should be drained from the fuel tank prior to shipping (see 3.4.5).
i. If special marking is required (see 3.6).
j. If vehicle drive-on and drive-off capability is required (see 3.7).
k. If additional fuel should be supplied (see 3.7.1)
l. If first article sample size should be other than as specified (see 4.2).
m. If production processed vehicles should be subjected to inspections other than as specified (see 4.3).

6.3 Safety precautions. Caution should be exercised in handling carbon dioxide (CO_2) fire extinguisher cylinders. Cylinders should not be dropped, permitted to strike each other, or handled roughly. Extreme care should be exercised during the reinstallation operation to avoid tripping the fire extinguisher control trigger (see 3.3.8.5).

6.4 Forms. A copy of the "Equipment Log Book" and all required forms will be furnished to the contractor by the Government at least 30 days before shipment of the vehicles required by the contract delivery schedule (see 3.3.5).

6.5 Definitions.

6.5.1 Recovered materials. “Recovered materials” means materials that have been collected or recovered from solid waste (see 6.5.2).

6.5.2 Solid waste. “Solid waste” means (a) any garbage, refuse, or sludge from a waste treatment plant, water supply treatment plant, or air pollution control facility; and (b) other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities. It does not include solid or dissolved material in domestic sewage, or solid or dissolved material in irrigation return flows or industrial discharges which are point sources subject to permits under

section 402 of the Clean Water Act, (33 U.S.C. 1342 et seq.), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 U.S.C. 2011 et seq.) (Source: Federal Acquisition Regulations, section 23.402).

6.6 Marking. MIL-HDBK-129 "Military Markings" provides information on marking document MIL-STD-129. It should be used as a guide.

6.7 Subject term (key word) listing.

Government furnished equipment
Hatches and doors
Loading
Preservatives and atomized spray equipment
Ramp winch assembly
Relubrication
Vehicle closure
Ventilation

6.8 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

TABLE I. Preservation methods of basic issue items (BII) for M577-M577A3.

Identification number	Item description	Qty	Preservation method
5120-00-240-6040	Crowbar, Pinch Point, 1" Wide, 48" Long (11677049)	1	20
5120-01-041-4624	Fixture Assy, Track Connecting (12253183)	2	20
5120-01-041-9920	Gage, Track & Sprocket (12253280)	1	31
5120-00-900-6095	Hammer, Hand, Sledge, 6 Lb. (11677050)	1	20
5120-01-006-8847	Punch, Drive Pin (Track Pin Removal) (11678718)	1	20
2540-00-670-2549	Bag, Pamphlet, Canvas (7961712)	1	10
5140-00-473-6256	Bag, Tool, Satchel (11655979)	1	10
12381815	Bag, Tool, Chain Hoist	1	10
12381800	Chain Hoist	1	20
7240-00-242-6153	Can, Water, Military, 5 Gal. Steel (11655980)	1	10
5110-00-595-8229	Cutter, Barbed, Wire, Insulated Handles, Hand Operated (11655981)	1	31
4930-00-288-1511	Extension, Adapter, Lub Access (6300333)	1	31
6545-00-922-1200	First Aid Kit, Motor Vehicle, 12 Unit (11677011)	1	30
4930-01-022-4876	Grease Gun, Hand, High Pressure, Lever Operated, 15 Oz. Cap. 7000 PSI (10915142)	1	20

TABLE I. Preservation methods of basic issue items (BII) for M577-M577A3 - Continued.

Identification number	Item description	Qty	Preservation method
1240-00-768-8707	Head, Periscope (for Periscope, M19) (7688707)	1	any applicable method
5340-00-682-1645	Padlock, Key Operated 1 ½" w/o Clevis and Chain, Keyed Indiv. w/2 keys (MS35647-6)	1	31
12357918-2	Periscope, M17 (Driver's)	4	any applicable method
7652971	Periscope, M19 (IR-Driver's)	1	52
1240-01-005-6035	Optional: Periscope, M19 (IR-Driver's) (11747126)	1	30
7510-01-065-0166	Folder, Equipment (43986-1)	1	10
LO5-2805-203-14	Lubrication Order (Generator Set Engine)	1	10
LO9-2350-261-12	Lubrication Order (Vehicle)	1	10
TM9-6115-596-14	Technical Manual (Generator Set)	1	10
TM5-2805-203-14	Technical Manual (General Set, Engine)	1	10
TM9-2350-261-10	Technical Manual (Operator's)	1	31
5120-00-227-8074	Bar, Extension, ½" Drive 10" Long (11655788-1)	1	20
5120-00-061-8546	Hammer, Hand, Ball Peen 2 Lb. (11677028-3)	1	31
5120-00-236-7590	Handle, Socket Wrench, Hinged, ½" Drive (11655786-1)		
5120-00-119-4173	Pliers, Lineman's w/Side Cutter, Size 8" (11655790)	1	31
5120-00-223-7397	Pliers, Slip Joint, Straight Nose, Combination, w/Cutter, Thin, Size 8" (11655775-3)	1	31
5120-00-234-8913	Screwdriver, Cross Tip No. 2 (11655777-12)	1	31
5120-00-144-5207	Adapter, Socket Wrench 3/4" Male x ½" Female (11655788-3)	1	31
5120-00-278-1283	Screwdriver, Flat Tip, Common, Flared Side, Plastic Handle, 6" Blade (11655777-11)	1	31
5120-00-189-7932	Socket, ½" Drive (12 PT) 9/16" Opening (11677025-1)	1	31
5120-00-189-7946	Socket, ½" Drive (12 PT) 5/8" Opening (11677025-2)	1	31
5120-00-235-5870	Socket, ½" Drive (12 PT) 11/16" Opening (11677025-3)	1	31
5120-00-189-7985	Socket, ½" Drive (12 PT) 3/4" Opening (11677025-4)	1	31
5120-00-189-7934	Socket, ½" Drive (12 PT) 7/8" Opening (11677025-5)	1	31
5120-00-189-7935	Socket, ½" Drive (12 PT) 15/16" Opening (11677025-6)	1	31

TABLE I. Preservation methods of basic issue items (BII) for M577-M577A3 - Continued.

Identification number	Item description	Qty	Preservation method
5120-00-264-3796	Wrench, Adjustable, 1 5/16" Jaw Opening Size 12" (11655778-5)	1	31
5120-00-224-3141	Wrench Box, Double Head, (12 PT) 5/8" & 1/16" Openings (11655785-2)	1	31
5120-00-277-2342	Wrench, Engineers, Open End, Double Head, 3/8" & 7/16" Openings, 4" Long (11655789-1)	1	31
5120-00-187-7126	Wrench, Engineers, Open End, Double Head, 9/16" & 5/8" Openings, 6" Long (11655789-2)	1	31
5120-00-277-8300	Wrench, Engineers, Open End, Double Head, 11/16" & 13/16" Openings, 7 ½" Long (11655789-3)	1	31
5120-00-293-2336	Axe, Single Bit, 4 Lb. 36" Long (6150925)	1	10
5120-00-288-6574	Handle, Mattock Pick (11677021)	1	10
5120-00-243-2395	Pick, Mattock (11677022)	1	10
5120-00-293-3336	Shovel, Round Point, D-Handle Open Back (11655784)	1	10
4210-00-270-4512	Fire Extinguisher, Portable (7359703)	1	10
7714780	Optional: Fire Extinguisher, Portable	1	20
4930-00-169-8275	Oiler, Hand, Pump (6169931)	2	10
2540-00-679-8035	Tow Hook (10861607)		
5315-00-862-2683	Pin, Straight, Headed (10890323)	2	10
5315-00-598-5808	Clip, Retaining (7752865)	2	31

TABLE II. Preservation methods of components of end item (COEI) for M577-M577A3.

Identification number	Item description	Qty	Preservation Method
2590-00-363-7102	Cable Kit, Electric (NATO, on Top Deck) (11682379-2)	1	any applicable method
	Consisting Of:		
5935-00-322-8959	Adapter (11677570)	2	
11682336-2	Cable Assembly	1	
2590-00-898-6771	Cover, Periscope (On Periscope M17) (10866115)	4	30
8340-00-134-7512	Cover, Tent (11617260)	1	10
6115-00-857-1397	Generator Set and Cover (10919300)	1	FIP
2540-00-066-4281	Cover Assembly, Auxiliary Generator (10932720)	1	10
6250-00-933-6964	Lamp Holder Assembly (In Tool Bag) (10918129)	2	any applicable method
2540-00-003-8339	Tent Frame (10918155)	1	20

TABLE III. Preservation methods of basic issue items (BII) for M1068-M1068A3.

Identification number	Item description	Qty	Preservation method
5120-00-240-6040	Crowbar, Pinch Point, 1" Wide, 48" Long (11677049)	1	20
5120-00-041-4624	Fixture Assy, Track Connecting (12253183)	2	20
5120-01-041-9920	Gage, Track & Sprocket (12253280)	1	31
5120-00-265-7462	Hammer, Hand, Sledge, 6 Lb. (41796)	1	20
5120-01-006-8847	Punch, Drive Pin (Track Pin Removal) (11678718)	1	20
2540-00-670-2549	Bag, Pamphlet, Canvas (7961712)	1	10
5140-00-473-6256	Bag, Tool, Satchel (11655979)	1	10
12381815	Bag, Tool, Chain Hoist	1	10
12381800	Chain Hoist	1	20
4030-01-369-7612	Shackle (12381884)	2	20
7240-00-242-6153	Can, Water, Military, 5 Gal. Steel (11655980)	1	10
5110-00-595-8229	Cutter, Barbed, Wire, Insulated Handles, Hand Operated (11655981)	1	31
4930-00-288-1511	Extension, Adapter, Lub Access (6300333)	1	31
6545-00-922-1200	First Aid Kit, Motor Vehicle 12 Unit (11677011)	1	30
4930-01-022-4876	Grease Gun, Hand, High Pressure, Lever	1	20
1240-00-768-8707	Operated, 15 Oz. Cap. 7000 PSI (10915142)		any applicable
	Head, Periscope (For Periscope, M19) (7688707)	1	method
5340-00-682-1645	Padlock, Key Operated 1 ½" w/o Clevis and Chain, Keyed Indiv. w/2 Keys (MS35647-6)	1	31
12357918-2	Periscope, M17 (Driver's)	4	any applicable method
7652971	Periscope, M19 (IR-Driver's)	1	52
1240-01-005-6035	Optional: Periscope, M19 (IR-Driver's) (11747126)	1	10
7510-01-065-0166	Folder, Equipment (43986-1)	1	10
LO5-2805-203-14	Lubrication Order (Generator Set Engine)	1	10
LO9-2350-261-12	Lubrication Order (Vehicle)	1	10
TM9-6115-596-14	Technical Manual (Generator Set)	1	10
TM5-2805-203-14	Technical Manual (Generator Set, Engine)	1	10
TM9-2350-261-10	Technical Manual (Operator's)	1	10
TM10-5410-229-13&P	Technical Manual (Modular Command Post System)	1	10

TABLE III. Preservation methods of basic issue items (BII) for M1068-M1068A3- Continued.

Identification number	Item description	Qty	Preservation method
TM11-5985-263-15	Technical Manual (Antenna Mast)	1	10
5120-00-227-8074	Bar, Extension, ½" Drive 10" Long (11655788-1)	1	31
5120-00-061-8546	Hammer, Hand, Ball Peen 2 Lb. (11677028-3)	1	20
5120-00-236-7590	Handle, Socket Wrench, Hinged, ½" Drive (11655786-1)	1	31
5120-01-119-4173	Pliers, Lineman's w/Side Cutter, Size 8" (11655790)	1	31
5120-00-223-7397	Pliers, Slip Joint, Straight Nose, Combination, w/Cutter, Thin Size 8" (11655775-3)	1	31
5120-00-234-8913	Screwdriver, Cross Tip No. 2 (11655777-12)	1	31
5120-00-144-5207	Adapter, Socket Wrench, 3/4" Male x ½" Female (11655788-3)	1	31
5120-00-278-1283	Screwdriver, Flat Tip, Common, Flared Side, Plastic Handle, 6" Blade (11655777-11)	1	31
5120-00-189-7932	Socket, ½" Drive (12 PT) 9/16" Opening (11677025-1)	1	31
5120-00-189-7946	Socket, ½" Drive (12 PT) 5/8" Opening (11677025-2)	1	31
5120-00-235-5870	Socket, ½" Drive (12 PT) 11/16" Opening (11677025-3)	1	31
5120-00-189-7985	Socket, ½" Drive (12 PT) 3/4" Opening (11677025-4)	1	31
5120-00-189-7934	Socket, ½" Drive (12 PT) 7/8" Opening (11677025-5)		31
5120-00-189-7935	Socket, ½" Drive (12 PT) 15/16" Opening (11677025-6)	11	31
5120-00-264-3796	Wrench, Adjustable, 1 5/16" Jaw Opening Size 12" (11655778-5)	1	31
5120-00-224-3141	Wrench Box, Double Head, (12 PT) 5/8" & 11/16" Openings (11655785-2)	1	31
5120-00-277-2342	Wrench, Engineers, Open End, Double	1	31
5120-00-187-7126	Head, 3/8" & 7/16" Openings, 4" Long (11655789-1)	1	
5120-00-277-2342	Wrench, Engineers, Open End, Double	1	31

TABLE III. Preservation methods of basic issue items (BII) for M1068-M1068A3- Continued.

Identification number	Item description	Qty	Preservation method
5120-00-277-8300	Head, 9/16" & 5/8" Openings, 6" Long (11655789-2)		
	Wrench, Engineers, Open End, Double	1	31
5120-00-293-2336	Head, 11/16" & 13/16" Openings 7 ½" Long (11655789-3)		
	Axe, Single Bit, 4 Lb. 36" Long (6150925)	1	10
5120-00-288-6574	Handle, Mattock Pick (11677021)	1	10
5120-00-243-2395	Pick, Mattock (11677022)	1	10
5120-00-293-3336	Shovel, Round Point, D-Handle Open Back (11655784)	1	10
4210-00-270-4512	Fire Extinguisher, Portable (7359703)	1	10
7714780	Optional: Fire Extinguisher, Portable		
4930-00-169-8275	Oiler, Hand, Pump (6169931)	1	20
2540-00-679-8035	Tow Hook (10861607)	2	10
5315-00-862-2683	Pin, Straight, Headed (10890323)	2	10
5315-00-598-5808	Clip, Retaining (7752865)	2	31

TABLE IV. Preservation methods of components of end item (COEI) for M1068-M1068A3.

Identification number	Item description	Qty	Preservation method
2590-00-363-7102	Cable Kit, Electric (NATO, on Top Deck) (11682379-2)	1	any applicable method
	Consisting Of:		
5935-00-322-8959	Adapter (11677570)	2	
11682336-2	Cable Assembly	1	
2590-00-898-6771	Cover, Periscope (On Periscope M17) (10866115)	4	30
5410-00-323-2454	Green Modular Command Post System (5-4-6340-1)	1	IA
	OR		
5410-00-334-7529	Tan Modular Command Post System (5-4-6340-2)	1	IA
6115-00-857-1397	Generator Set and Cover (10919300)	1	FIP
2540-00-066-4281	Cover Assembly, Auxiliary Generator (10932720)	1	10
5820-01-263-1760	Grounding Kit (SC-D-681610)	1	30
5-4-7484	Bootwall Assembly	1	10

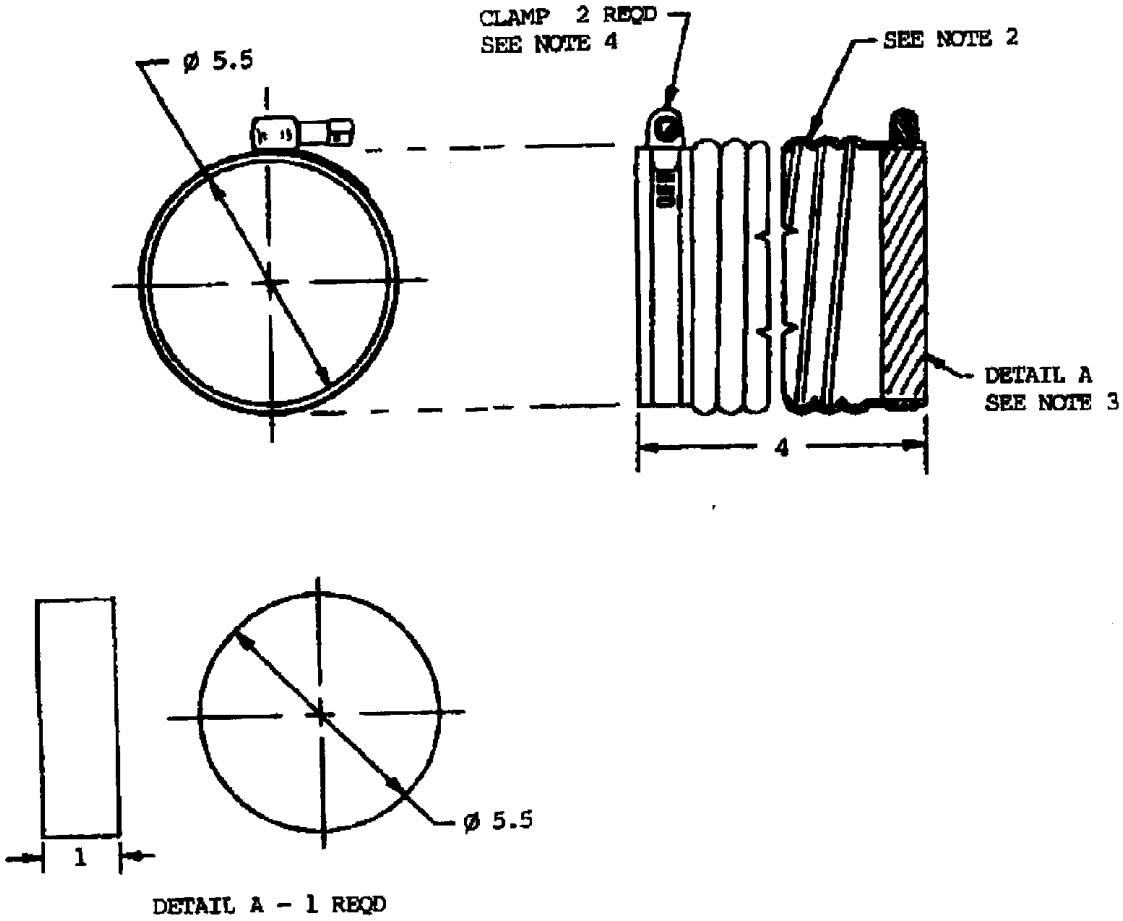
TABLE V. Processing inspection.
(See indicated paragraphs for levels A & B requirements.)

Component	Cleaning	Preservation		Packaging/Stowage	
	Levels A & B	Level A	Level B	Level A	Level B
Processing records				3.3.3	3.3.3
Disassembly				3.3.4	3.3.4
Matchmarking				3.3.4.1	3.3.4.1
Record forms				3.3.5	3.3.5
Interior of vehicle	3.3.6.1				
Battery supports & retainers	3.3.6.1.1	3.3.7.2	3.3.7.2		
Backrests & seats	3.3.6.1.2			3.3.8.3	3.4.6
Exterior of vehicle	3.3.6.2				
Relubrication		3.3.7.1	3.3.7.1		
Transmission, transfer assembly, control differential, and final drives 1/		3.3.7.3	3.4.1		
Cooling system 1/		3.3.7.4	3.3.7.4		
Water & antifreeze procedure		3.3.7.4.1	3.3.7.4.1		
Water & corrosion inhibitor procedure		3.3.7.4.2	3.3.7.4.2		
Antifreeze compound procedure		3.3.7.4.3	3.3.7.4.3		
Engine crankcase 1/		3.3.7.5	3.4.2		
Compression ignition engine		3.3.7.6	3.4.3		
Fuel system and combustion chamber preservation		3.3.7.6.2	3.4.3		
Preservation thru air intake and exhaust system, without turbocharger		3.3.7.6.3	3.4.3	3.3.7.6.3	
Preservation thru air intake and exhaust system, with turbocharger		3.3.7.6.4	3.4.3	3.3.7.6.4	
Preservation thru oil level gage rod opening		3.3.7.6.5	3.4.3	3.3.7.6.5	

TABLE V. Processing inspection - Continued.
(See indicated paragraphs for levels A & B requirements.)

Component	Cleaning	Preservation		Packaging/Stowage	
	Levels	Level	Level	Level	Level
	A & B	A	B	A	B
Preservation thru fly-wheel housing		3.3.7.6.6			
Personnel & engine compartment heaters and lines		3.3.7.7	3.4.4		
Fuel tank		3.3.7.8	3.4.5		
Fuel tank security				3.3.7.8.1	
Ramp lift assembly		3.3.7.9	3.3.7.9		
Ramp hydraulic reservoir		3.3.7.9.1	3.3.7.9.1		
Hatches & doors		3.3.7.10	3.3.7.10		
Engine compartment access plate, gasket, and drain plugs		3.3.7.11.1	3.3.7.11.1	3.3.8.7	3.3.8.7
Engine compartment access panels				3.3.7.11.2	3.4.9
Miscellaneous preservation		3.3.7.12	3.3.7.12		
Dry charged batteries & cables		3.3.8.1	3.3.8.1	3.3.8.1	3.3.8.1
Electrolyte				3.3.8.2	3.3.8.2
Periscopes				3.3.8.4	3.3.8.4
Fire extinguishers				3.3.8.5	3.3.8.5
BII and COEI items				3.3.8.6	3.3.8.6
Strapping				3.3.8.6.1	
Tow hooks				3.3.8.6.1	
Vehicle closure kit				3.3.8.8	3.4.8
COEI box marking				3.3.9.1	3.4.7
Loading flat cars				3.3.9.1.1	
Highway shipment				3.5.1	3.5.1
Reprocessing engine after loading				3.5.2 3.5.3.1	3.5.2 3.5.3.2
Marking				3.6	3.6
Lifting points				3.6.1	3.6.1

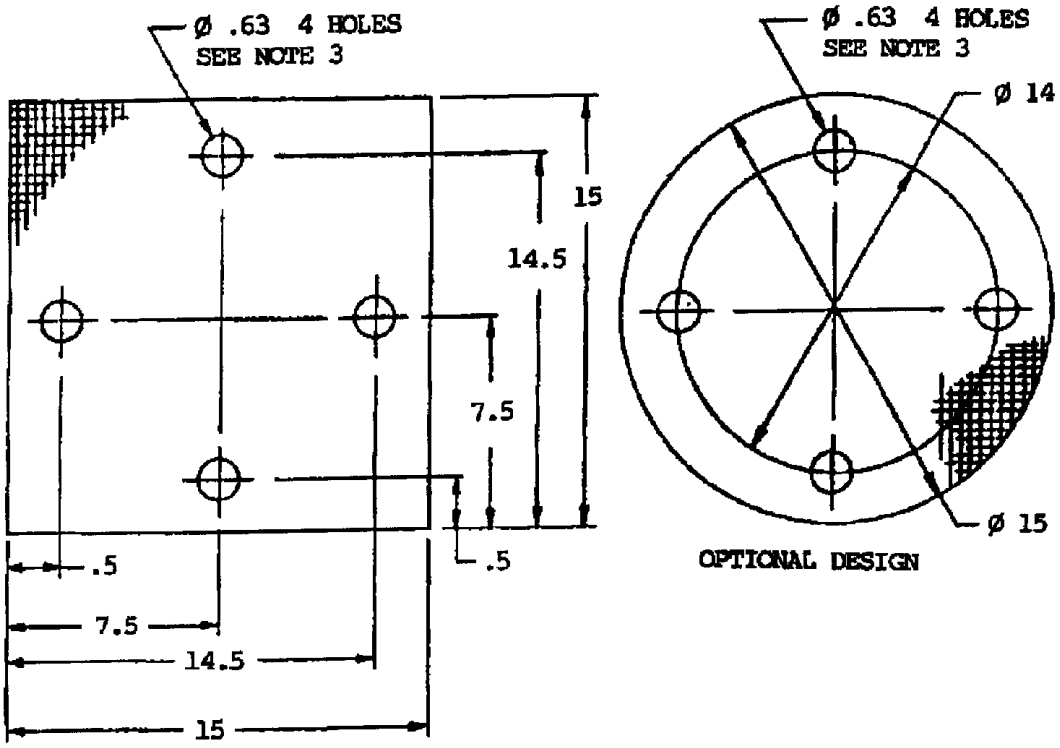
1/ Inspect DA Form 2258



NOTES:

1. Dimensions are in inches.
2. Flexible hose shall be made from material conforming to A-A-52546 or equivalent.
3. Plug shall be made from 1 in. plywood conforming to A-A-55057, type A, STD. INT. with EXT. glue.
4. Type F clamp conforming to A-A-52506 or equivalent.

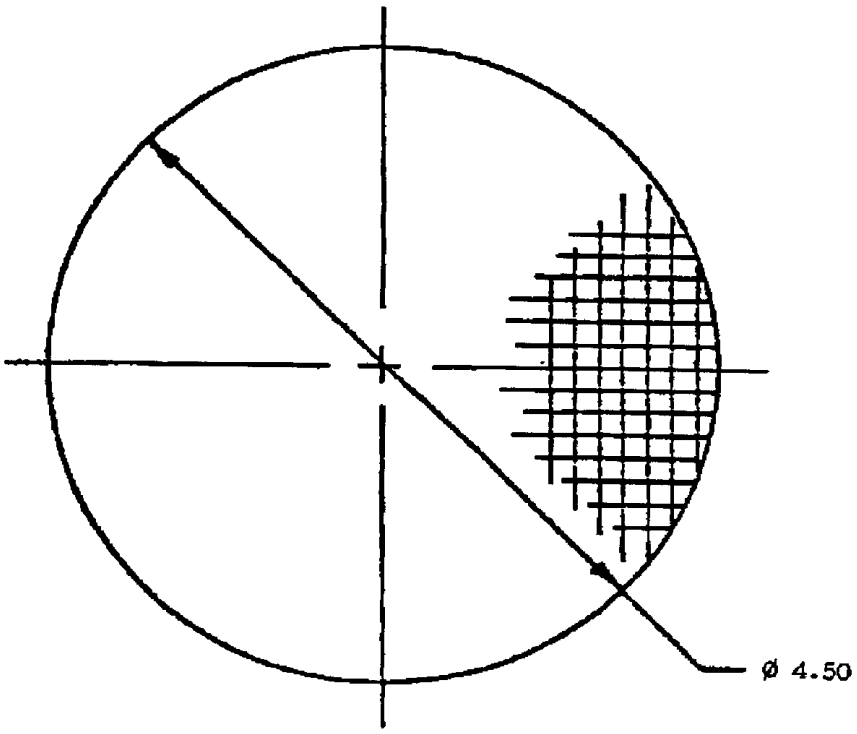
FIGURE 1. Air restrictor boot.



