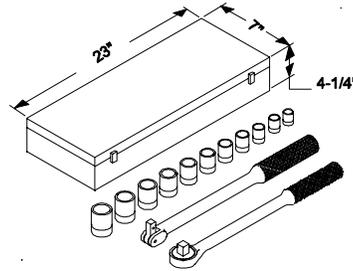


## SECTION K

### KEY SET - SOCKET HEAD

**NSN 5120-00-595-9244**

**WT.** 2.5 lbs      **VOL.** 23.8 in<sup>3</sup>



**DESCRIPTION:** 11 piece set, hardened steel, regular lengths sizes: 0.050 inch, 1/16 inch, 5/64 inch, 3/32 inch, 1/8 inch, 5/32 inch, 3/16 inch, 7/32 inch, 1/4 inch, 5/6 inch, and 3/8 inch.

**USE:** Used to perform various DCPO PMS functions.

**USE TIP:** The leverage required and the available working space will determine which end to use.

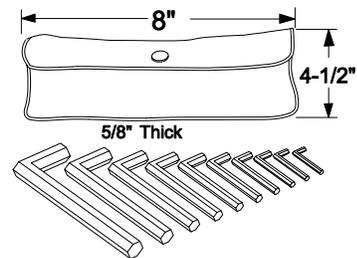
**REF:** Damage Control Petty Officer (DCPO) Kit.

---

### KEY SET, SOCKET HEAD (ALLEN WRENCH)

**NSN 5120-00-935-4641**

**WT.** 5.0 lbs.      **VOL.** 22.5 in<sup>3</sup>



**DESCRIPTION:** Allen wrench, L-shaped, short hexagonal bars in set made of hardened steel. Sizes: 0.028", 0.035", 0.050", 1/16", 5/16", 5/64", 3/32", 7/64", 1/8", 9/64", 5/32", 3/16", 7/32", 1/4", 5/16", 3/8", 7/16", 1/2", 9/16", 5/8", and 3/4".

**USE:** Used to facilitate performing some DCPO PMS functions such as turning screws or bolts with hexagonal openings.

**USE TIP:** Work space and leverage required will determine which end to use.

**REF:** Damage Control Petty Officer (DCPO) Kit.

---

**KIT - ADAPTERS/CONNECTIONS-DC**

**1HM0000-LL-CQA-2440**

**DESCRIPTION:** Portable, hand carried kit.

**USE:** Identifies all equipment used for the function of connecting various pipe sizes and hose sizes, as well as emergency jumper runs.

**USE TIP:** Stow with hoses and emergency jumper runs.

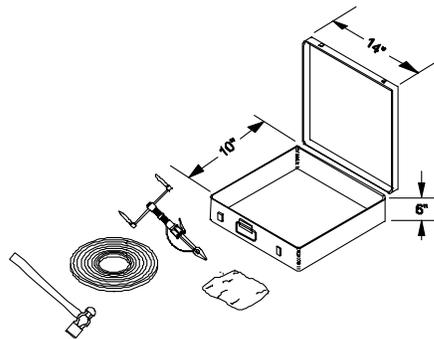
**REF:** Adapters/Connections Kit.

---

**KIT - BANDING KIT - BANDING TOOL-DC**

**1HM0000-LL-CQA-2441**

**DESCRIPTION:** Portable, hand carried kit consists of: a roll of banding straps, bag of 1/2" clips, banding tool, ballpeen hammer, chain wrench and metal pipe strong backs.



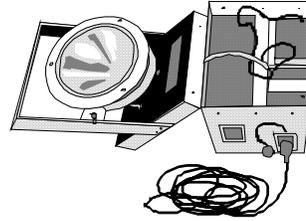
**USE:** Identifies all equipment used for the function of providing emergency pipe patching material, as well as emergency securing devices for other components.

