

TM 5-3810-305-24

TECHNICAL MANUAL

**UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT
MAINTENANCE**

FOR

**CRANE, WHEEL MOUNTED,
HYDRAULIC, LIGHT, 7 1/2 TON
(ROUGH TERRAIN CRANE)**

MODEL LRT 110

CONSISTS OF:

**Type I General Purpose
(3810-01-165-0646)**

**Type II Airborne/Airmobile
(3810-01-165-0647)**

This technical manual is an authentication of the manufacturers commercial literature and does not conform with the format and content specified in AR 25-30, Military Publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

Approved for public release: distribution is unlimited.

HEADQUARTERS, DEPARTMENT OF THE ARMY 3 DECEMBER 1991

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REPORTING OF ERRORS

You can help improve this manual. If you find any mistakes or if you know of away 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 Tank-Automotive Command, ATTN: AMSTA-MB, Warren, MI 48397-5000. A reply will be furnished to you.

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TABLE OF CONTENTS

	TITLE	PAGE
CHAPTER 1	INTRODUCTION	
	General	1-1
	Major Component Nomenclature	1-2
	Safety Precautions	1-3
	How to Use This Manual	1-10
CHAPTER 2	CLEANING/LUBRICATION	
	General Cleaning	2-1
	Electrical Cleaning	2-1
	Bearing Cleaning	2-2
CHAPTER 3	TROUBLESHOOTING AND PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS)	
	Section I. Troubleshooting	
	Engine	3-1
	Hydraulics - General	
	Swing Circuit	3-10
	Boom Hoist Circuit	3-12
	Boom Extend Circuit	3-14
	Outrigger Circuit	3-16
	steering circuit	3-19
	Pumps	3-25
	Relief Valves	3-27
	Brakes	3-27
	Electrical System	3-29
	Anti-Two Block System	3-32
	Transmission	3-35
	Axle Assembly	3-39
	Winch	3-40
	Section II. Preventive Maintenance Checks and Services (PMCS) Schedule	
	Daily Check (8 Service Hours)	3-46
	Weekly Check (40 Service Hours)	3-47
	Two Week Check (80-100 Service Hours)	3-45
	Three Month Check (250 Service Hours)	3-45
	Four Month Check (500 Service Hours)	3-48
	Six Month Check (1,000 Service Hours)	3-51
	Twelve Month Check (1,500-2,000 Service Hours)	3-54
CHAPTER 4	INSPECTION PROCEDURES	
	General Inspection	4-1
	Electrical Inspection	4-1
	Bearing Inspection	4-1

CHAPTER 5	PERFORMANCE VERIFICATION	
	Vehicle and STE/ICE Troubleshooting	5-1
	STE/ICE Test Procedure	5-3
CHAPTER 6	ENGINE	
	Engine/Transmission Assembly	6-1
	Mounting The Engine On A Rollover Stand	6-10
	Engine Mount	6-11
	Drive Belt, Pulleys and Fan	6-12
	Front Gear Train Accessory Drive and Front Cover	6-17
	Timing Pin Assembly	6-19
	Front Gear Housing	6-24
	Lube Oil Pump	6-28
	Air Cleaner	6-31
	Manifold CoverPlate	6-35
	Valve Covers	6-36
	Rocker Levers and Push Rods	6-37
	Cylinder Head	6-42
	Tappet Cover	6-53
	Camshaft and Valve Tappets	6-55
	Flywheel and Flywheel Housing	6-61
	Oil Pan and Suction Tube	6-66
	Crankshaft and Bearings	6-68
	Crankshaft Seals, Front and Rear	6-74
	Pistons, Connecting Rods and Bearings	6-79
	Oil Level Gauge	6-89
	Cylinder Block	6-90
	Lube Oil Cooler	6-98
CHAPTER 7	FUEL SYSTEM	
	Injection Pump	7-1
	Injector Nozzles	7-16
	Lift Pump	7-24
	Fuel Tank	7-25
	Fuel Lines	7-28
	Fuel Filters and Head Assembly	7-30
	Cold Start Device	7-31
	Fuel Injection Tubes	7-34
	Fuel Pressure Switch and Transducer	7-39
CHAPTER 8	EXHAUST SYSTEM	
	Exhaust Manifold	8-1
	Exhaust System	8-2
CHAPTER 9	COOLING SYSTEM	
	Thermostat	9-1
	Water Pump	9-3
	Water Inlet Connection	9-4
	Radiator and Oil Cooler	9-5

