

GROVE

OPERATOR'S MANUAL

This manual has been prepared for and is considered part of -

RT540E

Crane Model Number

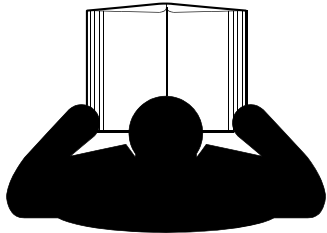
This Manual is divided into the following sections:

SECTION 1	INTRODUCTION
SECTION 2	SAFETY INFORMATION
SECTION 3	OPERATING CONTROLS AND PROCEDURES
SECTION 4	SET-UP AND INSTALLATION PROCEDURES
SECTION 5	LUBRICATION
SECTION 6	MAINTENANCE CHECKLIST

NOTICE

The crane serial number is the only method your distributor or the factory has of providing you with correct parts and service information.

The crane serial number is identified on the builder's decal attached to the operator's cab. **Always furnish crane serial number** when ordering parts or communicating service problems with your distributor or the factory.



⚠ WARNING

To prevent death or serious injury:

- Avoid unsafe operation and maintenance.
- This crane must be operated and maintained by trained and experienced personnel. Manitowoc is not responsible for qualifying these personnel.
- Do not operate or work on this crane without first reading and understanding Operator's Manual and Rating Plate supplied with crane.
- Store Operator's Manual in holder provided on crane.
- Attach laminated Capacity Charts supplied with crane to chain in operator's cab.
- If Operator's Manual or Capacity Charts are missing from cab, contact your distributor for new ones.



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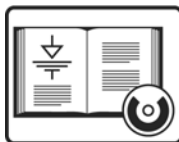
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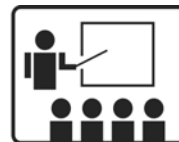
**Field
Service**



Parts



**Factory
Service**



Training

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SECTION 1 INTRODUCTION

GENERAL

NOTE: Throughout this handbook, reference is made to left, front, and rear when describing locations. These reference locations are to be considered as those viewed from the operator's seat with the superstructure facing forward over the front of the carrier frame.

This Handbook provides important information for the operator of the Model RT540E Series Grove Crane.

The rough terrain crane incorporates an all welded steel frame, using planetary drive axles to provide four-wheel drive. Axle steering is accomplished utilizing hydraulic steer cylinders. The engine is mounted at the rear of the crane and provides motive power through a six speed forward and reverse transmission. Hydraulic, double box, sliding beam outriggers are integral with the frame.

The carrier frame incorporates an integral fifth wheel, to which the rear axle is mounted, to provide axle oscillation. Axle oscillation lockout is automatic when the superstructure rotates from the travel position.

The superstructure is capable of 360° rotation in either direction. All crane functions are controlled from the fully-enclosed cab mounted on the superstructure. The crane is

equipped with a four-section cable synchronized full power boom. Additional reach is obtained by utilizing a swingaway boom extension. Lifting is provided by a main hoist and an optional auxiliary hoist.

NOISE/VIBRATION TEST RESULTS

Noise Level Test Results Are As Follows:

- At the operator's station with closed cab operation, the value is 78.5 dba maximum when measured according to the directives 98/37/EC and Kebomatief 27.

