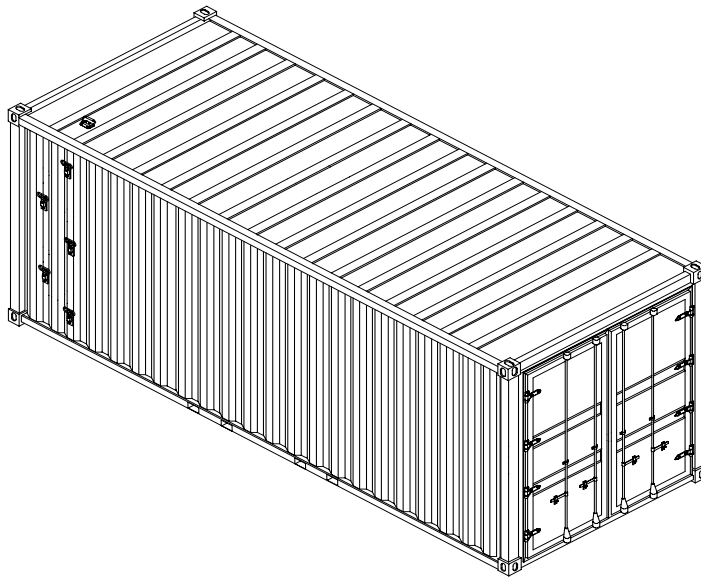


**OPERATOR'S, UNIT AND DIRECT SUPPORT
MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND
SPECIAL TOOLS LIST)**

**CONTAINERIZED SELF SERVICE LAUNDRY
(CSSL)
MODEL B
NSN 3510-01-485-0457**



DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY

30 SEPTEMBER 2002

HEADQUARTERS,
DEPARTMENT OF THE ARMY
WASHINGTON, D.C., 30 September 2002

TECHNICAL MANUAL

**OPERATOR'S, UNIT AND DIRECT SUPPORT MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS)**

**CONTAINERIZED SELF SERVICE LAUNDRY (CSSL)
MODEL B
(NSN 3510-01-485-0457)**

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter together with DA Form 2028 (Recommended Changes to Publications and Blank Forms), located in the back of this manual, directly to: Commander, U.S. Army Soldier and Biological Chemical Command, ATTN: AMSSB-RIM-L(N), Kansas Street, Natick, MA 01760-5052. You may also send in your recommended changes via electronic mail directly to amssbriml@natick.army.mil. A reply will be furnished to you. Instructions for sending an electronic 2028 may be found at the back of this manual immediately preceding the hard copy 2028.

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HOW TO USE THIS MANUAL

This Manual contains General Information, Operating Instructions, Operator Preventive Maintenance Checks and Services (PCMS), Troubleshooting, and Maintenance/Repair instructions for the Containerized Self Service Laundry (CSSL).

Chapter 1 contains introductory information on the CSSL and its associated equipment as well as a Theory of Operation. Chapter 2 includes operating instructions under usual and unusual conditions. Chapter 3 contents include operator troubleshooting, PMCS, and service procedures. Chapter 4 contains Unit Maintenance instructions. Chapter 5 contains Unit Maintenance instructions as well as troubleshooting procedures. Chapter 6 contains references and other supporting information. Chapter 7 includes the Repair Parts and Special Tools List (RPSTL) that identifies those parts or tools that are unique to the operation and maintenance of this equipment.

Manual Organization and Page Numbering System. The Manual is divided into seven major chapters that detail the topics mentioned above. Within each chapter are work packages covering a wide range of topics. Each work package is numbered sequentially starting at page 1. The work package has its own page numbering scheme and is independent of the page numbering used by other work packages. Each page of a work package has a page number of the form XXXX YY-ZZ where XXXX is the work package number (e.g. 0010 is work package 10) and YY is the revision number for that work package and ZZ represents the number of the page within that work package. A page number such as 0010 00-1/2 blank means that page 1 contains information but page 2 of that work package has been intentionally left blank.

