

**TM 9-4910-695-14&P**

---

**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.



LIGHT,  
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.

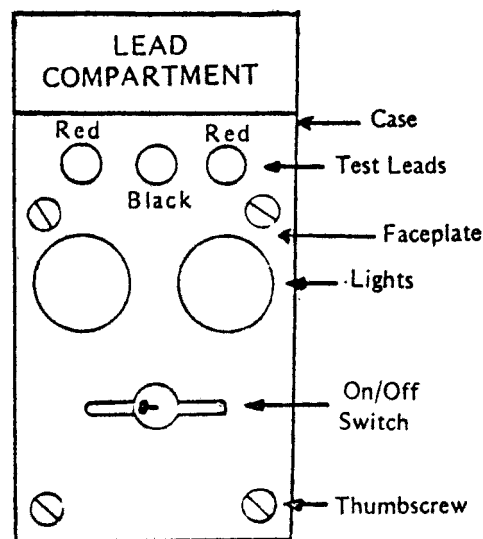


Fig. 1

#### 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.

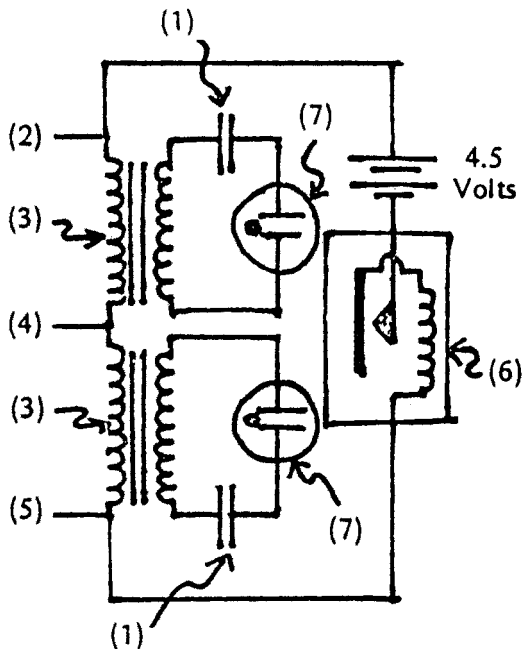
If unit does not work at all:

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.

LIGHT,  
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:

Official:

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

J. C. PENNINGTON  
*Major General, United States Army*  
*The Adjutant General*



RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



THEN... JOT DOWN THE DOPE ABOUT IT ON THIS FORM. CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!

SOMETHING WRONG WITH THIS PUBLICATION?

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

Your mailing address

DATE SENT

Date you filled out form.

PUBLICATION NUMBER

TM 9-XXXX-XXX-XX

PUBLICATION DATE

Date of TM

PUBLICATION TITLE

Title of TM

BE EXACT... PIN-POINT WHERE IT IS

PAGE NO	PARA-GRAPH	FIGURE NO	TABLE NO
400		183	
512		191	

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

Change illustration Reason: Tube end shown assembled on wrong side of lever cam.

Figure 191, item 3 has the wrong NSN. Supply rejects orders for this item. The NSN shown here is not listed in the AMDF or the MCRL.

Please give us the correct NSN and P/N.

SAMPLE

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

John Smith, S. SGT.

793/XXXX

SIGN HERE.

*John Smith*

DA FORM 2028-2  
1 JUL 78

PREVIOUS EDITIONS ARE OBSOLETE.

U.S.—IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

TEAR ALONG PERFORATED LINE

FILL IN YOUR  
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

---

---

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

POSTAGE AND FEES PAID  
DEPARTMENT OF THE ARMY  
DOD 314



TEAR ALONG PERFORATED LINE

Commander  
US Army Armament Materiel Readiness Command  
ATTN: DRSAR-MAS  
Rock Island, IL 61299

RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS



**SOMETHING WRONG WITH THIS PUBLICATION?**

THEN... JOT DOWN THE DOPE ABOUT IT ON THIS FORM, CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

TM 9-4910-695-14&P

PUBLICATION DATE

24 April 1981

PUBLICATION TITLE

Maintenance Manual for Ignition Light

BE EXACT... PIN-POINT WHERE IT IS

PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.
----------	------------	------------	-----------

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

TEAR ALONG PERFORATED LINE

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE:

DA FORM 2028-2  
1 JUL 79

PREVIOUS EDITIONS ARE OBSOLETE.

