DEPARTMENT OF THE ARMY TECHNICAL MANUAL

OPERATOR'S MANUAL

DEMOLITION KIT, PROJECTED CHARGE, M157

This reprint includes all changes in effect at the time of publication; change 1

HEADQUARTERS, DEPARTMENT OF THE ARMY
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TECHNICAL MANUAL

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DEMOLITION KIT, PROJECTED CHARGE, M157

TM 9-1375-204-10

HEADQUARTERS,
DEPARTMENT OF THE ARMY
WASHINGTON 26, D.C., 23 April 1963

CHANGES NO. 1

TM 9-1375-204-10, 11 June 1962, is changed as follows:

4. Description of Projected Charge Demolition Kit M 157 Parts

a. *Genera*l. The demolition kit * * * through (5) below.

(4) *Impact fuse section assembly*. Each impact fuse section assembly (fig. 7) is similar to the center loading section assembly in the following respects: Length, width, component parts, and two insert tubes continuing explosives (composition B and composition C-4).

The basic difference * * * approximately 153 pounds.

(5) (Superseded) *Tail section assembly*.

The tail section assembly (fig. 8) is similar to the nose section assembly in the following respects: length, width, height, weight, and joint system. The joint system, located at the front end of the tail section assembly, is identical to the joint system located at the rear end of the nose section assembly. The tail section assembly has a two position (push and pull) sliding rear hook assembly and a hinge assembly. The front notch of the rear hook assembly is used when dragging or pulling the demolition kit backward, while the rear notch of the rear hook assembly is used when pushing the demolition kit over a minefield. Chain assembly No. 1 pushing against the rear notch of the rear hook assembly causes this assembly to slide to the PUSH position, thereby causing the rear hook base to make contact with the last pushing bar, which in turn transmits pushing force to the pushing bar within each section. The hinge plate of the hinge assembly, fastened to a hinge and a spring at the rear of the tail section assembly, allows chain assembly No. 1 to slide over the tail section assembly and engage the rear notch of the rear hook assembly. The rear hook plate and the hinge plate rests against the bottom of the tank hull when the demolition kit is pushed, thereby preventing the tail section assembly from being crushed as the demolition kit is pushed over varied terrain.

b. (Superseded) *Tank Accessories*. The tank accessories are described in (1) through (7) below.

Note 1
The key letters and numerals shown in parentheses in the paragraphs below, refer to figure 9.

Note 2
For assembly procedures for tank accessories, see paragraph 11.

(1) *Chain assembly No. 1*. Chain assembly No. 1 (L) is a 7-foot length (approx.) of 5/8-inch chain with two round shackle pins at its ends. This assembly is used for pushing demolition kit M157 into the minefield area. Cable No. 1 (G) and the cam cleats (F-4) of gear box assembly (F) are used for raising or lowering chain assembly

No. 1 (L). Chain assembly No. 1 is secured to the front towing lugs of the tank.

(2) *Drag plate assembly*. The drag plate assembly (E) consists of a semicircular plate with a bar welded to one surface. This assembly is used for dragging or towing the demolition kit to the edge of the minefield. Chain assembly No. 2 (C) and shackle No. 1 (A-1) of the extension bar assemblies (A) are secured to the drag plate assembly (E) with shoulder screws (B).

(3) *Chair assembly No. 2.* Chain assembly No. 2 (C) consists of two 2-foot lengths of Y4-inch chain, one y4 X 2inch ring, and two modified eye nuts. Each of the two modified eye nuts are fastened to shackle No. 1 of the extension bar assemblies (A) with shoulder screws (B) while the ring is fastened to one of the snap-hooks of the spring assembly (D). Chain assembly No. 2 (C) together with the spring assembly (D),cable No. 2 (P), and gear box assembly (F) are used for raising or lowering the drag plate assembly (E).

(4) *Extension bar assembly*. The two 6foot extension bar assemblies (A), consisting of shackle No. 1 (A-1), extension bar (A-2), and shackle No. 2 (A-3), are used to secure the drag plate assembly (E) to the rear of the tank. Shackle No. 1 (A-i) of each extension bar assembly (A) is fastened to the drag plate assembly with a shoulder screw (B), while shackle No. 2 (A-3) of each assembly is secured to one of the rear tank towing lugs with a clevis pin assembly (K).

(5) *Gear box assembly*. The gear box assembly (F) consists of a body (F-i) which contains a ratchet wrench (F2), a wrench assembly (F-3), two cam cleats (F-4), gear spool assembly (F-), and a pulley assembly (F-6). One end of cable No. 2 (P) is secured to the gear spool assembly (F-) while cable No. 1 (G) is held in the pulley assembly (F-6) of the gear box assembly (F) by the cam cleats (F4). The ratchet wrench (F-2) and wrench assembly (F3) assist the operator when raising or lowering the drag plate assembly (E) and chain assembly No. 2 (C). The gear box assembly (F) is installed in the port periscope fitting in the front of the tank.

