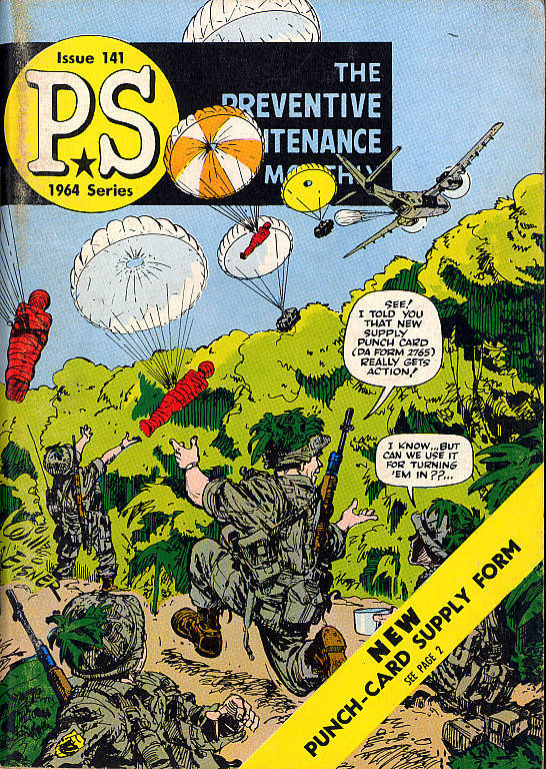

Issue 141
PS
1964 Series
THE
PREVENTIVE
MAINTENANCE
MONTHLY
SEE! I TOLD YOU THAT NEW SUPPLY PUNCH CARD (DA FORM 2765) REALLY GETS ACTION!
I KNOW...BUT CAN WE USE IT FOR TURNING 'EM IN ??...
NEW
PUNCH-CARD SUPPLY FORM
SEE PAGE 2

# READINESS CHECKS... MAINTENANCE INSPECTIONS... KNOW THE BIG DIFFERENCE

Since the first "Traffic Light" ESC (Equipment Serviceability Criteria) rolled down the pike a lot of guys have been mixing tears with their refreshments over maintenance inspections and readiness checks.

The confusion's not amusin'.

Let's give 'em a rundown and see how they shake out–

- A maintenance inspection (CMMI, for example) is made to see how well maintenance has been done. The work done is checked against what's required by the technical pubs and regulations.
- An ESC check is designed to tell you how well and how long your equipment can perform its combat job or function. It's a condition and operation check.

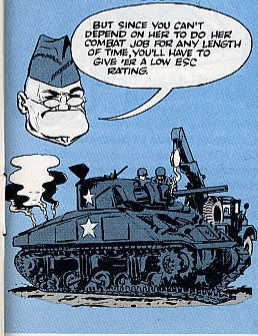
So, you can see they are *not* one and the same.

Good maintenance could give a good serviceability condition to your gear, but an inspection of present maintenance may not give a true reading of the ability of your equipment to do its combat job.

You could have an M151 that rates high on a CMMI because it's being maintained right. But it's amber or red on the ESC check because it can't be depended on for enough service life because of lack of combat reliability. The vehicle's age may be beyond five years, the battery may be near the end of its expected life, or the engine may be ready to retire (log book shows it uses too much oil).

Or, a vehicle may be "Green" under ESC but rate low on the CMMI because the oil is low, it's overdue for changing or the tire pressure is wrong. Or the log book records may not be done right or up-to-date.

So, never confuse your maintenance inspections and ESC checks. They're not the same thing.





**PS**

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THE PREVENTIVE MAINTENANCE MONTHLY

Issue No. 141 1964 Series


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PS wants your ideas and contributions, and is glad to answer your questions. Name and address are kept in confidence. Just write to:

Sgt. Half-Mast
PS Magazine,
Fort Knox, Ky.
40121

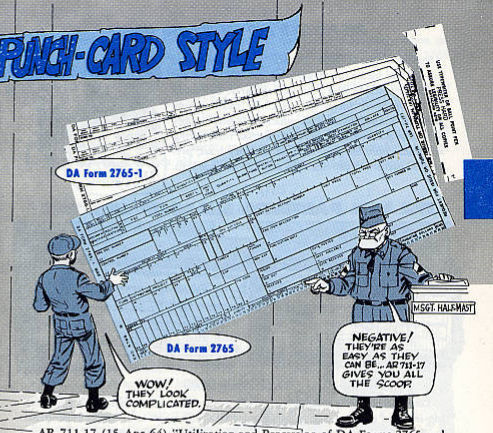
New size . . . new shape . . . slimmer . . . more compact . . . punch-card . . . code-type.

That'll give you some idea of the new tune the supply forms are singing these days, with the old DA Form 1546 fading and two (count 'em) new forms taking its place.

The 5-part DA Form 1546 (1 Mar 62) "Request for Issue and Turn-in" will leave the active Army supply scene and the new DA Form 2765-series supply forms will take over. On 1 August 1964 you'll start using the new pre-punched, pre-printed DA Form 2765 for expendable items and DA Form 2765-1 for nonexpendable stuff.

The old 1546 will still be used by the Reserves and National Guard until the stock is used up.






AR 711-17 (15 Apr 64) "Utilization and Processing of DA Forms 2765 and 2765-1, Request or Turn-in (Punch Card Series)", authorizes the new forms, and gives detailed info on using 'em.

Both of the new forms are single-line item forms for use along with procedures spelled out in AR 735-35 (16 Mar 62) "Supply Procedures for TOE Units, Organizations and Non-TOE Activities."

In event of argument between the supply forms, AR 711-17 has the final word.

The forms are designed to bring your supply forms and supply language more in line with the punch-card, code-type forms and procedures used by supply support outfits (from AR 711-16 "Installation Stock Control and Supply Procedures to AR 725-50, the Milstrip people).

Whoa, now! Stop spinning.

As far as you're concerned the new punch-card type 2765-series forms call for the same kind of supply info as the old form did, and you make 'em out by hand (pencil or ball point pen). Supply support outfits will handle 'em mechanically and electrically . . . just as they've been geared to do for sometime.



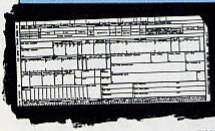
MORE

## PRE-PUNCHED AND PRE-PRINTED SERVICE

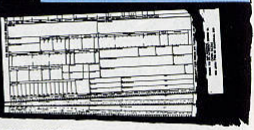
Supply support will provide pre-punched and pre-printed forms for all items on your PLL, and for other expendable stuff you use regularly. Entries in the pre-printed forms may include basic supply info and management data which will help supply to handle your requests faster, and make form-filling an easier chore for you. And, at the very least, pre-printed cards will provide FSN and unit of issue info.

## THE NEW PARTNERS SHAPE-UP LIKE THIS:

DA Form 2765, a single-card form, for expendables.



DA Form 2765-1, a three-copy form, for nonexpendable items.



## THE 2765 CARD

Like was just said, the single-card DA Form 2765, is for requesting and turning-in items on your PLL, that includes all repair parts and similar expendable stuff you get on a regular basis.

However, it may also be used for nonexpendable items if so OK'd by a major commander, and if supply support can issue the supplies on its own supply form, DD Form 1348-1, "DOD Single-line Item Release/Receipt Document."

When you receive a 2765 with all the expendable items you ordered . . . the form's done its job. You record the transaction in the document register, record of demands card (if it's on repair parts), and toss out the card. Only time you have to hold on to a 2765 is when supply owes you due-outs on it.

## DA FORM 2765-1 FOR NX ITEMS

The triple-copy form, DA Form 2765-1 is a lot like the 2765, except that it has blank (clear) spaces for entering the identification of the using unit and the identification of the supporting outfit.

The form consists of two hard copies and one tissue copy, and carbon inserts. It's for requesting and turning-in nonexpendable items . . . when the 2765 form isn't OK'd for NX items.

Supply support keeps the top hard copy for its files, and returns the tissue copy to you with due-out (D/O info). If it's not needed for D/O info, support can toss out the tissue. The last hard copy is the "receipt" copy and comes back to you with the supplies. After you record its info in the appropriate supply records (DA Form 2064 document register, property book, etc.) the receipt copy goes in the document file in organization document-number sequence.

## YOUR STATUS

When supply uses a 2765 (or one of its own forms) to give you information on your request the form's called a "status" card. It tells you what action supply has taken (or is taking) on your request. You're to hang on to the "status" cards until the request is finalized one way or another.

## CLOSE-UP ON FORMS

The compact forms can relay a bookload of supply-type conversation, but they're fairly easy to read once you latch on to the code-type talk, and learn which of the various-sized spaces, blocks, and columns give info which concerns you, directly.

If the punch-card, code-type form is like new to you, it'll pay you to invest a bit of serious concentration on the format of the new forms. Of course, the biggest batch of info on the forms mainly concerns supply support, and higher supply wheels, and you're normally due to do the least work on it . . . but, you do have to know how to read and use some of the coded info, otherwise, you'll not get the form's complete message.

For example, codes in columns 1-3 (document identifier) tell you what kind of supply errand the form's on. Codes in columns 65-66 (advice/status codes) tell you what action supply support has taken on your request.

In case you're curious about those tiny numbers (1-80) and space info listed at the bottom of the card . . . they correspond to the spaces on the top line of the card, and are guides for the supply people who handle the form mechanically, those who punch the card and otherwise handle requisitions electrically. Of course, you don't have to worry about the holes . . . all you have to work with are some of the printed codes and the printed or written info.

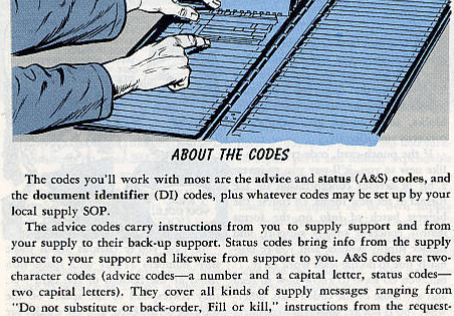


MORE

## SAVE THE FRESH PRE-PRINTS

When the new forms go to work in your area, your supply support unit (or someone else) will provide you with at least two copies of a pre-printed DA Form 2765 for each PLL item (and for other expendables) you're authorized. Afterwards you'll normally get a fresh pre-printed 2765 each time you send in a request for expendable items.