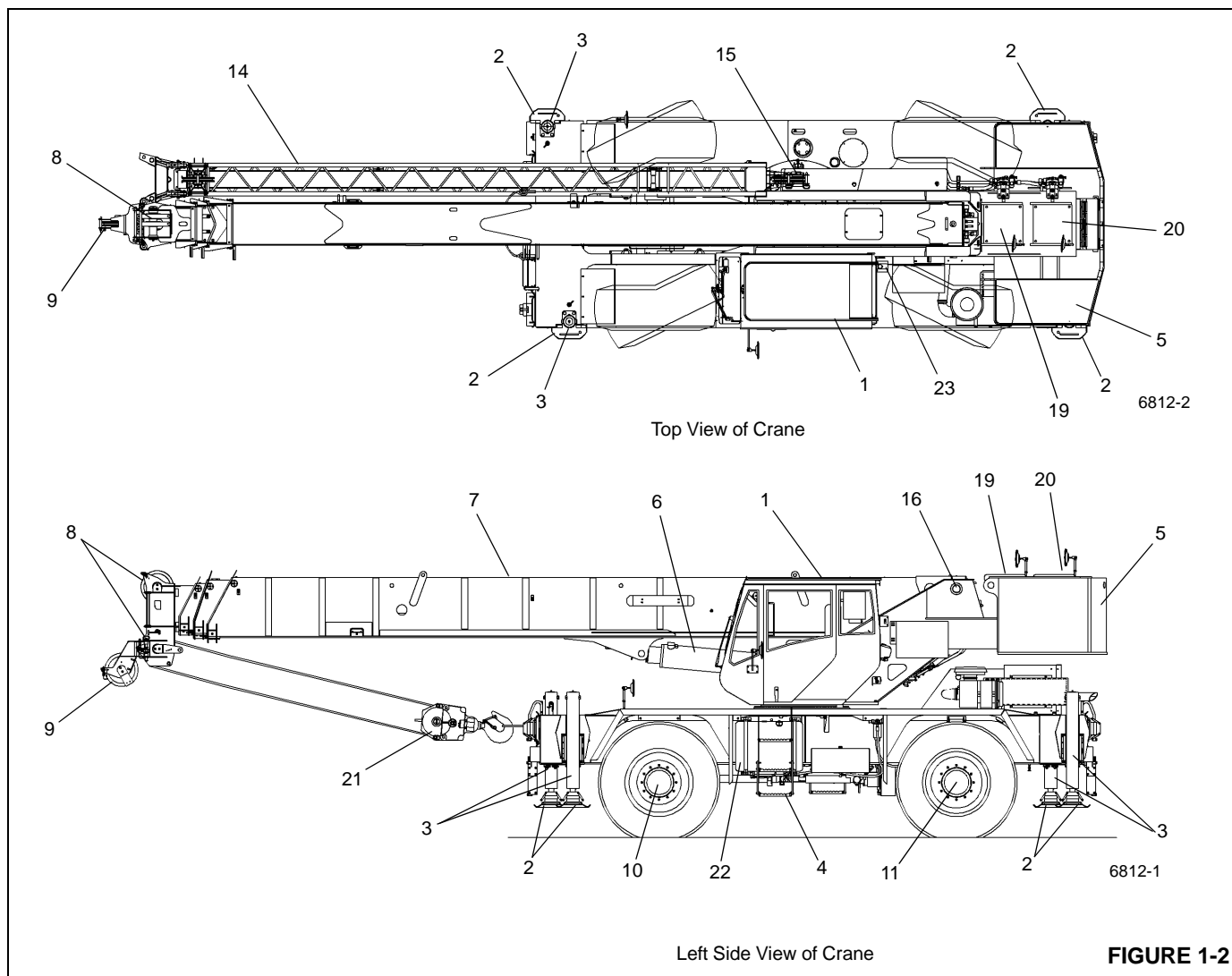
Vibration Level Test Results Are As Follows:

- At the operator's station with closed cab operation, vibration levels are less than 0.5 m/s/s for Whole Body Vibration exposure and are less than 2.5 m/s/s for Hand Arm Vibration exposure when measured according to 89/392/EEC Community Legislation on Machinery per standard ISO 2631/1 - Evaluation of Human Exposure to Work Body Vibration, ISO 5349 - Guidelines for the Measurement and Assessment of Human Exposure to Hand Transmitted Vibrations, and ISO/DIS 8041 - Human Response Vibration Measuring Instrumentation.

SERIAL NUMBER LOCATION (FIGURE 1-2)



FIGURE 1-1



Item	Description
1	Cab
2	Outrigger Float
3	Outrigger Stabilizer Cylinder
4	Steps
5	Counterweight
6	Lift Cylinder
7	Boom
8	Boom Nose Sheaves
9	Auxiliary Boom Nose
10	Front Axle
11	Rear Axle
12	Engine

Item	Description
13	Boom Extension Mast Sheave
14	Boom Extension
15	Boom Extension Nose
16	Boom Pivot
17	Hydraulic Tank
18	Hydraulic Filter
19	Main Hoist
20	Auxiliary Hoist
21	Hookblock
22	Fuel Tank
23	Windshield Washer Fluid Container
24	Air Cleaner