**USE TIP:** Keep tools and equipment lubricated while in storage.

**REF:** Individual items are listed on AELs #2-880044223 and #2-880044226.

---

**KIT - BATTERY CONVERSION  
LANTERN RECHARGEABLE**



**NSN 6130-01-406-8964**

**WT.** 2.0 lbs      **VOL.** 140.0 in<sup>3</sup>

**DESCRIPTION:** This kit consists of three sealed rechargeable 6V AA batteries and one 110V AC charger module.

**USE:** Provides a rechargeable power source for each emergency damage control lantern. The lanterns are used during loss of ship's power, emergency repairs, damage control and firefighting drills and actual casualty response. The damage control lantern rechargeable battery:

- Provides up to four hours operating time when fully charged, or up to eight hours extended operating time while connected to the battery charger.
- Capable of producing 100,000 candle power.
- Weight – 20 lbs.
- Rechargeable from repair locker electrical outlets (110 volts A/C, 50 or 60 cycles).
- A/C line protection (surge and spike protection).
- Water resistant.

**USE TIP:** Two per DCRS. Authorized as a replacement for current wet cell battery used in the lantern.

**REF:** NDI equipment.

---

**KIT - CBR DETECTION EQUIPMENT-DC**

**1HM0000-LL-CQA-2442**

**DESCRIPTION:** This kit contains computer (indicator), CP Kit (Chem Detector)

**USE:** Identifies equipment used while conducting personnel monitoring and ship's chemical, biological and radiological surveys.

**USE TIP:** Stow in DC locker.

**REF:** Individual items are listed on AEL 2-880044227. CBR Detection Equipment Kit.

---

**KIT - CBR PERSONNEL-CP EQUIPMENT-DC**

**1HM0000-LL-CQA-2443**

**DESCRIPTION:** Identifies all equipment used for the function of providing personnel protection and decontamination materials in a CBR environment.

**USE:** To protect personnel from harmful contaminants in a chemical, biological or radiation hazard environment.

**USE TIP:** Stow in DC locker.

**REF:** Individual items are listed on AEL #2-880044229 thru #2-880044231, CBR Personnel – CP Equipment Kit.

---

**KIT - COLLECTIVE PROTECTION SYSTEM (CPS)**

**1HM0000-LL-CQA-2444**

**DESCRIPTION:** Identifies all equipment used for the function of providing temporary CPS integrity. Listed in alphabetical order in this guide.

**USE:** Provides emergency temporary repair capability.

**USE TIP:** Stow in DC locker.

**REF:** Individual items are listed on AEL #2-880044235, Collective Protection System (CPS) Kit.

---

**KIT - DAMAGE CONTROL  
PETTY OFFICER (DCPO)**

**1HM0000-LL-CQA-2445**

**DESCRIPTION:** Identifies all maintenance equipment for divisional damage control.

**USE:** Used for the function of performing DC maintenance in accordance with MRC PMS requirements.

**USE TIP:** This equipment is not stowed in the DCRS.

**REF:** Individual items are listed on AEL #2-880044236 and #2-880044237, Damage Control Petty Officer (DCPO) Kit.

---

**KIT - DESMOKING EQUIPMENT-DC**

**1HM0000-LL-CQA-2446**

**DESCRIPTION:** Identifies all desmoking equipment .

**USE:** Used for the function of conducting desmoking operations during and after a fire.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044238 #2-880044239, Desmoking Equipment Kit.

---

**KIT - DEWATERING EQUIPMENT-DC**

**1HM0000-LL-CQA-2447**

**DESCRIPTION:** Identifies all dewatering equipment.

**USE:** Used for the function of conducting emergency dewatering operations on either a large or a small scale.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044240 and #2-880044241, Dewatering Equipment Kit.

---

**KIT - ELECTRICAL CABLE REPAIR-DC**

**1HMM0000-LL-CQA-2448**

**DESCRIPTION:** Identifies electrical cable repair equipment.

**USE:** Used for the function of making electrical cable repair. For more information see Electrical Cable Repair Crimping Tool-HYDRA, Electrical Cable Repair Crimping Tool-STRIPPER and Electrical Cable Repair Manuals (OPER X TOOLS, OPER X SERV) in this section.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044242, Electrical Cable Repair Kit.

---

**KIT - ELECTRICAL REPAIR-DC**

**1HM0000-LL-CQA-2449**

**DESCRIPTION:** Identifies all electrical repair equipment used by qualified repair party electricians.

**USE:** Used for the function of providing repairs to electrical panels, lighting, wireways and portable electrical equipment.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044243 and #2-880044244, Electrical Repair Kit.