The pre-prints may be filed in any handy file, just so they're safe (don't get 'em wet, greasy, creased, nicked, bent or torn, etc.) and in order (easy to select when needed). In the case of repair parts the forms can go in the visible file.



## ABOUT THE CODES

The codes you'll work with most are the **advice** and **status (A&S) codes**, and the **document identifier** (DI) codes, plus whatever codes may be set up by your local supply SOP.

The advice codes carry instructions from you to supply support and from your supply to their back-up support. Status codes bring info from the supply source to your support and likewise from support to you. A&S codes are two-character codes (advice codes—a number and a capital letter, status codes—two capital letters). They cover all kinds of supply messages ranging from "Do not substitute or back-order, Fill or kill," instructions from the requesting outfit to a "No record of your request" reply from the supply activity.

Status codes, for example, give you the kind of info you may've been getting in the past, on a disposition form (DF), in a note, or just written on your copy of the old 1546.

When advice or status codes are key-punched into the card, they go in columns 65-66. If status cards are prepared manually, you'll find the status code in Block 22.

## ADVICE CODES

| Columns: 65 | 66 | |
|---|---|---|
| 1 | A | Requisitioned quantity exceeds R/O with knowledge of the command. Quantity requisitioned does not exceed R/O minus on hand plus dues-out minus dues-in. Revised R/O will be submitted within 30 days. (For use only by Army Overseas requisitioners on requisitions for only nonsingle manager items.) |
| 1 | B | Requisitioned quantity exceeds R/O with knowledge of the command. Quantity requisitioned does not exceed R/O minus on hand plus dues-out minus dues-in. Revised R/O not [illegible] not be submitted. (For use only by [illegible]) |
| 2 | A | [illegible] |

FOR A COMPLETE LIST OF THE ADVICE AND STATUS CODES, SEE APPENDIX 1 OF AR 711-17

WHEN YOU USE THE ADVICE CODES, YOU'LL NOTE 'EM IN BLOCK 22 OF THE 2765-SERIES CARDS.

## STATUS CODES

| Columns: 65 | 66 | |
|---|---|---|
| B | A | Item being processed for release and shipment. |
| B | B | Item back-ordered. If release date is ascertainable, the estimated date of release is entered in columns 62 through 64. If not ascertainable, these columns are blank. |
| B | C | Item back-ordered. Long delay is anticipated. Item in "Remarks" field can be furnished as a substitute. If desired, submit cancellation and requisition offered substitute. |
| B | D | Item delayed. Supply action being continued. If release date is ascertainable, the estimated date of release is entered in columns 62 through 64. If not ascertainable, these columns are blank. |
| B | E | Item being procured for direct shipment to consignee. If delivery date is ascertainable, the estimated date of release of material for shipment is entered in columns 62 through 64. If not ascertainable, these columns are blank. |
| B | F | No record of your requisition. De-obligate funds, and if still required, requisition using new document number. |
| B | G | Stock number changed or stock number now assigned to part number submitted. Examine also unit of issue and quantity field for possible changes. Adjust all records accordingly. |
| B | H | Substitute item being supplied. See substituted stock or part number in stock number field. Examine also unit of issue and quantity fields for possible changes. Adjust records if applicable. |
| B | J | Unit of issue and/or quantity changed. Adjust all records accordingly. |
| B | K | Requisition erroneously addressed and has been re-routed. Forward subsequent followups to activity indicated in columns 67 through 69. |
| B | L | Followup forwarded to activity indicated in columns 67 through 69 who will furnish status. Forward subsequent followups to last known source. |
| B | M | Requisition referred to activity indicated in columns 67 through 69. [illegible] had. Separate correspondence referring to this document number is being [illegible] |



MORE

## THE DI CODE

The **document identifier** code is a three-character code (a combination of letters and numbers).

It's real important to everyone up the supply line. The code's printed in the top left corner of the form (columns 1-3), and it explains the form's errand.

There are some 15 of these codes (see Appendix II of AR 711-17) but you'll have contact mainly with the following:

| If You Are CONUS | If You Are Overseas | DI Code Means |
|---|---|---|
| AØA | AØ1 | Request with FSN |
| AØB | AØ2 | Request with part number |
| AØE | AØ5 | With exception data |

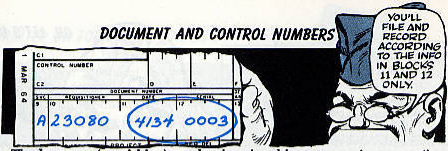
| Codes | Both CONUS and Overseas DI Code Means |
|---|---|
| AA1 | Reply to followup |
| AC1 | Cancellation |
| AE1 | Supply status |
| AF1 | Followup |
| AS1 | Shipment status |

## AND, THE RI CODE

Another printed code you'll get to know is the **routing identifier** (RI) code. RI codes amount to "coded" calling names which are given to supply and distribution outfits by the responsible major commands.

On an AO_coded document, the RI Code will be printed in columns 4-6 and tell all concerned from where or through whom the items on a requisition will be provided. On an AE1 or AA1 coded document, the RI Code of the last known source of supply is used in columns 67-69.

## DOCUMENT AND CONTROL NUMBERS




**The document (requisition) number** is assigned by your supply support (in blocks 9-12) when they have to go up higher to get your request filled. You'll file your due-in cards on the request by this number, and you'll also record it in your document register (column 3).

On requests filled from stocks on hand, support'll add a **control number** (in block C2). This one also gets recorded in column 3 of your document register.

## DATING THE NEW FORMS

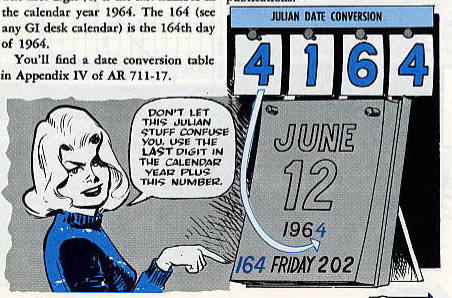
The new supply forms will take the calendar's numeric (Julian) date only. In case you don't already know, here's how you switch the normal calendar date to the four-digit numerical date:

The date 12 Jun 64, would be **4164**. The first digit (4) is the last number in the calendar year 1964. The 164 (see any GI desk calendar) is the 164th day of 1964.

You'll find a date conversion table in Appendix IV of AR 711-17.

## NO SWEAT... HARDLY—

Once you get the feel of the new forms and the procedures you'll find that there aren't too many codes you have to really worry with, and those codes you're expected to work with will be spelled out for you in your local supply SOP or in DA supply publications.






MORE

## OK, LET'S USE A PRE-PRINTED DA FORM 2765 FOR EXPENDABLES

DA Form 2765 used for parts you can stock will normally be provided with pre-printed info on top line. You keep pre-prints on file and add info in the blocks shown to submit request to supply.

**Block C1**—Organization document number. A 7-digit number made up like this:

The first four digits are the numeric date. The last three digits are the organization's document number (from the document register, which will run serially from 001 through 999 daily. Example: The first document made out on 1 Jun 64 would be numbered 4153-001).

**Block 13**—Demand code. This is a mandatory code on all requests for issue. It's a capital R if the item's a recurring demand, or a capital N if it's a nonrecurring demand.

The R (recurring) means the requested item will replace stock of repair parts, supplies, tools and equipment . . . things used on a day-to-day basis or which are consumed or made unserviceable in use.

The N (nonrecurring) pegs the item as a one-time demand (stocks to meet other planned needs, or to take care of a one-time job or maintenance need).

**Block 20**—Issue priority designator (if required).

**Block 15**—Organization supply code. Takes the three-character organization supply code (per AR 735-35, para 5) flanked by zeros, or if used, the single-character symbol used by the major command, as a prefix, and a single-character symbol which may be used to identify the specific activity in an organization making out the request, as a suffix.

"pre-printed info"

**Block I**—Cost detail account number (when needed).

**Block L**—Quantity requested.

**Block P**—Urgency-of-need designator (if required).

When pre-printed forms aren't available you fill in the seven blocks, plus a few more like so:

Blocks 4 through 6—FSN and/or other part number.

Block 7—Unit of issue.

Block M—Item description (short-line description of item requested).

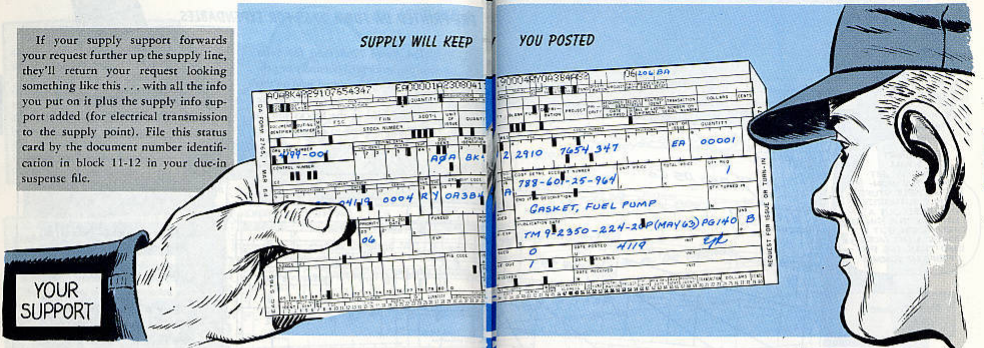
Block O—Publication. (Type, number, year, page number, etc., of TM, SM, TOE, TA, etc., which authorizes the item.)

WHEN A 2765 IS FILLED, ITS INFO IS RECORDED IN THE DOCUMENT REGISTER (AND THE RECORD OF DEMANDS CARD, IF NEEDED)—— IT'S READY FOR SUPPORT.

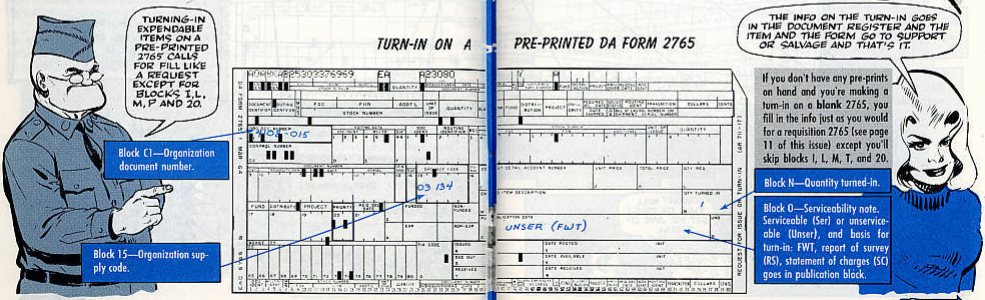
MORE

If your supply support forwards your request further up the supply line, they'll return your request looking something like this . . . with all the info you put on it plus the supply info support added (for electrical transmission to the supply point). File this status card by the document number identification in block 11-12 in your due-in suspense file.

