

CHAPTER 3

LIFE PRESERVER SPECIAL TOOLS AND SUPPORT EQUIPMENT

Section 3-1. Description

3-1. GENERAL.

3-2. This chapter lists special support equipment required for the testing and inspection of life preservers.

An assembly and parts breakdown is included with each item of support equipment. See [Section 3-3](#).

Section 3-2. Life Preserver Support Equipment

3-3. LEAK TEST FIXTURE.

3-4. A life preserver leak test fixture may be fabricated to meet the requirements of the schematic shown in [figure 3-1](#). A suggested leak test fixture, consisting of three-way valve, pressure gage, and adapters for connection to a source of low-pressure air and to the life preserver, is shown in [figure 3-3](#).

WARNING

Care shall be taken at all times when working with or handling pressurized air (high or low), carbon dioxide cylinders (all sizes), or associated equipment.

CAUTION

If three-way valve is not used, measuring device valve must be closed when air feed valve is open.

Damage may occur to oral inflation valves if air supply pressure entering the life preserver exceeds ten (10) psi during leak tests.

NOTE

If suitable air source is not available, water-pumped nitrogen (BB-N-411) may be substituted.

3-4A. TEMPERATURE AND BAROMETRIC PRESSURE GAGES.

3-4B. The temperature and barometric pressure must be recorded when performing leakage tests on life

preservers. Should existing gages need to be replaced the equipment listed below is authorized for use. Calibration of this equipment is not required.

1. Certified thermo-hygrometer (P/N 5033) provides temperature and relative humidity, wall mounted.

2. Marine barometer (P/N M111) provides barometric pressure, wall mounted.

3. Outdoor weather computer, hand held, digital display provides temperature and barometric pressure. Pressure provided in bar graph trends for 12 hours and pressure history for 24 hours in 2 hour increments. Calendar/clock functions are included.

4. Above items must be ordered open purchase from:

American Weather Enterprises
P.O. Box 14381
San Francisco, CA 94114
Phone (800) 293-2555

3-5. PNEUMATIC INFLATOR VALVE (CHECK VALVE) CORE TOOL.

3-6. A pneumatic inflator valve (check valve) core tool, part number 8769A or equivalent (CAGE 27783), can also be fabricated as described here. See [figure 3-2](#).

1. Use 3/16-inch diameter solid brass or aluminum rod, approximately 5 inches long.

2. Fabricate as shown in [figure 3-2](#).

3. There is no IPB or Numerical Index for this tool.

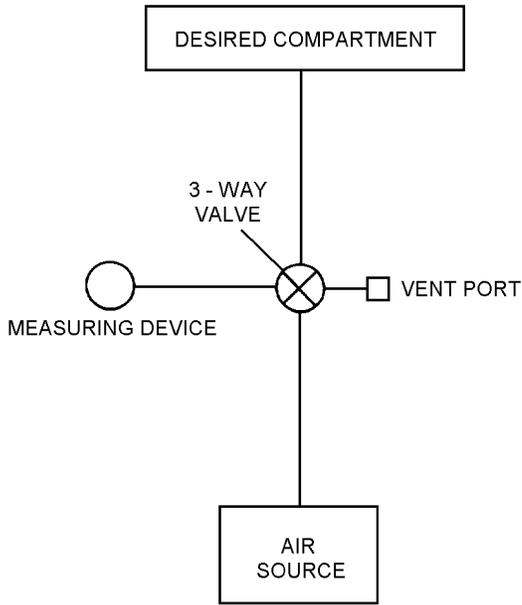


Figure 3-1. Leak Test Fixture Schematic

10030001

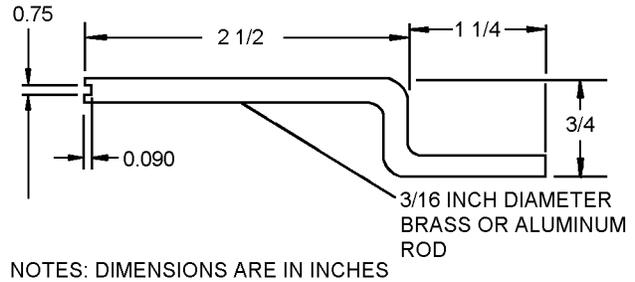


Figure 3-2. Core Tool

10030002

Section 3-3. Illustrated Parts Breakdown (IPB)

3-7. GENERAL.

3-8. This section lists and illustrates the assemblies and detail parts of the Special Tools and Support Equipment for Life Preservers.

3-9. The Illustrated Parts Breakdown should be used during maintenance when requisitioning and identifying parts.

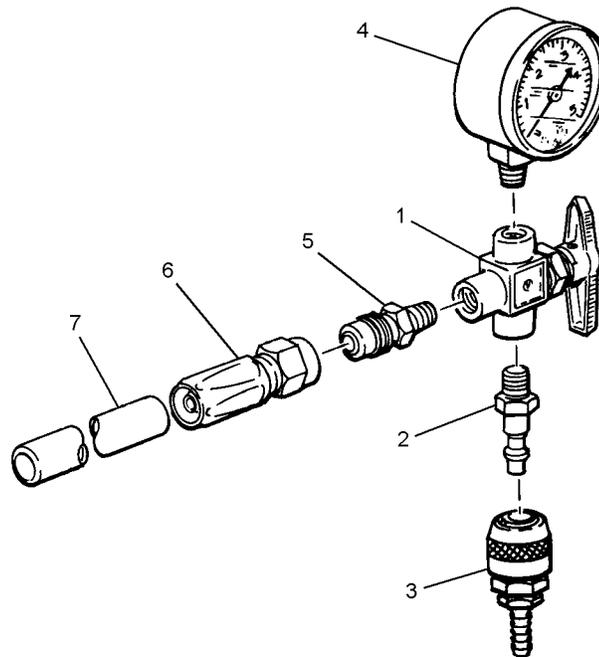


Figure 3-3. Leak Test Fixture - Life Preserver

10030003

Figure and Index Number	Part Number	Description							Units Per Assembly	Usable On Code
		1	2	3	4	5	6	7		
3-3	No Number	LEAKAGE TEST FIXTURE,							REF	
-1	B-43XF4	. VALVE, 3-way with vent (12623)							1	
-2	MIL-C-4109	. COUPLING, air hose (male)							1	
-3	MIL-C-4109	. COUPLING, air hose (female)							1	
-4	P-734	. GAGE, Pressure, 0 to 5 psig							1	
	40R31-2	. GAGE, Pressure, 0 to 15 psig							1	
	CC-TM-12	. MANOMETER, Mercury, calibrated 0 to 6							1	
-5	AN816-4-8D	. REDUCER, 3/4-inch tubing to 1/2-inch pipe							1	
-6	MS27404-8D	. FITTING, Hose 1								
-7	No Number	. HOSE, Rubber, 1/2-inch ID 3/4-inch OD							A/R	
NOTE:		1. NIIN 01-014-2696 2. Select quick-disconnect coupling compatible with low pressure air installation. 3. NIIN 00-087-3143 4. NIIN 00-942-8127								

NUMERICAL INDEX

Part Number	Figure and Index Number	SM&R Code
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AN816-4-8D	3-3-5	
B-43XF4	3-3-1	
CC-TM-12	3-3-4	
MIL-C-4109	3-3-2	

Part Number	Figure and Index Number	SM&R Code
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MIL-C-4109	3-3-3	
MS27404-8D	3-3-6	
P-734	3-3-4	
40R31-2	3-3-4	