Finding Information. The Table of Contents permits the reader to find information in the manual quickly. The reader should start here first when looking for a specific topic. The Table of Contents lists the topics contained within each chapter and the Work Package Sequence Number where it can be found.

Example: If the reader were looking for instructions on "Preventive Maintenance Checks and Services", which is a Operator Maintenance topic, the Table of Contents indicates that Operator Maintenance information can be found in Chapter 3. Scanning down the listings for Chapter 3, "Preventive Maintenance Checks and Services" information can be found in WP 0010 00 (i.e. Work Package 10).

An Alphabetical Index can be found at the back of the Manual, and lists specific topics with the corresponding work package.

**CONTAINERIZED SELF SERVICE LAUNDRY (CSSL)
NSN 3510-01-485-0457
GENERAL INFORMATION**

SCOPE.

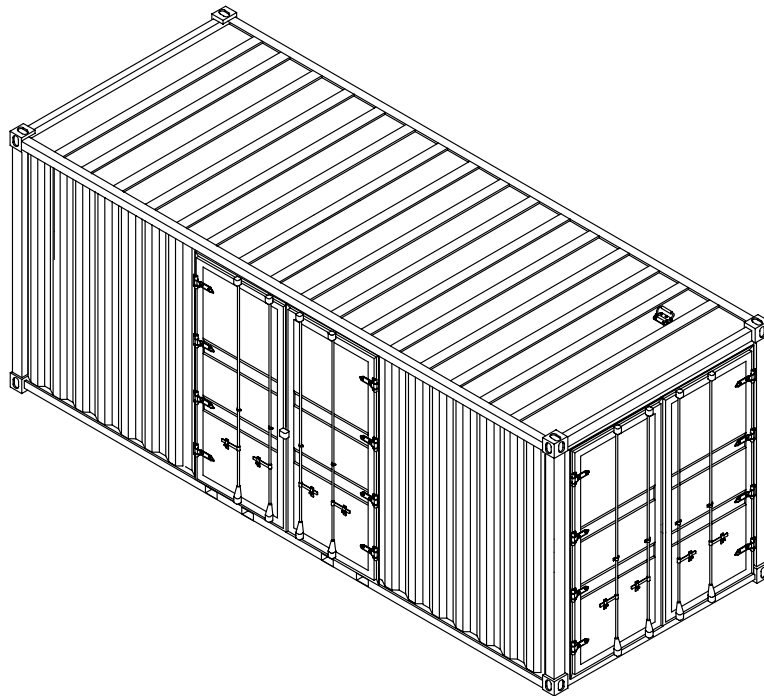
This Technical Manual contains instructions for the operation, as well as preventive, and corrective maintenance of the Containerized Self Service Laundry (CSSL) (Refer to Figure 1.)

The CSSL is non-organizational equipment and must be requested through Army support channels.

Type of Manual: Operators, Unit, and Direct Support Maintenance, including Repair Parts and Special Tools List.

Model Number and Equipment Name: Containerized Self Service Laundry (CSSL) Model B, P/N 5-13-6637, NSN 3510-01-485-0457.

Purpose of Equipment: The CSSL provides cold-water washing and drying capacity of 10lbs per washer/ dryer. It can support 120 personnel over a 20 Hour operating period. CSSL components can be operated by MOS non-specific personnel, however, initial power connections direct support level maintenance of some components must be accomplished by MOS 51R, 52C, 52D, or 52G qualified personnel.



Containerized Self Service Laundry (Stored Configuration).

MAINTENANCE FORMS RECORDS AND REPORTS

Department of the Army forms and procedures used for equipment maintenance will be those prescribed by DA PAM 738-750, Functional Users Manual for The Army Maintenance Management System (TAMMS) (Maintenance Management Update).

REPORTING EQUIPMENT IMPROVEMENT RECOMMENDATIONS (EIRs).

If your CSSL needs improvement, let us know. Send us an EIR. You, the user are the only one who can tell us what you don't like about your equipment. Let us know why you don't like the design or performance. Put it on an SF368 Product Quality Deficiency Report. Mail it to: Commander U.S. Army Soldier and Biological Chemical Command; ATTN: AMSSB-RIM-E(N), Kansas St. Natick, MA 01760-5052. We will send you a reply.