## SUPPLY WILL KEEP YOU POSTED




## TURN-IN ON A PRE-PRINTED DA FORM 2765




If you don't have any pre-prints on hand and you're making a turn-in on a **blank** 2765, you fill in the info just as you would for a requisition 2765 (see page 11 of this issue) except you'll skip blocks I, L, M, T, and 20.





MORE

## MAKING OUT A DA FORM 2765-1 FOR NON-EXPENDABLE ITEMS

THE 3-PART 2765-1 WILL NORMALLY GET YOU THE NON-EXPENDABLE STUFF YOU'RE AUTHORIZED. IT'S FILLED OUT A LOT LIKE THE SINGLE-CARD FORM, BUT IT TAKES A BIT MORE INFO THAN THE PRE-PRINTED FORM.

Block A—Identification of supply support.

Block C1—Organization document number.

Block B—Identification of user or the outfit making out the request.

Blocks 4 through 6—FSN and/or other part number.

Block 7—Unit of issue.

Block L—Quantity requested.

Block 13—Demand code.

Block 20—Issue Priority Designator (if required).

Block 15—Organization supply code.

Block M—End item description.

Block O—Publication info.

Block I—Cost detail account number (when required).

Block P—Urgency-of-need designator.

The transaction is recorded in the document register and the complete form is forwarded to support. The form is initialed by the man who picks up the supplies. The top copy stays with the support activity and the bottom copy comes back with the supplies.

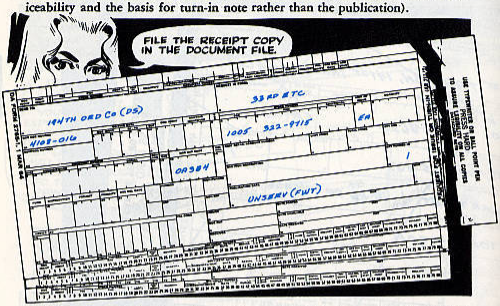




MORE

## TURN-IN ON A DA FORM 2765-1 (NX ITEMS)

On a turn-in for nonexpendable items the form takes info like a request, but you skip block I (cost detail account number), block L (quantity requested), block M (end item description), block P (UND), and block 20 (priority code). You add info in block N (quantity turned-in) and block O (which takes the serviceability and the basis for turn-in note rather than the publication).




When a turn-in form's made out it's recorded in the document register. After the items are given to support or salvage the additional turn-in info from the form's receipt copy goes in the document register, the property book, and the receipt copy is filed in the document file.

## KEEPING TRACK OF TRANSACTIONS

Your present files and supply records will change a bit, too.

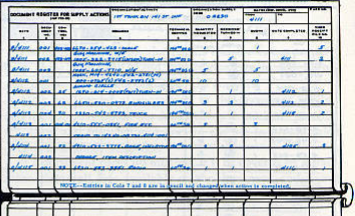
For example, the new procedures say both TOE and non-TOE outfits will keep separate document registers for recording the expendable and the nonexpendable supply deals (When you're authorized to request NX items). The registers are to be kept at the organizations, units, sections, shops, etc., which are authorized to send supply requests to a supporting supply activity.

Separate blocks of the organization's document serial numbers will be assigned to registers for expendables and nonexpendable items. For example, 001-499 for expendable items and 500-999 for nonexpendable items.

## THE DOCUMENT REGISTERS WILL RECORD:

| | |
|---|---|
| **Organization/ Activity block** | Name of organization, and the name of the activity (maintenance shop, motor pool, radio shop, etc.) making out the request may be noted in parentheses. |
| **Organization supply code** | The organization supply code flanked by zeros if the major command and sub-activity codes aren't used. |
| **Dates block** | Takes date (numeric) page is started in the "From" block, and date last entry is made on the page in the "To" block. |

ORGANIZATION DOCUMENT NUMBERS WILL RUN FROM 001-999 DAILY. USE SEPARATE BLOCKS OF NUMBERS FOR YOUR X AND NX REGISTERS.



DOCUMENT REGISTER FOR SUPPLY ACTIONS

| DATE | DOCU-MENT NO. | CON-TROL SYM-BOL | REMARKS | DESIGNATOR OR SERIAL NO. | REQUISITIONED QUANTITY | REQUISITION NUMBER | DOCUMENT NO. | DATE | SUPPLY ACTION TAKEN |
|---|---|---|---|---|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 6/5/01 | 001 | NX | [illegible] | [illegible] | 1 | | 1 | | S |
| 6/5/01 | 002 | NX | [illegible] | [illegible] | 1 | S | | 6/11 | S |
| 6/5/01 | 003 | X | [illegible] | [illegible] | 1 | | S | | |
| 6/5/01 | 004 | NX | [illegible] | [illegible] | 10 | | 10 | | |
| 6/5/01 | 005 | NX | [illegible] | [illegible] | 1 | | | 6/12 | 1 |
| 6/5/01 | 006 | NX | [illegible] | [illegible] | 3 | 3 | | 6/12 | 3 |
| 6/5/01 | 007 | NX | [illegible] | [illegible] | 1 | | 1 | | |
| 6/5/01 | 008 | NX | [illegible] | [illegible] | 3 | 3 | | 6/12 | 3 |
| 6/5/01 | 009 | NX | [illegible] | [illegible] | 1 | | | 6/12 | 1 |
| 6/5/01 | 010 | NX | [illegible] | [illegible] | 1 | | 1 | | |

NOTE—Entries in Cols 7 and 8 are in pencil and changed when action is completed.

DA FORM 2064

| | |
|---|---|
| **Page number** | Numerical sequence. |
| **Column 1** | The date column takes the UND (or priority designator code) on the request, followed by a slash and the numeric date. |
| **Column 2** | Organization document serial number. |
| **Column 3** | Control number (block C2 of supply form) which is assigned by support, or the last eight digits (date and serial number) of support's document (requisition) number in blocks 11-12 of the form. |
| **Column 4** | Remarks. FSN, name (noun) of item requested or turned-in, or other info, like inventory document info, etc. |
| **Column 5** | Tech service column. Takes the last three digits of the requisitioner address code in columns 33-35 of the form. When your supply support isn't assigned a requisition address code, column 5 takes the name of your supply support outfit. |
| **Column 6** | Quantity requested (for NX items only). |
| **Column 7** | Quantity received or turned-in. Partial shipments you note in pencil (for NX items only). |
| **Column 8** | Quantity due-in noted in pencil (NX items only). |
| **Column 9** | Date (numeric) when action is completed. |
| **Column 10** | Hand receipt file number (when H/R's used). On expendable items the name of actual user, or end item application may be noted here. |



PS MORE

## RECORD OF DEMANDS

**RECORD OF DEMANDS**
(AR 710-11)

STOCK NO. 2990-928-2252

| DATE | BOH DOCO. NO. | QTY DEMANDED | CUMULATIVE DEMANDS | DATE | BOH DOCO. NO. | QTY DEMANDED | CUMULATIVE DEMANDS | DATE | BOH DOCO. NO. | QTY DEMANDED | CUMULATIVE DEMANDS |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 4/04-003 | 0 | (3) | 3 | 4/03-001 | 1 | (1) | 4 | | | | |
| 4/12-007 | 1 | (3) | 4 | 4/13-039 | 1 | (2) | 6 | | | | |
| 4/20-004 | 2 | (2) | 6 | 4/13-INV | 1 | — | — | | | | |
| 4/25-005 | 1 | (1) | 1 | | | | | | | | |
| 4/25-006 | 1 | (1) | 2 | | | | | | | | |
| 4/10-012 | 1 | (4) | 4 | | | | | | | | |
| 4/16-007 | 1 | (2) | 6 | | | | | | | | |
| 4/23-018 | 1 | (2) | 2 | | | | | | | | |
| 4/30-INV | 1 | — | — | | | | | | | | |
| 4/09-021 | 0 | (3) | 4 | | | | | | | | |
| 4/16-010 | 0 | (1) | 5 | | | | | | | | |
| 4/23-022 | 1 | (2) | 2 | | | | | | | | |
| 4/30-INV | 0 | (1) | 3 | | | | | | | | |

DA FORM 1 MAR 63 2527

* GPO : 1966 O - 187-182

Entries in the record of demands card include:

- The stock number recorded on the title insert is also noted in the stock number block on the card's top right corner.

- The organization document number in block C1 of DA Form 2765 goes in the "date" column. Ditto the abbreviation SSSC (self-service supply center), SALTI, or the date of DA Form 2402 (Exchange Tag) also go in the date column. The dates of receipts and issues won't be recorded in the date column.

- The column heading "document number" will be changed to read "Balance On Hand" (BOH for short). And entries in the BOH column will be made in pencil and changed to show receipts and issues.

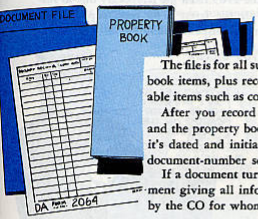
- The amount requested or DX'd goes in the "Quantity Demanded" column. The amount will be circled when received, and due-in's will be noted in pencil outside the circled amount. When items come in, the due-in figure gets erased.

- The "Cumulative Demands" column will record the running totals. You total the column monthly, draw a line under the monthly demands and then start counting anew. (You can adjust allowances per AR 735-35, para 31, after six review periods, 180-days.)

- Colored signals may be used behind the title insert window as a quick reference on status of an item . . . i.e., one color for due-ins, another to show zero balance, etc.

## NOSE COUNT

After a periodic inventory (informal, and as called by the CO) the date (numeric) and the abbreviation "INV" will go in the date column, and the figure in the "balance on hand" column will be brought in line with the inventory count. (Count slips and adjustment reports won't be required on these informal checks.)




## YOUR DOCUMENT FILE

The file is for all supply documents which concern property book items, plus receipt and turn-in requests on nonexpendable items such as components of kits and sets.