---

**KIT - ELECTRONIC REPAIR-DC**

**1HM0000-LL-CQA-2450**

**DESCRIPTION:** Identifies all electronic repair equipment.

**USE:** Used for the function of providing repair to vital electronic equipment support systems during battle.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044245, Electronic Repair Kit.

---

**KIT - EMERGENCY COMMUNICATION-DC**

**1HM0000-LL-CQA-2451**

**DESCRIPTION:** Identifies all emergency communication equipment.

**USE:** Used for the function of providing emergency communications at battle stations or other general shipboard casualties.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044246 and #2-880044247, Emergency Communications Kit.

---

**KIT - EMERGENCY LIGHTING-DC**

**1HM0000-LL-CQA-2452**

**DESCRIPTION:** Identifies all emergency lighting equipment..

**USE:** Used for the function of providing extension cables and lights where power supply has been interrupted during shipboard casualties and Condition 1.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044248 and #2-880044249, Emergency Lighting Kit.

---

**KIT - ENGINEERING SPACES-DC**

**1HM0000-LL-CQA-2453**

**DESCRIPTION:** Identifies all engineering spaces equipment for plugging and pipe patching.

**USE:** Used for the function of providing emergency plugging and pipe patching operations in main and auxiliary engineering spaces.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044250 and #2-880044251, Engineering Spaces Kit.

---

**KIT - FIREFIGHTING/ACCESS EQUIPMENT-DC**

**1HM0000-LL-CQA-2454**

**DESCRIPTION:** Identifies all firefighting/access equipment.

**USE:** Used for the function of providing access to fire areas.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044252 and #2-880044253, Firefighting/Access Equipment Kit.

---

**KIT - FIREFIGHTING/ACCESS PERSONNEL-DC**

**1HM0000-LL-CQA-2455**

**DESCRIPTION:** Identifies all firefighting/access personnel equipment.

**USE:** Used for the function of providing personnel protection to the fire fighter.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

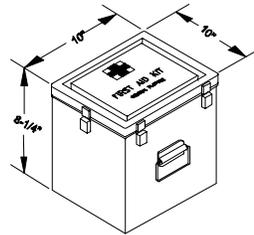
**REF:** Individual items are listed on AEL #2-880044254 thru #2-880044256, Firefighting/Access Personnel Kit.

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**KIT - FIRST AID**

**NSN 6545-00-116-1410**

**WT.** 10.0 lbs.                      **VOL.** 825.0 in<sup>3</sup>



**DESCRIPTION:** Materials used to provide first aid to DC personnel during DC emergencies.

**USE:** Contents to be periodically checked by ship's medical department.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** BUMED Doc. No. C65451L Vol. 2.

---

**KIT - GAS FREE ENGINEER-DC**

**1HM0000-LL-CQA-2456**

**DESCRIPTION:** Identifies all gas free engineering equipment.

**USE:** Used for the function of detecting the presence of poisonous and volatile fumes and gas, and to determine oxygen deficiency in a given compartment.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044260 and #2-880044261, Gas Free Engineering Kit.

---

**KIT - INVESTIGATOR-DC**

**1HM0000-LL-CQA-2457**

**DESCRIPTION:** Identifies all investigator equipment.

**USE:** Used for the function of performing the preliminary survey of a known or suspected damage/fire/flooding area.

**USE TIP:** OBA canisters are to be obtained from distributive stowage racks in the DCRS area of responsibility. After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

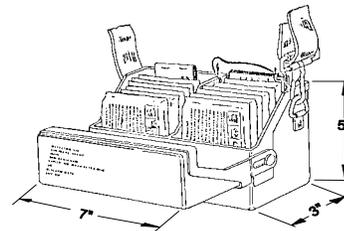
**REF:** Individual items are listed on AEL #2-880044262 and #2-880044263, Investigator Kit.