CORROSION PREVENTION AND CONTROL (CPC).

Corrosion Prevention and Control (CPC) of Army materiel is a continuing concern. It is important that any corrosion problems with this item be reported so that the problem can be corrected and improvements can be made to prevent the problem in future items.

While corrosion is typically associated with rusting of metals, it can also include deterioration of other materials, such as rubber or plastic. Unusual cracking, softening, swelling or breaking of these materials may be a corrosion problem.

If a corrosion problem is identified, it can be reported using SF 368, Product Quality Deficiency Report. Use of key words such as corrosion, rust, deterioration or cracking will ensure that the information is identified as a CPC problem. This form should be submitted to the address specified in DA Pam 738-750.

DESTRUCTION OF ARMY MATERIEL TO PREVENT ENEMY USE.

For procedures to destroy this equipment to prevent its use by the enemy refer to TM 750-244-3, Procedures for Destruction of Material to prevent Enemy use.

NOMENCLATURE CROSS-REFERENCE LIST.

Common Name	Official Name
Bootwall	TEMPER End Section, ISO Modified
Container	Shelter Modified, Welded Assembly, CSSL
CSSL	Containerized Self Service Laundry Model B
Freshwater hose	Hose Assembly, Fresh Water, 2"
Pressure tank	Tank pre-pressurized, diaphragm type
Tent	TEMPER, Section, Window
Wastewater hose	Hose Assembly, Discharge, Waste Water, 2"
Water Pump	Water Pump, 30gpm (Freshwater)
Washer/Dryer	Maytag Stacked Washer/Dryer Units
Sump pump	Teel Simplex Sewage Package System

LIST OF ABBREVIATIONS/ACRONYMS.

AAL	Additional Authorization List	MOS	Military Occupational Specialty
AMP	Amperage	MSDS	Material Safety Data Sheet
BII	Basic Issue Item	MTOE	Modified Table of Org and Equipment
COEI	Component of end item	NBC	Nuclear, Biological, Chemical
CPC	Corrosion Prevention Control	NIIN	National Item Identification Number
CSSL	Containerized Self Service Laundry	NSN	National Stock Number
cm	Centimeter	P/N	Part Number
°C	Degrees Celsius (Centigrade)	POL	Petroleum, Oil and Lubricant
°F	Degrees Fahrenheit	PMCS	Preventive Maintenance Checks and Services
EIR	Equipment Improvement Recommendation	PSI	Pounds per square inch
GFCI	Ground Fault Circuit Interrupt	QD	Quick Disconnect
GPM	Gallons per Minute	RCPT	Receptacle
hr	Hour	RPSTL	Repair Parts and Special Tools List
IAW	In Accordance With	SMR	Source, Maintenance, and Recoverability
ISO	International Organization for Standardization	TMDE	Test, Measurement, Diagnostic Equipment
in	Inches	TOE	Table of Organization and Equipment
kg	Kilogram	U/M	Unit of Measure
kW	Kilowatt	UOC	Usable On Code
lbs	Pounds	VAC	Volt Alternating Current
l	Liter	WP	Work Package

SAFETY, CARE AND HANDLING, WARNINGS, CAUTIONS AND NOTES.

Always pay attention to Warnings, Cautions and Notes appearing throughout the manual. They will appear prior to applicable procedures. Ensure you read and understand their content to prevent serious injury to yourself and others, or damage to equipment.

END OF WORK PACKAGE

TM 10-3510-224-13&P

CHAPTER 1
DESCRIPTION AND THEORY OF OPERATION
FOR THE
CONTAINERIZED SELF SERVICE LAUNDRY
(CSSL)
MODEL B

CONTAINERIZED SELF SERVICE LAUNDRY (CSSL)
NSN 3510-01-485-0457
EQUIPMENT DESCRIPTION AND DATA

EQUIPMENT CHARACTERISTICS, CAPABILITIES AND FEATURES.