After you record a transaction in the document register and the property book, the document gets marked "posted," it's dated and initialed and goes in the file in organization document-number sequence.

If a document turns up missing, it'll be covered by a statement giving all info available on the document, and signed by the CO for whom the property book is kept.

## THE DUE-IN SUSPENSE FILES

You'll also need two suspense files. **A temporary due-in suspense file and a regular due-in suspense file.**

An up-to-date suspense file system will keep you posted on what supply support owes you and what it's doing about it. And, it'll also tell you when you can nudge supply with a follow-up card if you get concerned about a due-in request.

### TEMPORARY SUSPENSE

When support returns a request to you with due-in info (part, or all, of order) the form goes in the temporary suspense file in organization document-number sequence. (After you've recorded its message in your document register and the record of demands card, if it's on repair parts.)

When the due-in items come in you complete the supply records (the register and demands cards, etc.), pull the due-in form from the temporary suspense file and toss it out. The copy of the 2765 or DD Form 1348-1 which brings you the due-in items is also tossed out. (Unless, of course, a due-in is still outstanding on the request.) The copy of the form which brings you NX items goes in the document file.



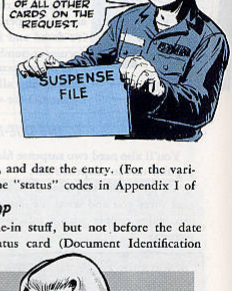
MORE

## REGULAR SUSPENSE FILE

When you get back a request which shows that support is requisitioning your order from higher up, the card goes in the regular due-in suspense file. And this one's filed by the document (requisition) number assigned by support (blocks 11-12 on the card).

Same goes when you already have a 2765 in your temporary suspense file and support sends you another 2765 on the request saying that they've had to requisition your due-in item. You pull the 2765 from the temporary due-in suspense file and toss it out. And then you file the latest 2765 from support, per support's document number, in the due-in suspense file.

## ABOUT STATUS CARDS




If support sends you a supply **status** card, code AE1, or a **shipping** card, code AS1 (in columns 1-3) the card goes in the due-in suspense file ahead of all other status cards you may've received on that specific request. As always the card will explain the requests status in column 65-66.

If you get a status card with a rejection code (in columns 65-66) you pull all the cards from the suspense file and dump them. Then cancel the request document number in the document register, and date the entry. (For the various codes used to give rejection info see the "status" codes in Appendix I of AR 711-17.)

## F-U SOP

You can send supply follow-ups on due-in stuff, but not before the date shown in columns 62-64 of your latest status card (Document Identification Code AE1).

To send a follow-up you take the latest status card from the due-in file and note "AF1" (the follow-up code) in block D, and put the info you find in columns 67-69 (unless it's zeros) in block E. Circle your entries with a colored

pencil and fire the form off to support. (If you find zeros in columns 67-69, forget about block E, just circle your block D note.)

When you don't have a status card on a request you've sent supply, pull the request from the suspense file, add "AF1" in block D, circle it in color and send the follow-up card to support.

## F-U ANSWERS

An answer card from supply (code AA1 in columns 1-3) to your follow-up card gets filed in the due-in suspense file ahead of all other cards you've received on the request.

## YOU, TOO, CAN CANCEL DUE-IN'S

Should you no longer need an item you've got due-in, you can note "AC1" (the cancellation code) in block D of the latest status card on the request. Note the form's info from columns 67-69 in block E, enter AC1 in block D, circle your entries, as before, and shoot the card to supply.

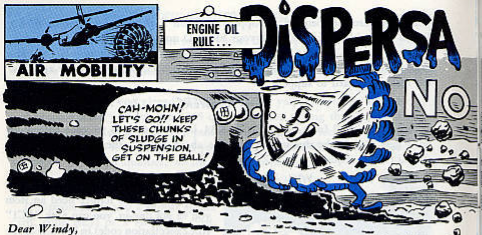
When you have no status card on an item due-in and you want to cancel the request, pull the form from the temporary due-in suspense file, enter the cancel code (AC1) in block D, circle it in color and send the card to supply soonest.

Your request won't be officially canceled until support verifies the canceled request. Support uses the DI code AA1 in column 1-3, and status code CC in column 65-66.

When you receive a cancellation card from support, make the canceled entry in the document register, take all cards on the request out of the suspense file and destroy 'em.

That's about it—why don't you take ten and then run through it again.

END




*Dear Windy,*

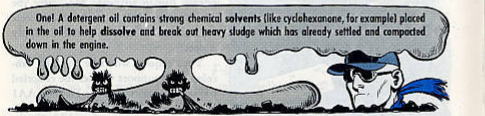
*The Army and most NG aviation units have gone to Dispersant Oil, MIL-L-22851, in all recip engines. My question is:*

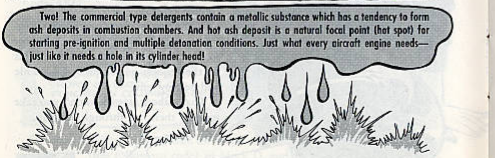
*Will the dispersant oil mix with commercial type detergent oils without adverse results? Since my unit uses gas and oil on commercial credit cards a good deal of time, I am interested. How say ye?*

**Capt R. E. E.**

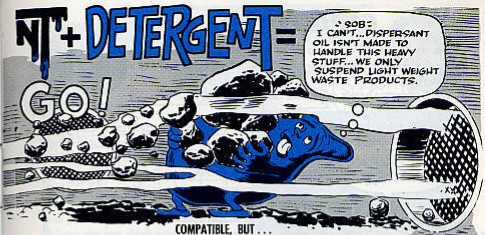
Dear Captain R. E. E.,

Negative! Dispersant and commercial type detergent oils **do not** mix!





**COMPATIBLE, BUT . . .**

So as not to confuse things, Air Force oils with the cyclohexanone additive are also ashless. So, chemically, they're compatible. But, on the other hand, you're still dealing with a strong solvent (cyclohexanone) and the risk of loosened up sludge. If you're forced to accept cyclohexanone at some transient Air Force base, do it on a one-time emergency basis only.

However, in the near future this oil should be replaced by MIL-L-22851 dispersant oil in the Air Force supply system also. So there shouldn't be any need for failing to follow para 153a of Change 3 to TM 55-405-3 . . . which says that: "Cyclohexanone will not be used with dispersant oil."

The Army's MIL-L-22851 dispersant oil has a chemical additive which does not tackle sludge the way a strong solvent does. The dispersant element in this oil is intended to **hold in suspension** those pre-sludge breakdown products which normally form in a lubricant before they get thick enough to settle out as sludge. That's why the new MIL-L-22581 oil won't budge the sludge already in your engines any more than the old MIL-L-6082 did . . . and mixing these two is no problem.

But this dispersant additive can't handle chunks of sludge broken loose from your engine's innards by a detergent's activity. And those loose chunks would just roam around looking for another home . . . like an orifice, screen, filter or narrow line opening.

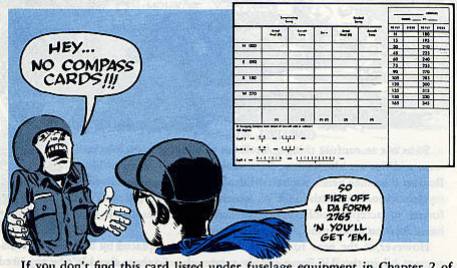
And that's why I say commercial type **detergents** are **"no go"** for Army aircraft. Howsomever, you can safely ask for Aeroshell **W120** or Esso Aviation Oil **E-120** with your credit cards, Sir. These are commercial type **dispersants** equal to MIL-L-22851 oils according to the Army's Qualified Products List.

*Windy*

# CARDS TO STEER BY

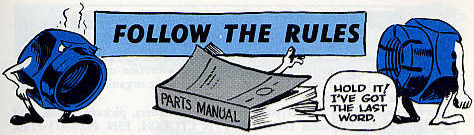
You remember that small size item on page 46 of PS 133 about . . . Form, Printed, Pilot Compass Card . . . FSN 6605-584-4227 (P/N AN 5823-1)? Of course you do!

Well, anyway, here's what that card looks like:




If you don't find this card listed under fuselage equipment in Chapter 2 of your aircraft's -20P, then fire off a DA Form 2028 like it says in your -20P's introduction about reporting TM improvements. Why waste time making up forms when they're already in the system?

If the transparent plastic on your bird is coated with stubborn grease that you can't get off with mild soap, try using Aliphatic Naphtha, Fed Spec TT-N-95, Type II. You'll find it listed in TM 55-405-3 and your aircraft's -20 manual under FSN 6810-238-8119. Don't use Aliphatic Naphtha, Fed Spec T-N-95A, Type I, listed in SM 3-1-6800 (19 Apr 63)—it's not for cleaning plastic. Type II's listed in SM 3-C6800-ML and SM C6800-IL as a Defense Fuel Supply Center (DFSC) item.




There never was a marble to compare with the steelie when the chips were down. The kid who had one could walk off with all the marbles.

The same might be said for the new all-steel self-locking nut, when you compare it with the old fiber insert type of nut. The steelie has it all over the old nut—and it's legal.

With the old nut you always had to consider whether or not to use it at certain places. High temperatures could ruin a fiber insert for real. And once you did use the nut there was always a question of whether the fiber threads had enough holding power for re-use . . . not so with the steelie.

The sturdy steelie is showing up more and more on starters, carburetors, magnetos and such. After awhile, they'll take over for real.

Meanwhile, you want to continue to use the nuts called out in the parts manual for your bird. That's the rule of the maintenance game.

What's needed in this man's Army is a good five-cent cigar!

You'd settle for a dial indicator?

Can't say anyone would blame you. There's a dozen places you can use one on the Raven (OH-23), alone.

Take TM 55-1520-206-20 (5 Nov 62), Chap 2, Sect VII. How you gonna check the .005-in maximum side (axial) play in the collective link rod end bearings, as called for in Para 7-16, without a dial indicator? You can't.

How you gonna follow the poop in Para 7-21 about checking the .050-in radial (side) play of the grip sleeve, without having a dial indicator to attach to the forward end of the stick tube? Impossible.

Then there's the prop shaft run-out check on a Bird Dog (0-1) and Beaver (U-6) that needs to be made when a prop is damaged . . . using a dial indicator.

