

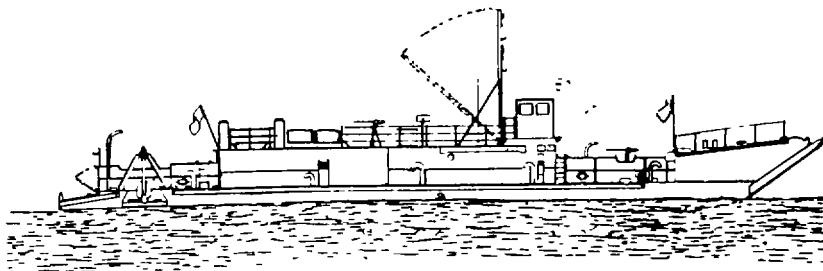
TECHNICAL MANUAL

**OPERATOR'S, ORGANIZATIONAL,
DIRECT SUPPORT, AND GENERAL SUPPORT
MAINTENANCE MANUAL**

**LANDING CRAFT UTILITY
LCU 1667-1670
(1905-00-168-5764)**

**OPERATION UNDER
USUAL CONDITIONS**

**OPERATION UNDER
UNUSUAL CONDITIONS**



**HEADQUARTERS, DEPARTMENT OF THE ARMY
7 DECEMBER 1983**

TECHNICAL MANUAL }
NO. 55-1905-219-14-2 }

HEADQUARTERS
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 7 December 1983

OPERATOR'S, ORGANIZATIONAL, DIRECT SUPPORT,
AND GENERAL SUPPORT MAINTENANCE MANUAL

LANDING CRAFT UTILITY

LCU 1667-1670
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REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistake or if you know of a way to improve the procedures, please let us know. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in the back of this manual direct to Commander, U S Army Troop Support Command, ATTN AMSTR-MMTS, 4300 Goodfellow Boulevard, St Louis, MO 63120-1798. A reply will be furnished directly to you.

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* This manual supersedes TM 55-1905-219-14-2, 24 July 1980.

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CHAPTER 2

(CONTINUED)

SECTION III. OPERATION UNDER USUAL CONDITIONS

2-19. GENERAL.

a. The instructions in this section are for the personnel who operate the various systems of the landing craft. The instructions for each component of a system are as follows:

- (1) Preliminary Adjustments - Settings for valves or switches that must be checked prior to initial starting of a device.
- (2) Local Start - Starting from the physical location of the device. Warm and cold weather starting is also included.
- (3) Remote Start - Starting the device from a remote location.
- (4) Local Stop - Stopping at the physical location of the device.
- (5) Remote Stop - Stopping the device from a remote location.

b. The following is an index to the procedures for operation under usual conditions:

<u>DESCRIPTION</u>	<u>PARAGRAPH</u>
Air Conditioning System	2-105
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2-19. GENERAL (Cont).

<u>DESCRIPTION</u>	<u>PARAGRAPH</u>
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- c. Before you operate. Always keep in mind the CAUTIONS and WARNINGS.
- d. Before you operate. Perform the PMCS(s) in Chapter 2, Section II.

2-20. HYDRAULIC STARTING SYSTEM.

- a. The following paragraphs contain the procedures that must be performed prior to starting the propulsion engines, generator engines or anchor winch engine.
- b. The hydraulic starting system located in the forward engine room is for the port main engine and generator engine.
- c. The hydraulic starting system located in the aft engine room is for the starboard main engine and generator engine.
- d. The hydraulic starting system for the anchor winch engine is located in the anchor winch compartment.
- e. The following is an index to the procedures:

	<u>DESCRIPTION</u>	<u>PARAGRAPH</u>
(1)	Forward Engine Room - Preliminary Adjustments	2-21
	Shut Down	2-22
(2)	Aft Engine Room - Preliminary Adjustments	2-23
	Shut Down	2-24
(3)	Anchor Winch Compartment - Preliminary Adjustments	2-25
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2-21. HYDRAULIC STARTING SYSTEM - FORWARD ENGINE ROOM

Preliminary Adjustments.