NOTES:

1. Dimensions are in inches.
2. Screen material shall be wire cloth, type I, class I, 4x4 mesh, 0.0348 in. diameter, in accordance with ANSI O1.
3. Holes may be formed with drift pin at installation.

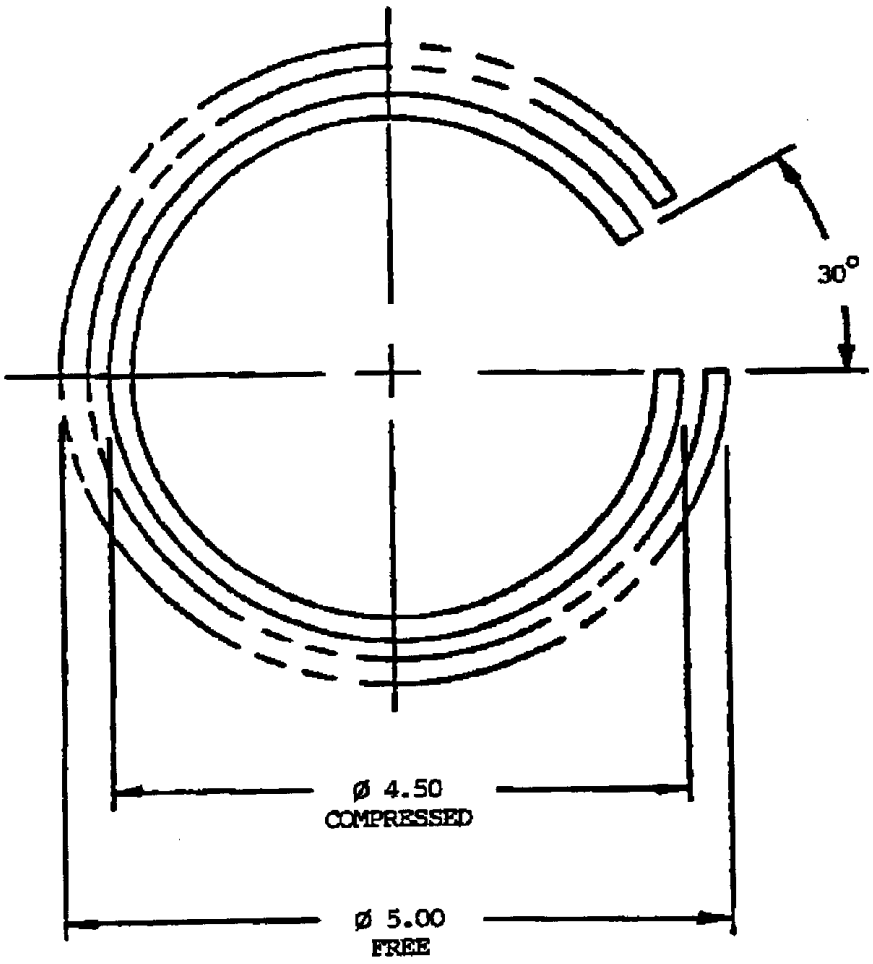
FIGURE 2. Screen.



NOTES:

1. Dimensions are in inches.
2. Screen material shall be wire cloth, type I, class I, 4x4 mesh, 0.0348 in. diameter, in accordance with ANSI O1.

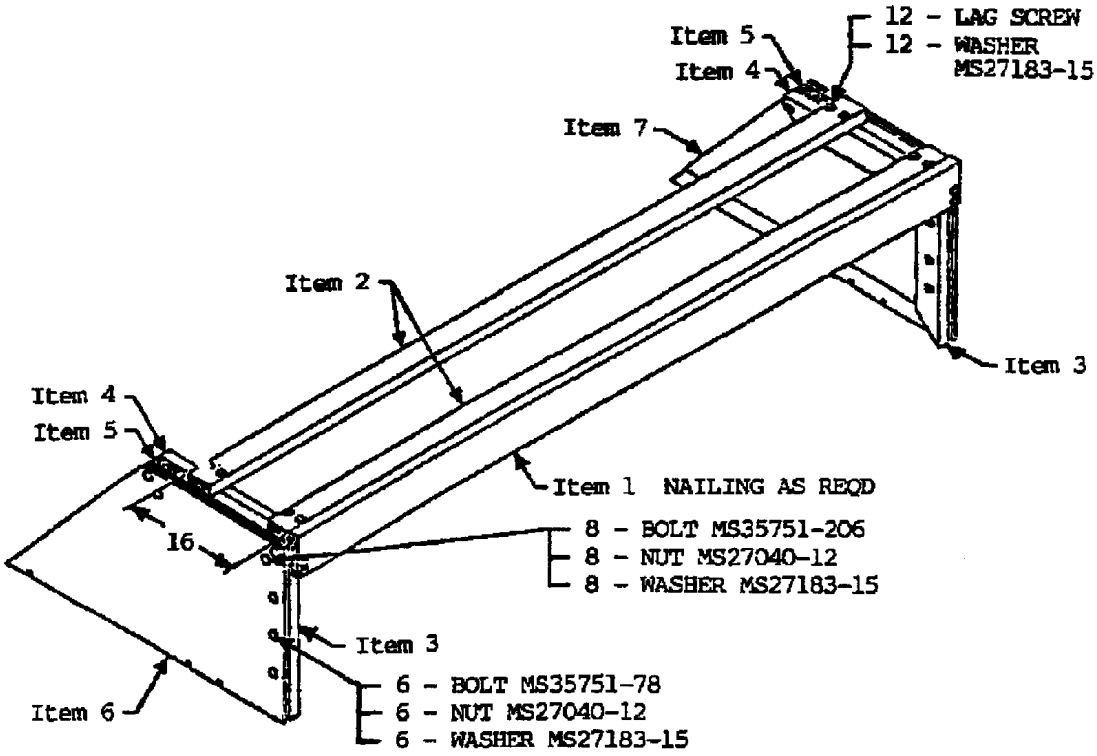
FIGURE 3. Screen.



NOTES:

1. Dimensions are in inches.
2. Material shall be steel, music wire, 0.156 in. diameter, in accordance with ASTM A228/A228M.

FIGURE 4. Spring retainer.

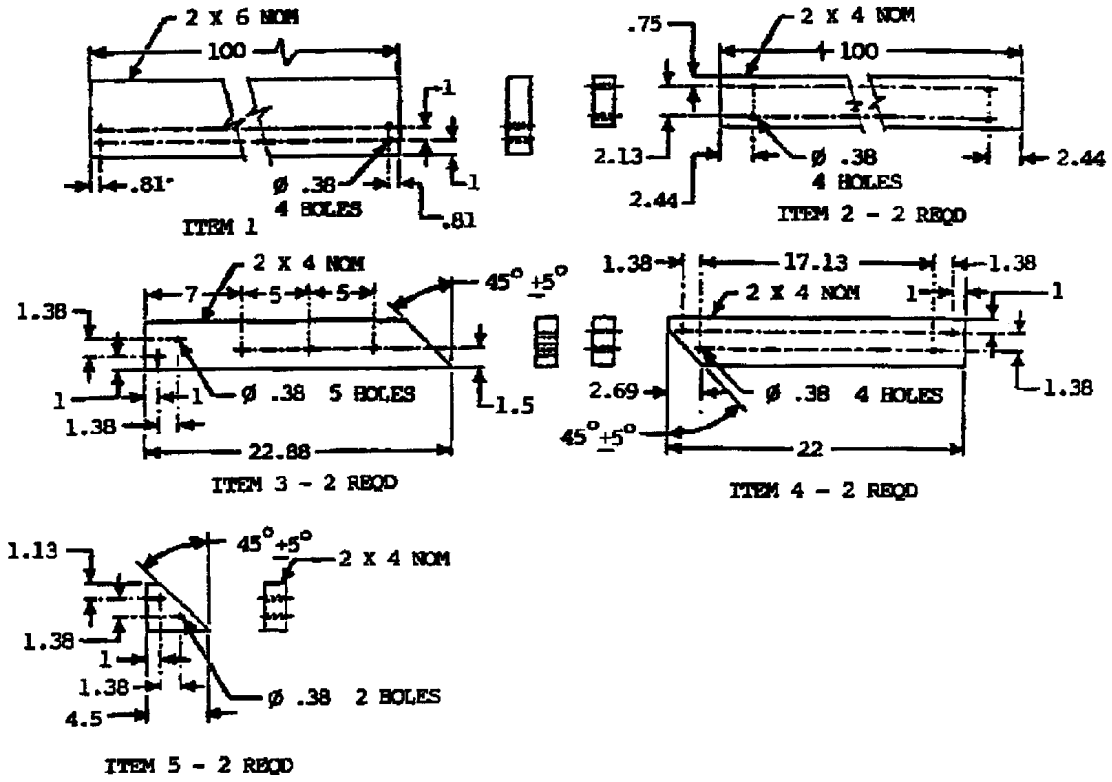


NOTES:

1. Dimensions are in inches.
2. See figures 5A and 5B for details of items 1 through 7.

SHEET 1 OF 3

FIGURE 5. Saddle BII stowage.

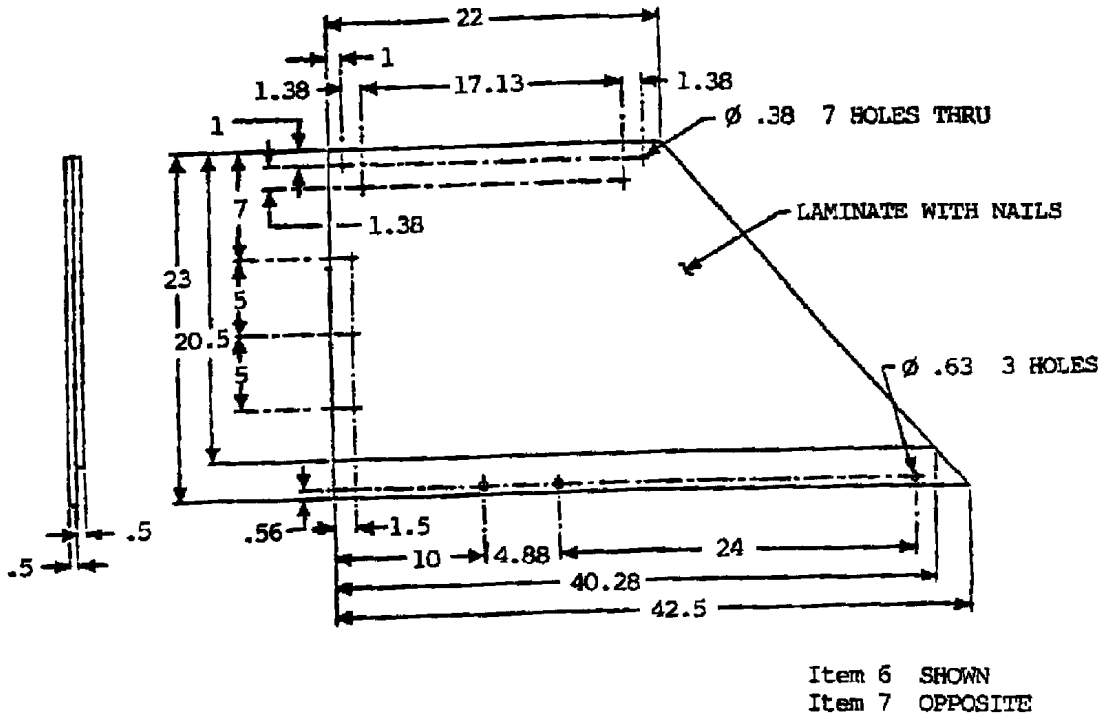


NOTES:

1. Dimensions are in inches. Unless otherwise specified, tolerances shall be ± 0.06 in.

SHEET 2 OF 3

FIGURE 5A. Saddle BII stowage.



NOTES:

1. Dimensions are in inches. Unless otherwise specified, tolerances shall be $\pm$ 0.06 in.
2. Material shall be plywood conforming to A-A-55057, type A, STD. INT. with EXT. glue.

FIGURE 5B. Saddle BII stowage.

APPENDIX A

REQUIREMENTS FOR FABRICATING, ASSEMBLING, INSTALLING, REMOVING, DISASSEMBLING, AND PRESERVING, PACKAGING, AND PACKING VEHICLE CLOSURE FOR M577, M577A2, M577A3, M1068, AND M1068A3

A.1 SCOPE

A.1.1 Scope. This appendix covers the requirements for fabricating, assembling, installing, removing, and disassembling the vehicle closure and for preserving, packaging, and packing the disassembled vehicle closure for the M577, M577A2, M577A3, M1068, and M1068A3. This Appendix is a mandatory part of the purchase description. The information contained herein is intended for compliance.

A.2 APPLICABLE DOCUMENTS

A.2.1 General. The documents listed in this section are specified in Appendix A of this purchase description. This section does not include documents cited in other sections of this purchase description or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in Appendix A of this purchase description, whether or not they are listed.

A.2.2 Government documents.

A.2.2.1 Specifications and standards. The following specifications and standards form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATIONS

FEDERAL

A-A-30081	- Tip, Cane and Crutch.
V-T-295	- Thread, Nylon.
QQ-A-225/8	- Aluminum Alloy 6061, Bar, Rod, Wire and Special Shapes, Rolled, Drawn, or Cold Finished.
QQ-A-250/7	- Aluminum Alloy 5086, Plate and Sheet.
QQ-A-250/8	- Aluminum Alloy 5052, Plate and Sheet.

APPENDIX A

QQ-S-698	- Steel, Sheet and Strip, Low-Carbon.
TT-C-490	- Cleaning Methods For Ferrous Surfaces and Pretreatments For Organic Coatings.
TT-P-664	- Primer Coating, Alkyd, Corrosion-Inhibiting, Lead and Chromate Free, VOC-Compliant.
WW-T-700/4	- Tube, Aluminum Alloy, Drawn, Seamless, 5052.
WW-T-700/5	- Tube, Aluminum Alloy, Drawn, Seamless, 5086.
WW-T-700/6	- Tube, Aluminum Alloy, Drawn, Seamless, 6061.

DEPARTMENT OF DEFENSE

MIL-C-20696	- Cloth, Coated, Polyester or Nylon, Waterproof.
MIL-E-52891	- Enamel, Lusterless, Zinc Phosphate, Styrenated Alkyd Type.
MIL-P-53030	- Primer Coating, Epoxy, Water Reducible, Lead and Chromate Free.

STANDARDS

FEDERAL

FED-STD-595	- Colors Used in Government Procurement.
FED-STD-751	- Stitches, Seams, and Stitching.

DEPARTMENT OF DEFENSE

MS21044	- Nut, Self-Locking, Hexagon, Regular Height, 250°F, 125 Ksi Ftu and 60 Ksi Ftu
MS35207	- Screw, Machine-Pan Head, Cross-Recessed, Carbon Steel, Cadmium Plated, UNF-2A (IN./MM).
MS51922	- Nut, Self-Locking, Hexagon-Prevailing Torque, General Purpose, 250°F, UNC-2B and UNF-2B.
MS90725	- Screw, Cap, Hexagon Head (Finished Hexagon Bolt), Steel, Grade 5, Cadmium Plated, UNC-2A.
MS90726	- Screw, Cap, Hexagon Head (Finished Hexagon Bolt), Steel, Grade 5, Cadmium Plated, UNF-2A.

(Unless otherwise indicated, copies of the above specifications and standards are available from the Standardization Document Order Desk, 700 Robbins Avenue, Building 4D, Philadelphia, PA 19111-5094.)

APPENDIX A

A.2.2.2 Other Government drawings and publications. The following other Government drawings and publications form a part of this document to the extent specified herein. Unless otherwise specified, the issues are those cited in the solicitation.

DRAWINGS

ARMY

114838	- Washer.
116263	- Double Stud.
116267	- Washer.
116268	- Eyelet.
7392987	- Grommets and Washers, Oblong.
7392993	- Grommets and Washers, Oblong.
10906339	- Tip, Cane and Crutch.
10922144	- Fastener.

PACKAGING DATA SHEETS

10918220	- Closure Kit, Vehicle Protective, M577 and M577A1.

(Unless otherwise indicated, copies of the above drawings and publications are available from the U.S. Army Tank-automotive and Armaments Command, AMSTA-TR-E/BLUE, Warren, MI 48397-5000.)

A.2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DoDISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DoDISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

ASTM A36/A36M	- Carbon Structural Steel, Standard Specification for (DoD Adopted).
ASTM A108	- Steel Bars, Carbon, Cold Finished, Standard Quality Standard Specification for (DoD Adopted).
ASTM A123	- Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products, Standard Specification for (DoD Adopted).

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ASTM A576	- Steel Bars, Carbon, Hot-Wrought, Special Quality Standard Specification for (DoD Adopted).
ASTM A675/A675M	- Steel Bars, Carbon, Hot-Wrought, Special Quality, Mechanical Properties, Standard Specification for (DoD Adopted).
ASTM B221	- Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes, Standard Specification for (DoD Adopted).
ASTM B241	- Aluminum and Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube, Standard Specification for (DoD Adopted).
ASTM B633	- Electrodeposited Coatings of Zinc on Iron and Steel, Standard Specification for (DoD Adopted).

(Application for copies should be addressed to the American Society for Testing and Materials, 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959.)

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI/AWS A5.10	- Specification for Bare Aluminum and Aluminum Alloy Welding Electrodes and Rods.
ANSI/ASME Y14.5	- Dimensioning and Tolerancing.
ANSI/AHBA A135.4	- Basic Hardboard.

(Application for copies should be addressed to the American National Standards Institute, 11 West 42nd Street, New York, NY 10036.)

A.3 REQUIREMENTS

A.3.1 Vehicle closure. The vehicle closure (see figure 6) shall consist of a frame assembly (see figure 7) and a cover assembly (see figure 30). The lower frame shall be assembled and installed on the vehicle, then the upper frame shall be assembled and attached to the lower frame, and finally, the cover shall be installed and attached to the frame assembly.

A.3.2 Fabrication of the frame sections. Frame sections shall be fabricated in accordance with figures 9 through 29. When permitted by optional material callouts, frame sections may be fabricated from either steel or aluminum. However, when mating a steel with an aluminum part, bare steel contact against aluminum shall not be permitted.

APPENDIX A

A.3.3 Fabrication of cover. Cover shall be fabricated in accordance with figures 30 through 44.

A.3.4 Assembly and installation.

A.3.4.1 Attitude of fasteners. Except for the 8 screws used to attach frame sections (see figures 17, 18, and 19) to connector (see figure 20), all screws in the frame assembly shall be installed with the threaded ends pointing down or toward center of the assembly.

A.3.4.2 Assembly of lower frame. Lower frame shall be assembled as follows:

a. Form 2 angle assemblies by joining 3 frame sections, figure 29, using 2 connectors, figure 27, 12 screws, figure 8-2, and 12 nuts, figure 8-5, for each assembly (see detail D, figure 9).
b. Form an angle assembly by joining 1 frame section, figure 28-1, and 1 frame section, figure 28-2, using 1 connector, figure 20, 6 screws, figure 8-2, and 6 nuts, figure 8-5 (see detail C, figure 9).
c. Form an angle assembly by joining 1 frame section, figure 12-1, and 1 frame section, figure 12-2, using connector, figure 20, 6 screws, figure 8-2, and 6 nuts, figure 8-5. Next attach 1 frame section, figure 10-1, and 1 frame section, figure 10-2, to each end of this angle assembly using the mounting holes near the center of frame sections with 4 screws, figure 8-2, and 4 nuts, figure 8-5 (see figure 9, view BB).
d. Join the 4 angle assemblies formed in steps a, b, and c at corners using 4 connectors, figure 11, 16 screws, figure 8-2, and 16 nuts, figure 8-5 (see figure 9).
e. Form an angle assembly by joining 1 frame section, figure 13, and 1 frame section, figure 14, using 1 connector, figure 20, 6 screws, figure 8-2, and 6 nuts, figure 8-5. Attach this angle assembly to assembly formed in step A.3.4.2 (d), using 2 supports, figure 15, 8 screws, figure 8-2, and 8 nuts, figure 8-5 (see figure 9). This completes the lower frame assembly.

A.3.4.3 Installation of lower frame on vehicle. Lower frame shall be installed as follows:

a. Lower the trim vane.
b. Raise and lock the ramp.
c. Close all hatches.

d. Lift the lower frame assembly on the vehicle so that the slots in frame sections, figure 10, line up with holes in existing bracket on rear of vehicle (see figure 6, sheet 2, detail C). Attach lower frame to bracket using 2 screws, figure 8-10, 2 washers, figure 8-11, and 2 nuts, figure 8-12. Next attach 2 supports, figure 43, to support, figure 15, using 2 screws, figure 8-7, 2 washers, figure 8-8, and 2 nuts, figure 8-9. Remove the 2 track shroud bolts which will match holes in the supports. Place 3 washers, figure 8-11, between shrouds using existing 2 washers and 2 screws (see section AA, figure 6, sheet 2).

A.3.4.4 Assembly of upper frame. Upper frame shall be assembled as follows:

a. Form an angle assembly by joining 1 frame section, figure 17-1, 1 frame section, figure 18, and 1 frame section, figure 17-2, using 2 connectors, figure 20, 12 screws, figure 8-2, and 12 nuts, figure 8-5 (see A.3.4.1 for position of screws).
b. Form an angle assembly by joining 1 frame section, figure 17-2, 1 frame section, figure 18, and 1 frame section, figure 19, using 2 connectors, figure 20, 12 screws, figure 8-2, and 12 nuts, figure 8-5 (see A.3.4.1 for position of screws).
c. Form 2 angle assemblies by joining 1 frame section, figure 12-2, using 1 connector, figure 20, 6 screws, figure 8-2, and 6 nuts, figure 8-5, for each assembly.
d. Join the 4 angle assemblies formed in steps a, b, and c at corners using 4 connectors, figure 11, 16 screws, figure 8-2, and 16 nuts, figure 8-5 (see figure 9).
e. Form an angle assembly by joining 1 frame section, figure 13, and 1 frame section, figure 14, using 1 connector, figure 20, 6 screws, figure 8-2, and 6 nuts, figure 8-5. Attach this angle assembly to assembly formed in step A.3.4.2 (d), using 2 supports, figure 15, 8 screws, figure 8-2, and 8 nuts, figure 8-5 (see figure 9). This completes the lower frame assembly.
f. Attach the tube assembly to inside of frame assembly formed in step (d) using 14 screws, figure 8-2, and 14 nuts, figure 8-5.
g. Position upper frame assembly, step (f), so that cutout in frame section, figure 19, will be located at the right rear corner of the vehicle. Lift assembly onto vehicle and attach to frame sections, figure 10, using 4 screws, figure 8-2, and 4 nuts, figure 8-5. Then attach 1 frame section, figure 16-1, and frame section, figure 16-2, between upper and lower frame using 8 screws, figure 8-2, and 8 nuts, figure 8-5.
h. Attach 26 fasteners, figure 8-6, to lower frame as shown on figure 6, using 26 screws, figure 8-1, and 26 nuts, figure 8-4. This completes the frame assembly.

APPENDIX A

A.3.5 Installation of cover. Cover shall be installed as follows:

a. Unfold the cover, figure 30, and install it over the frame assembly with vent covers and access openings on the outside.
b. Fold the cover flaps and insert 10 rods, figure 44 (see figure 6, sheet 2). Clamp rods using 26 fasteners, figure 8-6, which were attached in step A.3.4.4 (h) (see detail B, figure 6, sheet 2).
c. Lower cover flaps.
d. Raise trim vane. This completes closure installation.

A.3.5.1 Removal of cover. Cover shall be removed as follows:

a. Lower the trim vane.
b. Fold up cover flaps and release 26 rod fasteners.
c. Withdraw 10 rods from cover.
d. Remove cover from frame.