So how do you get your hands on one, you may ask?

It's easy—now that a revision of SM 55-4-5180-AO8 has put dial indicator, FSN 5210-277-8840, into the organizational maintenance A, B, and C tool kits.

Just dial A, B, or C for the indicator.

# NO SPECIAL METER

There's nothing special about the CEC1-117 vibration meter, FSN 6625-590-6502, listed in the special tools section of both the organizational and field maintenance P manuals for your Iroquois (UH-1).

To use the CEC1-117 meter you had to have adapters, pickups, cables, and such. That's why Vibration Tester Kit, P/N LTCT484, FSN 4920-973-2149, is being issued. The new kit is complete, ready to use.

Don't look for the new tester kit in your P manuals, though. It'll become part of the B and C Engine Field Maintenance Shop Sets listed in SM 55-4-4920-S23, S24, S33 and S41.

# LEAD TOOL

*Dear Windy,*

*Disconnecting the ignition lead at the igniter plug on our Iroquois (UH-1B) engine is a problem. Neither the ⅜-in drive, ½-in crowfoot socket nor any of the open-end wrenches in the general mechanic's tool kit will do the job.*

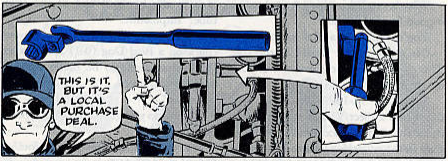
*Can you give us the low-down on a wrench that will fit the lead connection?*

**SP 6 K. R. J.**

Dear Specialist K. R. J.,

It's true that wrench clearance on all T53 engines in the UH-1 series is limited. The same goes for the Mohawk (OV-1).

The ⅜-in crowfoot is supposed to fit, tho, if you place it on the lead connection in an upside down position.

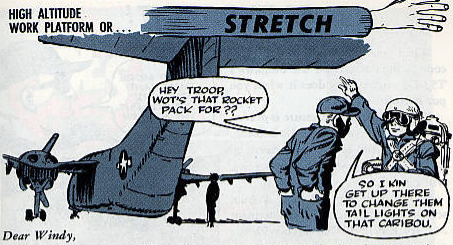



If the wrench still won't work, Socket Wrench crowfoot attachment, FSN 5120-224-7288, will fit the lead like a glove. You'll find this baby listed on page 203 of Federal Supply Catalog C6-5-SL (1 Apr 63).

But there's a hitch—the attachment's not in any of the organizational aircraft tool kits. So getting the tool will have to be a local purchase deal.

Windy

## HIGH ALTITUDE WORK PLATFORM OR . . . STRETCH

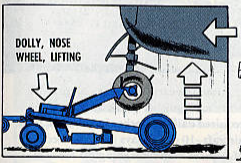


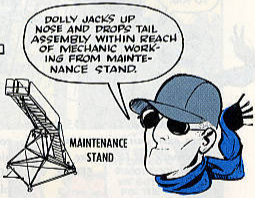

*Dear Windy,*

*Since the average military type mechanic never grows much over six feet, he has a brain-wracking time trying to stretch 30 feet to change tail lights on the top of the Caribou rudder.*

*We've been using a borrowed Air Force mobile crane because we don't have the time to scout the circus sideshows for a human rubberband. But isn't there some Army equipment that will do the job just as well?*

**Short Maintenance Crew**




Dear Short Maintenance Crew,

So happens there was supposed to be one Dolly, Nose Wheel, Lifting—FSN 1730-066-4378—in your TM 55-1510-206-20P (Apr 64). It's P/N SD5598-5 and shows up in your -20 as Fig 2-7.

This dolly's primarily for jacking up the nose and easing Caribou rudders under low hanging hangar tops. But it'll also drop the tail assembly within reach of an average size mechanic working from this Maintenance Stand . . . FSN 4940-390-5620 (P/N 48J20090) . . . pictured in Fig T24 of field maintenance's Caribou "P" manual.

Both items belong to the special tools for the Caribou.

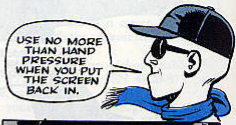
Windy

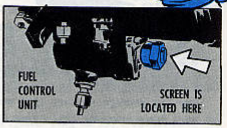
# EASY DOES IT!

When you periodically eye the fuel control inlet screen on the Mohawk's T53-L-3 engine, easy does it when you put it back.

If more than hand pressure is needed to hold the screen against the housing, it's cocked. And forcing the screen, by tightening the three retaining screws, will crush it.

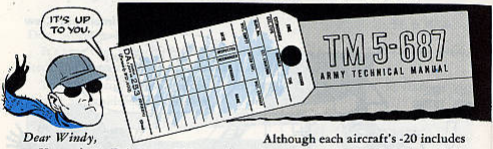
Should you happen upon a bum screen, tho, and you need a replacement . . . try FSN 2915-796-4316 with the supply types.




FIRE EXTINGUISHERS...

# TO TAG OR NOT TO TAG?




*Dear Windy,*

*How about DA Form 253 on aircraft fire extinguishers as per TM 5-687? We have yet to see one.*

**SFC H. V. L.**

Dear Sergeant H. V. L.,

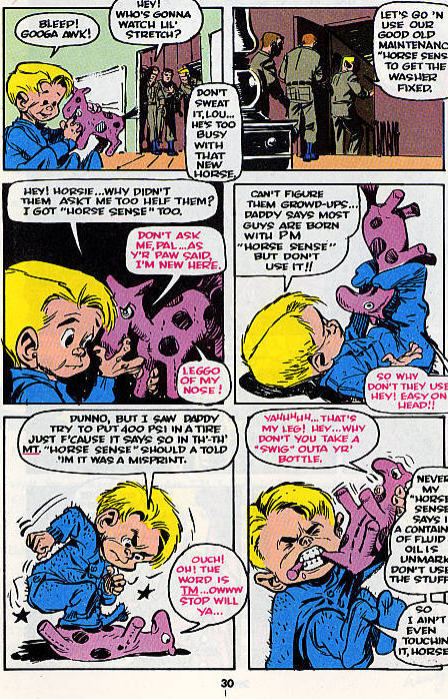
There's a question you'll have to answer for yourself. You're right about TM 5-687 calling for a DA Form 253 on all fire extinguishers. But then this TM is intended for R and U types who check extinguishers in buildings, storage areas and such.

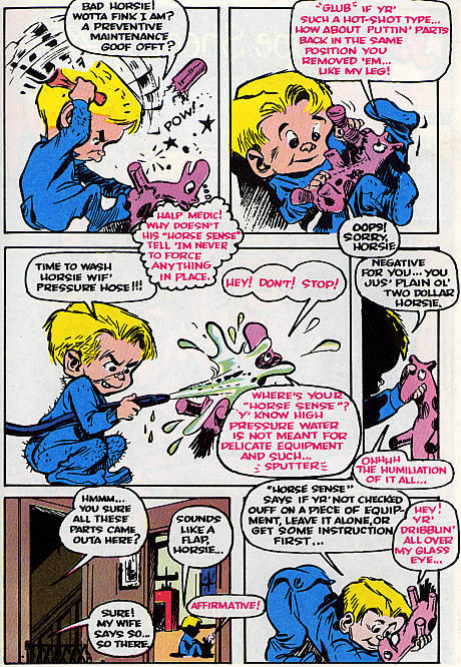
Although each aircraft's -20 includes a fire extinguisher check as part of the required daily and other inspections, no aircraft -10 or -20 says a 253 is needed. Maybe it's because signing off the complete inspection on the aircraft's -13 Maintenance Record covers the extinguisher.

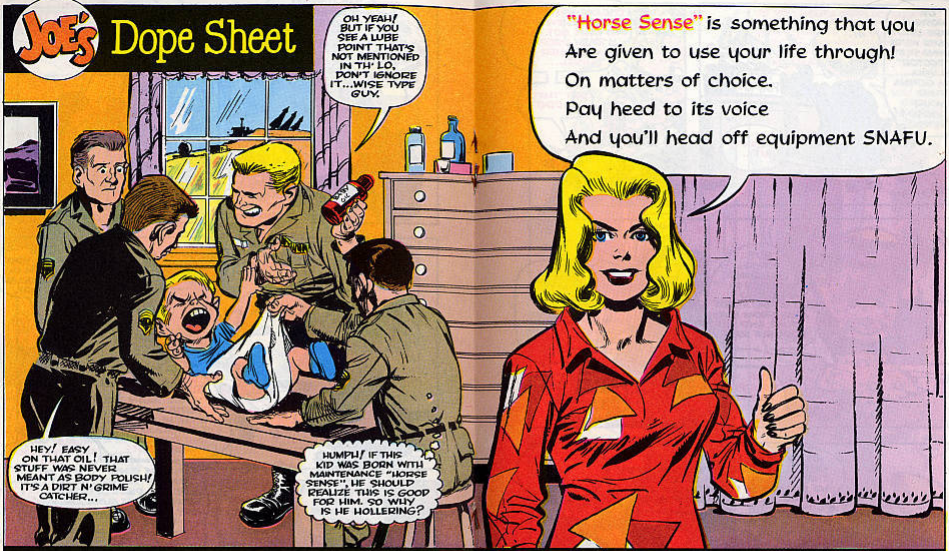
So if you think it's convenient to use the 253 tag, go ahead, Sarge. Put it in your local SOP. But if covering the extinguisher as one of the inspection items on your -13 is good enough, forget the tag. It's up to you!

Windy

JOE'S DOPE
IF YR' BRN WITH IT... WHY NOT USE IT...?
(Maintenance "horse sense", that is...)
DONG
DONG
DONG
A moonlit summer night . . . Precisely at the stroke of nine, three shadowy figures approach the back door of a darkened house . . .
A hurried knock . . .
KNOK KNOK!
IT'S ABOUT TIME...COME ON IN...
YOU ARE ALL "SPEC"B'S AND HIGHLY SKILLED IN YOUR FIELDS... YOU ALL KNOW WHY YOU ARE HERE.
SO! BEFORE WE CAN GO'N SHOOT POOL, WE GOTTA FIX THE WASHING MACHINE.
WOTTA FLAP, HUH?