CHAPTER 10	ELECTRICAL SYSTEM	
	Alternator	10-1
	Starting Motor	10-8
	Battery Assembly	10-16
	Electrical Wiring Harness Repair	10-24
	Main Engine Wiring Harness	10-34
	Cab Main Harness	10-36
	Main STE/ICE Harness	10-39
	Left Front Lights and Bracket	10-41
	Right Front Lights and Bracket	10-43
	Rear Lights	10-45
	Travel Alarm	10-46
	Horn	10-47
	Boom Electrical	10-48
	Electrical Collector Ring	10-57
	Axle Centering Light Switch Assembly	10-63
	Anti-Two Block Control Panel	10-66
	STE/ICE DCA Connector/Resistor Module	10-69
	Work Lights	10-70
CHAPTER 11	TRANSMISSION	
	Front Cover and Main Case	11-1
	Output Disconnect Group	11-17
	Drive plate Group and Converter Assembly	11-22
	First Stage Clutch Group	11-28
	Second Stage Clutch Group	11-42
	Third Stage Clutch Group	11-54
	Input Shaft Group	11-65
	Charge Pump	11-66
	Pump Adapter	11-69
	Control Valve	11-71
	Control Valve Pressure Checks	11-78
	Clutch Pack Pressure Test	11-79
	Transmission 2WD/4WD Linkage	11-80
CHAPTER 12	DRIVE SYSTEM	
	Tires and wheels	12-1
	Front Axle	12-5
	Rear Axle	12-9
	Brake Assembly	12-12
	Front Differential Assembly	12-17
	Rear differential Assembly	12-28
	Tie Rod	12-33
	Constant Velocity Joint and Axle Shaft	12-35
	Planetary Wheel End	12-38
	Pivot and Spindle Assembly	12-45
	Front Drive Shaft	12-51
	Rear Drive Shaft	12-54
CHAPTER 13	HYDRAULIC SYSTEM	
	Boom Hoist Cylinder	13-1
	Boom Extend Cylinder	13-10
	Axle lockout Cylinder	13-19
	Outrigger Cylinder Assembly	13-25

	Steering Cylinders	13-32
	Main Hydraulic Pump	13-37
	Ground Driven Steering Pump	13-44
	Swing Motor	13-51
	Rotary Manifold	13-60
	Hydraulic Reservoir	13-66
	Return Filter	13-69
	Hydraulic System Valve Bank	13-71
	Outrigger Solenoid Valve	13-74
	Steering Selector Valve	13-78
	Flow Divider and Steering Valve	13-83
	Relief Valve	13-86
	Axle Lockout Valve	13-89
	General Hose Repair	13-91
	Outrigger Hydraulics	13-92
	Suction Hydraulics	13-96
	Master Cylinder	13-98
	Bleeding Procedures	13-103
	Steering System Hydraulics	13-104
	Lower Boom, Swing, Winch Hydraulics	13-107
	Return Pressure Hydraulics	13-110
	Steering Control Unit	13-114
	Hydraulic Brakes	13-118
	Upper Hydraulic Lines	13-123
CHAPTER 14	FRAME AND CAB	
	Marking Decals	14-1
	Pintle Hook	14-3
	Outrigger Assembly	14-5
	Fenders, Deck Plates, Battery Box and Tool Box with Covers	14-8
	Seat	14-11
	Seat Belts	14-12
	Mirror	14-13
	Cab	14-15
	Cab Door	14-19
	Engine Hood and Grill Guard	14-22
	Hood Support	14-25
	Hood Block Tieback	14-26
CHAPTER 15	CRANE	
	Boom	15-1
	Swing Bearing	15-15
	Upperstructure	15-18
	Swing Gear Box	15-25
	Boom Angle Indicator	15-34
CHAPTER 16	WINCH	
	Winch	16-1
	Primary Planet Carrier	16-14
	Output Planet Carrier	16-16
	Brake Clutch	16-18
	Winch Brake Valve	16-21
	Motor Support Brake Cylinder	16-24