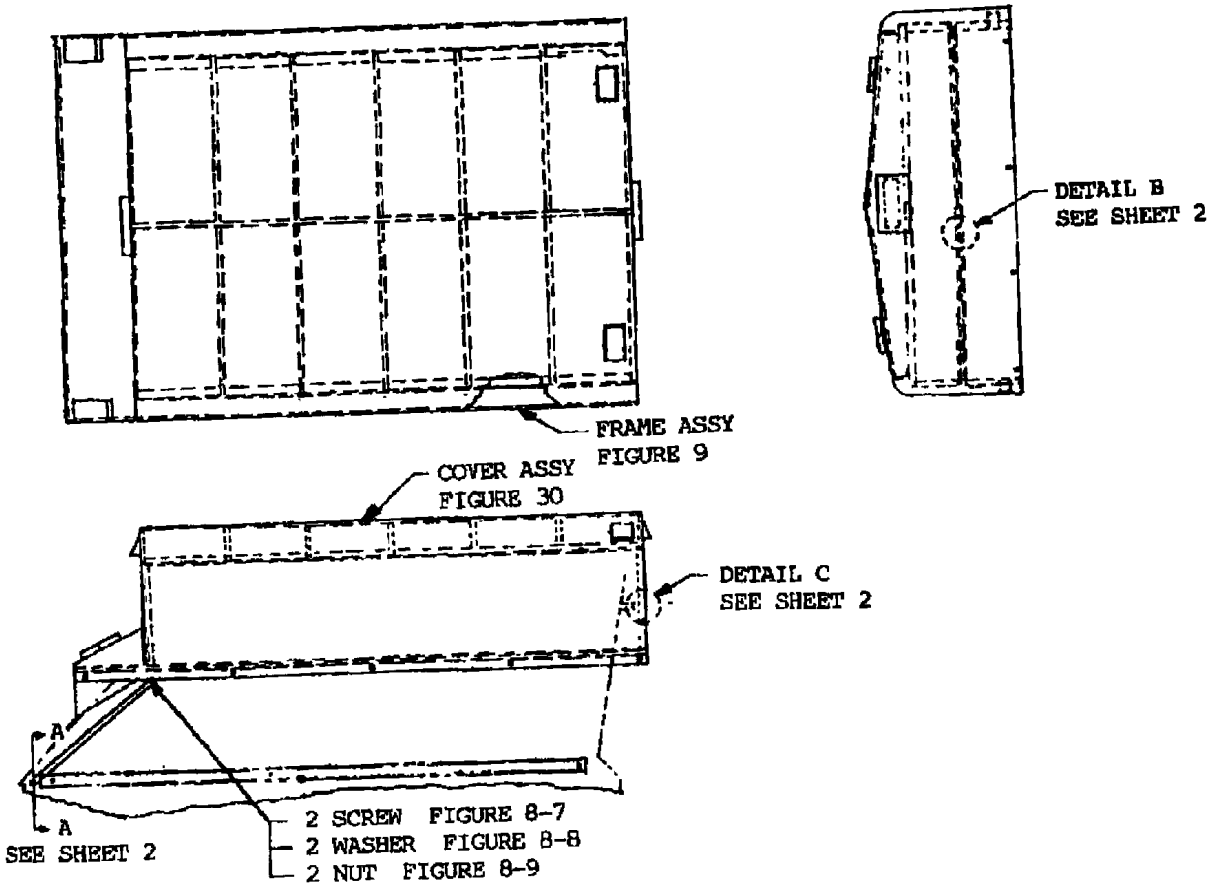
A.3.5.2 Removal of frame. Frame shall be removed as follows:

a. Remove 9 screws at top of angles which hold the upper and lower frame together and remove upper frame.
b. Remove 2 screws and 8 washers which attach the frame tiedown supports to the track shroud. Replace the 2 screws and 2 of the washers in the track shroud.
c. Remove the 2 screws and nuts which attach the tiedown supports to the frame.
d. Remove the 2 screws and nuts which attach lower frame assembly to bracket on rear of vehicle.
e. Remove lower frame.
f. Raise trim vane.

A.3.5.3 Disassembly of frame. Frame shall be disassembled by removing screws and nuts from all joints and connectors.

A.3.6 Preservation, packaging, and packing. The disassembled vehicle closure shall be preserved, packaged and packed in accordance with packaging data sheet 10918220.

APPENDIX A



SHEET 1 OF 2

FIGURE 6. Vehicle closure kit.

APPENDIX A

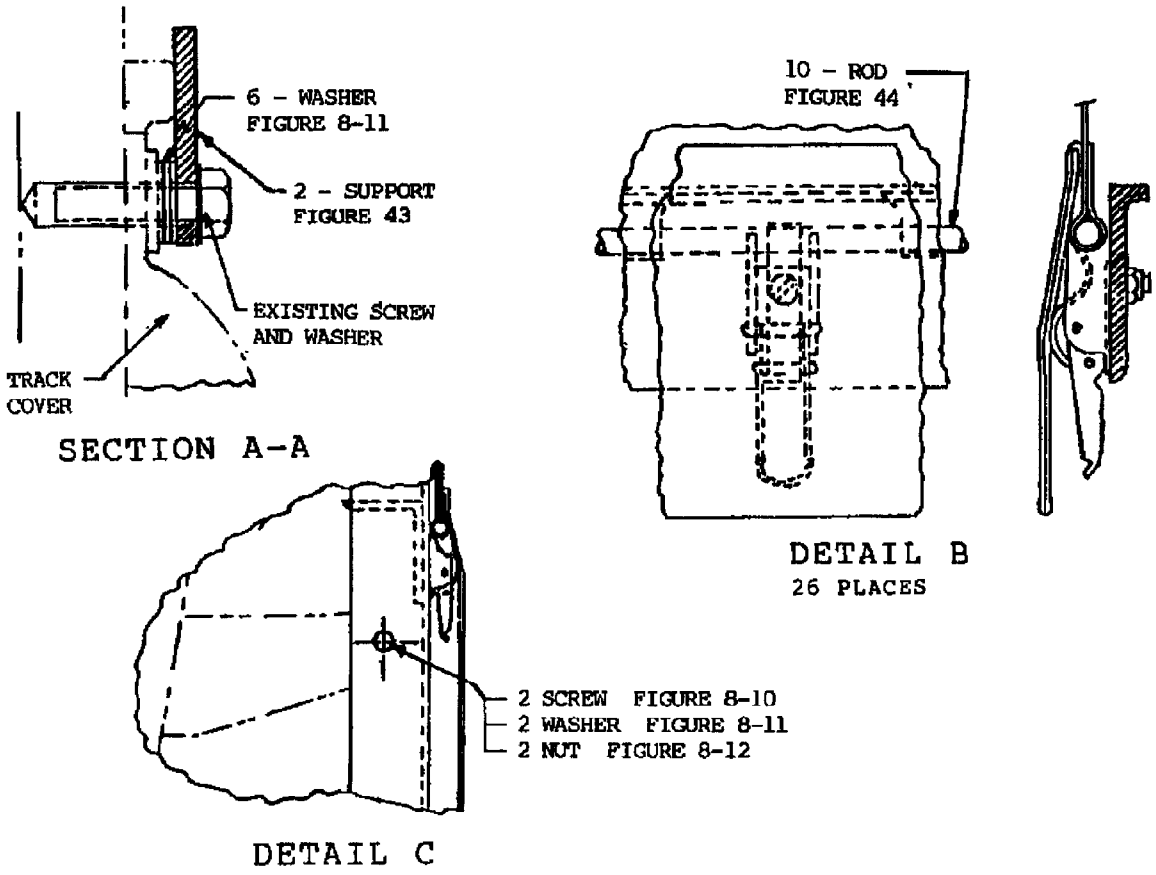


FIGURE 6. Vehicle closure kit - Continued.

APPENDIX A

FIGURE NO.	DESCRIPTION	QTY REQ'D
6	Vehicle Closure Kit Consisting of:	1
43	Support	2
44	Rod	10
9	Frame Assembly Consisting of:	1
10-1	Angle, Frame Section	1
10-2	Angle, Frame Section	1
11	Connector, Lower Frame	4
12-1	Angle, Frame Section	3
12-2	Angle, Frame Section	3
13	Angle, Frame Section	1
14	Angle, Frame Section	1
15	Frame Support	2
16-1	Angle Frame Section	1
16-2	Angle Frame Section	1
17-1	Angle Frame Section	1
17-2	Angle Frame Section	2
18	Angle Upper Frame	1
19	Angle Upper Frame	1
20	Connector, Frame	2
21	Tube Metal	14
22-1	Tube Center Top	2
22-2	Tube Center Top	1
23	Connector Tube	7
24	Connector Tube	2
25	Tubing Section End Top	2
26	Tubing Section Center Top	1
27	Connector, Lower Frame	4
28-1	Angle Lower Front.	1
28-2	Angle Lower Front	1

SHEET 1 OF 2

FIGURE 7. Parts list-vehicle closure kit.

APPENDIX A

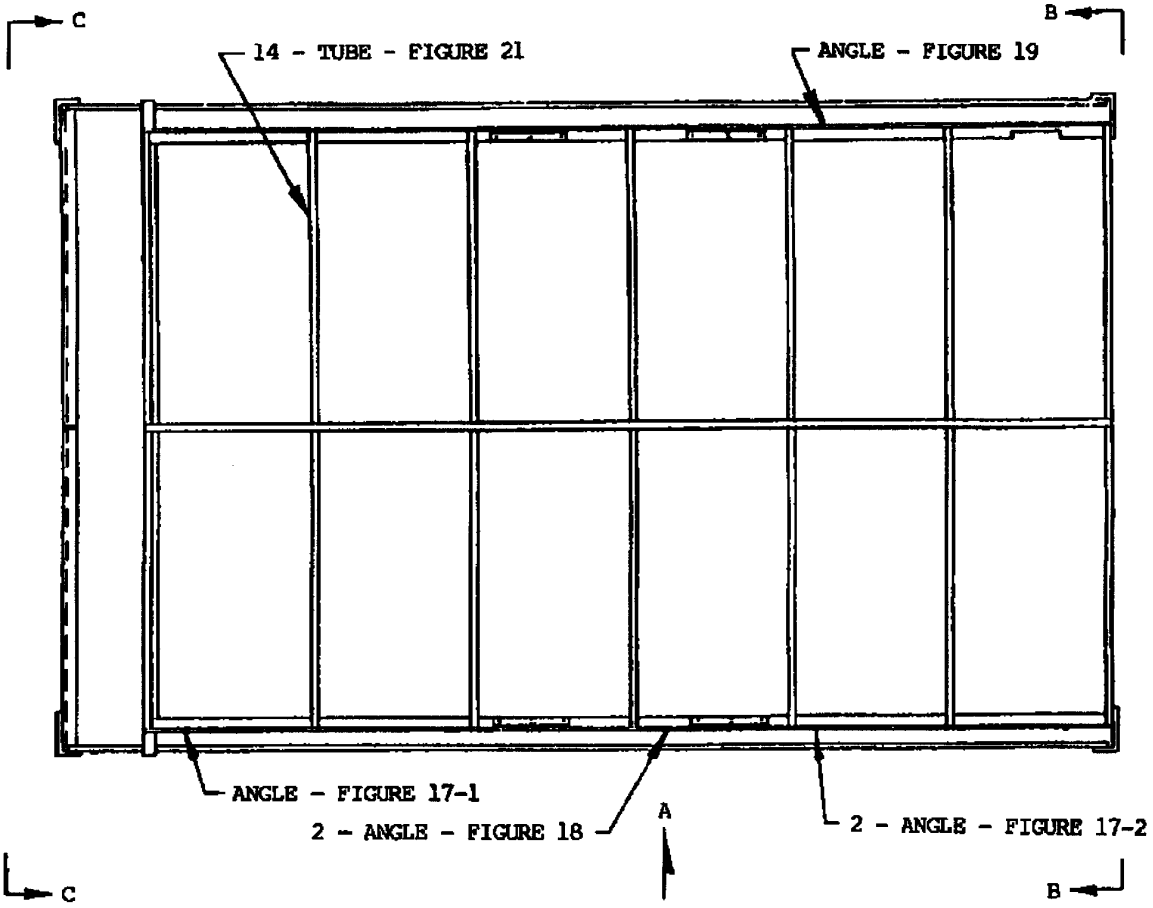
FIGURE NO.	DESCRIPTION	QTY REQ'D
29	Angle Lower Frame	6
30	Cover Vehicle Closure Consisting of:	
31	Cover, Vehicle Closure	1
32-1	Flap, Cover	1
32-2	Flap, Cover	1
33-1	Flap, Cover	1
33-2	Flap, Cover	1
34	Reinforcing Strip	3
35	Vent, Cover	2
36	Cover, Vent	2
37	Stiffener, Vent Cover	2
38	Access, Opening	4
39	Flap, Extension	2
40	Access, Opening Assy	4
41	Insert, Access Opening	4
42	Access, Cover Opening	4

FIGURE 7. Parts list-vehicle closure kit - Continued.

APPENDIX A

FIGURE NO.	QTY REQD.	PART NUMBER	DESCRIPTION
		FRAME ASSEMBLY	
8-1	26	MS35207-65	Screw, Machine, Cross-Recessed Pan Hd, 10-32, UNF-2A x 3/4
8-2	140	MS90725-7	Screw, Cap, Hex Hd, 1/4-20 UNC-2A x 7/8
8-3	18	MS90725-12	Screw, Cap, Hex Hd, 1/4-20, UNC-2A x 1 ½
8-4	26	MS21044N3	Nut, Self-Locking, 10-32NF
8-5	158	MS51922-1	Nut, Self-Locking, 1/4-20, UNC-2B
8-6	26	10922144	Fastener
		INSTALLATION	
8-7	2	MS90725-62	Screw, Hex Hd, 3/8-16, UNC-2Ax 1 1/4
8-8	2	MS27183-14	Washer 3/8 DIA.
8-9	2	MS51922-17	Nut, Self-Locking, 3/8-16, UNC-2B
8-10	2	MS90726-114	Screw, Hex Hd, ½-20, UNF-2A x 1 3/4
8-11	8	MS27183-18	Washer, ½ DIA.
8-12	2	MS21044N3	Nut, Self-Locking, ½-20 UNF-3B
		COVER	
8-13	16	116263	Fasteners, Turn Button Type
8-14	16	114838	Washer
8-15	16	116268	Eyelet
8-16	16	116267	Washer
8-17	18	7392987	Grommet
8-18	18	7392993	Washer
8-19	4	10906339	Tip, Rubber, Size 15, A-A-30081

FIGURE 8. Hardware list.



SHEET 1 OF 6

FIGURE 9. Vehicle closure frame assembly.

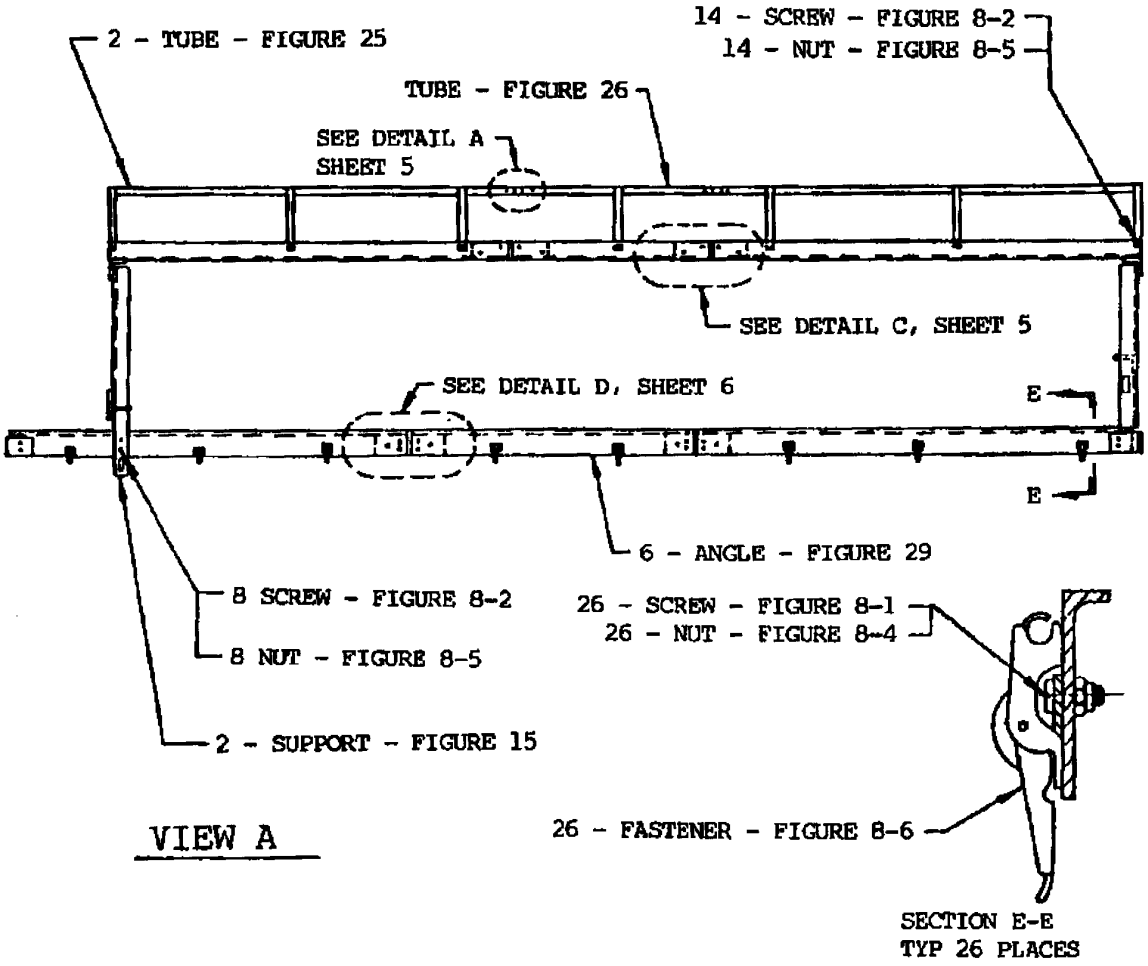


FIGURE 9. Vehicle closure frame assembly - Continued.

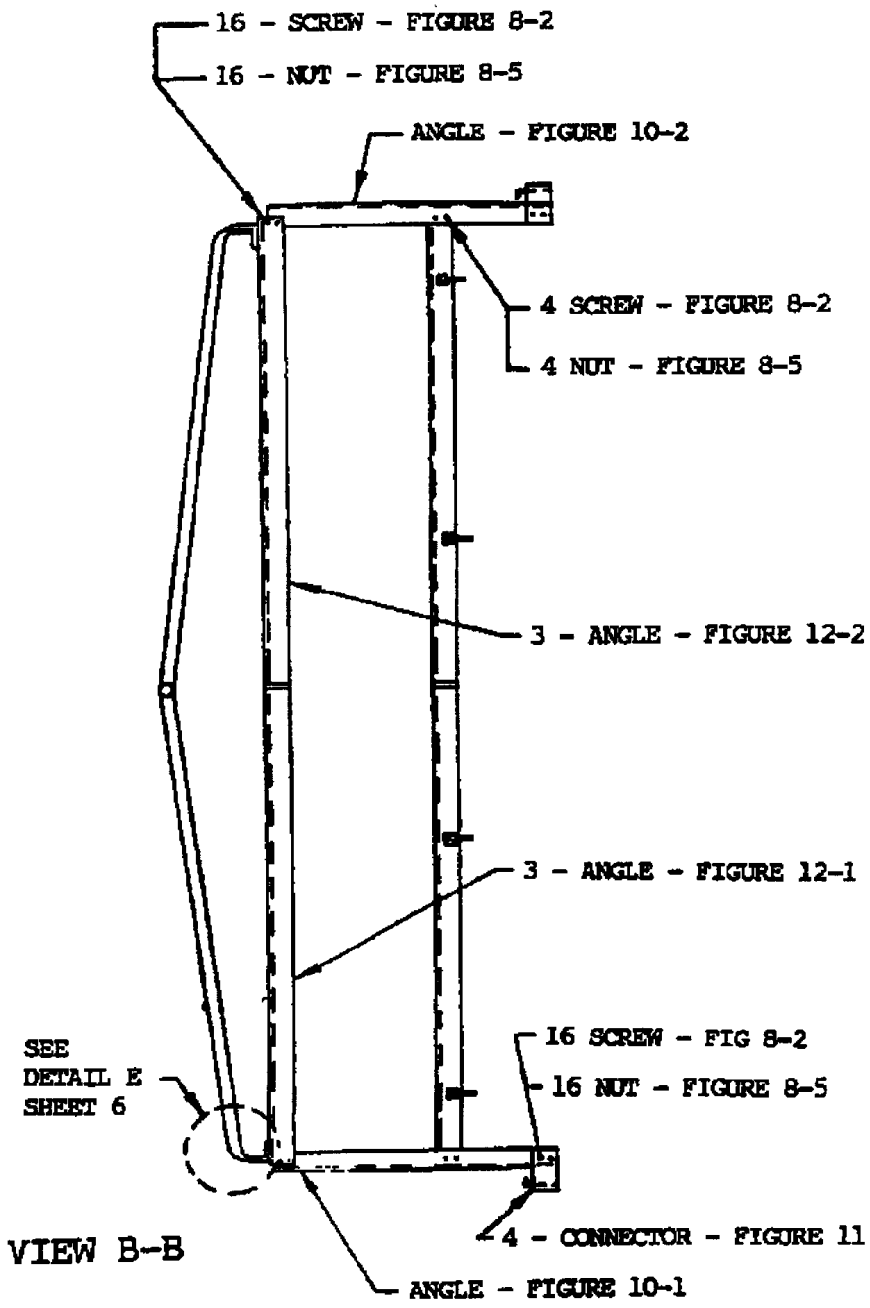


FIGURE 9. Vehicle closure frame assembly - Continued.

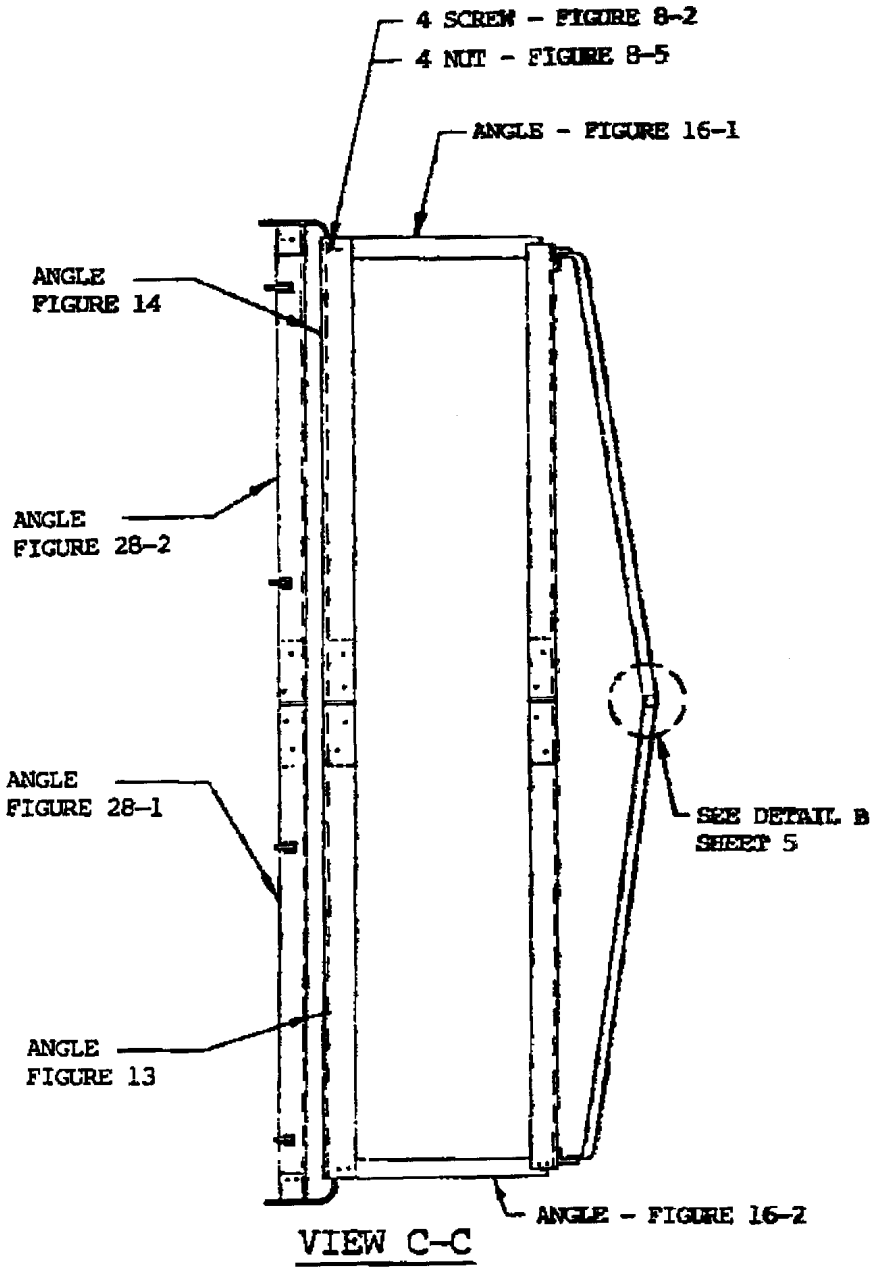


FIGURE 9. Vehicle closure frame assembly - Continued.