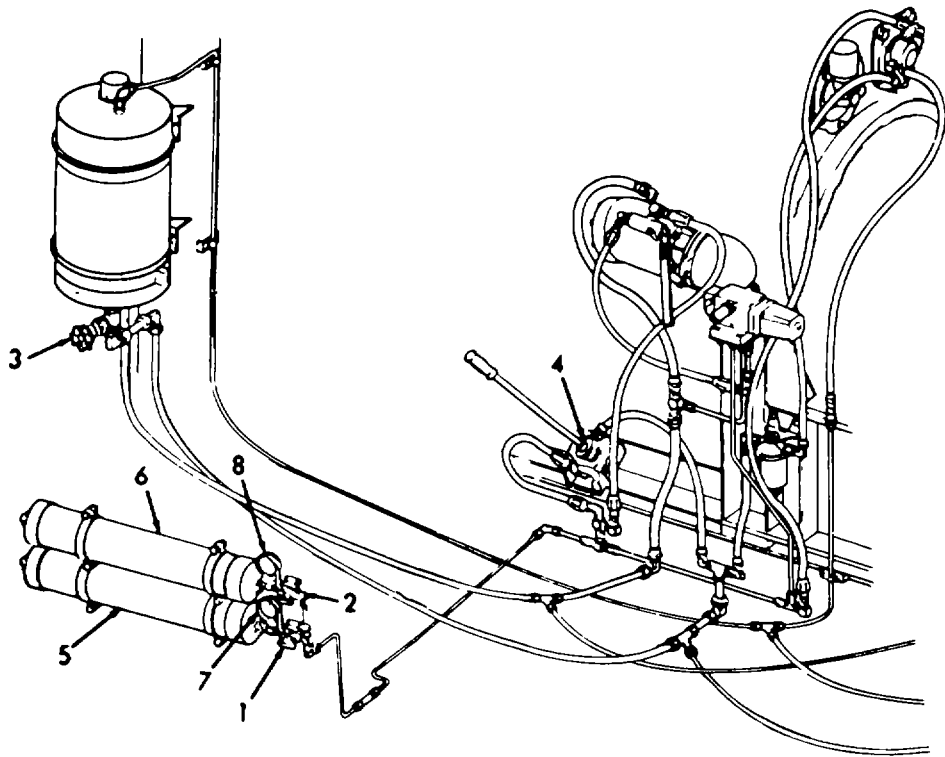
- a. Open shut off valves (1 and 2) by rotating valves counter-clockwise.
- b. Open shut off valve (3) by rotating valve counter-clockwise.
- c. Operate hand pump (4) to charge accumulators (5 and 6).
- d. Pressure gages (7 and 8) should read:

AMBIENT TEMPERATURE

Above 40°F (4.4°)
 40 F to 0°F (4.4° C to -17.8°C)
 Below 0°F (-17.8°C)

GAGE READING

1500 psi (1054.5 kg sq cm)
 2500 psi (1757.5 kg sq cm)
 3300 psi (2319.9 kg sq cm)

**2-22. HYDRAULIC STARTING SYSTEM - FORWARD ENGINE ROOM - SHUT DOWN.**

In usual operating conditions, the hydraulic starting system should not be shut down. The engines, when running, maintain a constant pressure in the system.

- a. Close all valves by rotating clockwise.
- b. Note the pressure on the gages will remain constant.

2-23. HYDRAULIC STARTING SYSTEM - AFT ENGINE ROOM

Preliminary Adjustments.

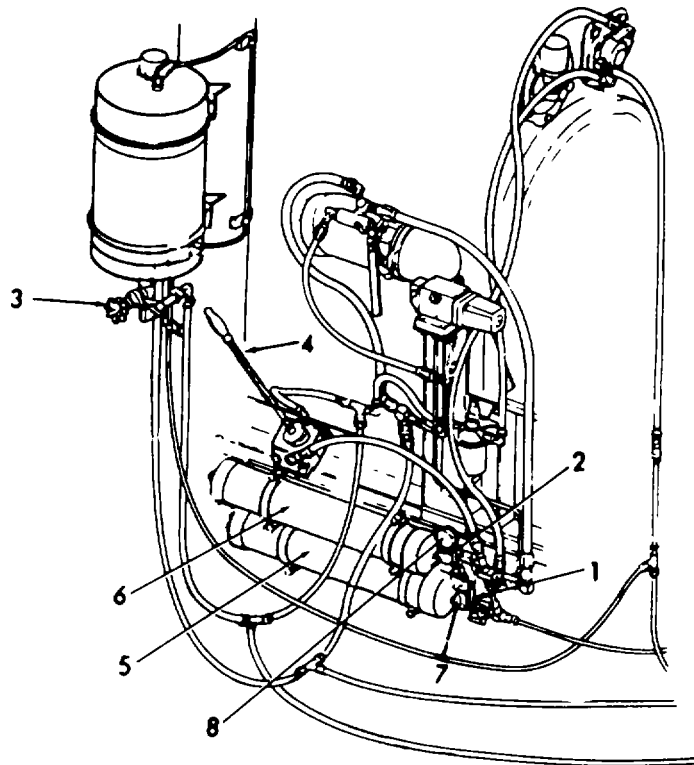
- a. Open shut off valves (1 and 2) by rotating valves counter-clockwise.
- b. Open shut off valve (3) by rotating valve counter-clockwise.
- c. Operate hand pump (4) to charge accumulators (5 and 6).
- d. Pressure gages (7 and 8) should read:

AMBIENT TEMPERATURE

Above 40°F (4.4°)
 40° F to 0° F (4.4° C to -17.8° C)
 Below 0°F (-17.8°C)

GAGE READING

1500 psi (1054.5 kg sq cm)
 2500 psi (1757.5 kg sq cm)
 3300 psi (2319.9 kg sq cm)

**2-24. HYDRAULIC STARTING SYSTEM - AFT ENGINE ROOM - SHUT DOWN.**

In usual operating conditions, the hydraulic starting system should not be shut down. The engines, when running, maintain a constant pressure in the system.

- a. Close all valves by rotating clockwise.
- b. Note the pressure on the gages will remain constant.

2-25. HYDRAULIC STARTING SYSTEM - ANCHOR WINCH COMPARTMENT.

Preliminary Adjustments.

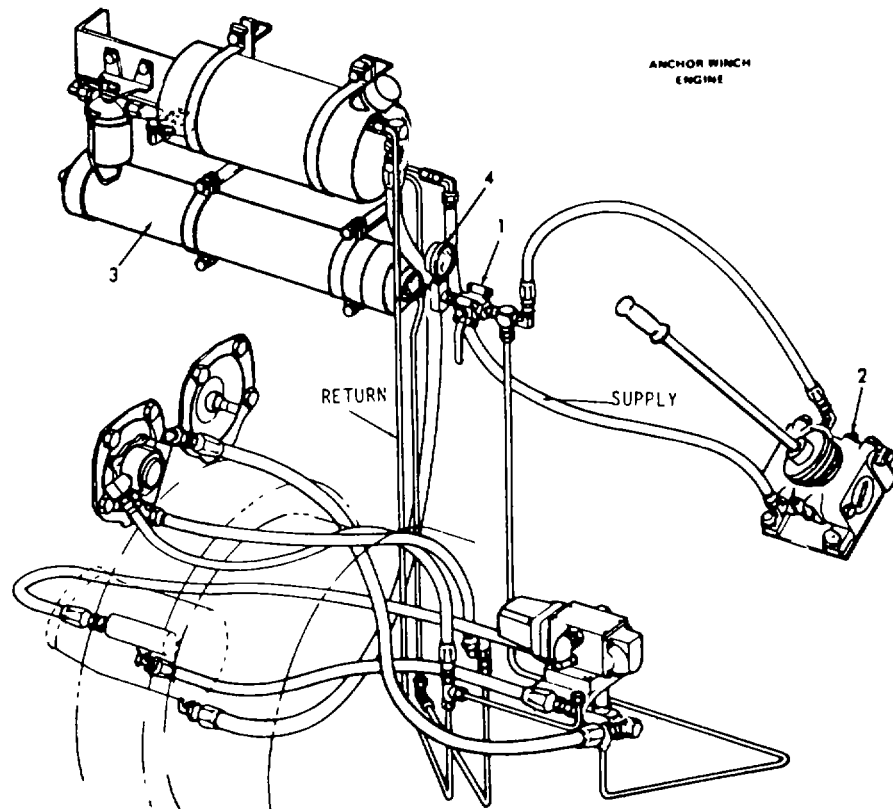
- a. Open shut off valve (1) by rotating valve counter-clockwise.
- b. Operate hand pump (2) to charge accumulator (3).
- c. Pressure gage (4) should read:

AMBIENT TEMPERATURE

Above 40°F (4.4°C)
 40°F to 0°F (4.4°C to -17.8°C)
 Below 0°F (-17.8°C)

GAGE READING

1500 psi (1054.5 kg sq cm)
 2500 psi (1757.5 kg sq cm)
 3300 psi (2319.9 kg sq cm)

**2-26. HYDRAULIC STARTING SYSTEM - ANCHOR WINCH COMPARTMENT-SHUT DOWN.**

In usual operating conditions, the hydraulic starting system should not be shut down. The engines, when running, maintain a constant pressure in the system.

