

TM 5-1310

WAR DEPARTMENT TECHNICAL MANUAL

BULLDOZER,
TANK-MOUNTING,
HYDRAULIC—OPERATED,
LaPLANT-CHOATE MODEL BM4,
FOR M4A1-A2 AND -A3,
MEDIUM MODEL TANKS



MAINTENANCE INSTRUCTIONS AND PARTS CATALOG

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Maintenance Manual and Parts Catalog

For

Bulldozer, Tank-Mounting, Hydraulic-Operated,
LaPlant-Choate, Model BM4, For M4A1-A2 And
A3, Medium Model Tanks

Manufactured for

Corps of Engineers

By

LaPlant Choate Mfg., Inc.
Cedar Rapids, Iowa

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Section 1. Operator's Instruction

Section 2. Maintenance Manual

Section 3. Parts Manual

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G. C. Marshall
Chief of Staff

Official

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Major General
The Adjutant General

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SECTION I

OPERATOR'S INSTRUCTION MANUAL

FOR

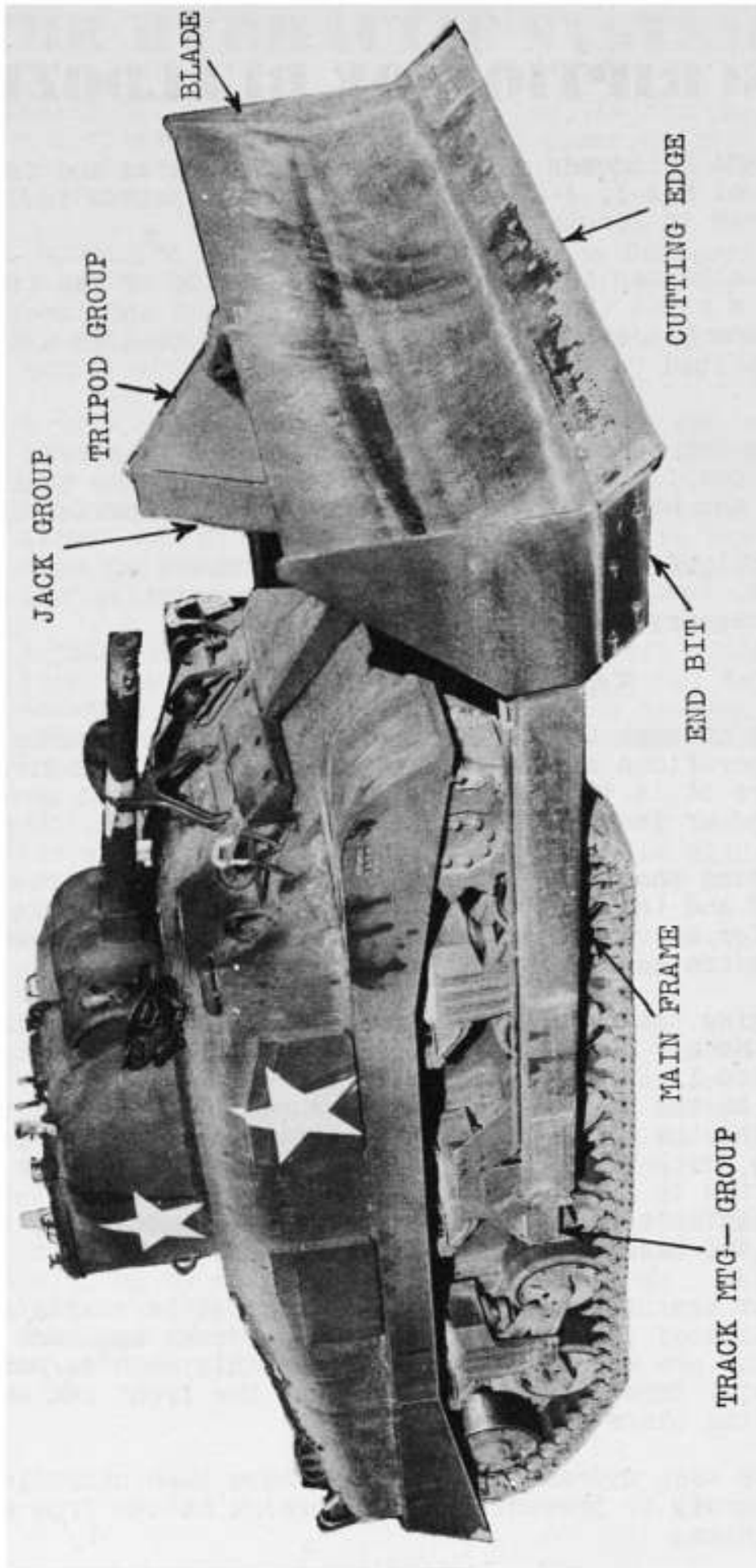
LaPLANT-CHOATE BULLDOZER

ON

M4 TANK

LaPLANT CHOATE MANUFACTURING CO., INC.

Cedar Rapids, Iowa



BM4 - BULLDOZER GENERAL ARRANGEMENT

DESCRIPTION OF BULLDOZER

The BM4 Bulldozer is hydraulically operated and is mounted on the Model M4A-1, A-2, and A-3 Tanks. The blade is 10 ft., 3-1/2 inches in length.

The bulldozer is attached to the outside of the track frames on a pivot type mounting and is lifted and lowered by means of one 5-1/4 inch hydraulic jack supported in a trunnion which is bolted to the front of the tank.

Power for operation of the blade is provided by a P-11 hydraulic pump located on transmission case of the tank and driven by two belts, which are driven by the propeller shaft.

Control of the blade is provided by means of a CV-11 control valve, located on the oil tank which provides the supply of oil necessary for operation of the machine.

SAFETY PRECAUTIONS

Never attempt to perform any greasing, maintenance or repairing operations on the tank or bulldozer without first making sure it is in such a position that it cannot move and trap a hand or foot.

Greasing should be accomplished with the blade resting on the ground and the tank engine stopped. This will make it impossible for anyone to accidentally move the control lever and injure someone working on the machine.

Changing the cutting edge must be accomplished with the blade in the air but under no circumstances should anyone be permitted to lie under the blade. The safe way is to raise the blade to the desired height, then shutting the engine off and blocking the blade in position. A further safety precaution is to block under the side frames of the bulldozer so it cannot settle to the ground. Instead of lying under the blade, take a position to the front so it will be unnecessary to have more than the hands or arms under the blade.

Do not wear the cutting edge down until it starts wearing on the bottom of the blade proper as the front and back sheets of the blade are welded together and if this weld is worn off, material will immediately lodge between the front and back sheets of the blade and damage it.

Always keep hydraulic lines that have been uncoupled capped securely to prevent dirt or foreign matter from entering the system.