---

**KIT - M256A1 - TRAINING**

**NSN 6665-01-112-1644**

**WT.** 1.2 lbs      **VOL.** 105.0 in<sup>3</sup>



**DESCRIPTION:** Identifies items stowed together as a damage control training kit.

**USE:** Used for damage control training.

**USE TIP:** Two per DCRS on CV and CVN class ships; and one per DCRS for all other surface ships. After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Training Kit.

---

**KIT - MAINTENANCE GENERAL  
FOR WATER DRIVEN FAN**

**NSN 4140-01-339-1293**

**WT.** 2.5 lbs.

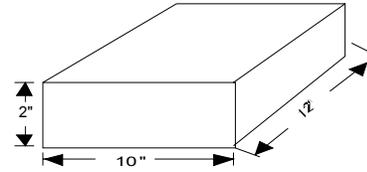
**VOL.** 240.0 in.<sup>3</sup>

**DESCRIPTION:** Supplies general maintenance equipment required for water driven fan.

**USE:** Used for general maintenance.

**USE TIP:** Included with water driven fan, when ordered. After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Desmoking Equipment Kit.



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**KIT - MONITORING TEAM, CBR-DC**

**1HM0000-LL-CQA-2459**

**DESCRIPTION:** Identifies all CBR monitoring team equipment.

**USE:** Used for the function of providing CBR surveys in order to isolate CBR boundaries.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044266 and #2-880044267, Monitoring Team, CBR Kit.

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## **KIT - PIPE JUMPER HOSE SYSTEM 1**

**NSN 4720-01-413-9060**

**WT.** lbs                    **VOL.** in<sup>3</sup>

**DESCRIPTION:** Identifies pipe jumper hose system equipment consisting of jumper fittings, prefabricated jumper hoses and associated support.

**USE:** Used for faster and less labor intensive battle damage emergency repair. Enables DC personnel to rapidly repair any severed pipeline systems (except steam) from 1/4" to 2-1/2" in diameter by:

- Removing the jagged end of the pipes with PECU or hacksaw and smoothing any sharp edges with a file.
- Measuring outside diameter of pipes and selecting a pair of PJHS fittings of correct size.
- Installing the mechanically operated PJHS fittings and securing them with spanner wrenches.
- Snapping on (Kit 1) or screwing on (Kit 2) the jumper hose.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** PJHS 1 Kit.

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## **KIT - PIPE JUMPER HOSE SYSTEM 2**

**NSN 4720-01-413-9058**

**WT.** lbs                    **VOL.** in<sup>3</sup>

**DESCRIPTION:** Identifies pipe jumper hose system equipment consisting of jumper fittings, prefabricated jumper hoses and associated support.

**USE:** Used for faster and less labor intensive battle damage emergency repair. Enables DC personnel to rapidly repair any severed pipeline systems (except steam) from 1/4" to 2-1/2" in diameter by:

- Removing the jagged end of the pipes with PECU or hacksaw and smoothing any sharp edges with a file.
- Measuring outside diameter of pipes and selecting a pair of PJHS fittings of correct size.
- Installing the mechanically operated PJHS fittings and securing them with spanner wrenches.
- Snapping on (Kit 1) or screwing on (Kit 2) the jumper hose.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** PJHS 2 Kit.

---

**KIT - PIPE PATCHING-DC**

**1HM0000-LL-CQA-0095**

**DESCRIPTION:** Identifies all pipe patching equipment.

**USE:** Used for the function of providing emergency pipe repair on L.P. systems.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044268 and #2-880044269, Pipe Patching Kit.

---

**KIT - PLASTIC PIPE PATCHING-  
PLASTIC PATCH/PIPE REPAIR  
(KIT #1)**

**NSN 4730-00-542-3359**

**DESCRIPTION:** Identifies plastic patch – pipe repair equipment.

**USE:** Used for the function of providing emergency pipe repairs on various low and medium pressure systems.

**USE TIP:** This kit is applicable only to those ships outfitted with AELs #2-880044200 and #2-880044201. After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044271, Plastic Patch-Pipe Repair Kit.