APPENDIX A

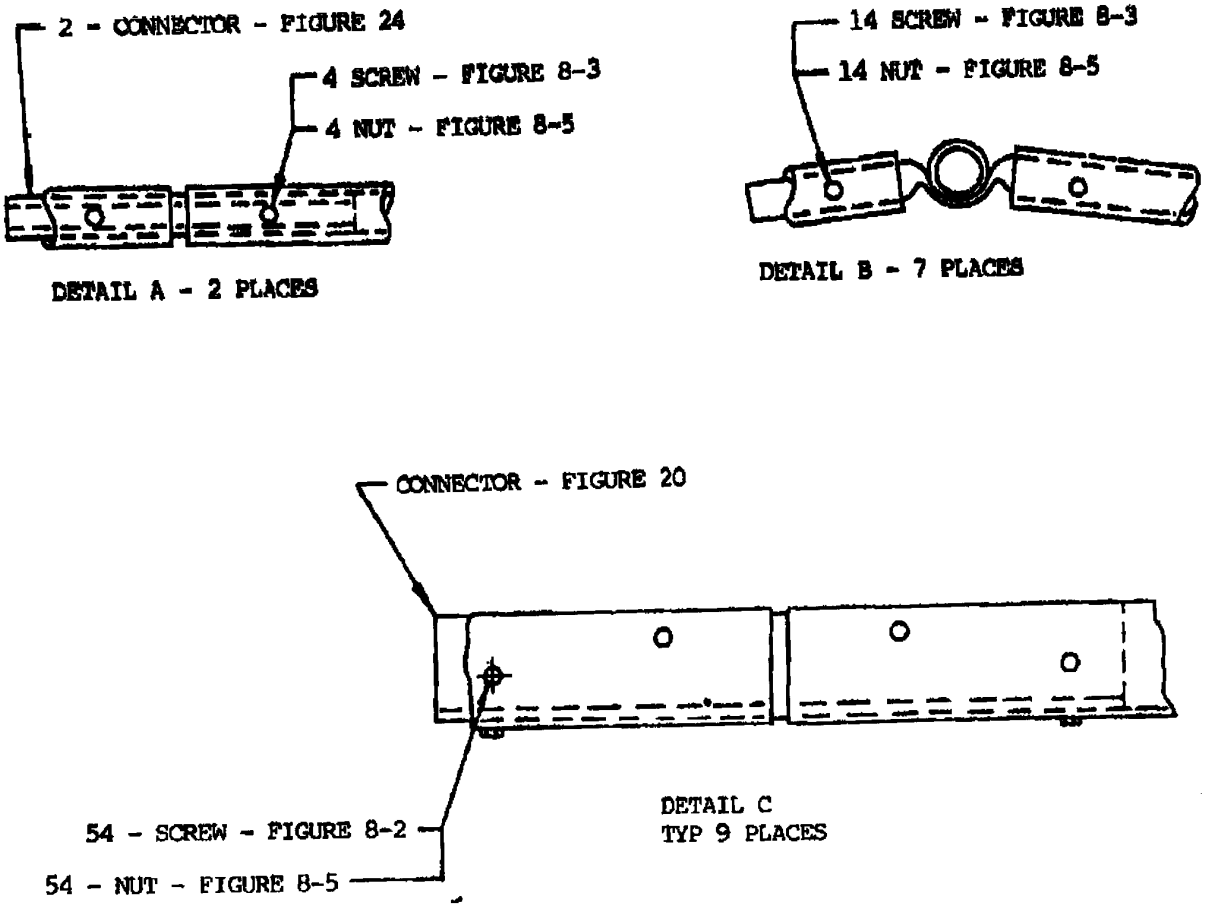
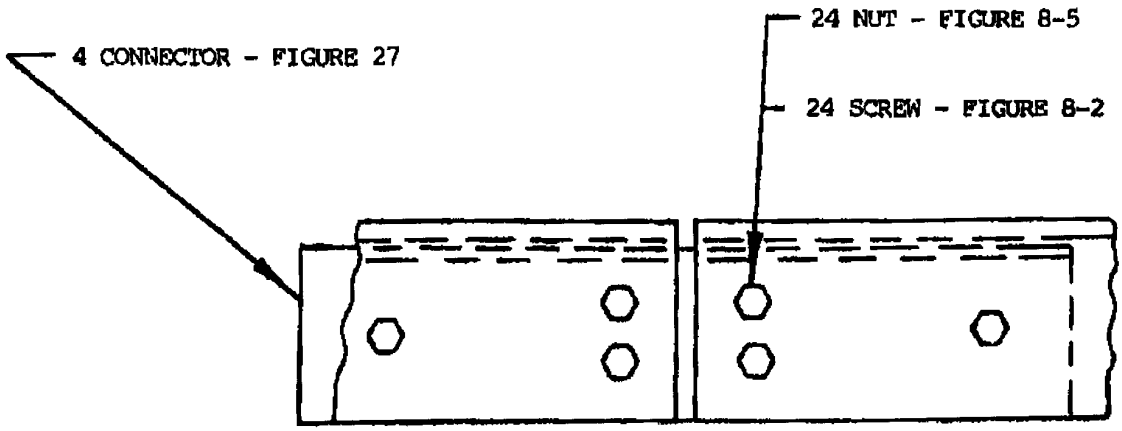
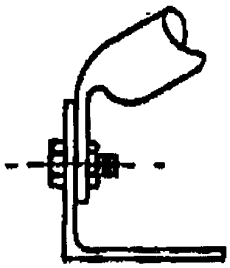


FIGURE 9. Vehicle closure frame assembly - Continued.



DETAIL D - 4 PLACES



DETAIL E - TYP 14 PLACES

FIGURE 9. Vehicle closure frame assembly - Continued.

APPENDIX A

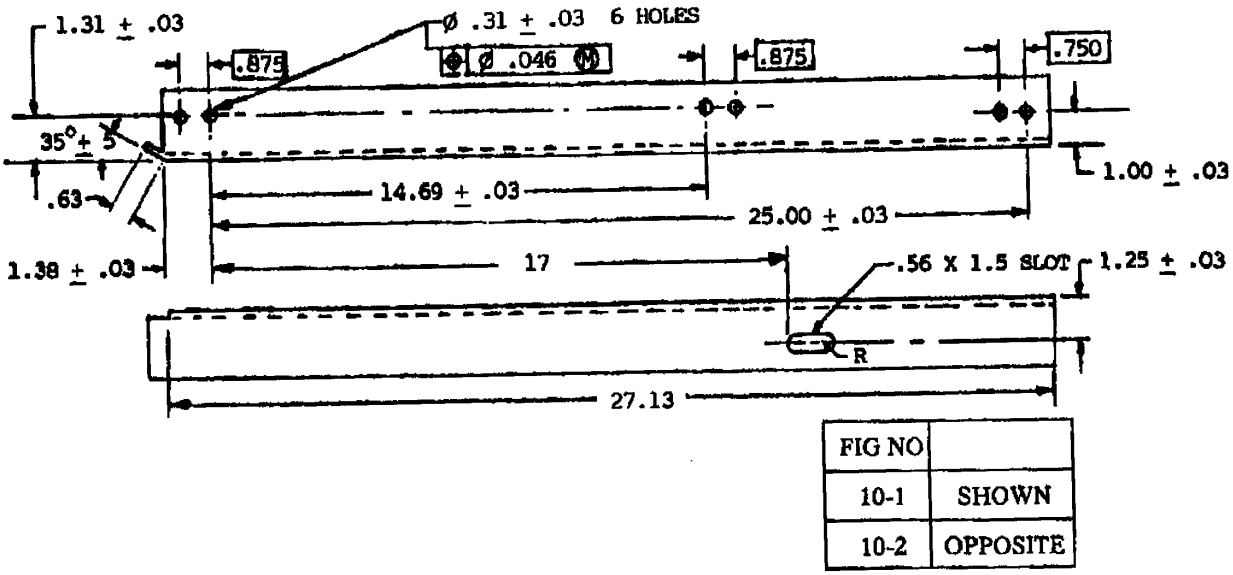


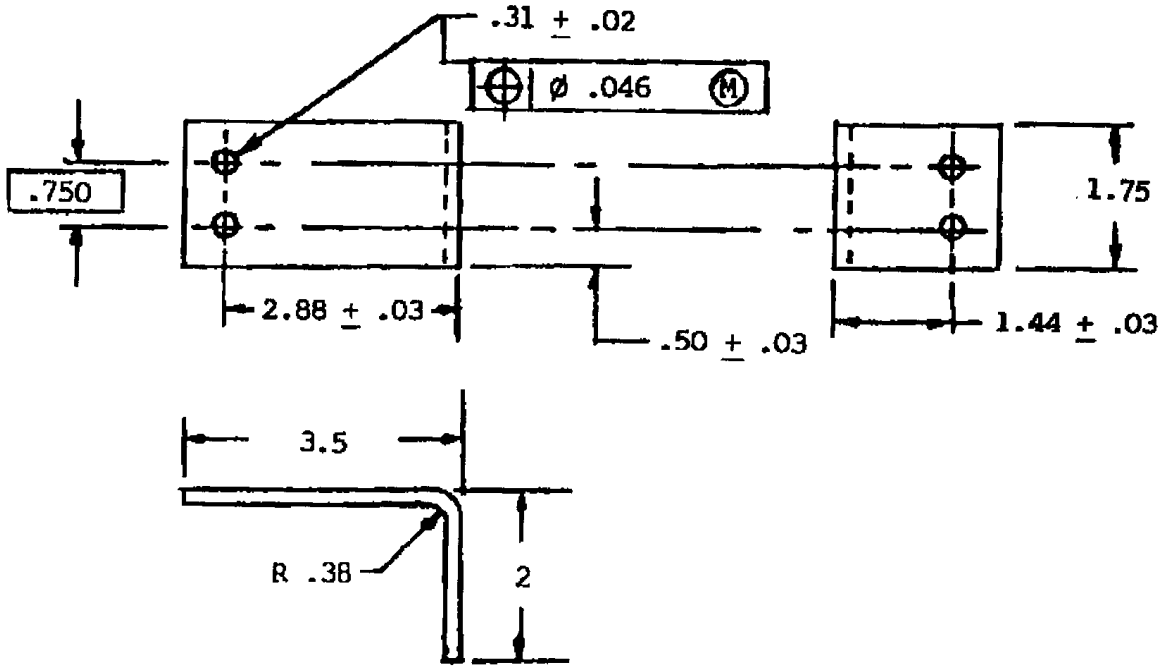
FIG NO	
10-1	SHOWN
10-2	OPPOSITE

NOTES:

1. Material: Aluminum, 6061-T6, ASTM B221 or ASTM B241, or
   Aluminum, 6061-T6, QQ-A-225/8, or
   Aluminum, 5083-H111, ASTM B221 or ASTM B241,
   2.000 x 2.000 x .188 in. angle.
2. Optional material: Steel, carbon, ASTM A36/A36M, 2.000 x 2.000 x .125 in. angle.
3. Finish for steel only:
   Clean per method II or III, treat per type I or III, TT-C-490.
   Apply primer, TT-P-664 or MIL-P-53030, 0.75 to 1.25 mils thk and apply enamel, olive drab, CL A, comp opt, TT-E-529, 1.25 to 1.75 mils thk or
   Apply enamel, olive drab, type opt, comp opt, MIL-E-52891, 2.00 to 2.50 mils thk.
4. Dim. in inches, tol. ±.06 in., unless otherwise specified.
5. Interpret dim. And tol. per ANSI/ASME Y14.5M.

FIGURE 10. Angle, frame section.

APPENDIX A

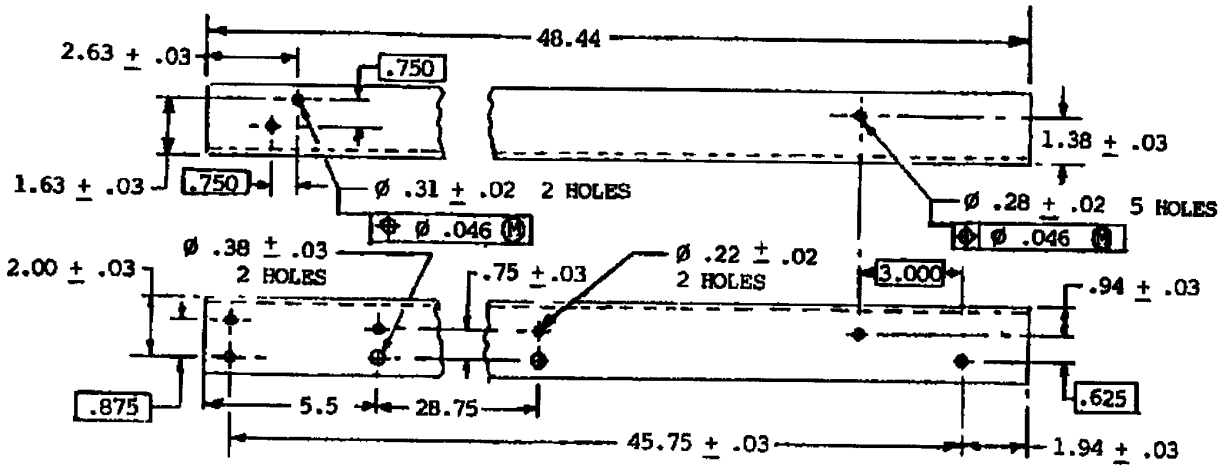


NOTES:

1. Material: Carbon steel, QQ-S-698, .180 in. thick sheet or strip.
2. Finish:
   Zinc plate, ASTM A123 or ASTM B633, .0015 in. minimum.
3. Dim. in inches, tol. ±.06 in., unless otherwise specified.
4. Interpret dim. and tol. per ANSI/ASME Y14.5M.

FIGURE 11. Connector, lower frame.

APPENDIX A

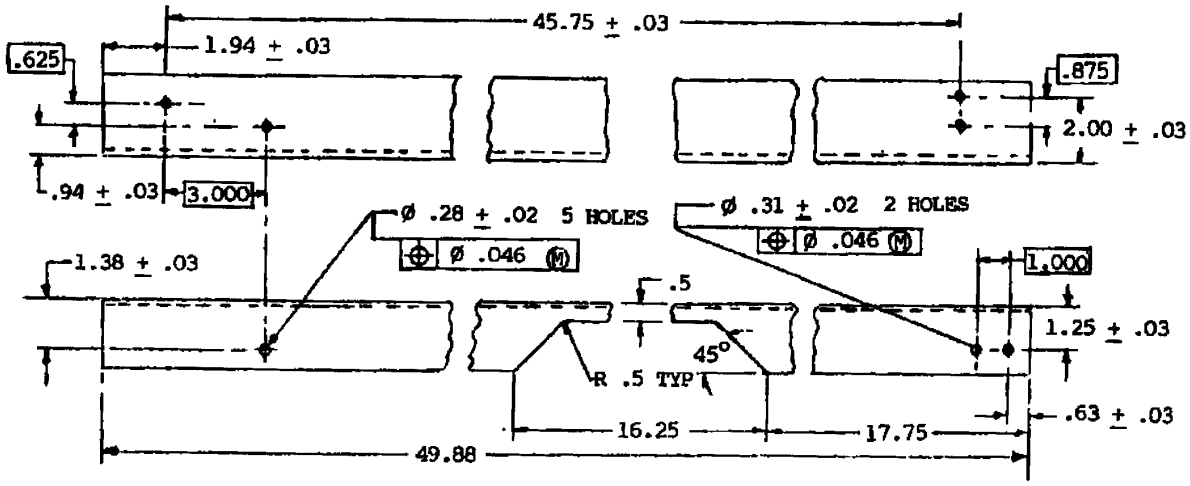


NOTES:

1. Material: Aluminum, 6061-T6, ASTM B221 or ASTM B241, or aluminum, 6061-T6, QQ-A-225/8, or aluminum, 5083-H111, ASTM B221 or ASTM B241, 2.500 x 2.000 x .188 in. angle.
2. Optional material: Steel, carbon, ASTM A36/A36M, 2.500 x 2.000 x .125 in. angle.
3. Finish for steel only:
   Clean per method II or III, treat per type I or III, TT-C-490.
   Apply primer, TT-P-664 or MIL-P-53030, 0.75 to 1.25 mils thk and apply enamel, olive drab, CL A, comp opt, TT-E-529, 1.25 to 1.75 mils thk or
   Apply enamel, olive drab, type opt, comp opt, MIL-E-52891, 2.00 to 2.50 mils thk.
4. Dim. in inches, tol. ±.06 in., unless otherwise specified.
5. Interpret dim. And tol. per ANSI/ASME Y14.5M.

FIGURE 12. Angle, frame section.

APPENDIX A

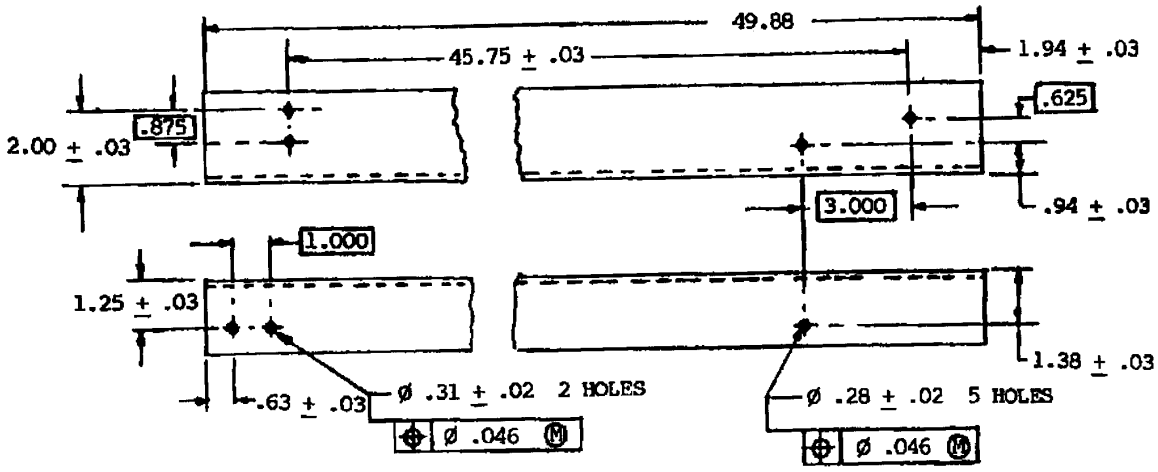


NOTES:

1. Material: Aluminum, 6061-T6, ASTM B221 or ASTM B241, or aluminum, 6061-T6, QQ-A-225/8, or aluminum, 5083-H111, ASTM B221 or ASTM B241, 2.500 x 2.000 x .188 in. angle.
2. Optional material: Steel, carbon, ASTM A36/A36M, 2.500 x 2.000 x .125 in. angle.
3. Finish for steel only:
   Clean per method II or III, treat per type I or III, TT-C-490.
   Apply primer, TT-P-664 or MIL-P-53030, 0.75 to 1.25 mils thk and apply enamel, olive drab, CL A, comp opt, TT-E-529, 1.25 to 1.75 mils thk or
   Apply enamel, olive drab, type opt, comp opt, MIL-E-52891, 2.00 to 2.50 mils thk.
4. Dim. in inches, tol. ±.06 in., unless otherwise specified.
5. Interpret dim. And tol. per ANSI/ASME Y14.5M.

FIGURE 13. Angle, frame section.

APPENDIX A

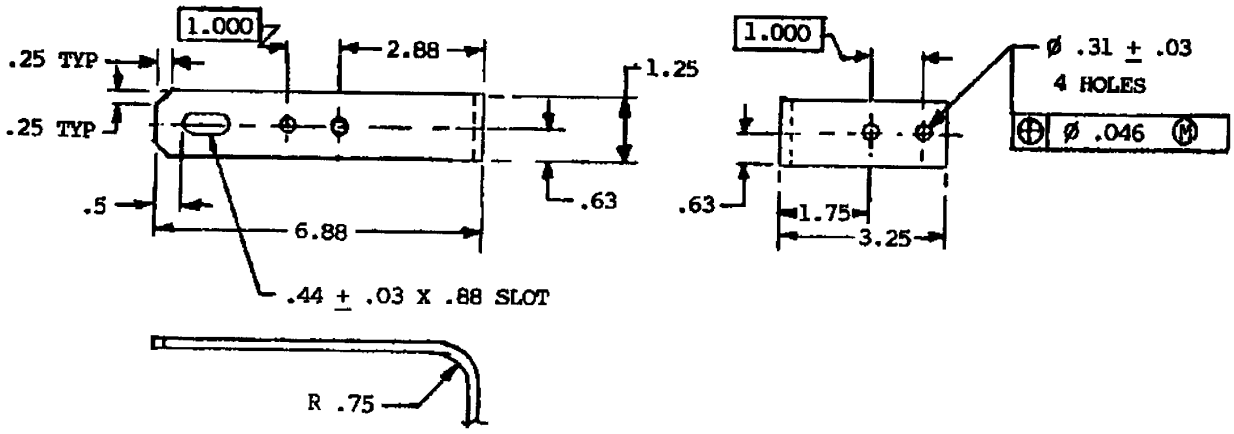


NOTES:

1. Material: Aluminum, 6061-T6, ASTM B221 or ASTM B241, or aluminum, 6061-T6, QQ-A-225/8, or aluminum, 5083-H111, ASTM B221 or ASTM B241, 2.500 x 2.000 x .188 in. angle.
2. Optional material: Steel, carbon, ASTM A36/A36M, 2.500 x 2.000 x .125 in. angle.
3. Finish for steel only:
   Clean per method II or III, treat per type I or III, TT-C-490.
   Apply primer, TT-P-664 or MIL-P-53030, 0.75 to 1.25 mils thk and apply enamel, olive drab, CL A, comp opt, TT-E-529, 1.25 to 1.75 mils thk or
   Apply enamel, olive drab, type opt, comp opt, MIL-E-52891, 2.00 to 2.50 mils thk.
4. Dim. in inches, tol. ±.06 in., unless otherwise specified.
5. Interpret dim. And tol. per ANSI/ASME Y14.5M.

FIGURE 14. Angle, frame section.

APPENDIX A

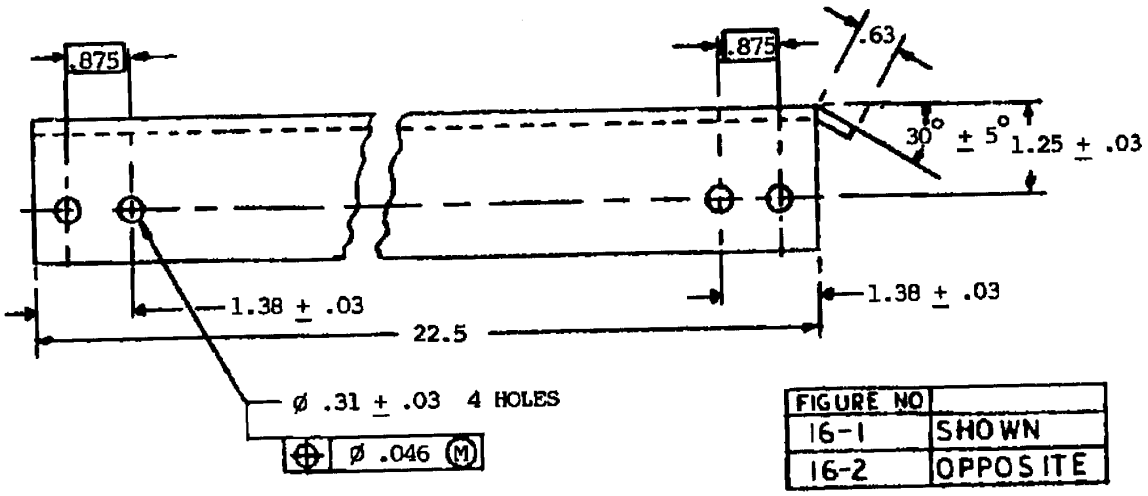


NOTES:

1. Material: Carbon steel, QQ-S-698, .120 in. thick sheet or strip.
2. Finish:
   Zinc plate, ASTM A123 or ASTM B633, .0015 in. minimum.
3. Dim. in inches, tol. ±.06 in., unless otherwise specified.
4. Interpret dim. and tol. per ANSI/ASME Y14.5M.

FIGURE 15. Frame support.

APPENDIX A

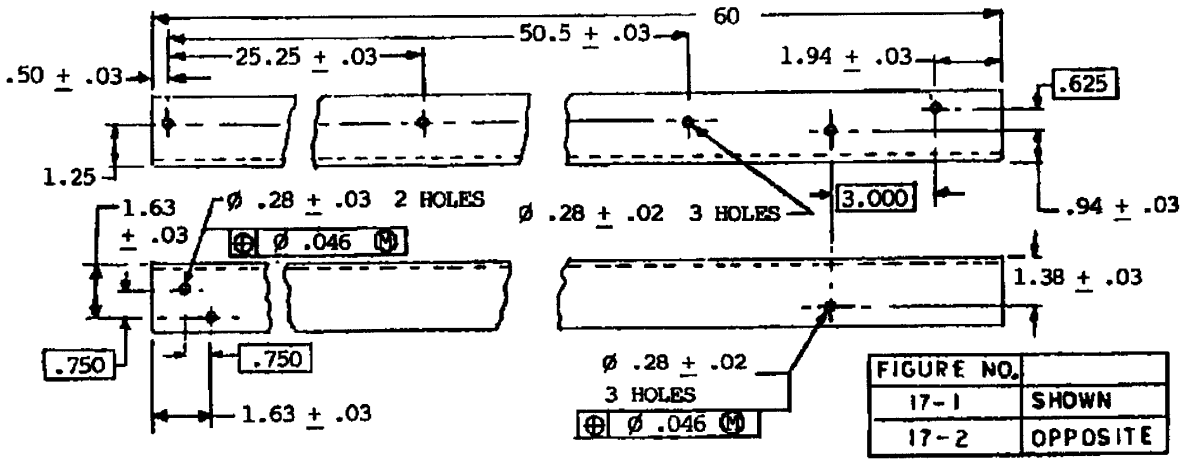


NOTES:

1. Material: Aluminum, 6061-T6, ASTM B221 or ASTM B241, or aluminum, 6061-T6, QQ-A-225/8, or aluminum, 5083-H111, ASTM B221 or ASTM B241, 2.000 x 2.000 x .188 in. angle.
2. Optional material: Steel, carbon, ASTM A36/A36M, 2.500 x 2.000 x .125 in. angle.
3. Finish for steel only:
   Clean per method II or III, treat per type I or III, TT-C-490.
   Apply primer, TT-P-664 or MIL-P-53030, 0.75 to 1.25 mils thk and apply enamel, olive drab, CL A, comp opt, TT-E-529, 1.25 to 1.75 mils thk or
   Apply enamel, olive drab, type opt, comp opt, MIL-E-52891, 2.00 to 2.50 mils thk.
4. Dim. in inches, tol. ±.06 in., unless otherwise specified.
5. Interpret dim. And tol. per ANSI/ASME Y14.5M.

FIGURE 16. Angle, frame section.