	Winch Motor	16-31
	Hook Block	16-39
	Winch Control Valve	16-41
CHAPTER 17	OPERATORS CONTROLS	
	Boom Hoist Winch, and Outrigger Valve Controls	17-1
	Swing/Telescoping Valve Controls	17-4
	Transmission Shift Controls	17-6
	Throttle Control	17-10
	Heater	17-15
	Defroster Fan	17-24
	Windshield Wiper	17-26
	Brake Pedal and Linkage	17-28
	Brake Booster Valve	17-30
	Parking Brake	17-40
	Parking Brake/Speedometer Adjustment	17-45
	Transmission Cable	17-46
	Vehicle Level	17-52
	Valve Control Cables	17-54
	Dash Panel Gauges and Switches	17-61
	Speedometer Alarm Test	17-71
	Tachometer Adjustment	17-71
CHAPTER 18	TYPE II SUPPLEMENT	
	Type II Engine and Transmission Assembly	18-1
	Mast Assembly	18-11
	Pivot Bearings	18-13
	Truss Rod	18-15
	Rotary Manifold Quick Disconnects	18-17
	Type II Fenders and Deck	18-22
	Type II Boom	18-23
	Type II Marking Decals	18-24
	Type II Rear Electrical	18-25
	Type II Heater	18-26
	Type II Fuel Tank	18-27
	Type II Pintle Hook	18-28
	Type II Outriggers	18-29
	Type II Transmission Shift Assembly	18-30
	Type II Upperstructure	18-31
	Type II General Hose Replacement and Hydraulic Quick Disconnects	18-32
CHAPTER 19	PREPARATION FOR SHIPMENT	19-1
CHAPTER 20	STORAGE	
	Machine Storage	20-1
	Short-Term Storage (30 Days or Less)	20-1
	Long-Term Storage (More Than 30 Days)	20-2
	Restoration to Service	20-4
	Restoring Engine to Service	20-5
	Restoring Transmission to Service	20-5
APPENDIX A	TORQUE SPECIFICATION	A-1
	Fastener Identification	A-1

Engine Fastener Torque Values	A-3
Transmission Fastener Torque Values	A-3
All Other Fasteners except Engine and Transmission English Torque Values	A-4
All Other Fasteners except Engine and Transmission Metric Torque Values	A-5
Hydraulic Tube Assembly	A-6
APPENDIX B-PUBLICATION REFERENCES	B-1
APPENDIX C-MAINTENANCE ALLOCATION CHART	C-1
APPENDIX D-UNIT PMCS	D-1
VEHICLE ELECTRICAL SCHEMATIC	FO-1
LRT 110 ELECTRICAL SYSTEM IDENTIFICATION	FO-2
STE-ICE ELECTRICAL SCHEMATIC	FO-3
LRT 110 HYDRAULIC SCHEMATIC	FO-4
INDEX	INDEX-1

CHAPTER 1
INTRODUCTION

Title	Page
General	1-1
Major Component Nomenclature	1-2
Safety Precautions	1-3
How To Use This Manual	1-10

The purpose of this manual is to familiarize personnel with the LRT 110 Crane and provide the necessary information and data needed for Troubleshooting, Cleaning/Inspection, Testing, Lubrication and Maintenance of all major components.

GENERAL

The LRT 110 Crane is a wheel-mounted, self-contained, two- and four-wheel drive, two- and four-wheel steering crane. A diesel engine powers the LRT 110 Crane, driving through a

powershift transmission with tandem pump hydraulic power for operation of the crane, outriggers, fully revolving upperstructure and steering system (refer to Figures 1-1 and 1-2).

The LRT 110 Crane design meets all the applicable requirements of OSHA, EPA, PCSA Std. #4, ANSI B30.5 and the specified SAE Standards.