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**KIT - PLASTIC PIPE PATCHING -  
PLASTIC PATCH/PIPE REPAIR  
(KIT #2)**

**NSN 4730-00-542-3362**

**DESCRIPTION:** Identifies all plastic patch – pipe repair equipment.

**USE:** Used for the function of providing emergency pipe repairs on low and medium pressure systems.

**USE TIP:** This kit is applicable only to those ships outfitted with AELs #2-880044200 and #2-880044201. After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044271, Plastic Patch – Pipe Repair Kit.

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**KIT - PLASTIC PIPE PATCHING -  
PLASTIC PATCH/PIPE REPAIR-DC**

**1HM0000-LL-CQA-2461**

**DESCRIPTION:** Identifies all plastic patch – pipe repair equipment.

**USE:** Used for the function of providing emergency pipe repairs on various low and medium pressure systems.

**USE TIP:** This kit is applicable only to those ships outfitted with AELs #2-880044200 and #2-880044201. After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044271, Plastic Patch – Pipe Repair Kit.

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**KIT - PLUGGING-DC**

**1HM0000-LL-CQA-0102**

**DESCRIPTION:** Identifies all plugging equipment.

**USE:** Used for the function of providing emergency hull/bulkhead and pipe repair by caulking.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044272 and #2-880044273, Plugging Kit.

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**KIT - PORTABLE EXOTHERMIC CUTTING UNIT (PECU)-DC**

**NSN 4240-01-272-3841**

**DESCRIPTION:** This kit identifies all equipment used for the function of cutting through ferrous, non-ferrous wiring and other shipboard materials; in particular aircraft carrier flight decks.

**USE:** The PECU utilizes expendable cutting rods which operate on the exothermic torch principle. This principle involves the use of oxygen which is combined with a fuel. In this case the fuel is a steel tube. The exothermic cutting rod is ignited when the oxygen passing through the iron rod comes in contact with a spark generated from a 12 volt DC battery powered igniter. Once ignited, the fuel rod will continue to burn until expended, provided the oxygen flow is maintained. Releasing the oxygen lever will extinguish the rod. A 12-volt battery is the maximum electrical power permitted. Larger power sources will melt cables. The exothermic torch will cut through most materials, including steel, aluminum, laminates, piping, and cable. It will operate with the cutting rod and torch handle under water or in air. Commercially available units may not provide underwater cutting capability.

**USE TIP:** The PECU will replace existing portable oxyacetylene cutting units on a one for one basis. The PECU will provide for more rapid access into areas of the ship where normal access is impaired for

fire fighting operations, and to drain accumulated firefighting water from areas of the ship where the effects of the accumulated firefighting water will impair the ship's stability. Individual items are listed on AEL #2-880044274 and #2-880044275.

**CAUTION**

*Do not cut piping that is pressurized, piping that contains flammable fluid, or electrical cables that are energized.*

**WARNING**

*The exothermic torch will produce sparks and molten slag which can burn personnel, damage equipment, or ignite combustibles on both sides of the deck or bulkhead being cut. Holes cut in ship structure should be circular, not less than 6 inches in diameter, nor more than 19 inches in diameter. Forming of corners that initiate or induce stress cracking shall be avoided. When using this torch in the weather, the operator and other personnel should position themselves upwind of the cut, and the cut should be started downwind of the planned hole so that molten slag, heat, and smoke formed by the torch or vented from the hole will blow clear of personnel. The access team should have smoke curtains; plugging, patching and shoring materials; and firefighting equipment immediately available as applicable to the situation.*

Operation of the PECU will generate a large fume plume. In some situations it may be necessary to provide respiratory protection or emergency ventilation to the operator, or even for the operator to don an OBA. If an OBA is worn, it should be shielded from molten splatter.

The equipment technical manual contains specific directions for maintenance, stowage and cleaning of the PECU. In general, these directions require that responsible personnel:

- Keep the oxygen feed system clean (free of oil, grease and dirt)
- Ensure that the flash arrester is in place prior to use.
- Ensure that the collet nut and washer are in good condition.
- Remove the fuel rod prior to storing the PECU.
- Never leave a torch unattended with the oxygen feed system pressurized or the ignition system energized.
- Remove all slag, dirt and debris from external surfaces prior to storing the PECU.