APPENDIX A

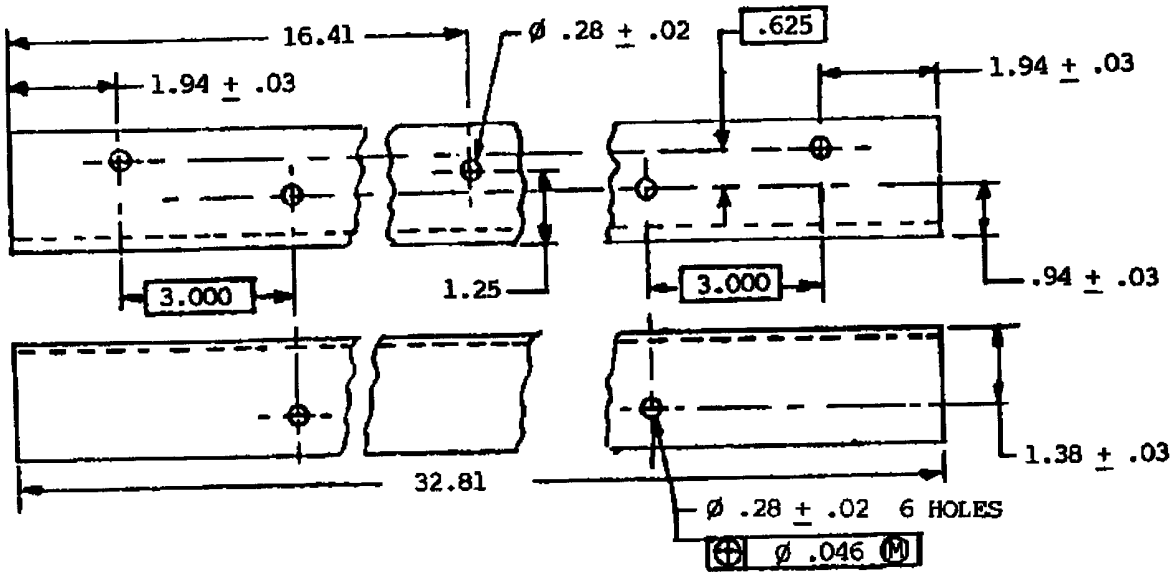


NOTES:

1. Material: Aluminum, 6061-T6, ASTM B221 or ASTM B241, or aluminum, 6061-T6, QQ-A-225/8, or aluminum, 5083-H111, ASTM B221 or ASTM B241, 2.500 x 2.000 x .188 in. angle.
2. Optional material: Steel, carbon, ASTM A36/A36M, 2.500 x 2.000 x .125 in. angle.
3. Finish for steel only:
   Clean per method II or III, treat per type I or III, TT-C-490.
   Apply primer, TT-P-664 or MIL-P-53030, 0.75 to 1.25 mils thk and apply enamel, olive drab, CL A, comp opt, TT-E-529, 1.25 to 1.75 mils thk or
   Apply enamel, olive drab, type opt, comp opt, MIL-E-52891, 2.00 to 2.50 mils thk.
4. Dim. in inches, tol. ±.06 in., unless otherwise specified.
5. Interpret dim. And tol. per ANSI/ASME Y14.5M.

FIGURE 17. Angle, upper frame.

APPENDIX A

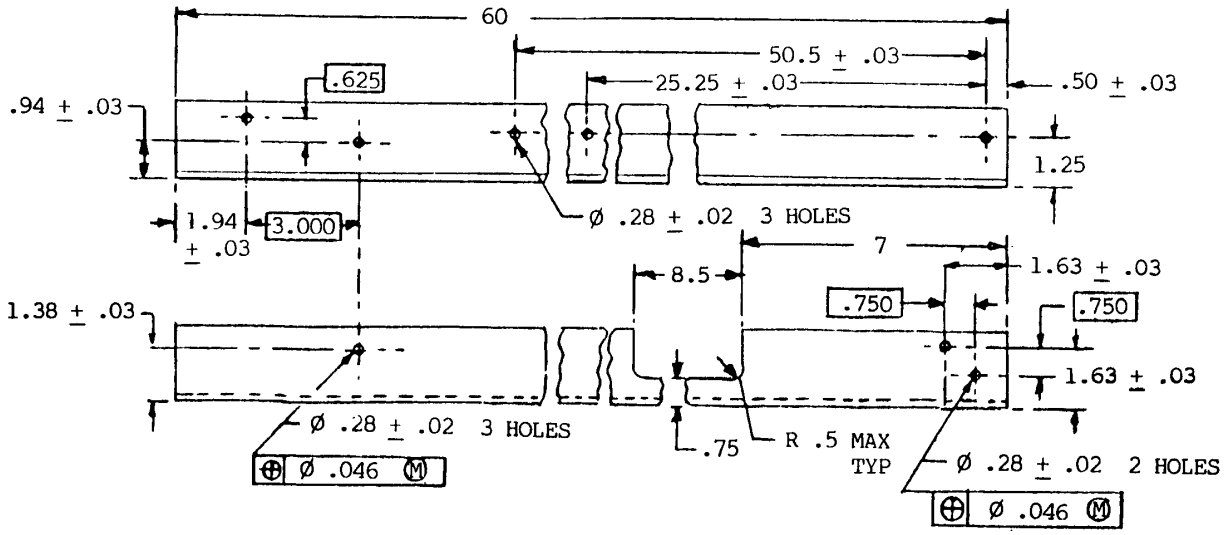


NOTES:

1. Material: Aluminum, 6061-T6, ASTM B221 or ASTM B241, or aluminum, 6061-T6, QQ-A-225/8, or aluminum, 5083-H111, ASTM B221 or ASTM B241, 2.500 x 2.000 x .188 in. angle.
2. Optional material: Steel, carbon, ASTM A36/A36M, 2.500 x 2.000 x .125 in. angle.
3. Finish for steel only:
   Clean per method II or III, treat per type I or III, TT-C-490.
   Apply primer, TT-P-664 or MIL-P-53030, 0.75 to 1.25 mils thk and apply enamel, olive drab, CL A, comp opt, TT-E-529, 1.25 to 1.75 mils thk or
   Apply enamel, olive drab, type opt, comp opt, MIL-E-52891, 2.00 to 2.50 mils thk.
4. Dim. in inches, tol. ±.06 in., unless otherwise specified.
5. Interpret dim. And tol. per ANSI/ASME Y14.5M.

FIGURE 18. Angle, upper frame.

APPENDIX A

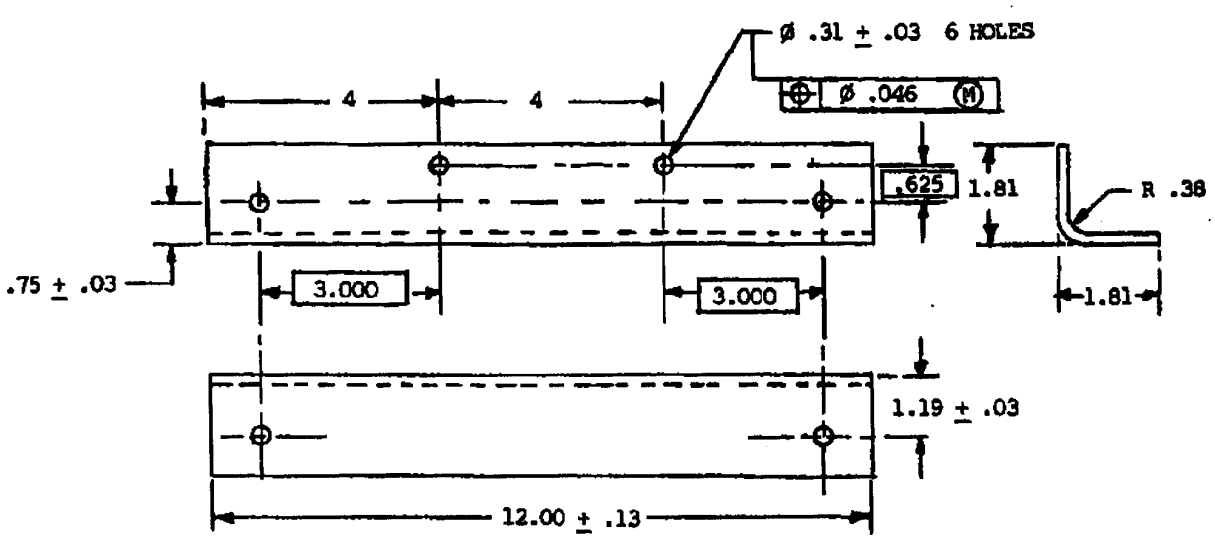


NOTES:

1. Material: Aluminum, 6061-T6, ASTM B221 or ASTM B241, or aluminum, 6061-T6, QQ-A-225/8, or aluminum, 5083-H111, ASTM B221 or ASTM B241, 2.000 x 2.000 x .188 in. angle.
2. Optional material: Steel, carbon, ASTM A36/A36M, 2.000 x 2.000 x .125 in. angle.
3. Finish for steel only:
   Clean per method II or III, treat per type I or III, TT-C-490.
   Apply primer, TT-P-664 or MIL-P-53030, 0.75 to 1.25 mils thk and apply enamel, olive drab, CL A, comp opt, TT-E-529, 1.25 to 1.75 mils thk or
   Apply enamel, olive drab, type opt, comp opt, MIL-E-52891, 2.00 to 2.50 mils thk.
4. Dim. in inches, tol. ±.06 in., unless otherwise specified.
5. Interpret dim. And tol. per ANSI/ASME Y14.5M.

FIGURE 19. Angle, upper frame.

APPENDIX A

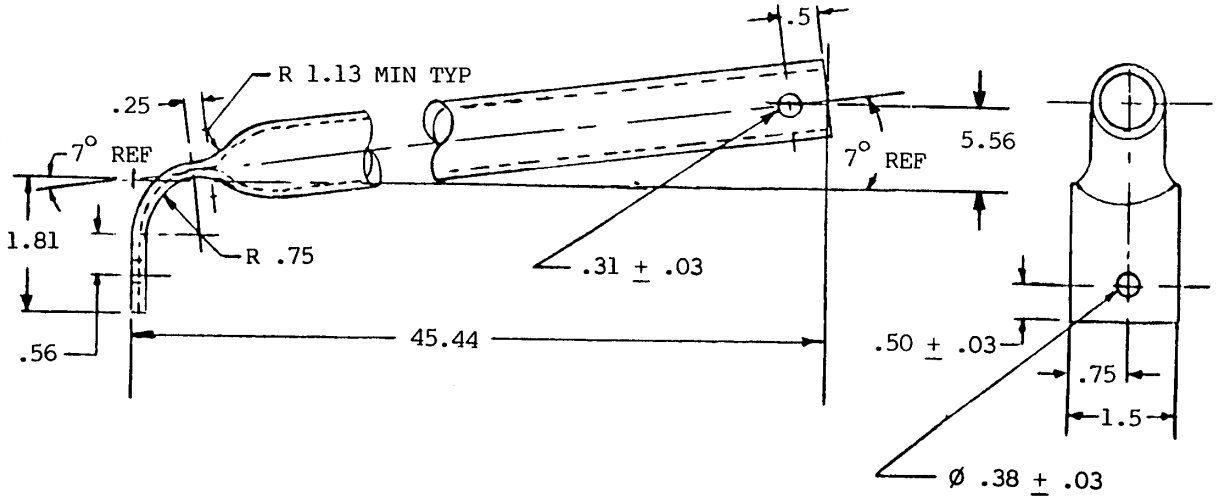


NOTES:

1. Material: Carbon steel, QQ-S-698, .120 in. thick sheet or strip.
2. Finish:
   Zinc plate, ASTM A123 or ASTM B633, .0015 in. minimum.
3. Dim. in inches, tol. ±.06 in., unless otherwise specified.
4. Interpret dim. and tol. per ANSI/ASME Y14.5M.

FIGURE 20. Connector, frame.

APPENDIX A



NOTES:

1. Material: Tube aluminum, 5086-0, Type I, WW-T-700/5 or tube aluminum, 6061-0, WW-T-700/6, 1.000 in. OD x .120 in. wall.
2. Optional material: Tube steel, carbon, type opt, MT 1010 to MTX 1020, 1.000 in. OD x .065 in. wall.
3. Finish for steel only:
   Clean per method II or III, treat per type I or III, TT-C-490.
   Apply primer, TT-P-664 or MIL-P-53030, 0.75 to 1.25 mils thk and apply enamel, olive drab, CL A, comp opt, TT-E-529, 1.25 to 1.75 mils thk or
   Apply enamel, olive drab, type opt, comp opt, MIL-E-52891, 2.00 to 2.50 mils thk.
4. Dim. in inches, tol. ±.06 in., unless otherwise specified.
5. Interpret dim. And tol. per ANSI/ASME Y14.5M.

FIGURE 21. Tube, metal.

APPENDIX A

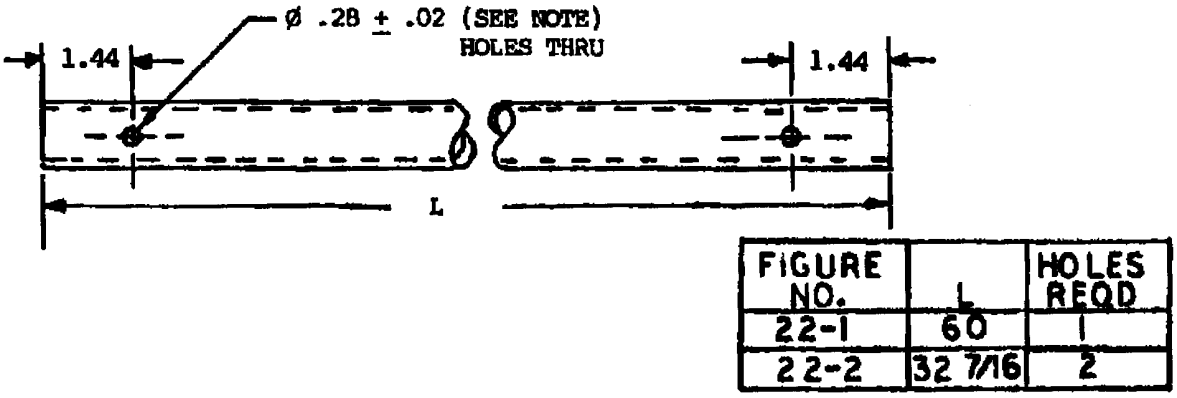


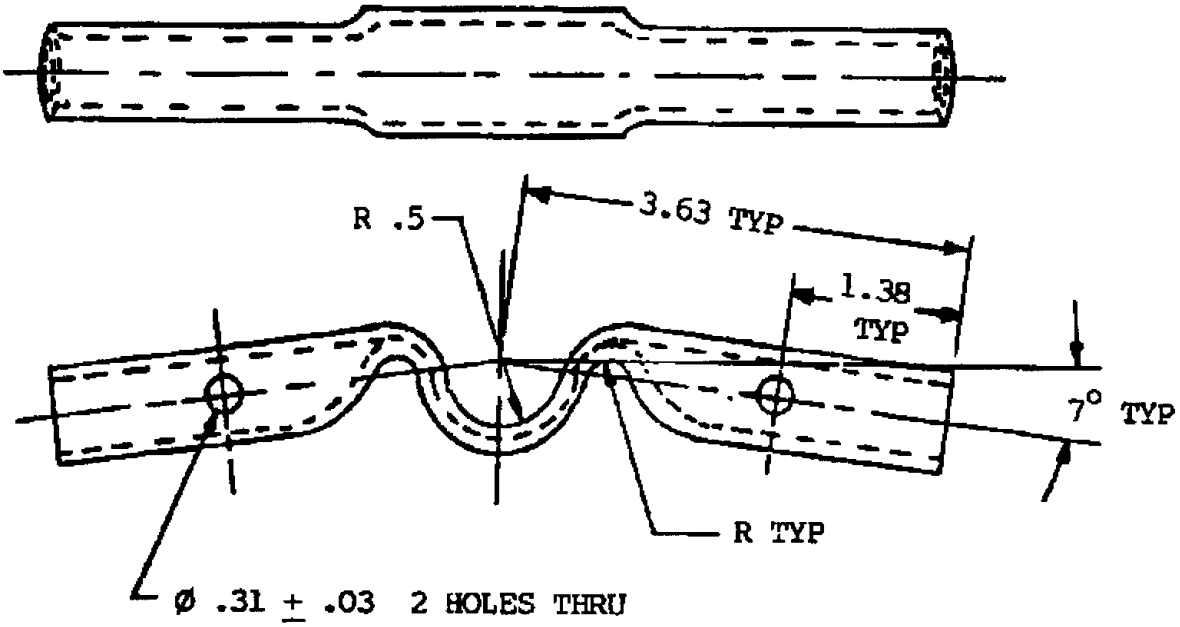
FIGURE NO.	L	HOLES REQD
22-1	60	1
22-2	32 7/16	2

NOTES:

1. Material: Tube aluminum, 5086-H32, Type I, WW-T-700/5 or tube, aluminum, 6061-T6, Type I, WW-T-700/6, .785 in. I.D. x .120 in. wall.
2. Optional material: Tube, steel, carbon MT 1010 to MTX 1020, cond opt, 1.000 in. OD x .065 in. wall.
3. Dim. in inches, tol. ±.06 in., unless otherwise specified.
4. Interpret dim. and tol. per ANSI/ASME Y14.5M.

FIGURE 22. Tube, center top.

APPENDIX A

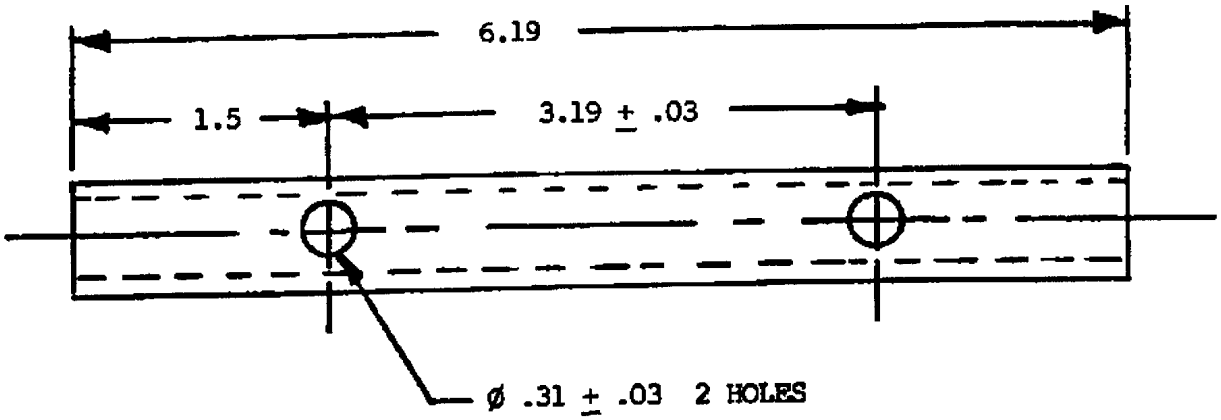


NOTES:

1. Material: Tube aluminum, 5086-0, Type I, WW-T-700/5 or tube, aluminum, 5052-0, Type I, WW-T-700/4 or tube aluminum, 5083-0, ASTM B241, 0.750 in. OD x 0.095 in. wall.
2. Optional material: Tube steel, carbon, seamless MT 1010 to MTX 1020, type optional, CDSR-RD, 0.812 in. OD x 0.065 in. wall.
3. Dim. in inches, tol. ±.06 in., unless otherwise specified.
4. Interpret dim. and tol. per ANSI/ASME Y14.5M.

FIGURE 23. Connector tube.

APPENDIX A

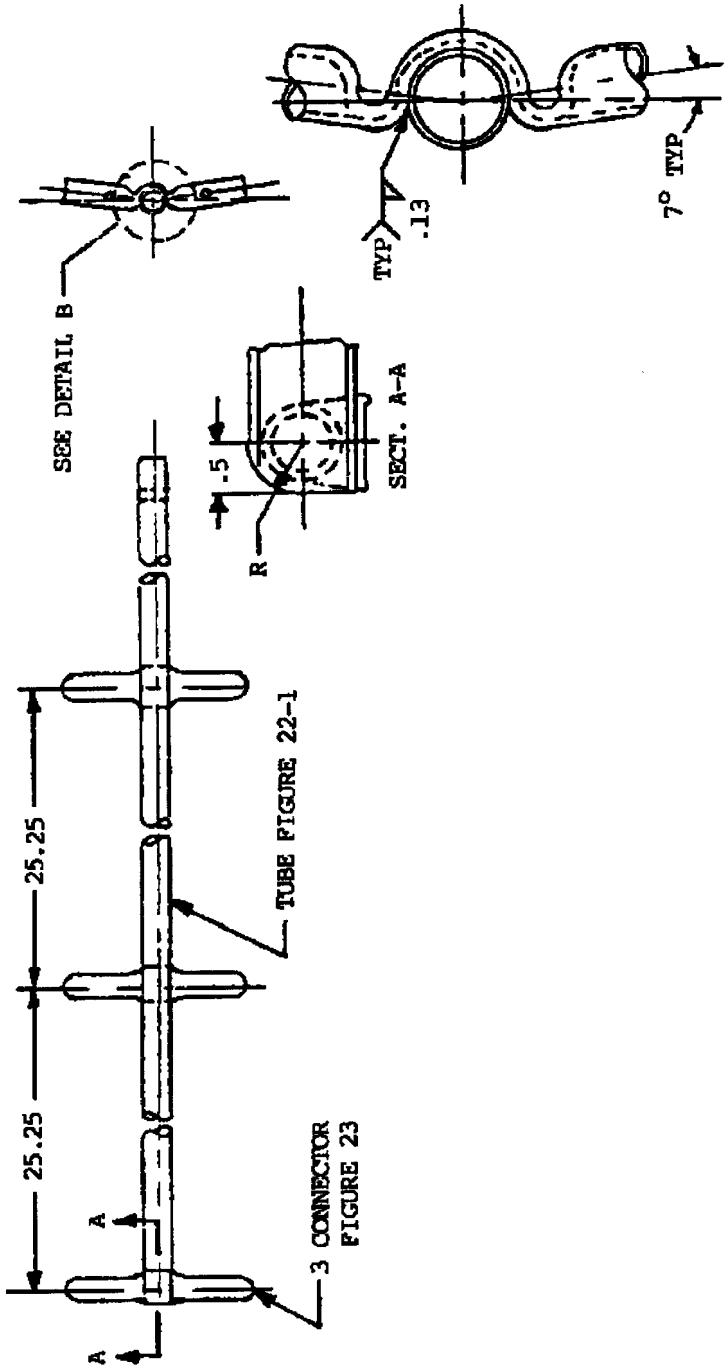


NOTES:

1. Material: Tube aluminum 5086-H32, Type I, WW-T-700/5 or tube aluminum 6061-T6, Type I, WW-T-700/6, 0.750 in. OD x 0.120 in. wall.
2. Optional material: Steel carbon tubing, MT 1010-MTX 1020, type opt., CD-RD, 0.812 in. OD x 0.187 in. wall.
3. Finish for steel only:
   Zinc plate, ASTM A123 or B633, 0.0015 in. minimum.
4. Dim. in inches, tol. ± 0.06 in., unless otherwise specified.
5. Interpret dim. and tol. per ANSI/ASME Y14.5M.

FIGURE 24. Connector, tube.

APPENDIX A

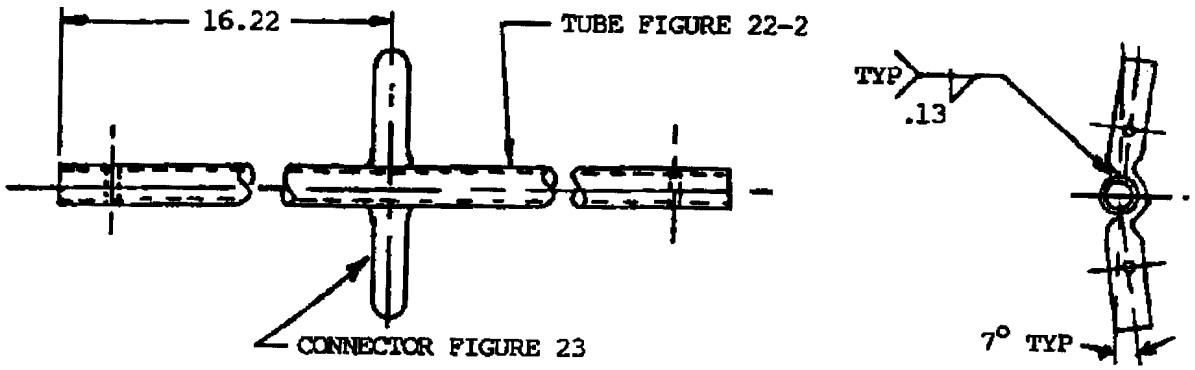


NOTES:

1. Aluminum: Weld in accordance with MIL-STD-372, class B, use electrode type 5356, ANSI/AWS A5.10. For steel option: Weld in accordance with class I, MIL-STD-1261. All weld sizes are min.
2. Finish for steel only:
   Clean per method II or III, treat per type I or III, TT-C-490.
   Apply primer, TT-P-664 or MIL-P-53030, 0.75 to 1.25 mils thk and apply enamel, olive drab, CL A, comp opt, TT-E-529, 1.25 to 1.75 mils thk or
   Apply enamel, olive drab, type opt, comp opt, MIL-E-52891, 2.00 to 2.50 mils thk.
3. Dim. in inches, tol. ± .06 in., unless otherwise specified.
4. Interpret dim. and tol. per ANSI/ASME Y14.5M.

FIGURE 25. Tubing section, end top.

APPENDIX A

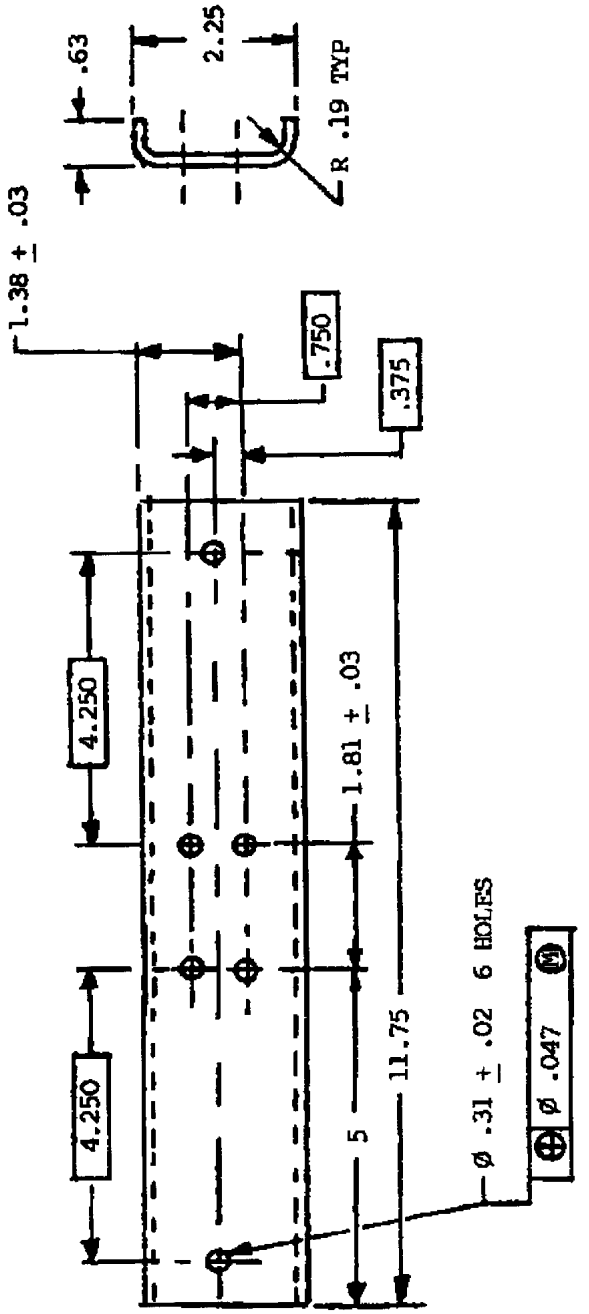


NOTES:

1. Aluminum: Weld in accordance with MIL-STD-372, class B, use electrode type 5356, ANSI/AWS A5.10. For steel option: Weld in accordance with class I, MIL-STD-1261. All weld sizes are min.
2. Finish for steel only:
   Clean per method II or III, treat per type I or III, TT-C-490.
   Apply primer, TT-P-664 or MIL-P-53030, 0.75 to 1.25 mils thk and apply enamel, olive drab, CL A, comp opt, TT-E-529, 1.25 to 1.75 mils thk or
   Apply enamel, olive drab, type opt, comp opt, MIL-E-52891, 2.00 to 2.50 mils thk.
4. Dim. in inches, tol. $\pm$ 0.06 in., unless otherwise specified.
5. Interpret dim. and tol. per ANSI/ASME Y14.5M.