BLEEP! GOOGA AWK!
HEY! WHO'S GONNA WATCH LIL' STRETCH?
DON'T SWEAT IT, LOU... HE'S TOO BUSY WITH THAT NEW HORSE.
LET'S GO 'N USE OUR GOOD OLD MAINTENANCE "HORSE SENSE" TO GET THE WASHER FIXED.
HEY! HORSIE...WHY DIDN'T THEM ASKT ME TOO HELF THEM? I GOT "HORSE SENSE" TOO.
DON'T ASK ME, PAL...AS Y'D PAW SAID, I'M NEW HERE.
LEGGO OF MY NOSE!
CAN'T FIGURE THEM GROWD-UPS... PADDY SAYS MOST GUYS ARE BORN WITH PM "HORSE SENSE" BUT DON'T USE IT!!
SO WHY DON'T THEY USE IT? HEY! EASY ON MY HEAD!
DUNNO, BUT I SAW PADDY TRY TO PUT 400 PSI IN A TIRE JUST F'CAUSE IT SAYS SO IN TH'-TH' MT. "HORSE SENSE" SHOULD A TOLD 'IM IT WAS A MISPRINT.
OUCH! OH! THE WORD IS TM...OWWW STOP WILL YA...
YAHHHHH...THAT'S MY LEG! HEY...WHY DON'T YOU TAKE A "SWIG" OUTA YR' BOTTLE.
NEVER! MY "HORSE SENSE" SAYS IF A CONTAINER OF FLUID OR OIL IS UNMARKED, DON'T USE THE STUFF!
SO I AIN'T EVEN TOUCHIN' IT, HORSEY...


BAD HORSIE! WOTTA FINK I AM? A PREVENTIVE MAINTENANCE GOOF OFFT?
POW!
"GLUB" IF YR' SUCH A HOT-SHOT TYPE... HOW ABOUT PUTTIN' PARTS BACK IN THE SAME POSITION YOU REMOVED 'EM... LIKE MY LEG!
HALP MEDIC! WHY DOESN'T HIS "HORSE SENSE" TELL 'IM NEVER TO FORCE ANYTHING IN PLACE!
OOPS! SORRY, HORSIE
TIME TO WASH HORSIE WIF' PRESSURE HOSE!!!
HEY! DON'T! STOP!
NEGATIVE FOR YOU... YOU JUS' PLAIN OL' TWO DOLLAR HORSIE.
WHERE'S YOUR "HORSE SENSE"? Y' KNOW HIGH PRESSURE WATER IS NOT MEANT FOR DELICATE EQUIPMENT AND SUCH... :SPUTTER:
OHHHH THE HUMILIATION OF IT ALL...
HMMM... YOU SURE ALL THESE PARTS CAME OUTA HERE?
SOUNDS LIKE A FLAP, HORSIE...
AFFIRMATIVE!
SURE! MY WIFE SAYS SO... SO THERE
"HORSE SENSE" SAYS IF YR' NOT CHECKED OUFF ON A PIECE OF EQUIPMENT, LEAVE IT ALONE, OR GET SOME INSTRUCTION FIRST...
HEY! YR' DRIBBLIN' ALL OVER MY GLASS EYE...

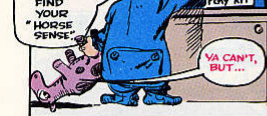



# WE HAVE THE WORLD'S BEST EQUIPMENT ... *Take care of it*

**IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.**

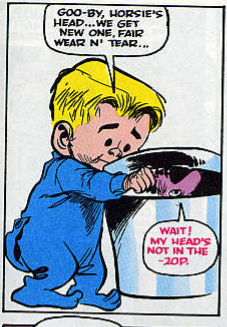
OK HORSIE! SHAPE UP... 'CAUSE WE'RE GONNA PLAY "DOCTOR" ON YOU... I'M GONNA FIND YOUR "HORSE SENSE."
DOCTOR PLAY KIT
YA CAN'T, BUT...

IT SAYS WRENCHES, PLIERS, SCREWDRIVER, ETC WERE NOT MADE TO BE USED AS A HAMMER OR CHISEL...
GET THAT, KIDDO?

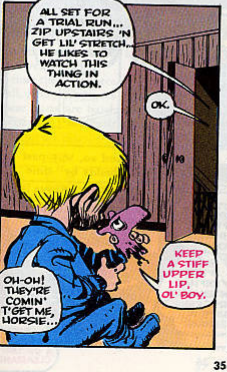

BUT HORSIE, I'M MAKING A REPAIR IN THE FIELD SO I GOTTA FIND A SPOT AWAY FROM MUD, DUST, AND POSSIBLE RAIN.
OH! I SUPPOSE THAT MAKES IT OK! HUH...

HMM?
LISTEN... KIDDO! IF YR' NOT SURE ABOUT TM INFO, ASK BEFORE YOU DO THE JOB...WILL YA PLEASE?

OK, HORSIE... I WON'T DO IT UNTIL I ASKT AN EXPERT, MY DADDY. THEN HE KIN WRITE AN EIR FOR ME SO WE KIN EWENTUALLIE GET YOU BACK TOGEDDER AGIN...
WELL, GET WITH IT, TROOP! GET WITH IT...


GOO-BY, HORSIE'S HEAD... WE GET NEW ONE, FAIR WEAR N' TEAR...
WAIT! MY HEAD'S NOT IN THE -ZOP.

IF YOU NEED A REPLACEMENT PART THAT'S NOT IN TH' SUPPLY MANUAL, DON'T THROW MY HEAD AWAY ER... BROKEN PART... YOUR ONLY QUICK WAY IS TO REPAIR MY HEAD, ER... PART...
GEE! YOU ON TH' BALL, HORSIE.


ALL SET FOR A TRIAL RUN... ZIP UPSTAIRS 'N GET LIL' STRETCH... HE LIKES TO WATCH THIS THING IN ACTION.
OK.
KEEP A STIFF UPPER LIP, OL' BOY.
OH-OH! THEY'RE COMIN' T'GET ME, HORSIE...

LET'S GO'N WATCH THE WASHIN' MACHINE RUN TH' OBSTACLE COURSE, LIL' TROOPER...
GOO ARK FEH
MY SENTIMENTS EXACTLY.

And so, way past "beddy by" time . . .

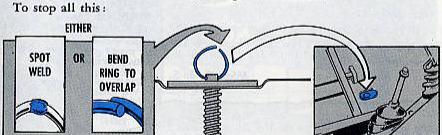
# TIE THAT LASSO

Just about all you M151 ¼-ton truck drivers know the operating-ring for the drain cover is tricky.

In time the ring spreads, slips out of the pin hole and away goes the pin, guts and all. Everything goes except the cover.

These parts are hard to replace 'cause they're not items of supply. They're replaced thru cannibalization—or you've got to make 'em.

To stop all this:




This'll stop the ring from spreading and working loose from the pin.

If you can't weld it soon, keep an eye on the ring. When the ring's in a position to work loose, turn the ring so the joint won't slip thru the pin.

Or you can bend the ring so the joint will overlap and stay tight.

THE KIT'S NOT NEEDED . . .

# JUST A SHORT TAIL

A lot of M151 ¼-ton trucks are running around with their exhaust tailpipe extension in sad shape. They usually get damaged by tire chains, when a chain link breaks.

A leaky exhaust extension could be dangerous to a radio operator or anybody who's got to stay in the back seat of a parked truck while the engine's running.

So, if your M151 has a leaky tailpipe extension, there's no need to requisition the whole exhaust system parts kit that's on page 18 of your TM 9-2320-218-20P (Dec 63).

You can get the tailpipe extension as a separate item. Ask for Pipe, Extension, Engine Exhaust System (7046649) FSN 2990-064-6312.

This extension is an authorized organizational repair part. The supply people have been notified to issue it to -20P users.

The other two tailpipe sections do not come as individual items. These pipes usually last as long as the muffler, so when any section is worn thru you're supposed to get the exhaust parts kit and replace the whole kaboodle.

Now about tire chains. A broken or loose chain'll whip and beat the tar outta the tailpipe extension, fender well and taillight wiring.

To prevent this type of mutilation keep your chains fastened right and have no loose long ends. And look your chains over often for cracks and badly worn links.

A chain that goes clickety-click is doing damage; get it off and repaired.

## IN REVERSE

*Dear Half-Mast,*

*Why do the odometers in our military type trucks run backward when the vehicle is being operated in reverse?*

MSgt T. J. S.

Dear Sergeant T. J. S.,

The odometer runs backwards and subtracts when the vehicle is run backwards because the odometer is mechanically connected to a shaft and is positive gear-driven.

The mileage accuracy lost this way is more than made up for by the cheaper cost of the direct-drive connection.

*Half-Mast*

*Dear Half-Mast,*

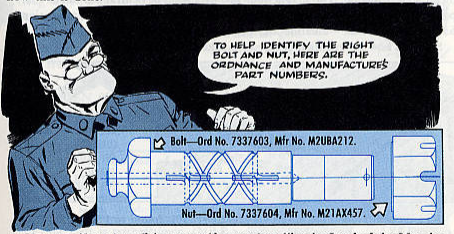
*Supply manuals for the M125 10-ton truck don't list the drawbar bolt and nut shown in Fig 1, MWO 9-2320-206-30/7 (18 Jan 61).*

*How can we get a replacement?*

**SP5 R. P. T.**

Dear Specialist R. P. T.,

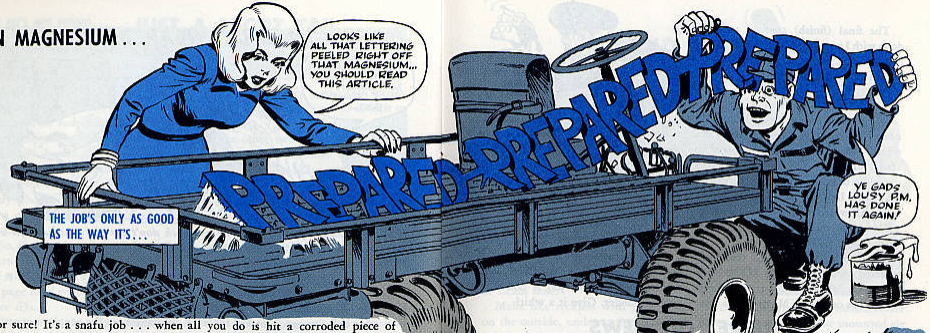
Neither bolt nor nut is stocked for issue, so chances are the people supporting you will have to make a local purchase from a representative of the manufacturer, Mack Trucks, Inc., P. O. Box 311, Somerville, N. J. See AR 715-30 for how this is done.