- a. Close valve by rotating clockwise.
- b. Note the pressure on the gage will remain constant.

2-27. FUEL SYSTEM.

a. The procedure contained in this paragraph must be performed prior to starting the propulsion engines, generator engines, or anchor winch engine. Refer to Figure FO-34 for orientation.

- (1) Open supply valves (1) in the forward engine room by rotating valve counter-clockwise.

NOTE

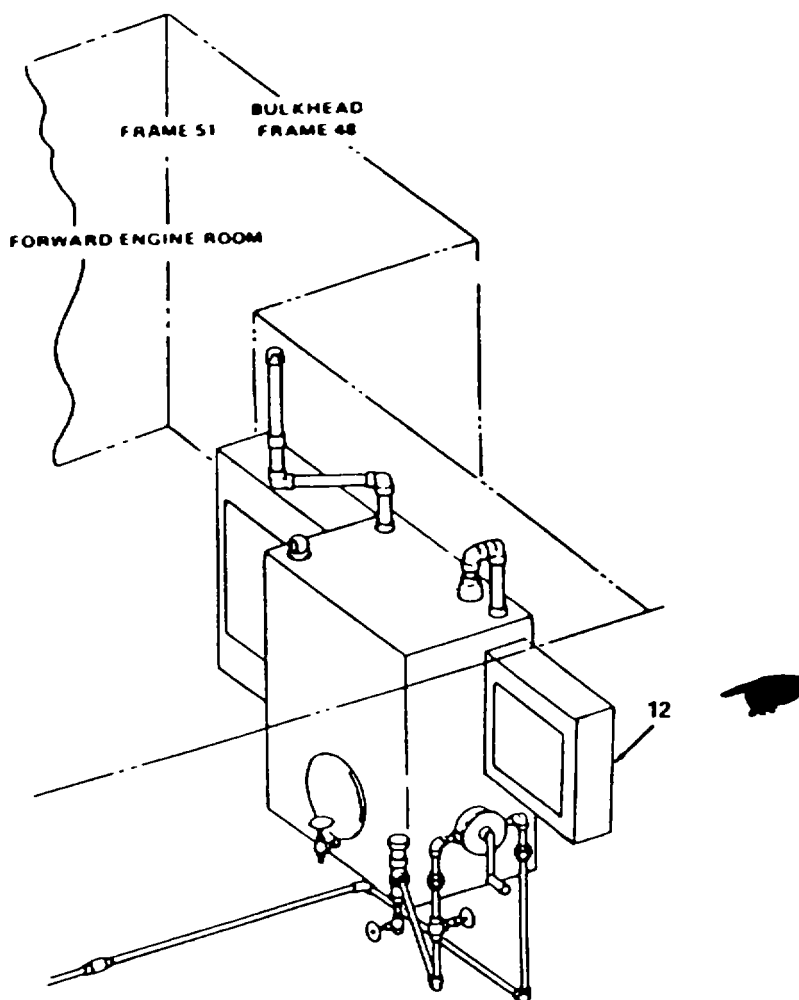
The supply valves can be opened by rotating the reach rods (2) counter-clockwise.

- (2) Remove deck plates in forward engine room at frame 49 1/2 Starboard, 2 feet 9 inches (83.8 cm) from centerline.
- (3) Place crossover valve (3) as follows:
 - (a) Starboard - Fuel oil will be taken from starboard tank and returned to the starboard tank.
 - (b) Port - Fuel oil will be taken from the port tank and returned to the port tank.
- (4) Open shut off valves as follows:
 - (a) Port Propulsion Engine - Open valve (4) by rotating counter clockwise.
 - (b) Starboard Generator Engine - Open valve (5) by rotating counter-clockwise.
 - (c) Isolation Valve - Open valve (6) by rotating counter-clockwise.
 - (d) Starboard Propulsion Engine - Open valve (7) by rotating counter-clockwise.
 - (e) Port Generating Engine - Open valve (8) by rotating counter-clockwise.
 - (f) Anchor Winch Engine - Open valve (9) by rotating counter-clockwise.
- (5) The return line can operate in either of two modes.
 - (a) Direct:
 - 1 Open bypass valve (10) by rotating counter-clockwise.
 - 2 Close shut off valves (11) by rotating clock-wise.

2-27. FUEL SYSTEM (Cont).

