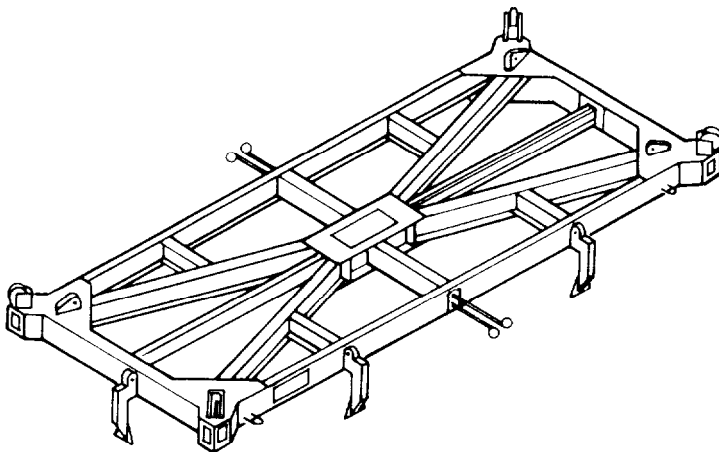

TECHNICAL MANUAL

**OPERATOR'S AND ORGANIZATIONAL MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS)
TOGETHER WITH SUPPLEMENTAL OPERATING MAINTENANCE
AND REPAIR PARTS INSTRUCTIONS (SOMARPI)**

FOR

**SPREADER, LIFTING FRAMES
NSN 3990-01-128-0089
(LINEFAST MODEL NO. 7127-51A-20L)
NSN 3990-01-128-0090
(LINEFAST MODEL NO. 7127-51A-35L)
NSN 3990-01-128-0091
(LINEFAST MODEL NO. 7127-51A-40L)
AND -
SPACER/STABILIZER BAR
FSCM 58400, PN 7127-SB**



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**SOMARPI
PART II**

HEADQUARTERS, DEPARTMENT OF THE ARMY

25 SEPTEMBER 1984

TM 10-3990-204-12&P

TECHNICAL MANUAL

No. 10-3990-204-12&P

**HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 25 September 1984**

**OPERATOR'S AND ORGANIZATIONAL MAINTENANCE MANUAL
(INCLUDING REPAIR PARTS AND SPECIAL TOOLS LISTS)
TOGETHER WITH SUPPLEMENTAL OPERATING MAINTENANCE
AND REPAIR PARTS INSTRUCTIONS (SOMARPI)**

FOR

**SPREADER, LIFTING FRAMES
NSN 3990-01-128-0089 (LINEFAST MODEL 20 FT. ISO)
NSN 3990-01-128-0090 (LINEFAST MODEL 35 FT. SEALAND)
NSN 3990-01-128-0091 (LINEFAST MODEL 40 FT. ISO)
AND
SPACER/STABILIZER BAR
FSCM 58400, PN 7127-SB**

PART I. OPERATING INSTRUCTIONS, SERVICE AND PARTS MANUAL

PART II. SUPPLEMENTAL MAINTENANCE AND REPAIR PARTS INSTRUCTIONS

REPORTING OF ERRORS

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, 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, US Army Tank-Automotive Command, ATTN: DRSTA-MBS, Warren, MI 48090. A reply will be furnished direct to you.

NOTE

This manual is published for the purpose of identifying an authorized commercial manual for the use of the personnel to whom this equipment is issued.

Manufactured by: Linefast Corporation
805 Grundy Avenue
Holbrook Avenue
New York, N.Y. 11741

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AUTHENTICATION STATEMENT

This technical manual is an authentication of the manufacturers' commercial literature and does not conform with the format and content specified in AR 310-3. Military Publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

<u>PAGE NO.</u>	<u>DESCRIPTION</u>
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PART I

**OPERATOR'S AND ORGANIZATIONAL MAINTENANCE
OPERATING INSTRUCTIONS AND SERVICE MANUAL**

FOR

SPREADER, LIFTING FRAMES

20 FT

35 FT

40 FT

AND

SPACER/STABILIZER BAR

- I.1 This manual includes operating, maintenance, and repair instructions for 20 ft., 35 ft., and 40 ft., fixed length, manually operated, x-frame type, intermodal freight container lifting spreaders with, four corner Cell Guide Wheel Assemblies, four side and two end Alignment Flipper Assemblies, a 45° single pick Lifting Sling Assembly and United States Department of Labor Form 3 Certification. National Stock Numbers are as shown on the front cover. All information is applicable to 20 ft., 35 ft., and 40 ft. Spreaders unless otherwise noted.

A Container Lifting Spreader is required for handling freight containers to prevent possible container or cargo damage which can result from using only Lifting Sling Assemblies as well as for convenience and speed.

- I.2 A 20 ft. Spreader has a safe working load of 44,800 lbs. and shall be used for handling I.S.O. (International Standards Organization), "Designation 1C", 20 ft. freight containers. 35 ft. Spreaders have a safe working load of 61,600 lbs. and shall be used for handling "Sealand" 35 ft. Freight Containers. 40 ft. Spreaders have a safe working load of 67,200 lbs. and shall be used for handling I.S.O. "Designation 1A" 40 ft. Freight Containers.

- I.3 Because the Spreaders are of a fixed length they may not be used interchangeably to handle alternate size freight containers and the Lifting Sling Assemblies must be kept at a 45° minimum angle of lift, see page 1, and are non-interchangeable. Consult the Repair and Replacement Component Parts List on pages 31 to 35 for reference to common parts. No special tools are required during normal operation, maintenance and repair of the spreaders, with the exception of a special Alignment Flipper Operating tool to be used whenever manual Alignment Flipper Operation is not possible. Certain hand tools listed in the Repair and Replacement Component Parts List may facilitate ease in installation of special component parts but are not requirements since standard hand tools can be used.

- I.4 The following are basic areas of the spreader and their purpose. Refer to the Component Part Identification section on pages 1 to 4.

Bayonet and Bayonet Body: The Bayonet is the link between the spreaders and the Freight Containers. It enters then locks in the Containers Corner Fittings for Lifting. The Bayonet Body serves as a housing for the Bayonet.

Striker Blocks: Limits Bayonet penetration and prevents Container Corner Fitting damage.

Spreader Control Cables: Operate the Spreader Linkage Assemblies to lock and unlock the Bayonets.

Centerbox: Serves as a housing for the Centerbox Linkage Assembly and is an integral part of the Spreader frame.

Centerbox Cover Plate: Removable for access to the Centerbox Linkage Assembly.

Driveshaft: Connects the End and Centerbox Linkage Assemblies.

EQUIPMENT CHARACTERISTICS, CAPABILITIES AND FEATURES