FIGURE 26. Tubing section, center top.

APPENDIX A

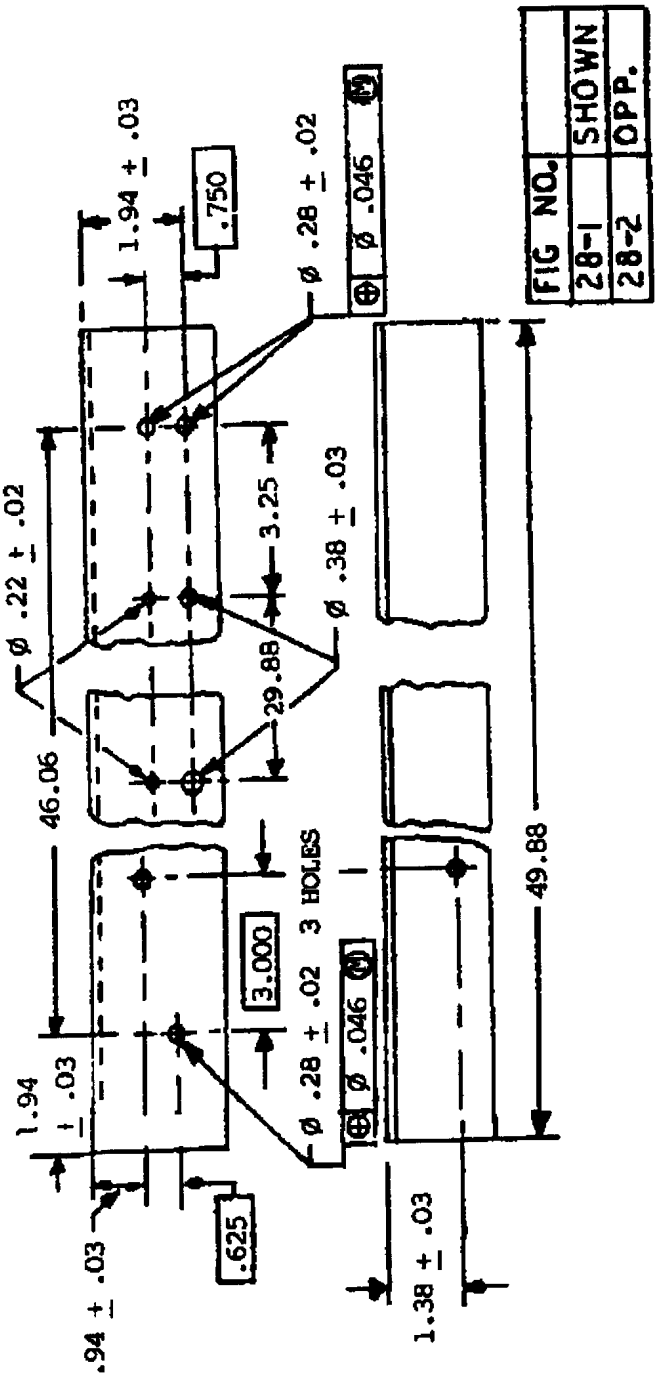


NOTES:

1. Material: Carbon steel, QQ-S-698, .120 in. thick sheet or strip.
2. Finish:
   Zinc plate, ASTM A123 or ASTM B633, .0015 in. minimum.
3. Dim. in inches, tol. ± .06 in., unless otherwise specified.
4. Interpret dim. and tol. per ANSI/ASME Y14.5M.

FIGURE 27. Connector, lower frame.

APPENDIX A

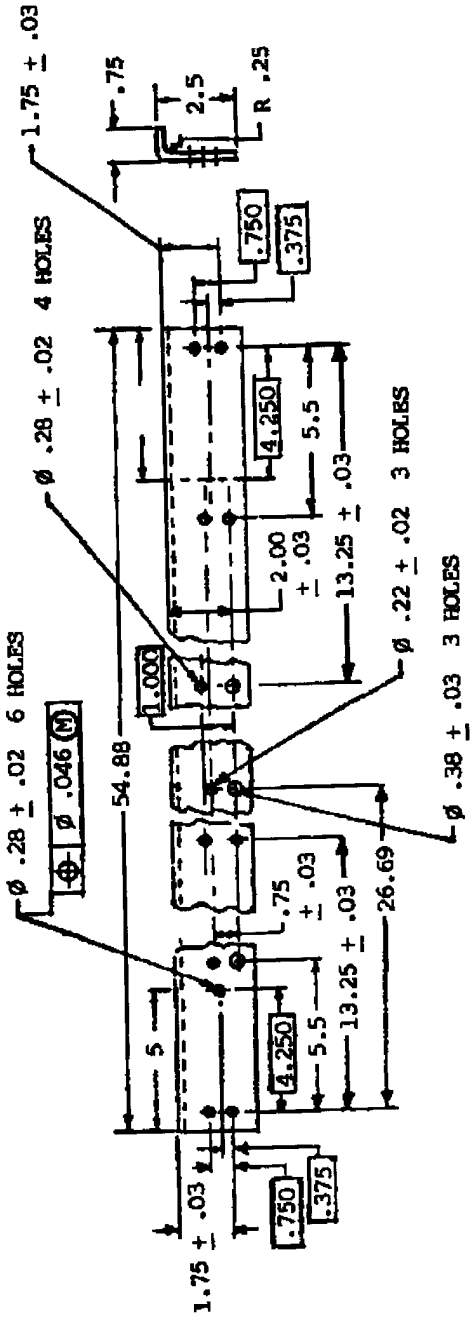


NOTES:

1. Material: Aluminum, 6061-T6, ASTM B221 or ASTM B241, or aluminum, 6061-T6, QQ-A-225/8, or aluminum, 5083-H111, ASTM B221 or ASTM B241, 2.500 x 2.000 x .188 in. angle.
2. Optional material: Steel, carbon, ASTM A36/A36M, 2.500 x 2.000 x .125 in. angle.
3. Finish for steel only:
   Clean per method II or III, treat per type I or III, TT-C-490.
   Apply primer, TT-P-664 or MIL-P-53030, 0.75 to 1.25 mils thk and apply enamel, olive drab, CL A, comp opt, TT-E-529, 1.25 to 1.75 mils thk or
   Apply enamel, olive drab, type opt, comp opt, MIL-E-52891, 2.00 to 2.50 mils thk.
4. Dim. in inches, tol. ± .06 in., unless otherwise specified.
5. Interpret dim. and tol. per ANSI/ASME Y14.5M.

FIGURE 28. Angle, lower front.

APPENDIX A



NOTES:

1. Material: Carbon steel, QQ-S-698, .134 in. thick sheet or strip.
2. Finish:
   Clean per method II or III, treat per type I or III, TT-C-490.
   Apply primer, TT-P-664 or MIL-P-53030, 0.75 to 1.25 mils thk and apply enamel, olive drab, CL A, comp opt, TT-E-529, 1.25 to 1.75 mils thk or
   Apply enamel, olive drab, type opt, comp opt, MIL-E-52891, 2.00 to 2.50 mils thk.
3. Dim. in inches, tol. ± .06 in., unless otherwise specified.
4. Interpret dim. and tol. per ANSI/ASME Y14.5M.

FIGURE 29. Angle, lower frame.

APPENDIX A

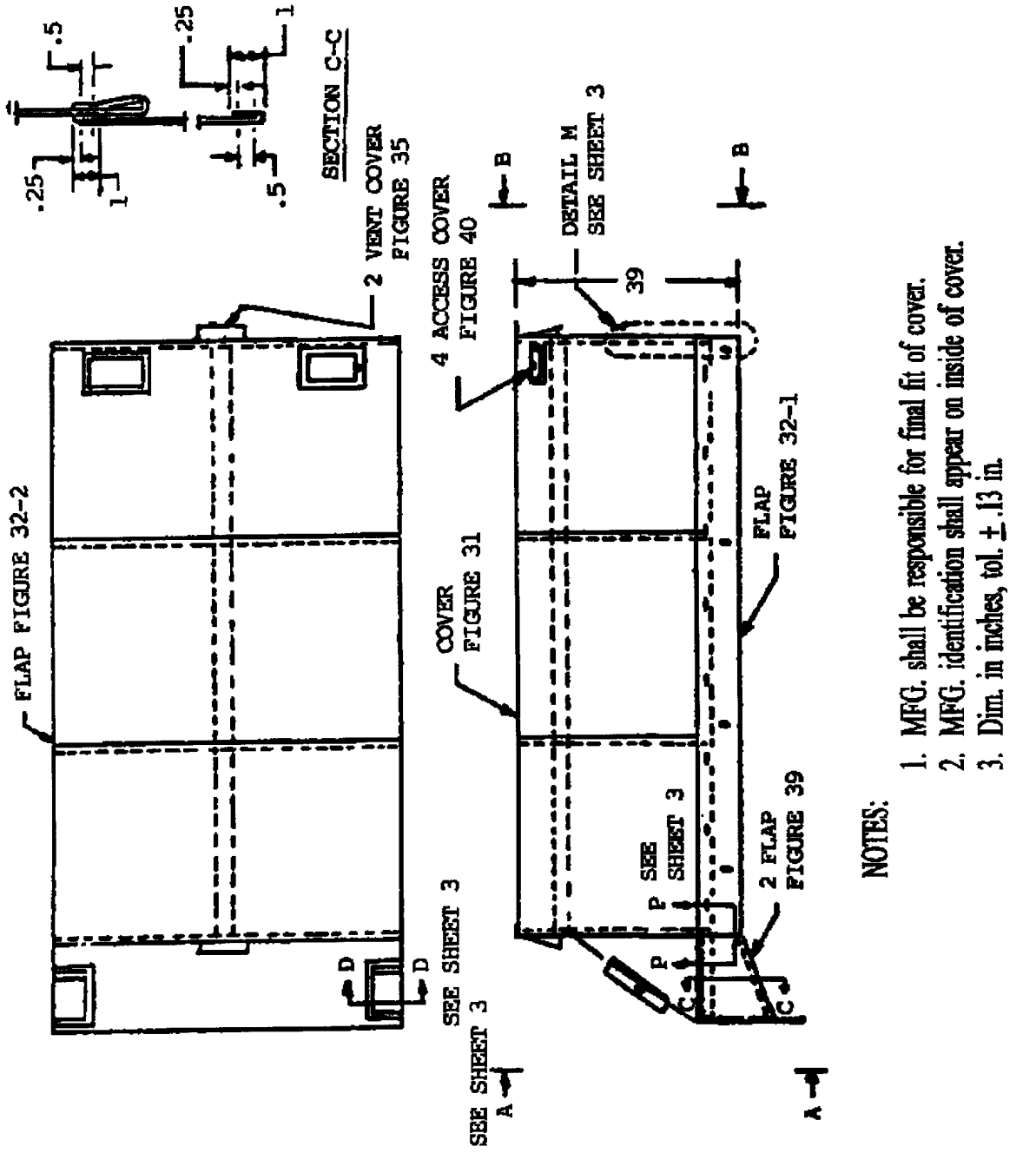
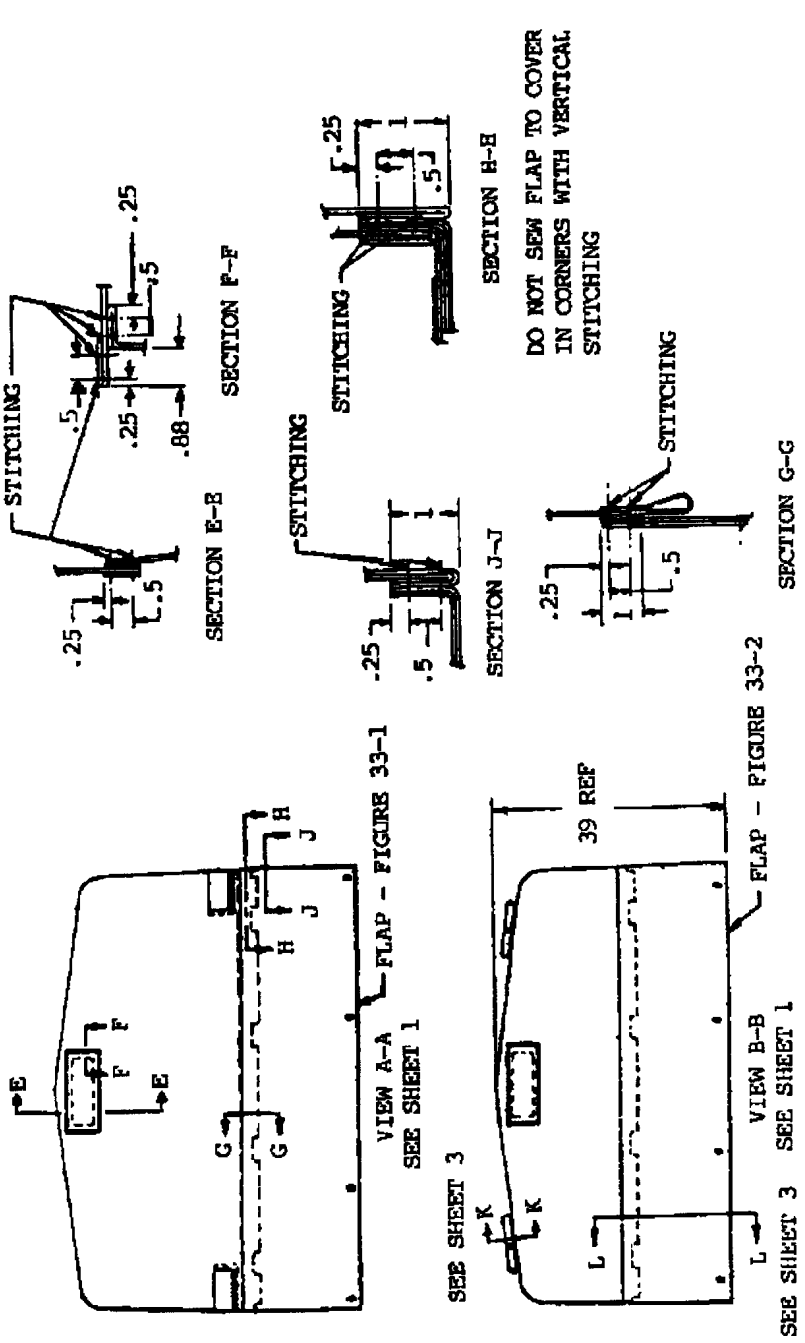


FIGURE 30. Cover, vehicle closure.

APPENDIX A



STITCHING NOTES:

1. Stitches, Type 301, FED-STD-751, 8 to 10 stitches per inch. smallest needle size feasible should be used in order to assure weatherproof seams. Thread, nylon, Type II, Class I, size F, color O.D., no x 24087, FED-STD-595, V-T-295.
2. Optional assembly: Seams to be heat sealed.
3. Dim. & tol. per ANSI/ASME Y14.5M.
4. Dim. in inches, tol. ± .13 in.

SHEET 2 OF 3

FIGURE 30. Cover, vehicle closure - Continued.

APPENDIX A

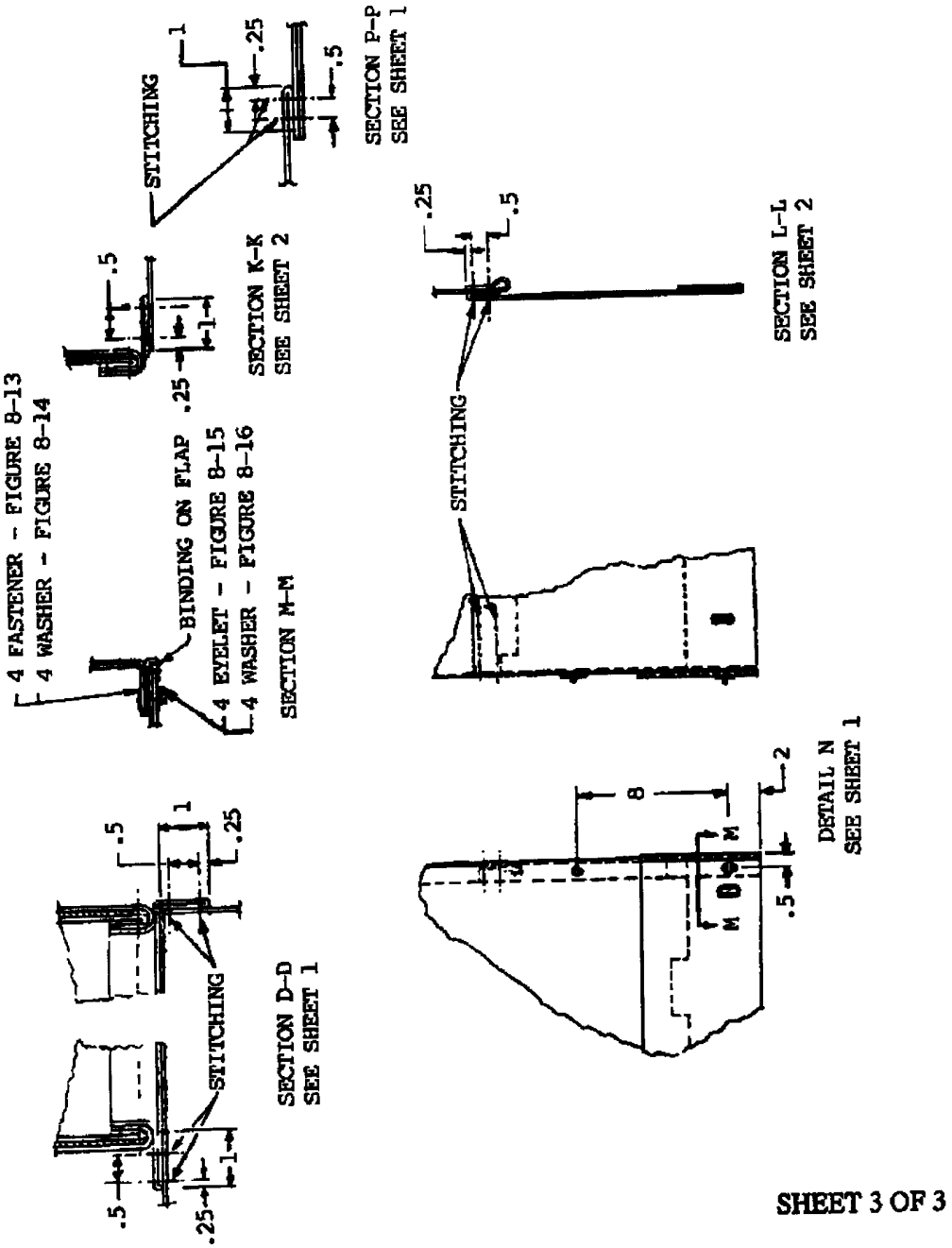


FIGURE 30. Cover, vehicle closure - Continued.

APPENDIX A

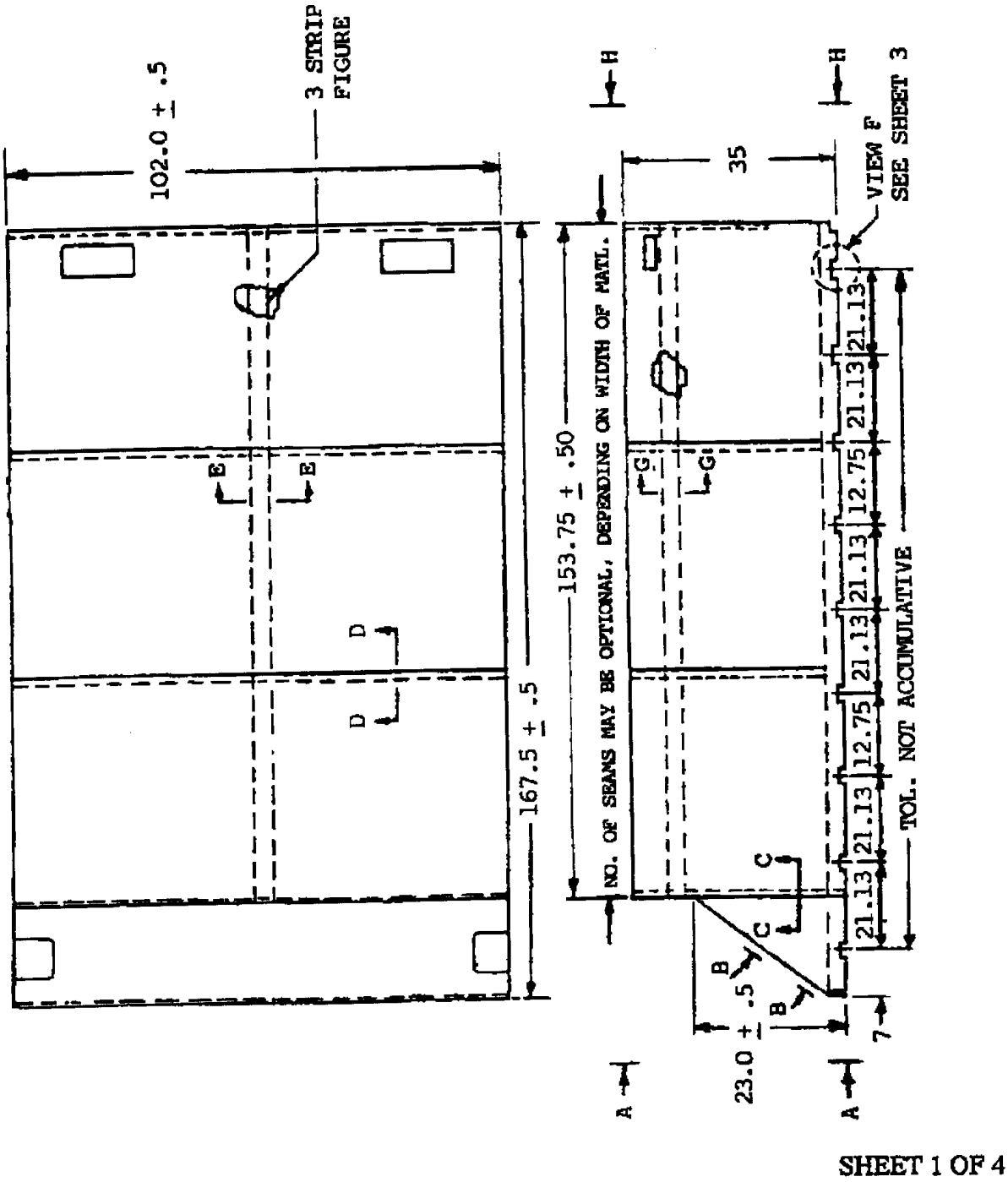
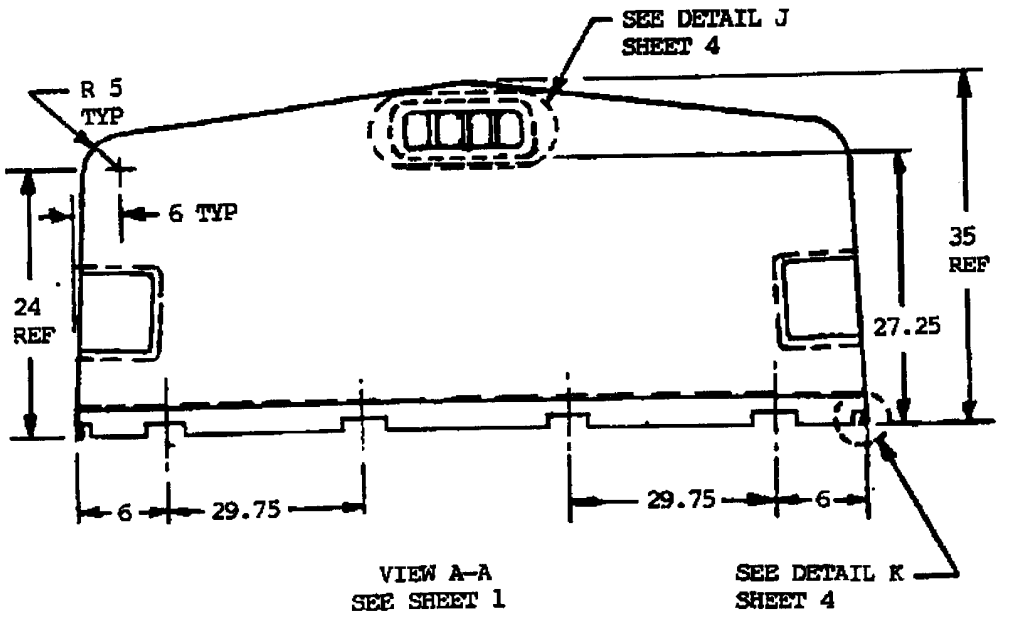
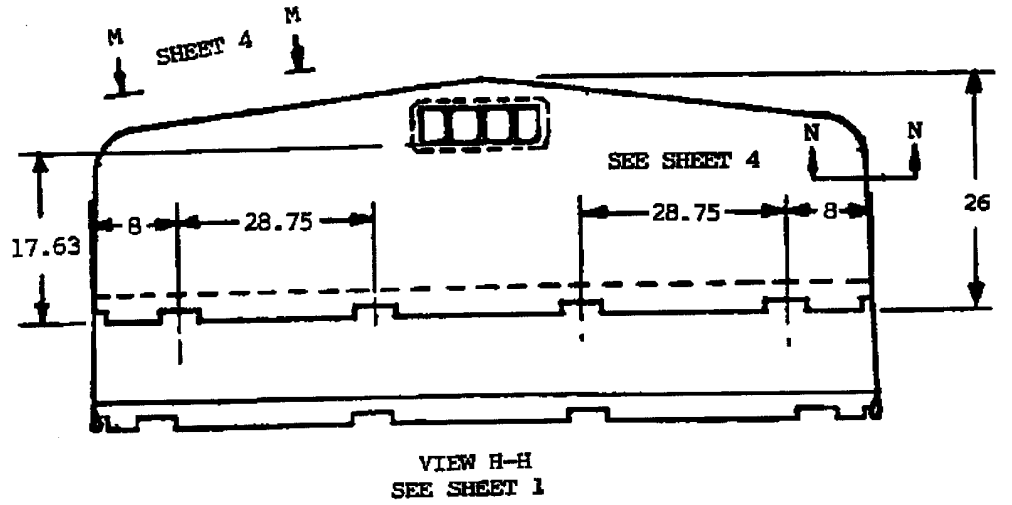


FIGURE 31. Cover, vehicle closure - Continued.