(b) Heat Exchanger:

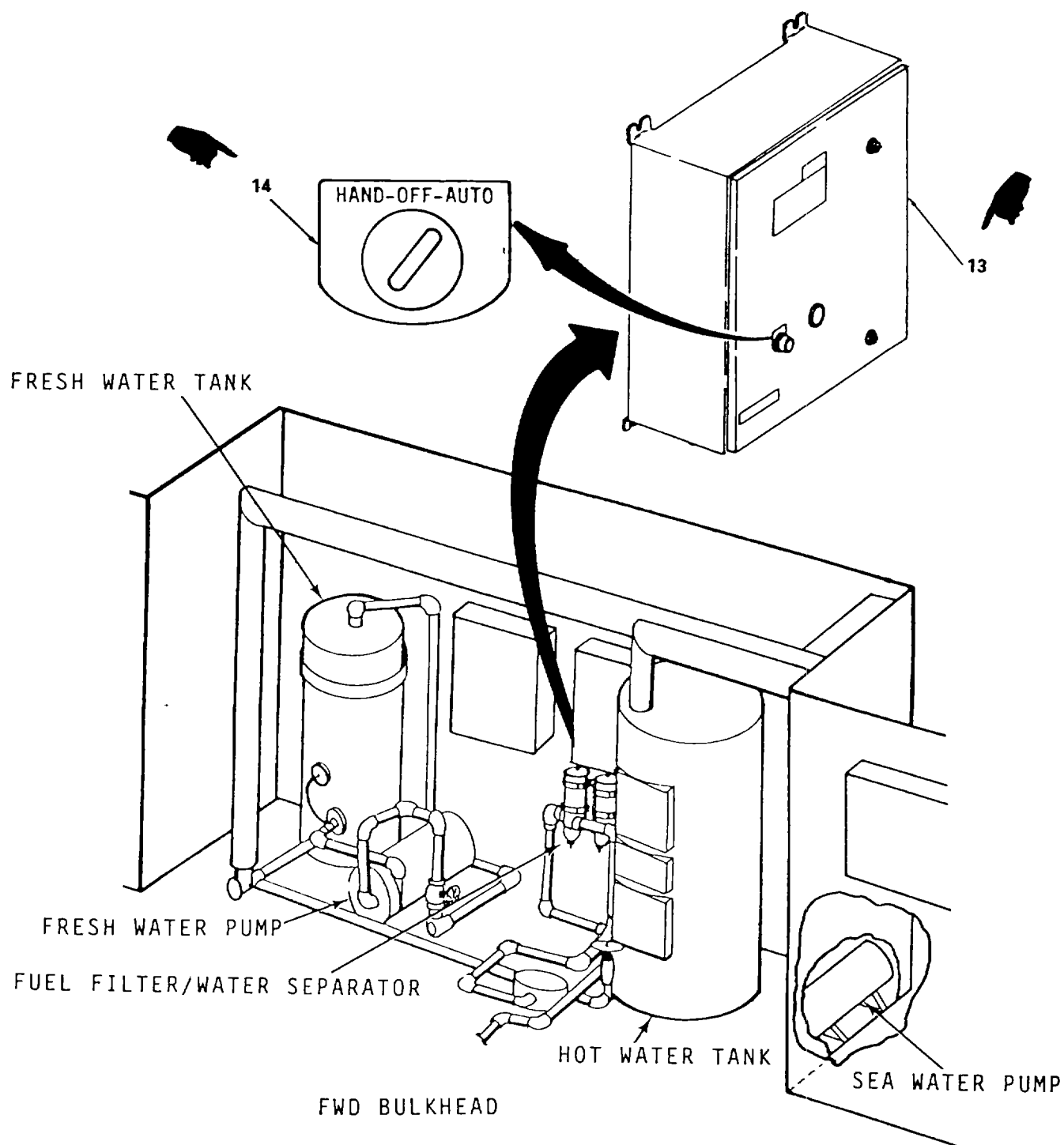
1. Close bypass valve (10) by rotating clockwise.
2. Open shut off valves (11) by rotating counter-clockwise.
3. On power distribution panel P-408, (12) place circuit breaker #5 in the ON position.



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2-27. FUEL SYSTEM (Cont).

5. In the fwd engine room; at controller (13), place selector switch (14) in the ON position.
6. Shut-Down - Place the selector switch (14) on the controller (13) in the OFF position.



- b. The various valves in the system can be left as initially set.