P.S.—IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.

FILL IN YOUR  
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

POSTAGE AND FEES PAID  
DEPARTMENT OF THE ARMY  
DOD 314



OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

TEAR ALONG PERFORATED LINE

Commander  
US Army Armament Materiel Readiness Command  
ATTN: DRSAR-MAS  
Rock Island, IL 61299



RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS

**SOMETHING WRONG WITH THIS PUBLICATION?**



*THEN... JOT DOWN THE  
DOPE ABOUT IT ON THIS  
FORM, CAREFULLY TEAR IT  
OUT, FOLD IT AND DROP IT  
IN THE MAIL!*

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

TM 9-4910-695-14&P

PUBLICATION DATE

24 April 1981

PUBLICATION TITLE

Maintenance Manual for  
Ignition Light

BE EXACT... PIN-POINT WHERE IT IS

PAGE NO.	PARA- GRAPH	FIGURE NO.	TABLE NO.

IN THIS SPACE TELL WHAT IS WRONG  
AND WHAT SHOULD BE DONE ABOUT IT:

TEAR ALONG PERFORATED LINE

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE:

DA FORM 2028-2  
1 JUL 79

PREVIOUS EDITIONS  
ARE OBSOLETE.

P.S.—IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR  
RECOMMENDATION MAKE A CARBON COPY OF THIS  
AND GIVE IT TO YOUR HEADQUARTERS.

FILL IN YOUR  
UNIT'S ADDRESS

FOLD BACK

TEAR ALONG PERFORATED LINE

DEPARTMENT OF THE ARMY

POSTAGE AND FEES PAID  
DEPARTMENT OF THE ARMY  
DOD 314



OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

Commander  
US Army Armament Materiel Readiness Command  
ATTN: DRSAR-MAS  
Rock Island, IL 61299

**RECOMMENDED CHANGES TO EQUIPMENT TECHNICAL PUBLICATIONS**



*THEN... JOT DOWN THE DOPE ABOUT IT ON THIS FORM, CAREFULLY TEAR IT OUT, FOLD IT AND DROP IT IN THE MAIL!*

**SOMETHING WRONG WITH THIS PUBLICATION?**

FROM: (PRINT YOUR UNIT'S COMPLETE ADDRESS)

DATE SENT

PUBLICATION NUMBER

TM 9-4910-695-14&P

PUBLICATION DATE

24 April 1981

PUBLICATION TITLE

Maintenance Manual for Ignition Light

BE EXACT... PIN-POINT WHERE IT IS

PAGE NO.	PARA-GRAPH	FIGURE NO.	TABLE NO.

IN THIS SPACE TELL WHAT IS WRONG AND WHAT SHOULD BE DONE ABOUT IT:

TEAR ALONG PERFORATED LINE

PRINTED NAME, GRADE OR TITLE, AND TELEPHONE NUMBER

SIGN HERE:

**DA, FORM 1 JUL 79 2028-2**

**PREVIOUS EDITIONS ARE OBSOLETE.**

**P.S.-IF YOUR OUTFIT WANTS TO KNOW ABOUT YOUR RECOMMENDATION MAKE A CARBON COPY OF THIS AND GIVE IT TO YOUR HEADQUARTERS.**

FILL IN YOUR  
UNIT'S ADDRESS

FOLD BACK

DEPARTMENT OF THE ARMY

OFFICIAL BUSINESS  
PENALTY FOR PRIVATE USE \$300

POSTAGE AND FEES PAID  
DEPARTMENT OF THE ARMY  
DOD 314



TEAR ALONG PERFORATED LINE

Commander  
US Army Armament Materiel Readiness Command  
ATTN: DRSAR-MAS  
Rock Island, IL 61299



**TM 9-4910-695-14&P — LIGHT, IGNITION**  
**(MKB MANUFACTURING CORPORATION)(NSN 4910-00-255-1449) — 1981**