APPENDIX A





SHEET 2 OF 4

FIGURE 31. Cover, vehicle closure - Continued.

APPENDIX A

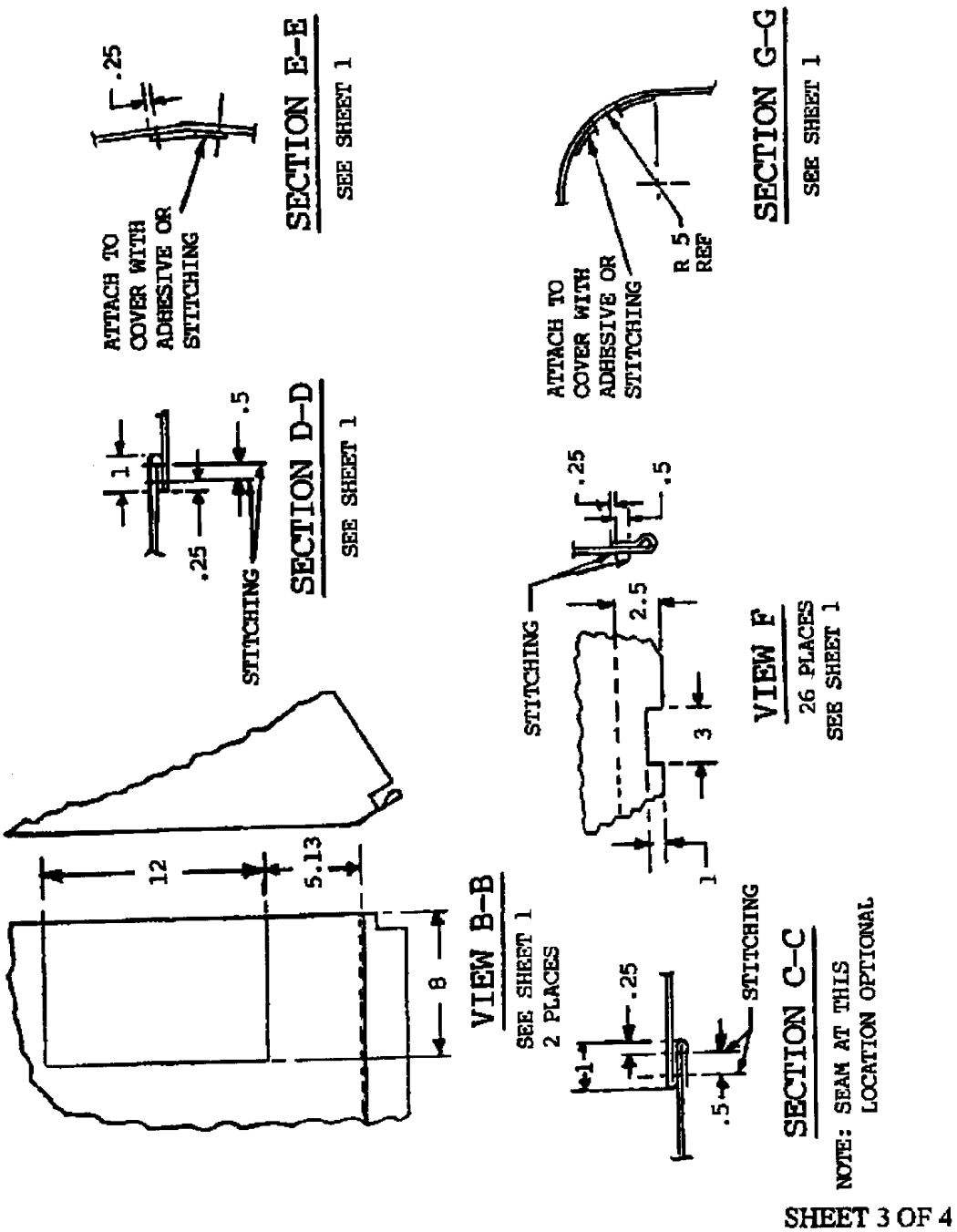
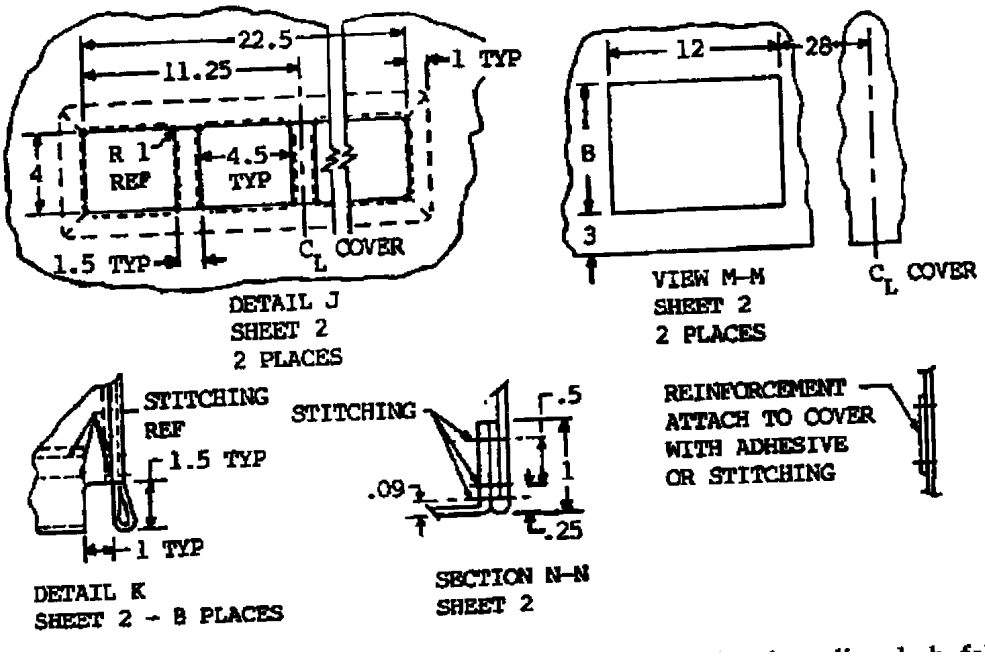


FIGURE 31. Cover, vehicle closure - Continued.

APPENDIX A



NOTES:

1. Material: Tarpaulin, Type II or V, class 2, MIL-C-20696, color, olive drab, fabric must be cementable with adhesive.
2. Stitching: Stitching tol to be std mfg tol. stitches, Type 301, FED-STD-751, 8 to 10 stitches per inch, smallest needle size feasible should be used in order to assure weatherproof seams. Thread, nylon, Type II, class I, size F, color, olive drab, no. x 24087, FED-STD-595, V-T-295.
3. Adhesive: Attach reinforcements to cover with adhesive as follows: Clean both surfaces thoroughly. Coat one surface with adhesive. Join surfaces firmly. Seams shall be cemented so that developed bond strength is 20 lbs min. Suitable test procedure follows: Two strips of body fabric 1 in. wide shall be cemented together. One of the two strips shall be held firmly across the width and the other shall be clamped with a device to which is secured a total wt of 20 lbs. Seams shall also have a developed bond strength of 15 lbs at ambient temp after being subjected to drying temp of 200°F for 72 hours.
4. Butting of cloths not permissible.
5. Dim & tol per ANSI/ASME Y14.5M.
6. Dim in inches, tol $\pm$.13 in., unless otherwise specified.

FIGURE 31. Cover, vehicle closure - Continued.

APPENDIX A

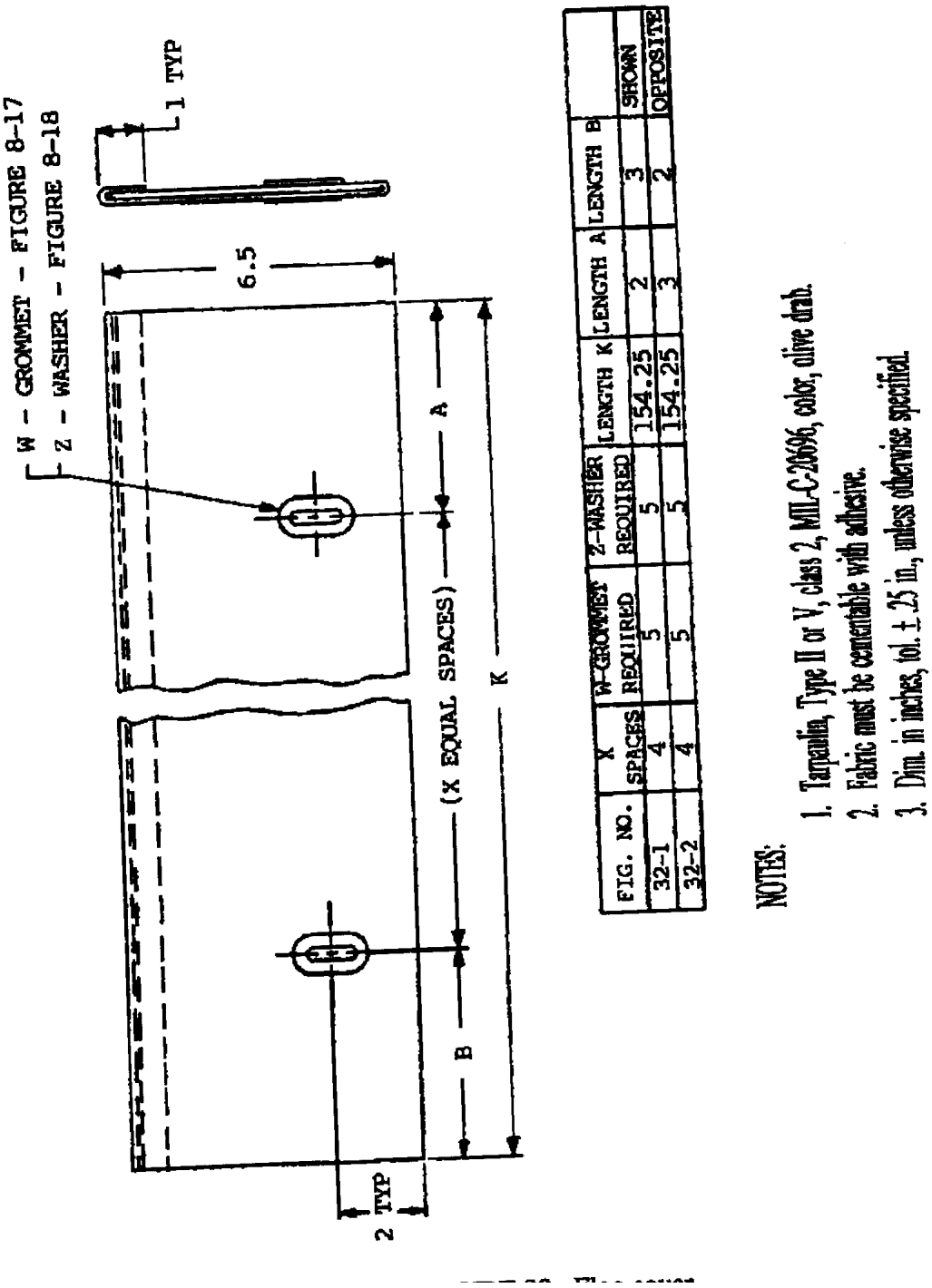


FIG. NO.	X SPACES	W-GROMMET REQUIRED	Z-WASHER REQUIRED	LENGTH K	LENGTH A	LENGTH B	
32-1	4	5	5	154.25	2	3	SHOWN
32-2	4	5	5	154.25	3	2	OPPOSITE

NOTES:
1. Tarpaulin, Type II or V, class 2, MIL-C-20696, color, olive drab.
2. Fabric must be cementable with adhesive.
3. Dim. in inches, tol. ± .25 in., unless otherwise specified.

FIGURE 32. Flap cover.

APPENDIX A

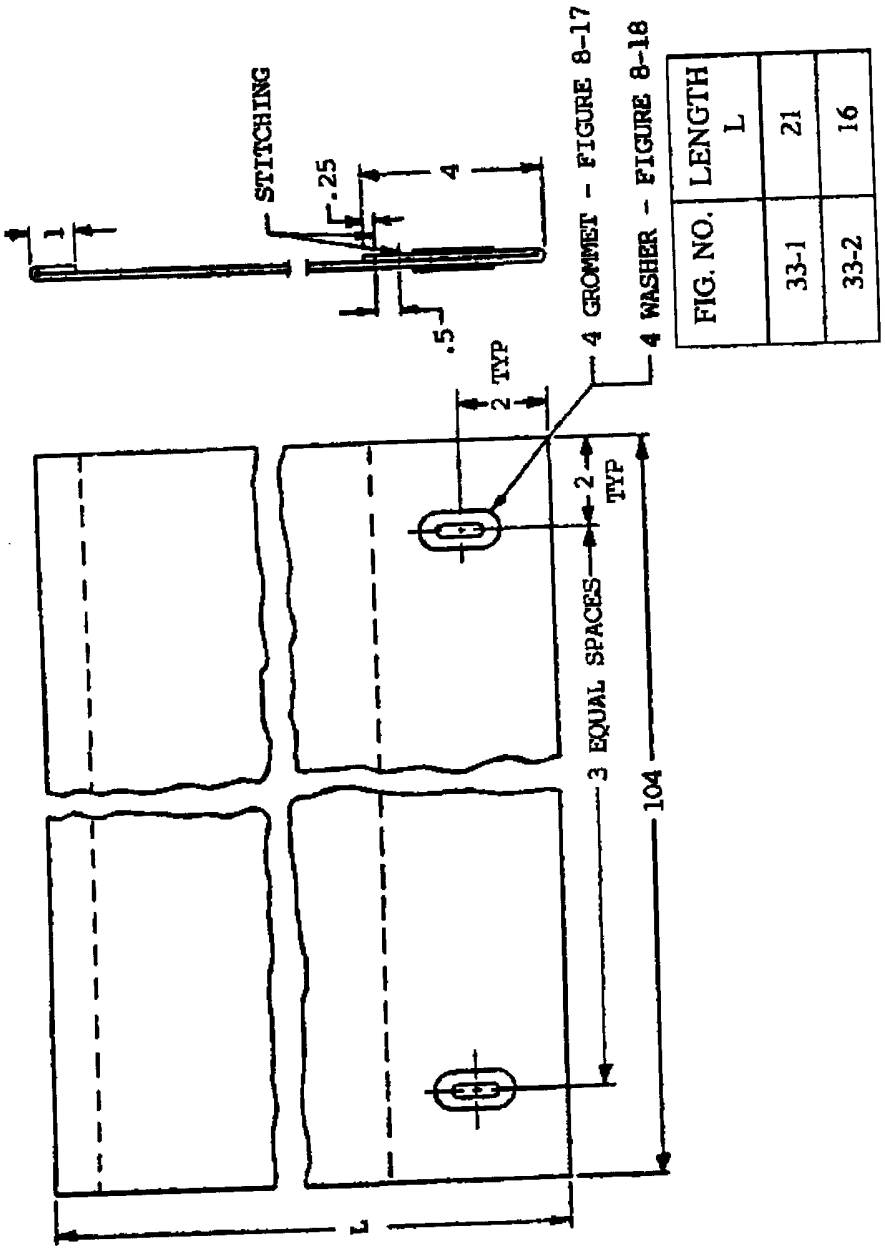


FIG. NO.	LENGTH L
33-1	21
33-2	16

NOTES:

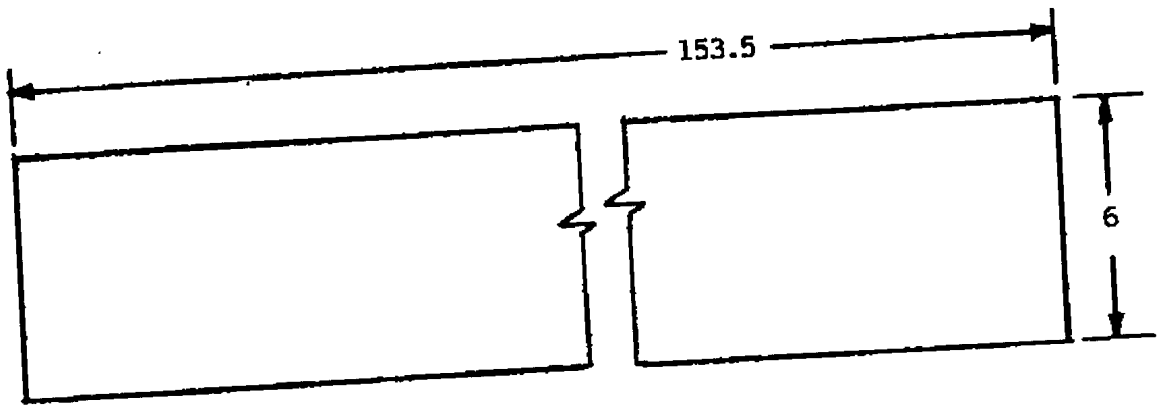
1. Tarpaulin, MIL-C-20696, Type II or V, class 2, color, olive drab.
2. Thread, nylon, Type II, class 1, size F, color olive drab no. x 24087, FED-STD-595, V-T-295.

STITCHING NOTES:

1. Stitching, Type 301, FED-STD-751, 8 to 10 stitches per inch. Smallest needle size feasible should be used in order to assure weatherproof seams.
2. Optional assembly: Seams to be heat sealed.
3. Dim. in inches, tol ± .13 in., unless otherwise specified.

FIGURE 33. Flap cover.

APPENDIX A



NOTES:

1. Tarpaulin, MIL-C-20696, Type II or V, class 2, color, olive drab.
2. Fabric must be cementable with adhesive.
3. Optional assembly: Seams to be heat sealed.
4. Dim. in inches, tol ±.25 in., unless otherwise specified.

FIGURE 34. Reinforcing strip.

APPENDIX A

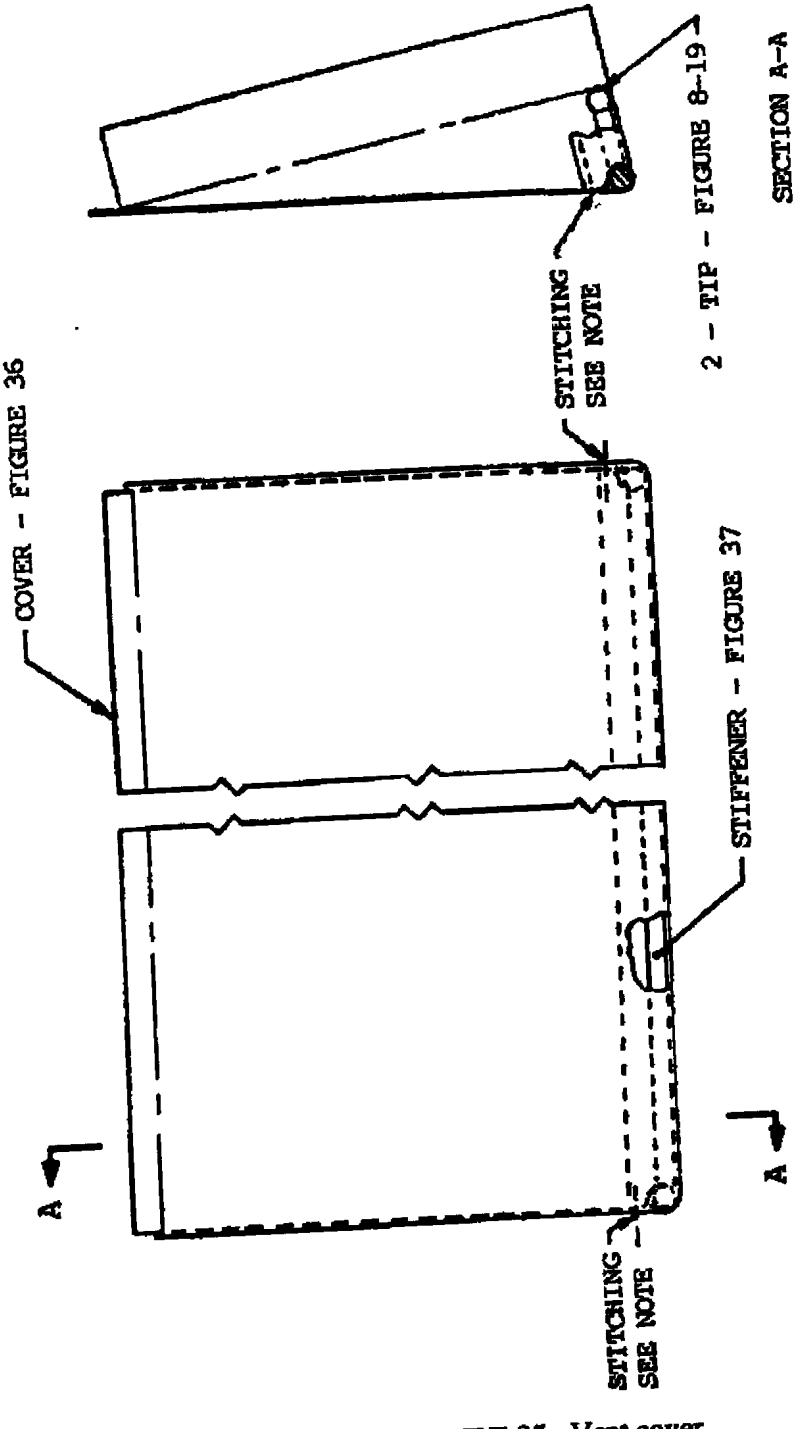


FIGURE 35. Vent cover.

APPENDIX A

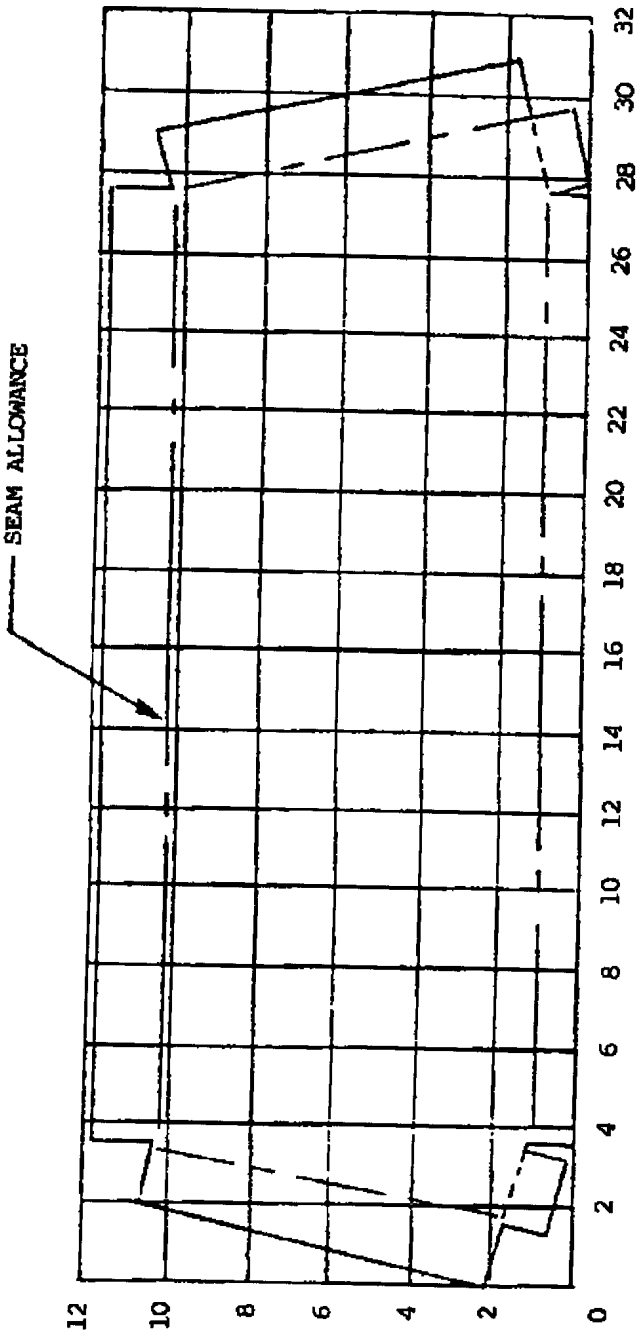
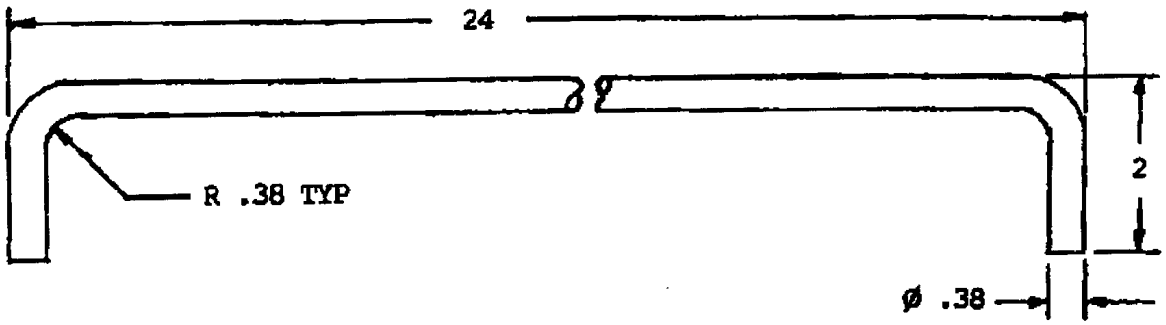


FIGURE 36. Cover, vent.