(6) *Cable No. 1 and cable No. 2*. Cable No. 1 (G) consists of an 8-foot length of '/-inch diameter wire. Safety snap hook (H) is secured to Cable No. 1 (G) at one end. Cable No. 2 (P) consists of a 27-foot length of 1/4-inch diameter wire rope. Safety hook (Q) is secured to cable No. 2 (P) at one end. One end of cable No. 1 (G) is fastened to the cam cleats (F-4) of the gear box assembly (F), and the safety snap hook (H) at the other end is fastened to chain assembly No. 1 (L). Cable No. 2 (P) is fastened to the gear spool assembly (F-5) of the gear box assembly (F) at one end, and the safety hook (Q) at the other end to the spring assembly (D).

(7) *Single sheave, multiple sheave, and pulley support post assemblies*. These three assemblies (M, N, and J) assist the other accessory items when raising or lowering the drag plate assembly (E) and chain assembly No. 2 (C). Each assembly consists of a support or bracket and pulley assembly. Each of the three assemblies are bolted to the tank hull when preparing the tank for demolition operations and can be removed when demolition operations are finished. Location of each assembly mentioned above depends on the tank model.

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e. Effectiveness.

(1) *Most suitable terrain*. Demolition kit M157 is more effective in flat or moderately rolling, open, or lightly wooded terrain. This type of * * * for maneuvering tanks.

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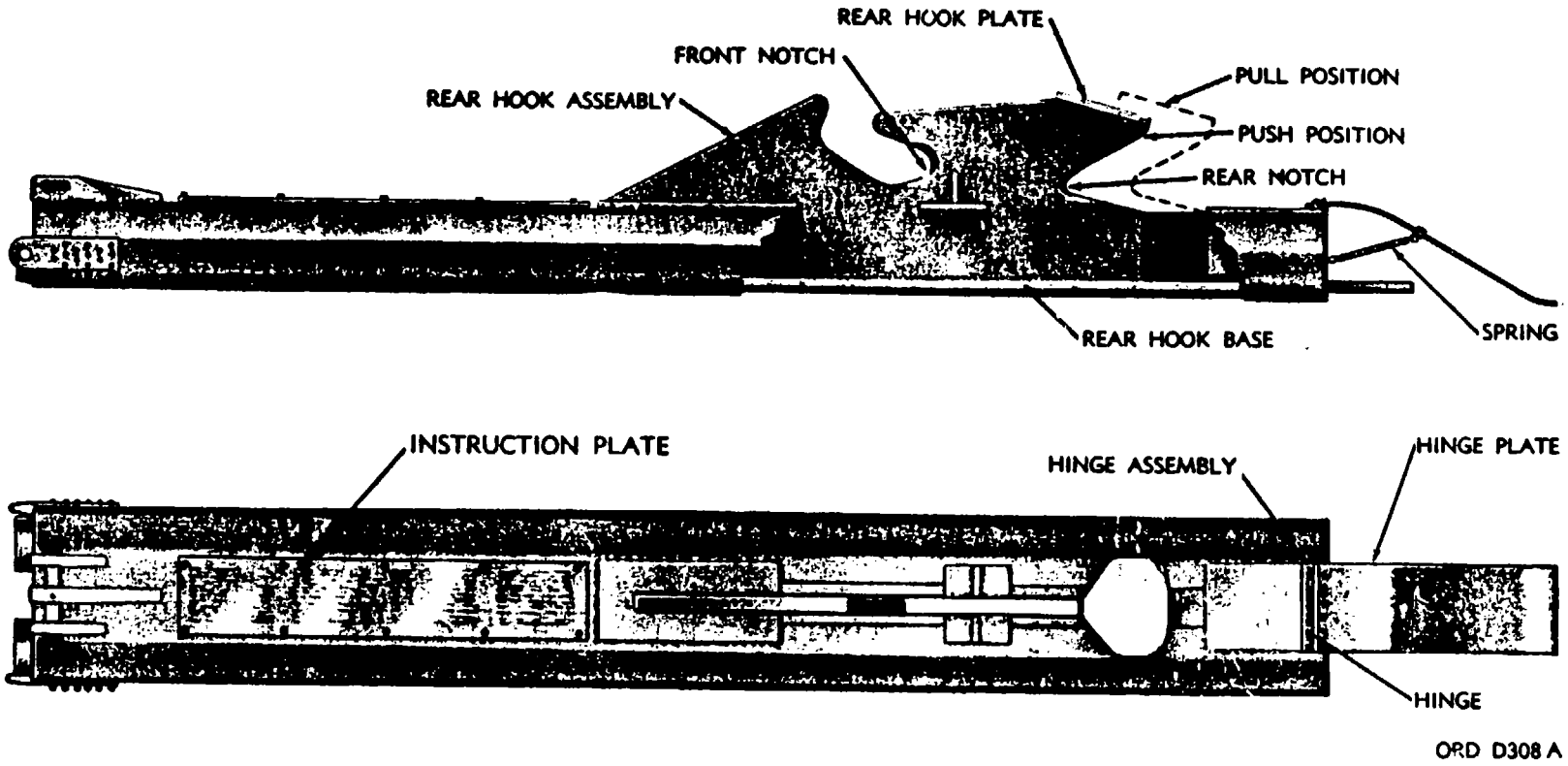

Figure 8 (Superseded) Tail section assembly.