**REF:** Battery maintenance shall be in accordance with NSTM Chapter 313, Portable Stowage and Dry Batteries. APL 419990197. Navy Technical Manual 0910-LP-574-3200. MIP/MRC 6641/006, 63B6CGN, 63B6CHN, 63B6CKN. Individual items are listed on AEL #2-880044274 and #2-880044275, PECU Kit.

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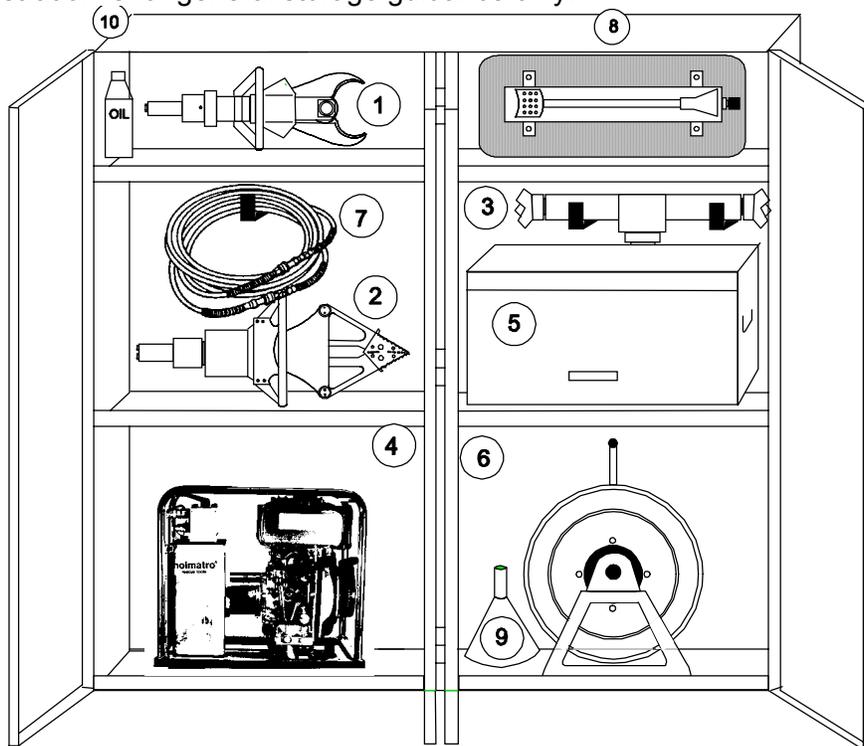
**KIT - PORTABLE HYDRAULIC ACCESS/RESCUE SYSTEM**

**NSN 4240-01-331-6853 - HOLMATRO TOOLS**

**DESCRIPTION/USE:** Identifies all equipment used for the function of emergency access and personnel rescue during damage control and rescue and assistance operations when the use of flame/spark producing equipment may not be appropriate. Each ship should have at least one PHARS kit.

EQUIPMENT DESCRIPTION	DIMENSIONS	LBS	IN <sup>3</sup>
1. Cutter	30.75"L x 8.75"W x 5"H	35.0	1345
2. Spreader	35"L x 12"W x 8.5"H	49.0	3570
3. Extension Ram	30.25"L x 4.75"W x 17"H	36.0	2443
4. Engine	21"L x 16"W x 22"H	80.0	7392
5. Box. Tool Kit	36"L x 16"W x 18"H	10.0	1260
6. Hose Reel - 100'	16.5"L x 14"W x 18"H	63.0	4158
7. Extension Hose, 1 x 16'	24"L x 18"W x 3"H	6.0	1296
8. Foot Valve	30"L x 10"W x 5"H	22.0	1500
9. Funnel	8"L x 4"W x 4"H	0.5	128
10. Oil, case - 7 quarts (1 quart illustrated)		13.0	572

**USE TIP:** 1. Spare hydraulic fluid (7 qts.) stored as designated by DCA.  
 2. Illustration is for general storage guidance only.



**REF:** Items are listed on AEL #2-884444276, Portable Hydraulic Access/Rescue System Kit.

**NSN 4240-01-376-3727 - PHOENIX TOOLS**

**DESCRIPTION/USE:** Identifies all equipment used for the function of emergency access and personnel rescue during damage control and shoreside disaster operations when the use of flame/spark producing equipment may not be appropriate. Each ship should have at least one PHARS kit.