APPENDIX A

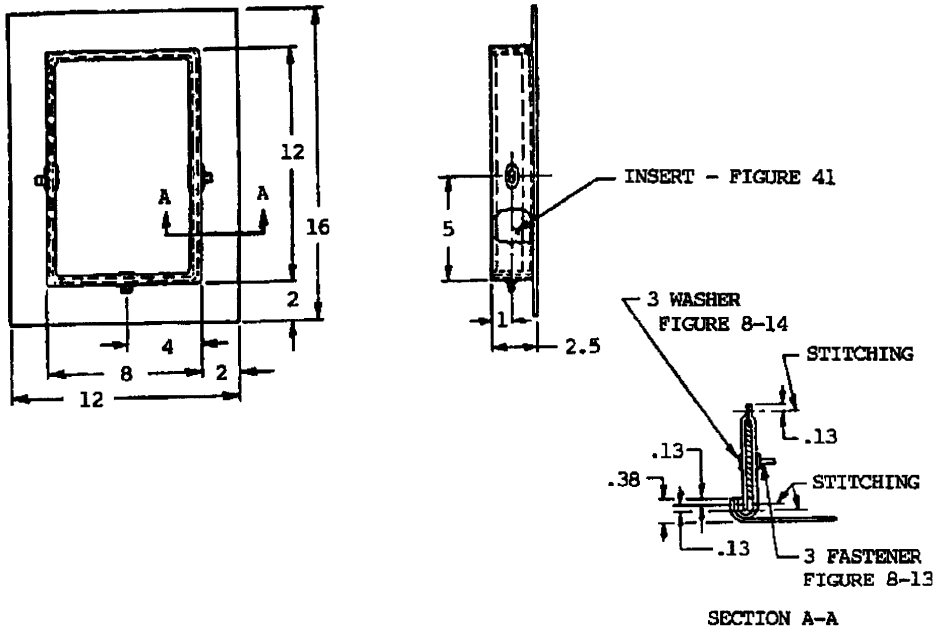


NOTES:

1. Material: Steel, carbon, C1010 thru C1020, ASTM A108.
2. Finish:
   Zinc plate, ASTM A123 or ASTM B633, .0015 in. minimum.
3. Dim. in inches, tol. ±.06 in., unless otherwise specified.
4. Interpret dim. and tol. per ANSI/ASME Y14.5M.

FIGURE 37. Stiffener, vent cover.

APPENDIX A

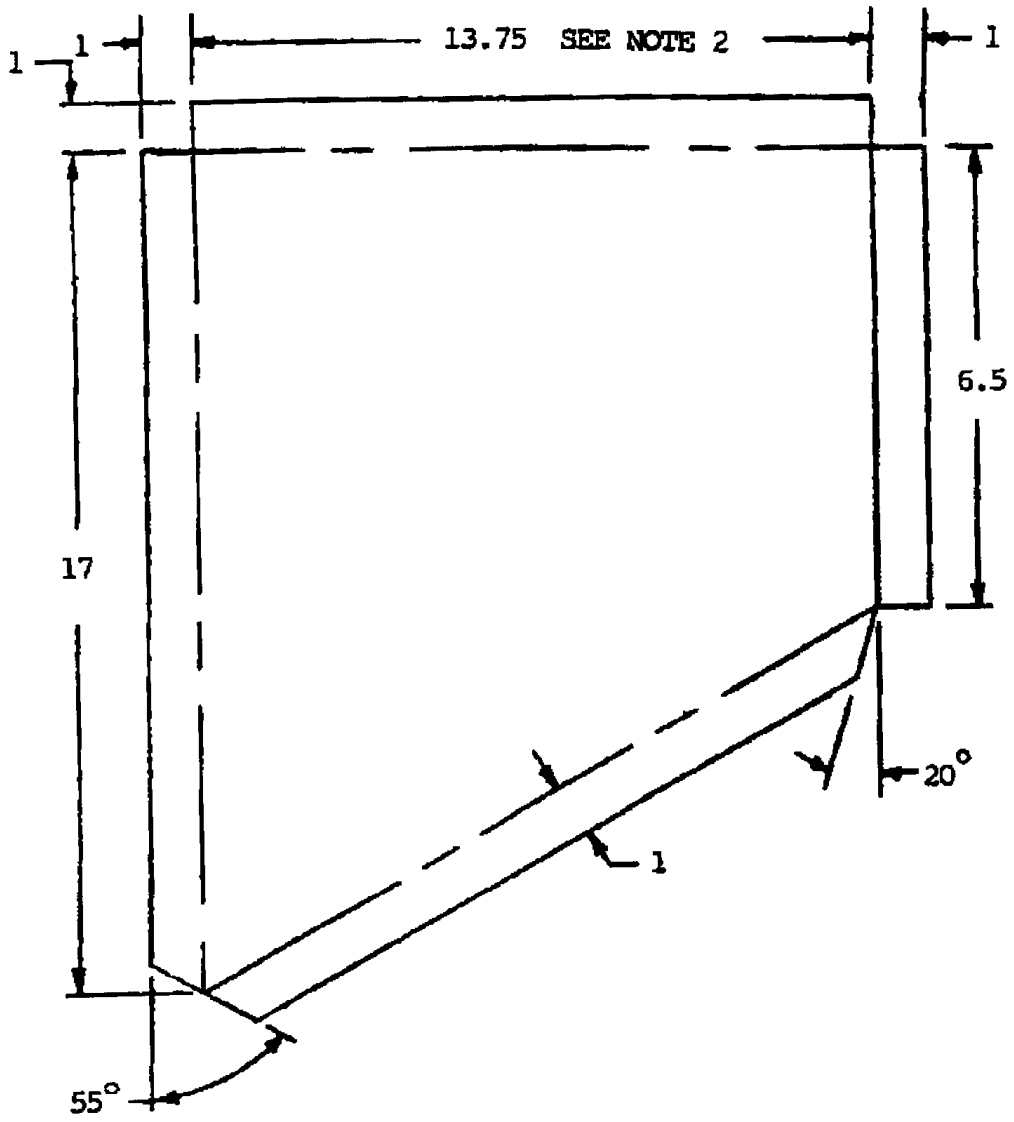


NOTES:

1. Material: Tarpaulin, Type II or V, class 2, MIL-C-20696, color, olive drab, fabric must be cementable with adhesive.
2. Stitching: Stitching tol to be std mfg tol. stitches, Type 301, FED-STD-751, 8 to 10 stitches per inch, smallest needle size feasible should be used in order to assure weatherproof seams. Thread, nylon, Type II, class I, size F, color, olive drab, no. x 24087, FED-STD-595, V-T-295.
3. Adhesive: Attach reinforcements to cover with adhesive as follows: Clean both surfaces thoroughly. Coat one surface with adhesive. Join surfaces firmly. Seams shall be cemented so that developed bond strength is 20 lbs min. Suitable test procedure follows: Two strips of body fabric 1 in. wide shall be cemented together. One of the two strips shall be held firmly across the width and the other shall be clamped with a device to which is secured a total wt of 20 lbs. Seams shall also have a developed bond strength of 15 lbs at ambient temp after being subjected to drying temp of 200°F for 72 hours.
4. Butting of cloths not permissible.
5. Dim & tol per ANSI/ASME Y14.5M.
6. Dim in inches, tol $\pm$.13 in., unless otherwise specified.

FIGURE 38. Access opening.

APPENDIX A

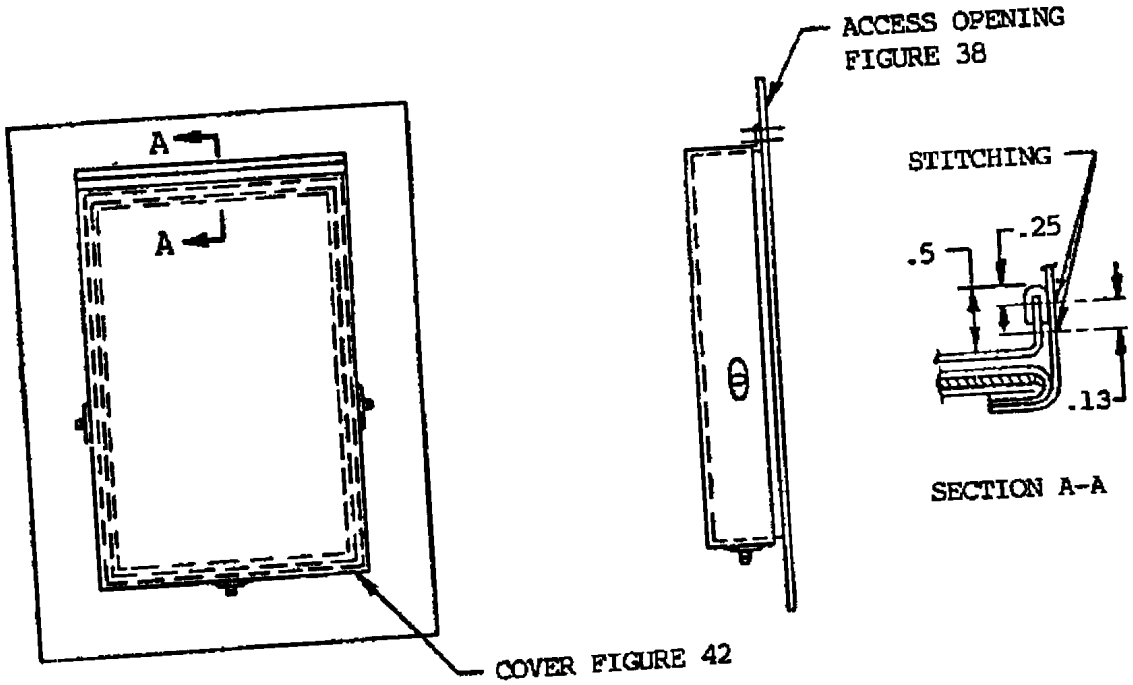


NOTES:

1. Material: Tarpaulin, MIL-C-20696, type II or V, class 2, color, olive drab.
2. Nominal dim.- actual dim. to be determined at assembly.
3. Dim. in inches, tol. ±.13 in.

FIGURE 39. Flap extension.

APPENDIX A

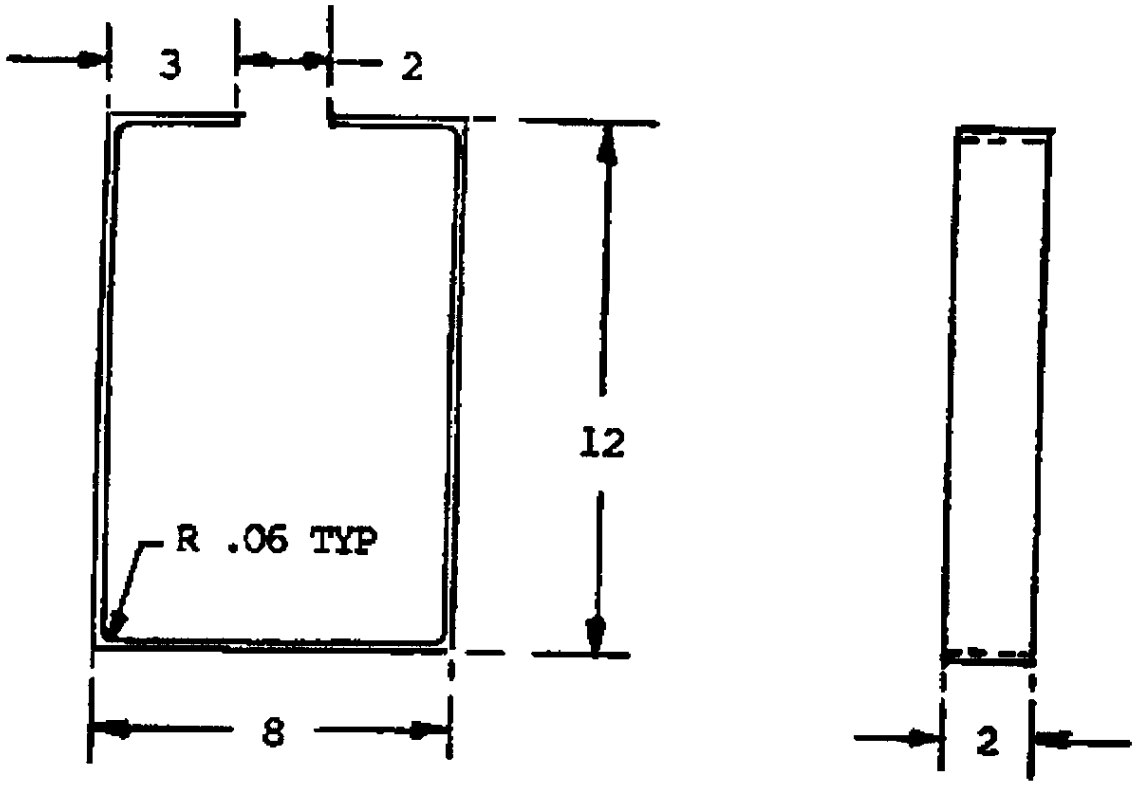


NOTES:

1. Stitching: Type 301, FED-STD-751, 8 to 10 stitches per inch. Smallest needle size feasible should be used in order to assure weatherproof seams.
2. Thread: Nylon, Type II, class 1, size F, color, olive drab, no. x 24087, FED-STD-595, V-T-295.
3. Optional assembly: Seams to be heat sealed.
4. Dim & tol per ANSI/ASME Y14.5M.
5. Dim in inches, tol $\pm$.13 in., unless otherwise specified.

FIGURE 40. Access opening assembly.

APPENDIX A

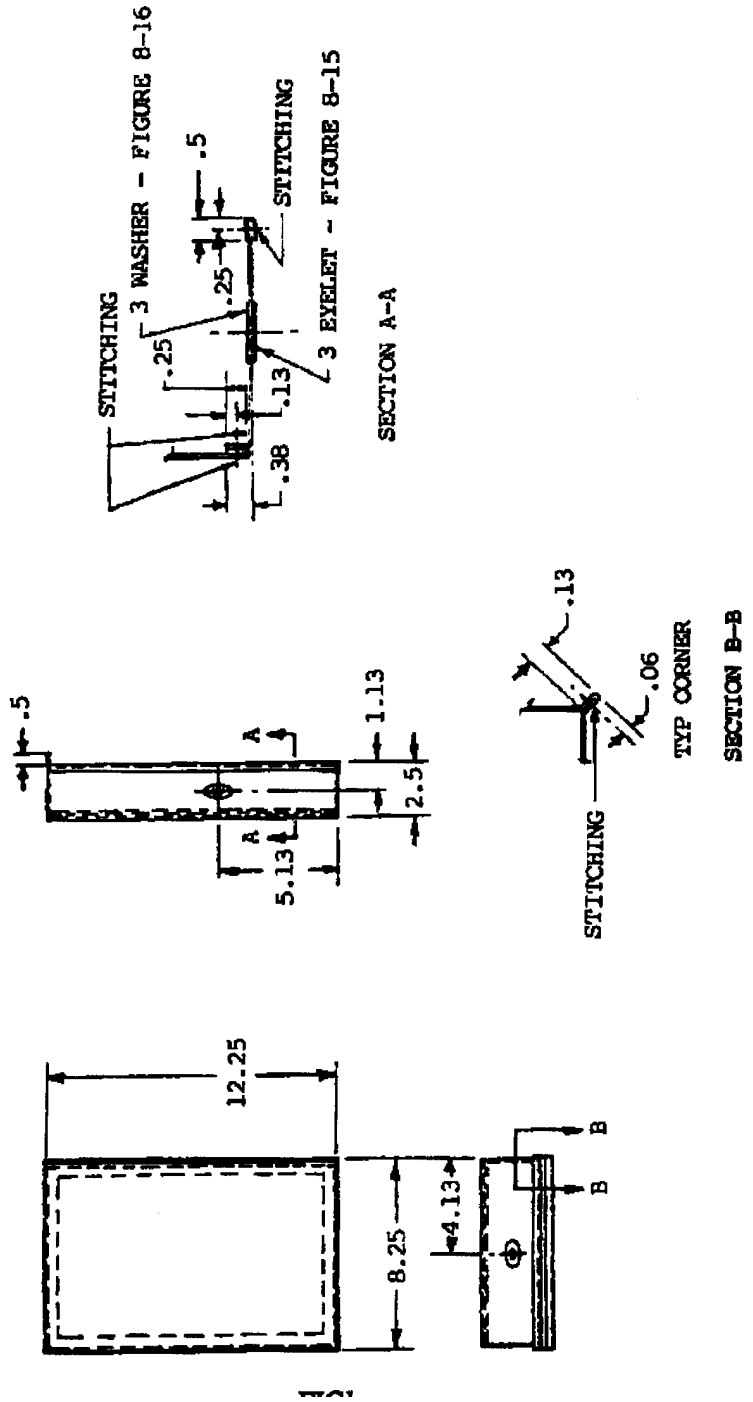


NOTES:

1. Material: Aluminum alloy 5086-H32, QQ-A-250/7, or aluminum alloy 5052-H32 or H34, QQ-A-250/8, .040 in. thk.
2. Dim. in inches, tol ±.06 in., unless otherwise specified.

FIGURE 41. Insert, access opening.

APPENDIX A

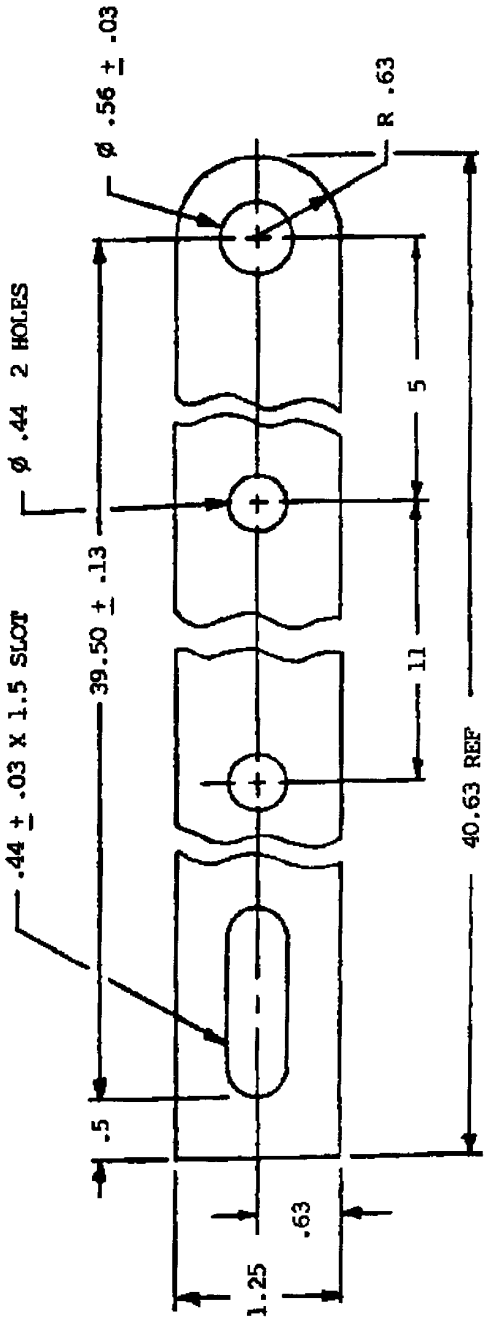


NOTES:

1. Material: Tarpaulin, MIL-C-20696, Type II or V, class 2, color, olive drab.
2. Stitching:
   Stitching, Type 301, FED-STD-751, 8 to 10 stitches per inch. Smallest needle size feasible should be used in order to assure weatherproof seams.
3. Thread:
   Nylon, Type I, class 1, size F, color, olive drab, no. x 24087, FED-STD-595, V-T-295.
4. Optional assembly: Seams to be heat sealed.
5. Dim. in inches, tol. ±.13 in., unless otherwise specified.

FIGURE 42. Access cover opening.

APPENDIX A

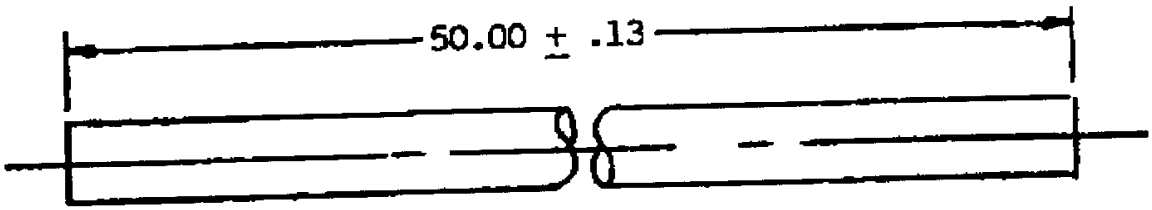


NOTES:

1. Material:
   Steel, carbon, grade A or B, ASTM A36/A36M, .25 in. thk or steel carbon, 1010 thru 1025, ASTM A576 or A675/A675M.
2. Final protective finish:
   Zinc plate, ASTM A123 or B633, .0015 in. minimum.
3. Dim. in inches, tol. ± .06 in., unless otherwise specified.

FIGURE 43. Support.

APPENDIX A



NOTES:

1. Material: Steel, carbon, C1010 thru C1020, ASTM A108, .38 in. dia.
2. Finish:
   Zinc plate, ASTM A123 or ASTM B633, .0015 in. minimum.
3. Dim. in inches, tol. ±.06 in., unless otherwise specified.
4. Interpret dim. and tol. per ANSI/ASME Y14.5M.

FIGURE 44. Rod, metal.

APPENDIX A

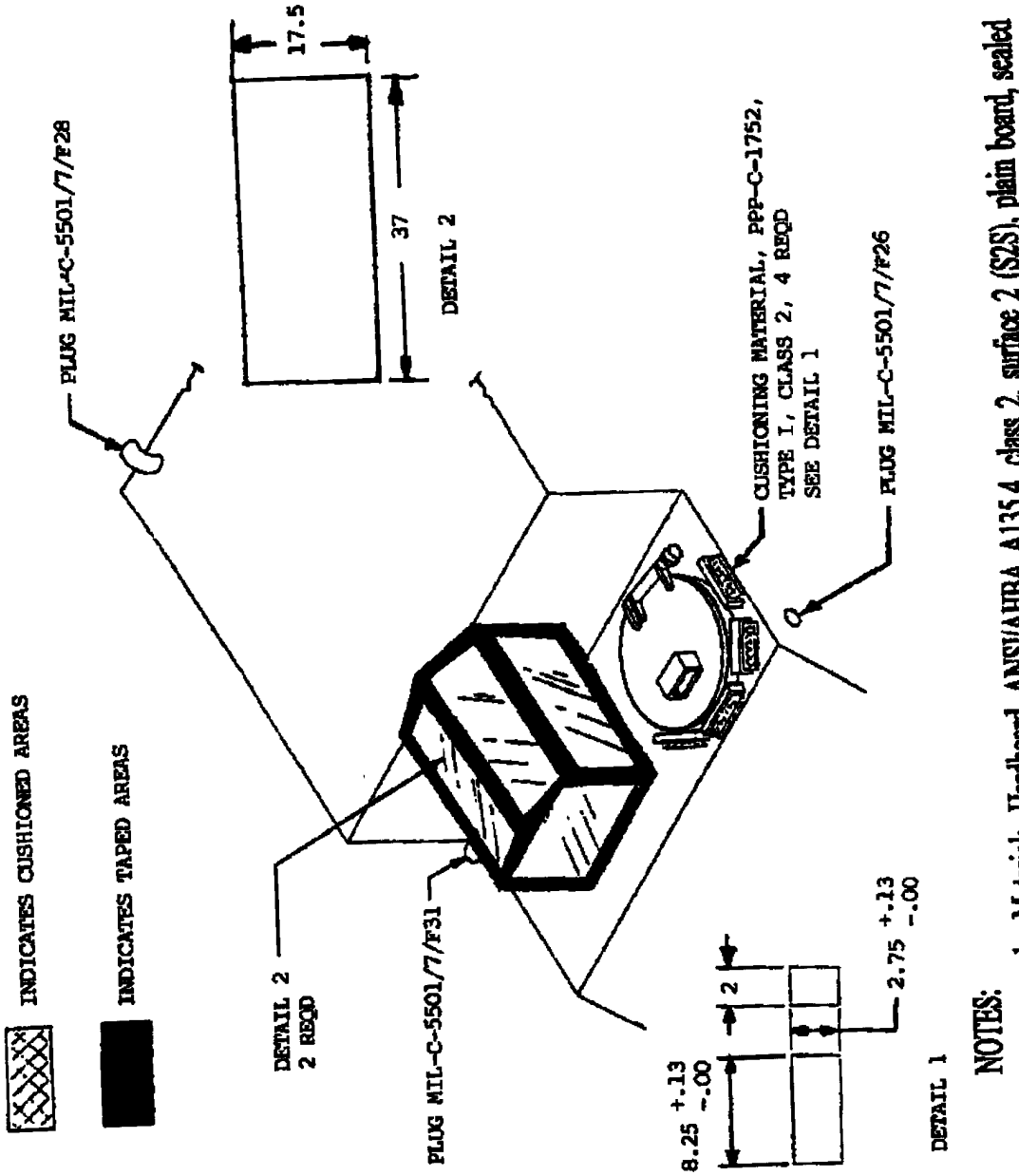


FIGURE 45. Level “B” closures.