Characteristics	Capabilities and Features
• The Modular system, whether in a stowed or deployed configuration, includes all the necessary equipment to operate the facility. • Four-person assembly and disassembly, within two hours each. • Provides cold-water washing only. • Suitable for operation in temperatures above 32^o F. • Washers/dryers are secured to the general cargo container floor and wall for stability during operation and shipment. • Features an 8 Foot TEMPER section (without vestibules). It is attached to the CSSL container using an ISO Modified end section, incorporating a boot that provides a weather-tight fit.	• Provides self-service laundry facilities using commercial washer/dryers. • Provides six individual washer/dryers for washing of personal clothing, each with a capacity of 10 lbs per cycle. • Supports 120 personnel over a 20 Hour operating period. • Container uses utility panels for easy fresh water, wastewater, and electrical power connections. • The CSSL features an internal heater and a vent fan for temperature control and ventilation. • Dryer exhausts are ducted to the outside through an exhaust duct. • The CSSL can be operated by MOS non-specific personnel.

Clothing Weight.

The CSSL washer/dryers are suitable for washing 10 lbs of personal clothing items and uniforms. An example of a 10 lb load consists of one battlefield dress uniform, together with undergarments, socks and a towel.

LOCATION AND DESCRIPTION OF MAJOR COMPONENTS (Internal).

Container. Modified general cargo container (1) with forklift pockets (2) and ISO fittings (3) for moving and lifting the container. Double doors are located at each end of the container. The personnel door (4) serves as main access door to the CSSL, and the rear door (5) provides access to the utility wall containing a freshwater panel (6), wastewater panel (7), power entry box (8) and vent fan (9). Located inside the container is a freshwater pump (10), wastewater tank (11) and pressure tank (12). An additional double service door (13) on the container side allows access to the rear of the washer/dryers (14). Built-in, hinged steps (15) and a handgrip (16) allow access to the top of the container

Space Heater. Installed inside the container at the rear, the heater (17) provides interior heating of the container when the CSSL is not in operation.

Power Entry Panel. The Power Entry Panel (8) is located in the utility wall and includes two 208 VAC, 3 Phase input connectors (18) for power supply to both circuit breaker panels right (19) and left (20), a 110 VAC GFCI utility receptacle (21) used for TEMPER interior lights, a 30 AMP twist lock receptacle (22) and a 60 AMP Class L connector (23). A ground terminal (24) is located in the lower right corner of the panel.

Power Distribution Panel (Right Side) (19). This panel contains a main breaker, and powers washers/dryers (14) #1 (a), 3 (c) and 5 (e) CSSL interior lights (25), the 60 AMP Class L connector (23), the space heater (17), the sump pump (26), the fresh water pump (10) and the vent fan (9).

Power Distribution Panel (Left Side) (20) This panel contains a main breaker, and powers washer/dryers (14) # 2, (b) 4, (d) and 6 (f), as well as the 30 AMP twist lock receptacle (22) and the 110 VAC GFCI utility receptacle (21).

Freshwater and Wastewater Panels. The utility wall freshwater supply (6) and wastewater drain panel (7) hose connections facilitate the following connections:

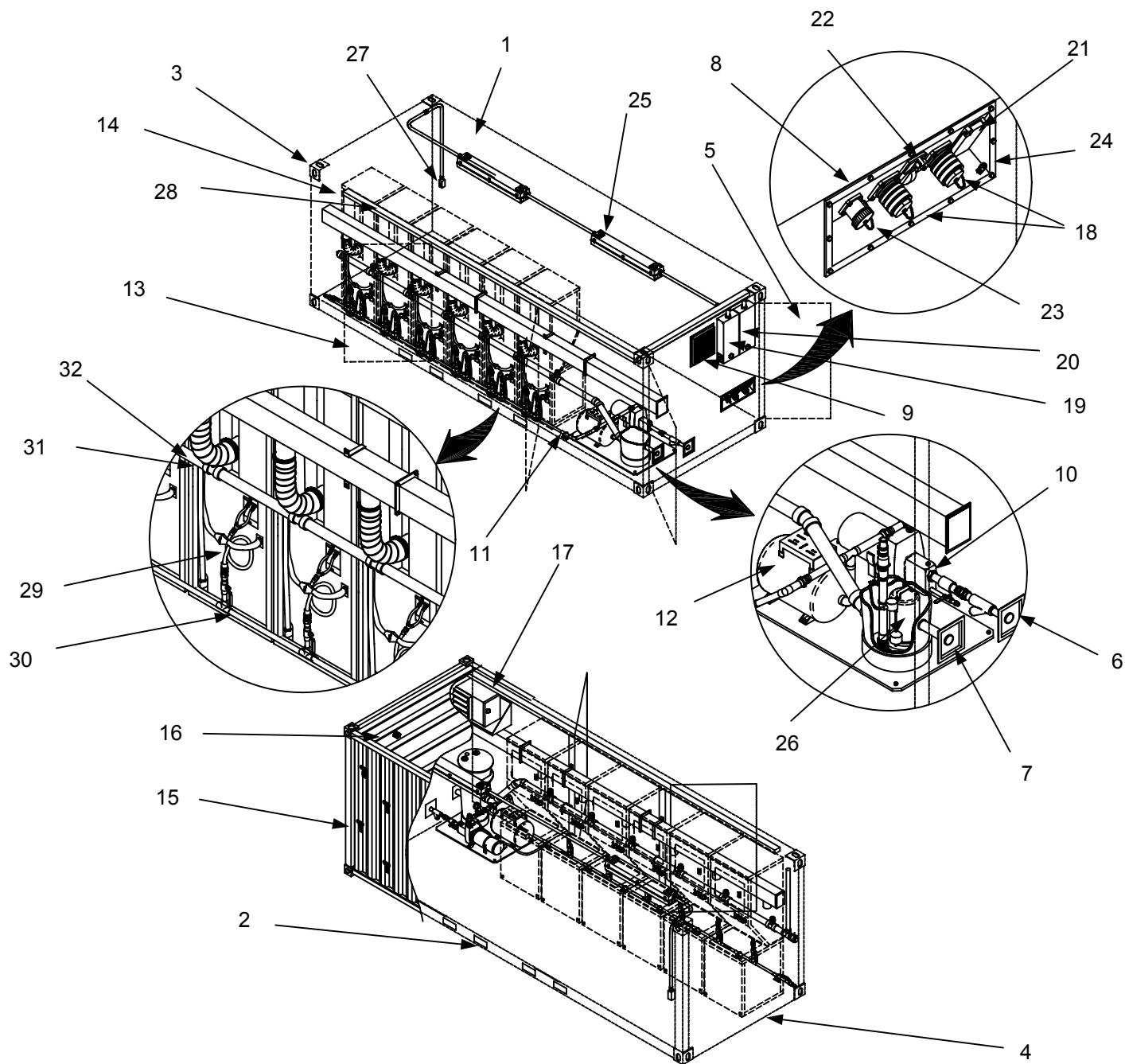
- *Outside CSSL:* Fresh water connection and wastewater connection to external source and disposal point, respectively.
- *Inside CSSL:* Fresh water connection to the fresh water pump, and wastewater connection from the wastewater holding tank.

CSSL Interior lights and light Switch. Two fluorescent light fixtures (25) are controlled from the light switch (27) located on the side wall near the personnel door.

Washers/Dryers #1 thru #6 (a thru f). The washer/dryers are mounted to the container floor and wall. The power cord of each washer/dryer unit is plugged into a twist-lock receptacle (28) located on the overhead raceway. One fresh water hose (29) connects each washer to the ¾" fresh water supply line (30). Using a standard Y connector. The washer drain hoses (31) are connected to the 3" PVC drain (32).

Freshwater Pump. The freshwater pump (10) is mounted onto the container floor and is connected to the fresh water supply panel. It provides fresh water under pressure to the main supply line when a 3,000 Gallon storage tank is used.

Wastewater Tank and Sump Pump. The wastewater tank (11) collects wastewater generated by the washers through the 3" PVC drainpipe (32). A sump pump (26) evacuates the wastewater from the tank to the designated external collection point or disposal site.



Location of Major Components (Internal).