

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

FIELD AND DEPOT MAINTENANCE MANUAL
DEGREASER MX-1760/G

Headquarters, Department of the Army, Washington 25, D. C.
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WARNING

DANGEROUS VOLTAGES EXIST IN THIS EQUIPMENT

Be careful when working on the 115-volt motor circuit. Serious injury or death may result from contact with this circuit. Turn off the power before making any connections or replacing any parts inside the equipment.

DON'T TAKE CHANCES!

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CHAPTER 1 THEORY

Section I. GENERAL

1. Scope

a. This manual covers field and depot maintenance for Degreaser MX-1760/G (degreaser). It includes instructions appropriate to third, fourth, and fifth echelons for testing and repairing the equipment and replacing maintenance parts. It also lists tools, materials, and test equipment for third, fourth, and fifth echelon maintenance. Detailed functions of the equipment are covered in paragraphs 3 and 4.

b. The complete technical manual for

this equipment includes TM 11-4940-204-12 and TM 11-4940-204-15P.

c. Forward comments concerning this manual to the Commanding Officer, U.S. Army Signal Materiel Support Agency, ATTN: SIGMS-PA2d, Fort Monmouth, N. J.

Note:

For applicable forms and records, see paragraph 2, TM 11-4940-204-12.

2. Index of Equipment Publications

Refer to DA Pamphlet 310-4 to determine what changes to or revisions of this publication are current.

Section II. MECHANICAL AND CIRCUIT THEORY

3. Mechanical Theory

Degreaser MX-1760/G contains a centrifugal pump (a below) which draws Cleaning Compound (Federal stock No. 7930-396-3420) from an integral reservoir and sprays the cleaning compound under pressure against a turntable which is free to rotate. The cleaning compound loosens grease and dirt from parts placed on the turntable and the force of the spray rinses the parts clean. The centrifugal pump is driven by an electric motor (b below) that is controlled by an electrical switch timer (c below).

Warning:

Cleaning compound is flammable and its fumes are toxic. Do not use near a flame; provide adequate ventilation.

a. *Centrifugal Pump* (fig. 3). A centrifugal pump is used to build up pressure. The impeller draws cleaning compound from the reservoir through the intake of the casing (22), and applies it under pressure through the outlet (23) to the sprays. A conventional stuffing box packed with graphite-impregnated asbestos forms a seal between the shaft and the casing.

b. *Ac Motor* (fig. 1). The 5.7-ampere reversible alternating current (ac) motor used in the degreaser requires single phase, 115-volt, 60-cycle-per-second power for operation. The motor is rated at 1/3 horsepower at 1,725 revolutions per minute (rpm). A 4-inch single-grooved pulley for a V-belt is mounted on the motor shaft.

c. *Electrical Switch Timer* (fig. 1). The electrical switch timer consists of a clock mechanism and contact points. The electrical switch timer operates the ac motor for a selected time period of up to 30 minutes maximum. If the automatic cutoff feature is not desired, the electrical switch timer consists be manually operated to the HOLD position, as long as necessary, by the rotation of the control knob, and then to the 0 position for cutoff.

4. Circuit Theory (fig. 1)

The ac input power is applied from one terminal of Connector Plug UP-121/M to terminal 1 of the electrical switch timer, through the switch contacts to terminal 2