<b>EQUIPMENT DESCRIPTION</b>	<b>DIMENSIONS</b>	<b>LBS</b>	<b>IN<sup>3</sup></b>
1. Cutter	21"L x 8"W x 5"H	12.0	840
2. Spreader	31"L x 13"W x 8"H	48.0	3224
3. Extension Ram	25"L x 7"W x 3"H	28.0	525
4. Engine	22"L x 20"W x 20"H	95.0	8800
5. Hose Reel - see Note 2	21"L x 18"W x 18"H	63.0	6804
6. Extension Hose, 1 x 15'	24"L x 16"W x 3"H	6.0	1152
7. Funnel	8"L x 4"W x 4"H	0.5	128
8. Oil, case - 7 quarts (1 quart illustrated)		13.0	512

- USE TIP:** 1. Spare hydraulic fluid (7 qts.) stored as designated by DCA.  
2. 100' hose with manifold attached to hose (optional).

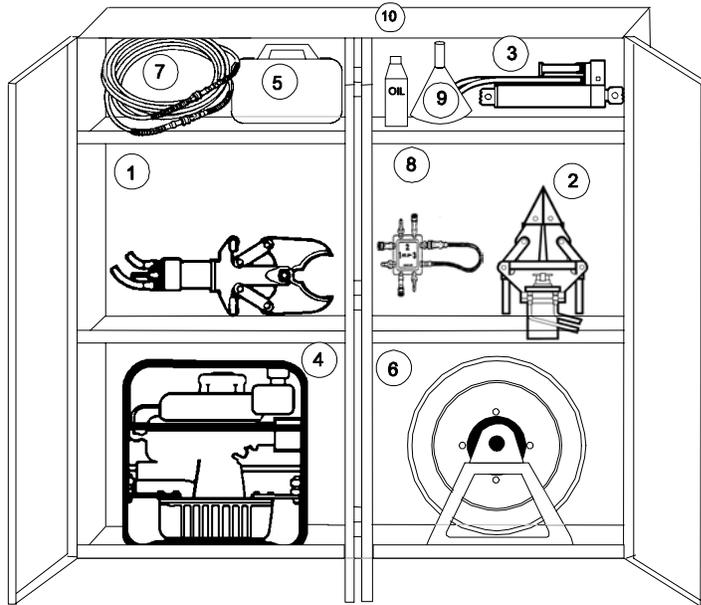
**REF:** Items are listed on AEL #2-884444276, Portable Hydraulic Access/Rescue System Kit.

**NSN 4240-01-279-8598 - HURST TOOLS**

**DESCRIPTION:** Identifies all equipment used for the function of emergency access and personnel rescue during damage control and shoreside disaster operations when the use of flame/spark producing equipment may not be appropriate. Each ship should have at least one PHARS kit.

EQUIPMENT DESCRIPTION	DIMENSIONS	LBS	IN <sup>3</sup>
1. Cutter	31½"H x 11½"W x 7"D	36.0	2536
2. Spreader	24.3"H x 14"W x 8½"D	48.0	2892
3. Extension Ram	23"H x 7"W x 3"D	28.0	483
4. Engine	22"H x 20"W x 20"D	95.0	8800
5. Attachment Case	11"H x 15d"W x 3"D	8.0	507
6. Hose Reel - 100' with Manifold attached to hose	18"H x 16½"W x 16½"D	63.0	4901
7. Extension Hose, 1 x 16'	24"H x 18"W x 3"D	6.0	1296
8. Multiple Connection Manifold	15"H x 9½"W x 5"D	10.0	713
9. Funnel	8"H x 4"W x 4"D	0.5	128
10. Oil, case - 7 quarts (1 quart illustrated)		13.0	512

**USE TIP:** 1. Spare hydraulic fluid (7 qts.) stored as designated by DCA.



**USE:** The PHARS consists of a motor driven hydraulic pump, a spreader, cutter, rams, hydraulic hose, reel and associated attachments (cutting tips, gripping tips, conical wedge block or V block). All tools are suitable for use underwater. All tools open and close hydraulically. Tools are powered by either diesel, gasoline or electrically driven hydraulic pumps.