O'course, if you're off by yourself someplace like the Land of the Morning Calm, your friendly manufacturer is a little far removed—and you'll probably have to get your support outfit to fabricate one for you by using an assembly from another M125 as a model. Or maybe order it thru channels like it says in AR 725-50.

*Half-Mast*

# ON MAGNESIUM . . .

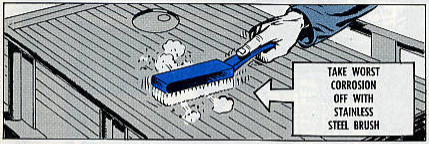



THE JOB'S ONLY AS GOOD AS THE WAY IT'S . . .

For sure! It's a snafu job . . . when all you do is hit a corroded piece of magnesium-built equipment with a quick scrape off and slap on some OD paint.

That's not enough! Corroded magnesium needs a little more than an ordinary metal spot-paint job. The magnesium surface's gotta be neutralized (made compatible), or your paint job's going to peel right off. This is because magnesium has an alkaline base—alkaline and paint don't take kindly to each other.

So here's how to prepare magnesium to take paint so it'll stick.




With a stainless steel brush (FSN 7920-269-1259), found in FSC-C7900-IL-A (Jun 64), on page 1.1, take the worst of the corrosion off.

Be sure to use a stainless steel brush cause when a plain carbon steel brush is used it's mucho easier to imbed a piece of its steel hairs into the magnesium.

Magnesium and steel are two dissimilar metals so electrolytic (galvanic) action sets in—more corrosion.



Next, get some garnet paper so's to sand down and finish the corrosion clean-off job. FSC-C-5350-SL, Vol 1 (Aug 63), pages 16-17 lists all the different size garnet paper you'll need. Might start out with a 3/0 or 1/0 grit and if you find it fills up too fast, try a heavier grit.

Get the surface shiny bright . . . wash all the grime off with fresh water—then dry.

Now she's ready for the pre-treat (neutralize) job. Brush on a coat of Wash Primer (FSN 8010-664-4966). It's found in FSC-C-8000-IL (Jan 64), page 60. Just follow the instructions on the package by mixing the two-part contents of the package. Make the coat thin enough to see thru. Let dry for about a half-hour to an hour.

**Be sure to put a coat of primer paint over the neutralizer within 8 hours or the job will hafta be done over again—from the start. Oxidation sets in.**

Prime coat it with Primer, (Mil-P-52192), FSN 8010-082-1714. It's listed on page 61 in FSC-C-8000-IL (Jan 64). This primer should be painted over with a finish coat within 14 hours.



MORE

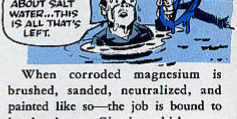
The final (finish) coat of paint is done with Lacquer, (Mil-L-52043), FSN 8010-842-5235—also listed in FSC-C-8000-IL (Jan 64), page 35.

**MAGNESIUM NOTES:**

Why is salt water so deadly to magnesium? Magnesium comes from sea water. When salt water is allowed to stand on naked magnesium, it works overtime to change it back to its original form. In other words . . . be sure to wash salt water off magnesium **pronto**.

How can you be sure you're foolin' with magnesium?

You can be quite sure on track and wheeled vehicles like the M274 Mule body, the M151 ¼-ton truck wheels (early jobs only), the M113 APC's floor plates and some early model missile trailers when regular spot paint jobs keep peeling off or never stay put.




When corroded magnesium is brushed, sanded, neutralized, and painted like so—the job is bound to last lots longer. Give it a whirl.

## TURRET OIL NEWS

Do you have a corrosion problem with the hydraulic oil you've been using in the turret power packs on your M48 and M60-series tanks?

A hydraulic oil designed not to corrode is available in the supply system.

Requisition it like so—

**Hydraulic Fluid, Petroleum Base, Turret Traversing and Elevating Mechanism (MIL-H-6083A):**

**1 Qt FSN 9150-082-2531**
**1 Gal FSN 9150-082-2532**

This hydraulic fluid is listed in Supply Catalog C9100-IL (Dec 63).

You never mix this new oil with any other types of hydraulic oil.

# HOLD THAT HOSE!

Tank? SP gun or howitzer?

They can bounce off the bullets, but you can do 'em in with water. That's right . . . water from a high-pressure or steam hose.

Make like reckless with your hoses on the outside, underneath or inside a vehicle and you'll invite trouble.

Water or steam under high pressure has a mean way of corroding precision parts and instruments by squirting dirt and moisture on 'em. Delicate seals and vents can't hold up under a direct stream of high pressure water or steam.

Parts seriously damaged by corrosion have to be replaced. That can get costly . . . $$$ . . . plus causing a lot of unnecessary hard work for you, the unit mechanic or support.

It could get real painful, too . . . like when your CO hits you with a statement of charges. It can be (and has been) done.

**Places you've got to specially watch are your turrets, artillery bottom carriage roller bearings, recoil mechanisms, sights and sight mounts, propeller shaft and gear case seal and trunnion bearings.**

**Don't direct high pressure water or steam against exterior mounted air cleaners or against the opening be-**

**tween hull and turret (turret ring), grilles, exhaust deflectors, fire control or armament openings.**

**It's safer to let air cooled engines cool down to normal idle operating temperature before cleaning the vehicle.**

Your best bet is to use the fast water on places you know it won't harm anything but mud—like on the track and the solid areas of the hull.

Is the M19 cupola on your M60 and M60A1 tanks rotating sorta jerky, and if you listen real close can you hear thumping?

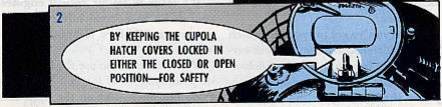
Could be. Chances are good that the cupola's plastic ball bearings have got flat sides or the races may have depressions in 'em (brinnelling).

How'd this happen?

Those balls are made of plastic—real different animals from the old steel ball bearings. Of course, plastic's not as hard as steel.

That's why why you've got to put the cupola thru her capers and give her several 360° twirls each day the tank's operated. This spreads the wear and pressure on the balls; they get repositioned each time the cupola's rotated.

You can help keep those balls in shape a couple of other ways, too—




Give your cupola that daily PT and you'll keep the balls on-the-ball.

# M88 VTR TRANSPORT?

Worried about how to transport your M88 tank recovery vehicles for long distances? Well, the only way is by rail. The M15A2 draggin' wagon trailer is too short and too light. It can't haul over 50 tons maximum, and the M88 weighs 56 tons. For shorter distances road marching the M88 is the answer which means you have to keep it in top shape.

## M88 LIFTING CHAIN

*Dear Half-Mast,*

*On the M88 recovery vehicle there's a heavy duty chain stowed under the towing pintle. TM 9-2320-222-10 (Nov 60) lists the chain as towing equipment, and also calls it a heavy-duty "V" lifting chain.*

*But the chain's pear-shaped hook is too big for the eye of the pintle, and we don't see how it could be used for a V-chain hook-up. Can you tell us if we got the wrong tow chain?*

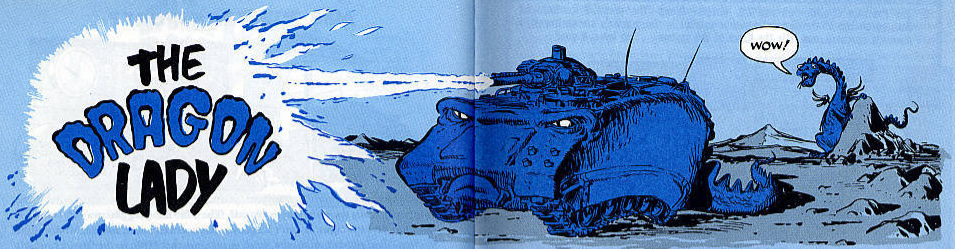
CWO D. M.

Dear Mr. D. M.,

You have the right chain, and it's supposed to be used only as a heavy duty lifting chain.

The TM pegs it right on page 119, where it's called a "V" heavy duty lifting chain, FSN 4010-330-0167.

# THE DRAGON LADY




They call her the M132 self-propelled flame thrower.

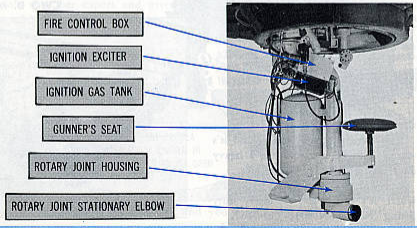
But if those rakish lines have a familiar look, you're right! She's basically a "Lucky Lady" (M113 PC) that can speak with a forked tongue.

Her devastatin' one-two punch is a cupola-mounted M10-8 flame thrower and an M73 7.62-mm machine gun. The cupola traverses 360 degrees and can elevate to plus 55 degrees and depress to minus 11. Both guns are fired electrically . . . but only one gun can be fired at a time. The machine gun can also be fired manually.

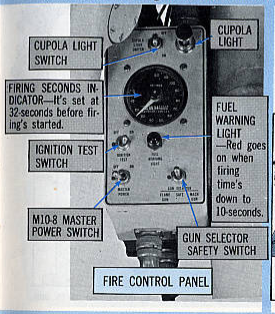
The flame gun'll fire a steady rod (32 seconds) or it'll fire bursts. The triggers are on the elevation handle. The gun selector switch and the firing-seconds indicator are on the gunner's fire control box.

**The M10-8 flame thrower has three major groups:**

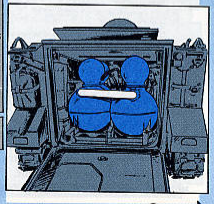
1. **M8 Cupola Group**—This takes in the cupola and cradle assembly, and the accessories assembly attached to the fuel inlet pipe in the gunner's compartment. In the accessories you find the following:





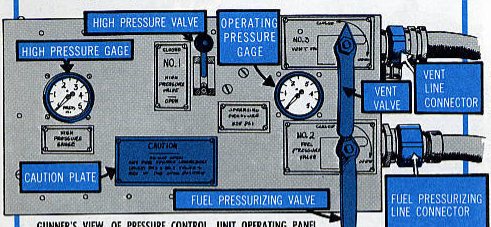

2. **M10 Fuel and Pressure Group**—The air tanks and fuel tanks are in the M132's cargo compartment.