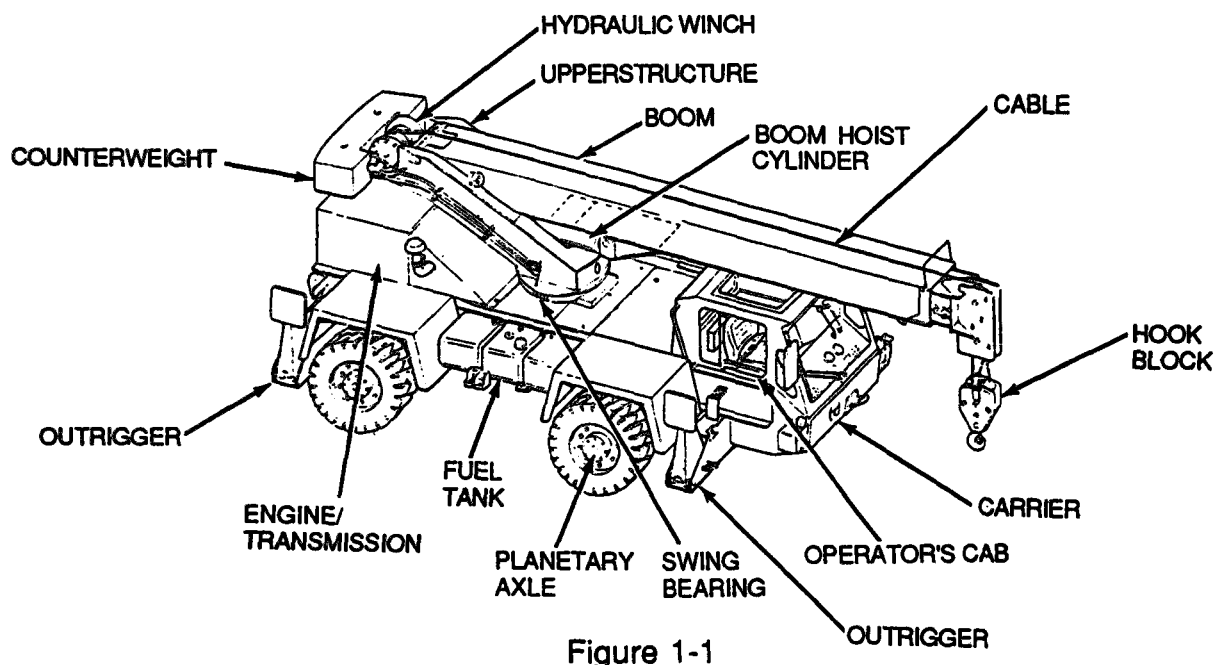


Figure 1-1

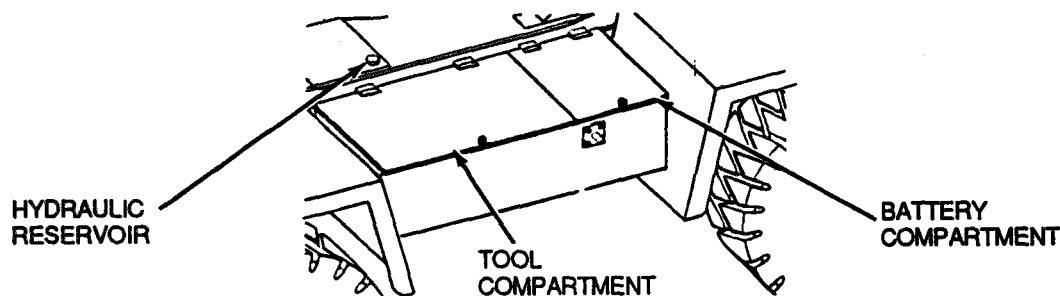


Figure 1-2

MAJOR COMPONENT NOMENCLATURE

NOTE

All directional references in this manual (right or left, front or rear, etc.) correspond to the position of the operator when facing forward in operator's cab.

Upperstructure: The upperstructure includes the counterweight, hydraulic winch and boom hoist cylinder.

Boom Attachment: The boom attachment includes the crane boom, boom extend cylinder and hook block.

Carrier: The carrier includes the frame, engine, transmission, swing bearing, planetary axles, outriggers, operator's cab, fuel tank, hydraulic reservoir, batteries and tool compartment.

Refer to the Koehring Commercial Operation Instructions manual for the following information:

- Capabilities
- Performance Characteristics
- Equipment Specifications
- Capacities
- Load Rating on Outriggers
- Load Rating on Tires
- Maximum Permissible Hoist
 - Line Load
- List of Items Required
- Storage Data
- Tools and Test Equipment
- Warranty Information.