**REF:** Individual items are listed on AEL #2-880044276 and in alphabetical order in this guide under the prefix "PHARS". Portable Hydraulic Access/Rescue System Kit.

**KIT - PORTABLE PUMP ACCESSORIES-DC**

**1HM0000-LL-CQA-2460**

**DESCRIPTION:** Identifies all portable pump accessories equipment.

**USE:** Used for the function of providing accessories to the P-100 to function as a dewatering/fire fighting pump.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044270, Portable Pump Accessories Kit.

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**KIT - REPAIR LOCKER TOOL-DC**

**1HM0000-LL-CQA-2463**

**DESCRIPTION:** Identifies repair locker tools and equipment.

**USE:** Provides additional tools and equipment that are not specifically identified in other kits.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044277 and #2-880044278, Repair Locker Tool Kit.

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**KIT - RESCUE AND ASSIST CHESTS-DC**

**1HM0000-LL-CQA-2464**

**DESCRIPTION:** Identifies all rescue and assistance equipment.

**USE:** Used for the function of providing off-ship assistance at sea or in port to conduct fire fighting, dewatering or personnel rescue operations.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044279, Rescue and Assistance Chests Kit.

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**KIT - SHORING MATERIAL-DC**

**1HM0000-LL-CQA-2465**

**DESCRIPTION:** Identifies shoring materials.

**USE:** Used for the function of conducting shoring and plugging operations by using steel and wooden shores.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044280 and #2-880044281, Shoring Material Kit.

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**KIT - SHORING SUPPLEMENT/GRP Repair-DC**

**1HS0000-LL-CQA-4178**

**DESCRIPTION:** Identifies all shoring supplement/GRP repair equipment.

**USE:** Used for the function of emergencies involving Glass Reinforced Plastic (GRP) repair as a shoring supplement on MHC 51 Class ships.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044289, Shoring Supplement/GRP Repair Kit.

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**KIT - SHORING TOOL-DC**

**1HS0000-LL-CJ7-5894**

**DESCRIPTION:** Identifies all shoring tools and equipment.

**USE:** Used for the function of conducting shoring operations by using steel and wooden shores.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044282 and #2-880044283, Shoring Tool Kit.

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**KIT - SOUNDING-DC**

**1HM0000-LL-CQA-0096**

**DESCRIPTION:** Identifies all sounding equipment.

**USE:** Used for the function of conducting soundings of tanks, voids and other compartments suspected of flooding.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044284 and #2-880044285, Sounding Kit.

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**KIT - TRAINING-DC**

**1HM0000-LL-CQA-2466**

**DESCRIPTION:** Identifies all training equipment.

**USE:** Used for the function of fire fighting and emergency egress training in a smoke filled environment.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

**REF:** Individual items are listed on AEL #2-880044286, Training Kit.

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**KIT - WELDING EQUIPMENT-DC**

**1HM0000-LL-CQA-2439**

**DESCRIPTION:** Identifies all welding equipment.

**USE:** Used for the function of performing emergency welding operations, such as reinforcing or repairing hull, deck, bulkhead, or piping systems.

**USE TIP:** After use, return all components that are not depleted to the kit and replace items of no further use in order to maintain kit completeness.

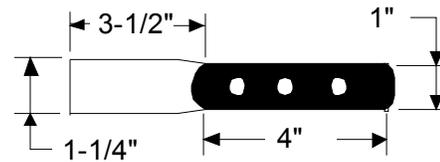
**REF:** Individual items are listed on AEL #2-880044287 and #2-880044288, Welding Equipment Kit.

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**KNIFE - PUTTY 1-1/4"**  
SEMI-FLEXIBLE

**NSN 5120-00-294-4605**

**WT.** 2.0 oz      **VOL.** 8.8 in<sup>3</sup>



**DESCRIPTION:** Narrow blade, 1-1/4" wide, with a squared-off end and plastic handle.

**USE:** Used for damage control PMS.

**USE TIP:** Clean after each use.

**REF:** Damage Control Petty Officer (DCPO) Kit.