CHAPTER 2
PARTS, TOOLS, AND EQUIPMENT

Section I. PARTS, COMMON TOOLS, AND EQUIPMENT

2-1. General

Repair parts, tools, and equipment are issued to the using organization for assembling, servicing, operating, and maintaining the missile. Tools and equipment should not be used for purposes other than those prescribed and, when not in use, should be stored in the storage boxes or cabinets provided.

2-2. Repair Parts

Repair parts for replacement of those parts likely to become worn, broken, or otherwise unserviceable are supplied for such operations as are within the scope of organizational maintenance functions. Repair parts and equipment supplied for assembly of missile material are listed in TM 9-1410-250-25P/1/1 and TM 9-1410-250-25P/2/1, which are the authority for requisitioning replacements.

2-3. Common Tools and Equipment

a. Common tools and equipment required for assembling, servicing, operating and maintaining the missile are described in b through e below.

b. Tools and equipment listed in SC 4935-95-CL-A42 are general-purpose tools issued to the organizational maintenance personnel for assembling and maintaining the missile.

c. Tools and equipment listed in SC 5180-95-CL-A02 are general-purpose tools issued to the mechanical maintenance personnel for performing their assigned duties.

d. Tools and equipment listed in SC 4935-95-CL-A32 are general-purpose tools issued to the mechanical maintenance personnel for performing their assigned duties.

e. Tools and equipment listed in SC 4935-95-CL-A33 are issued to the electronic maintenance personnel for assembling, maintaining, and adjusting electrical and electronic components of the missile.

Section II. SPECIAL TOOLS AND EQUIPMENT AND FABRICATED TOOLS

2-4. General

Special tools and equipment listed in para. 2-5 are listed in the applicable columns of SC 4935-92-CL-001. Paragraph 2-5 contains only those special tools necessary to perform the operations described in this manual. Instructions for fabricating tools necessary to perform the operations described in this manual are contained in paragraph 2-6.

2-5. Special Tools and Equipment

a. Rocket motor hoist beam 8003042 is used to place an individual rocket motor on the rocket motor cluster truck during the assembly of the rocket motor cluster. The two slings that fit around the body of the rocket motor are attached to the hoist beam by means of sling pins attached to a chain and secured with safety pins. The slings are lined with synthetic
rubber to cushion the rocket motor. The beam weighs 125 pounds and has a maximum capacity of 1,400 pounds.

b. The multimeter is a general purpose multimeter for checking resistance and continuity of electronic and electrical components, for checking current, resistance, and voltage in ac or dc circuits. Operation of this multimeter is described in TM 11–6625–366–15.

c. The arming mechanism ohmmeter is used for checking resistance of the rocket motor initiators and the safety-and-arming devices and for checking continuity of the guidance set and HPU squib batteries. The ohmmeter scale indicates 0 to 25 dc milliamperes on the bottom half of the scale, and 0 ohm to infinity on the top half of the scale. The two terminal posts on top of the unit provide the contact points for the two test leads that are included with the ohmmeter. Two test leads are furnished with an alligator clip soldered to one end and a test prod to the other end. The other test lead is a three-lead test cable.

d. Squib test sets 8522168 and 8525371 are used to check internal resistance of the rocket motor igniter. The scale indicates 0 to 1.00 dc milliampere. A calibration table on the inside cover of the test set indicates the equivalent in resistance to the dc milliampere indication on the scale. The adapter supplied with test set 8525371 has a 4-position switch to permit checking of all four rocket motor igniter cable assemblies used in the missile.

e. The electrical circuit test set is used for checking the initiator wiring harness for continuity and stray voltage.

f. The air leakage test set is a pressure regulated test set used with an air source to check for air leakage in the transponder control group.

g. Battery test set TS–737/U is used for checking the voltage of individual cells of the missile guidance set battery (BB–401/U).

h. The oil fill valve assembly is used to adapt hydraulic test stand M14 for filling the APS or the HPU in the missile with hydraulic oil.

i. The spanner wrench is an adapter wrench used to remove the igniter receptacle shipping closure from the rocket motor and to install the rocket motor igniter. The wrench is constructed of steel plate with four pins welded to the end. These pins engage holes in the shipping closures and in the igniters. On the other end of the wrench is a hexagon shaft used for attaching a socket wrench.

j. The hygrometer is used to measure the moisture content of the air supply used in serv-
icing the APS and HPU. Operation of the hygrometer is described in TM 5–6685–200–15.

k. The portable oil fill and filter unit is used for servicing the missile hydraulic system. A filtering system contained in the unit filters all oil delivered and permits recirculation of oil in the missile for cleaning.

2–6. Fabricated Tools

a. General. This paragraph contains instructions for fabricating tools required to maintain the missile.

b. Ram-Pressure Probe Alignment Template. Using scrap plywood, aluminum, or plastic, fabricate the ram-pressure probe alignment template as shown in figure 2–1.

c. Safety-and-Arming Switch Sling. Using available material, fabricate the safety and arming switch sling, using either of the two configurations shown in figure 2–2.

Figure 2–1. Fabrication of the ram-pressure probe alignment template.
Figure 2-2. Fabrication of the safety-and-arming switch sling.

1—Rd-hd screw (2)
2—Rd-hd screw (2)
3—F1 washer
4—1/4-in. plywood mtg plate
5—Hex nut (2)
6—Lockwasher (2)
7—1/4 x 3/4-in. plywood arm
8—1-in. hardwood doweling handling (or equivalent)

9—Wood screw
10—F1 washer (2)
11—1/8-in. al mtg plate
12—1/2-in. al tubing
13—Hex nut (2)
14—Lockwasher (2)
15—Flat washer (2)