#### TECHNICAL MANUAL

OPERATOR'S, ORGANIZATIONAL, DIRECT
SUPPORT AND GENERAL SUPPORT MAINTENANCE
MANUAL INCLUDING REPAIR PARTS LIST
FOR

# LIGHT, IGNITION MKB MANUFACTURING CORPORATION (NSN 4910-00-255-1449)

HEADQUARTERS, DEPARTMENT OF THE ARMY

**APRIL 1981** 

Technical Manual

No. 9-4910-695-14&P

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 24 April 1981

#### OPERATION'S, ORGANIZATIONAL, DIRECT SUPPORT AND GENERAL SUPPORT MAINTENANCE MANUAL INCLUDING REPAIR PARTS LIST FOR

LIGHT, IGNITION (NSN 4910-00-255-1449)

#### REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way 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, US Army Armament Materiel Readiness Command, ATTN: DRSAR-MAS, Rock Island, IL 61299. A reply will be furnished directly to you.

#### NOTE

This manual is published for the purpose of identifying an authorized commercial manual for the use of the personnel to whom this ignition light is issued.

Manufactured by: MKB Manufacturing Corporation

92 Brook Avenue Deer Park, NY 11729

Procured under Contract No. DAAA09-78-C-4019

This technical manual is an authentication of the manufacturers' commercial literature and does not conform with the format and content specified in AR 310-3, Military Publications. This technical manual does, however, contain available information that is essential to the operation and maintenance of the equipment.

### INSTRUCTIONS FOR REQUISITIONING PARTS

#### NOT IDENTIFIED BY NSN

When requisitioning parts not identified by National Stock Number, it is mandatory that the following information be furnished the supply officer.

- 1 Manufacturer's Federal Supply Code Number 26584
- 2 Manufacturer's Part Number exactly as listed herein.
- 3 Nomenclature exactly as listed herein, including dimensions, if necessary.
- 4 Manufacturer's Model Number -
- 5 Manufacturer's Serial Number (End Item)
- 6 Any other information such as Type, Frame Number, and Electrical Characteristics, if applicable.
- 7 If DD Form 1348 is used, fill in all blocks except 4, 5, 6, and Remarks field in accordance with AR 725-50.

Complete Form as Follows:

- (a) In blocks 4, 5, 6, list manufacturer's Federal Supply Code **Number** 26584 followed by a colon and manufacturer's Part Number for the repair part.
- (b) Complete Remarks field as follows:

Noun: (nomenclature of repair part)

For: NSN: 4910-00-255-1449

Manufacturer: MKB Manufacturing Corporation

Model:

Serial: (of end item)

Any other pertinent information such as Frame Number, Type, Dimensions, etc.

#### LI GHT,

#### IGNITION TIMING,

#### **MAGNETO**

Description: The timing light is for use in synchronizing two magnetos in a dual magneto ignition system. The timing light is also used to indicate the exact moment the magneto points open.

The timing light unit is composed of one main unit with a detachable cover.

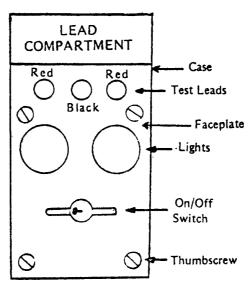


Fig. 1

#### OPERATING INSTRUCTIONS

#### A. Preparations:

- 1. Remove the four cover screws (see Fig. 1) and lift faceplate from case assembly.
- 2. Note polarity indications on battery holder and install three D batteries in correct positions.
- 3. Check operation by turning switch to On position. BOTH lights should light and you should hear a buzzing sound from the unit.
- 4. Touch all three alligator clips together. Both lights should go out.
- 5. Reinstall cover and the four screws.

#### B. Operation:

- 1. Place ignition switch in Off position.
- 2. Attach black ground to an unpainted stud or other good ground on magneto.
- 3. Disconnect primary lead from breaker.
- 4. Connect one of the red leads in its place. If there is only one magneto be sure the second red lead is not grounded and go to Step 7.
- 5. For a two magneto system, remove the primary lead from the second magneto's breaker points.
- 6. Attach the second red lead to the breaker points of the second magneto.
- 7. Turn timing unit switch on.
- 8. Turn ignition switch on.
- 9. Rotate engine slowly when the light goes out the breaker points are closed. Each light will indicate the exact point of the opening and closing of its corresponding breaker point.
- 10. If two magnetos are being synchronized, adjust them until both lights are turning on and off at the same time. The magnetos are now in synchronism.
- 11. Turn off timing light switch.
- 12. Turn off ignition switch.
- 13. Remove timing light.
- 14. Be sure to replace all wires and secure connections which have been removed for the timing process.

REMEMBER - When the light goes OUT the points are CLOSED.

#### TO REPLACE BULBS

Just unscrew the lamps out of the faceplate and replace.

#### TROUBLESHOOTING PROCEDURE FOR TIMING LIGHT.

If unit does not work at all:

- 1. Check battery orientation.
- 2. Replace batteries.
- 3. Check buzzer operation.
- 4. Check circuit connections for electrical contact and shorts.

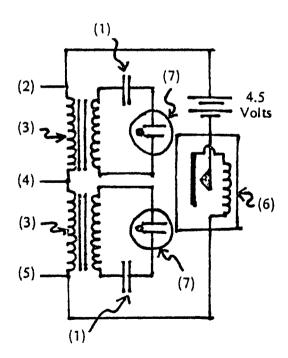
#### If any one light is lit:

- 1. Make sure the three probes are not making electrical contact.
- 2. Replace light bulb.

#### LI GHT,

#### IGNITION TIMING,

#### MAGNETO



- 1. Capacitor
- 2. Red-right magneto
- 3. Transformer
- 4. Black-ground
- 5. Red-left magneto
- 6. Buzzer
- 7. Neon light

Replaceable parts: Neon bulb

By Order of the Secretary of the Army:

E. C. MEYER General, United States Army Chief of Staff

Official:

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