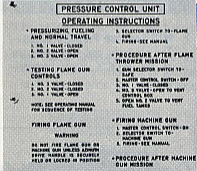
MORE

**3. The Pressure Control Unit and $CO_2$ Cabinet Group**—The pressure control unit (located on top of the fire extinguisher cabinet in the gunner's compartment) is manually operated, **and it is the heart of the system . . .** so learn it good.




GUNNER'S VIEW OF PRESSURE CONTROL UNIT OPERATING PANEL

**CAREFUL**—Never jerk any of its valves open. Crack 'em slowly and open 'em with a steady pull. Yanking the valves open allows excessive hydraulic pressure to blast into the system, and could damage the unit.



PRESSURE CONTROL UNIT
OPERATING INSTRUCTIONS

• PRESSURIZING, FUELING AND NORMAL TRAVEL
1. NO. 1 VALVE—CLOSED
2. NO. 2 VALVE—OPEN
3. NO. 3 VALVE—OPEN

• TESTING FLAME GUN CONTROLS
1. NO. 1 VALVE—CLOSED
2. NO. 2 VALVE—CLOSED
3. NO. 3 VALVE—OPEN

NOTE: SEE OPERATING MANUAL FOR SEQUENCE OF TESTING

FIRING FLAME GUN

WARNING

DO NOT FIRE FLAME GUN OR MACHINE GUN UNLESS GUNNER DEVICE HANDLE IS SECURELY HELD OR LOCKED IN POSITION

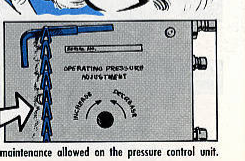
1. NO. 2 VALVE—OPEN
2. MASTER CONTROL SWITCH—ON
3. SELECTOR SWITCH TO—FLAME
4. FIRING—SEE MANUAL

• PROCEDURE AFTER FLAME THROWER MISSION
1. GUN SELECTOR SWITCH TO—SAFE
2. MASTER CONTROL SWITCH—OFF
3. NO. 1 VALVE—CLOSED
4. NO. 2 VALVE—OPEN TO VENT FUEL LINES
5. OPEN NO. 3 VALVE TO VENT FUEL LINES

• FIRING MACHINE GUN
1. MASTER CONTROL SWITCH—ON
2. SELECTOR SWITCH TO—MACHINE GUN
3. FIRING—SEE MANUAL

• PROCEDURE AFTER MACHINE GUN MISSION
1. SELECTOR SWITCH TO—SAFE
2. MASTER CONTROL SWITCH—OFF

The air tanks provide a maximum air pressure of 3,000 PSI. The weapon's normal operating pressure is 325 PSI, but it'll do OK with air pressure at 250 PSI. The operating pressure can be corrected to the proper setting by adjusting the regulator valve with the key chained to the control unit.

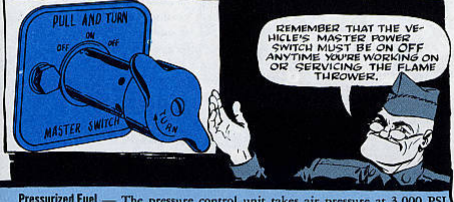



**NOTE:** This adjustment is the only organizational maintenance allowed on the pressure control unit.

**Pressure Safety** — A relief valve in the pressure control unit will vent automatically when the air pressure exceeds the reading on the operating pressure gage by 15 PSI. If the valve fails, a burst-disk in the pressure control unit vent line will rupture when your pressure exceeds 420 PSI. A vent valve in the M10 fuel and pressure group can be used to vent the air tanks in case of a malfunction in the pressure control unit. The valve's located at the gunner's left heel.

**Electrical Power** — All power for the M10-8 is controlled by the master power switch in the driver's compartment.

The ignition exciter in the accessories assembly jacks up the vehicle's 24-volts to 2,000-volts to power the two igniter plugs which flank the flame gun's nozzle.




**Pressurized Fuel** — The pressure control unit takes air pressure at 3,000 PSI from the air tanks and reduces it to the operating pressure (325 PSI) and sends it to the fuel tanks. From the fuel tanks the pressurized fuel goes to the flame gun through the rotary joint and the inlet pipe. The unit also pressurizes the ignition gas tank (to 325 PSI) and provides air at the flame gun actuator through a separate air line (from the pressure control unit to the rotary joint).

**Safety** — Like with anything else that uses pressurized air and gasoline you'll have to pay strict attention to the special operating cautions, and mind the data plate instructions to a T.

**Servicing** — Support'll service the flame thrower (fill and pressurize) with the M4 or the M4A2 service unit. TM's for the M10-8 are TM 3-1040-209-12 and the -20P, for the M113 you have the TM 9-2300-224-10, -20 and -20P; and for the M4, TM 3-1040-205-12 and -20P, and for the M4A2, TM 3-1040-219-12 and -20P.



END

# MACHINE GUN CHATTER

## BRAND HEX

How hot's hot? Well, your hot li'l hands and the scorching sun won't bother 'em, but just let the red-hot barrel of one M60 machine gun touch the rubber coating on the stock and hand guard of another M60 and, brother, the protective coating's shot. Remember this next time you rack 'em up after a torrid firing session, will you?

## SHORTER SCRAPER

The old booster and flash-hider scraper (FSN 1005-722-3846) for the M73 machine gun's got to lose its slender tip. Otherwise it won't do a good cleaning job on the newer design booster and flash-hider assembly you may find on some of these weapons.

Your Ord-type support can do the simple surgery easy—like it's spelled out on page 7 of TM 9-1005-233-34 (Jan 64).

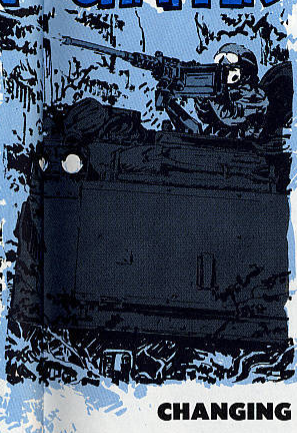
## SCREW CUT

There are times when some things have to be cut off.

Like with those beat-up depression stop screws and trigger guards on your Jeep-mounted M60 machine gun when you get your armorer to apply MWO 9-1005-245-20/1 (22 Nov 63).

The screw body can't be more'n 2 inches, measuring from under the head to the end. Any more than 2 inches has to be cut off so's it won't mess with the trigger guard when you're firing at extreme high elevation.





## FILL IN THE GAP

It's true . . . that ammo tray assembly locked onto the 50-cal MG cupola mount in your M113 PC's was designed to handle only the 105-round ammo boxes.

That's why a 100-round box of 50-cal stuff makes for a loose fit twixt the box and the tray receptacle.

So what do you do to keep the 100-round box from jumping around inside the tray?

Just use a block of wood or metal shaped up so it's about ¾-in thick, 12½-in long and 6⅞-in wide.

Or you can take the cover off the 100-round ammo box and put it on the bottom of the tray with the solid side up.

Putting either of these—block or cover—on the bottom of the tray should take up the gap from the reduced height of a 100-round box.

## CHANGING WEAPONS

Sweatin' over the business of changing an M2 .50-cal machine gun from a flexible type to a turret type weapon (like on an M59 PC)?

Forget it. This tricky chore calls for changing a lot of parts by your support unit. You'll be better off if you can get one or the other of the .50-cal machine guns listed in Ch 1, TM 9-2300-203-12 (Appendix III, page 5).

So try supply for:

Machine gun .50-cal, Browning, M2 HB, flexible, FSN 1005-726-5636 (for M59's Ser Nos. 7 to 2941).

Machine gun .50-cal, M2, TT (M13 cupola) FSN 1005-606-8412 (for M59's Ser Nos. 2942 and up. This one's also OK for the M84 SP mortar).

# HOMING ALL THE WAY KILLER

## LOOK FOR CRACKS

If you're not doing it, you oughta be.

Looking for cracks around the four bolt supports on the warhead for your Hawk missile . . . that's what.

You want to eyeball the supports whenever you remove the guidance section. And if you find any cracks, it's time to ship the warhead up the supply line.

Another thing . . . this has been said before, but it's worth repeating. That is, it pays to remove the warhead and warhead shell in one piece when possible. This saves wear and tear on the inserts in the warhead and the support bolts that get threaded into the inserts.

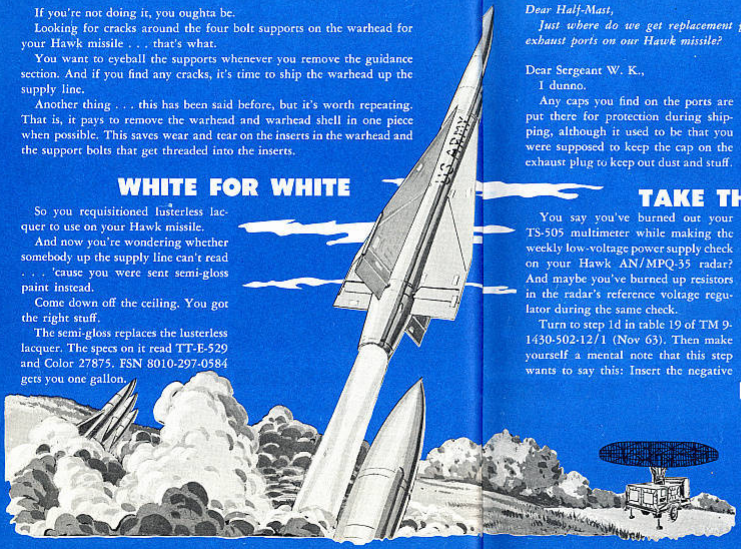
## WHITE FOR WHITE

So you requisitioned lusterless lacquer to use on your Hawk missile.

And now you're wondering whether somebody up the supply line can't read . . . 'cause you were sent semi-gloss paint instead.

Come down off the ceiling. You got the right stuff.

The semi-gloss replaces the lusterless lacquer. The specs on it read TT-E-529 and Color 27875. FSN 8010-297-0584 gets you one gallon.





## CAPS NOT NEEDED

*Dear Half-Mast,*

*Just where do we get replacement plastic caps for the pressure and exhaust ports on our Hawk missile?*

SFC W. K.

Dear Sergeant W. K.,

I dunno.

Any caps you find on the ports are put there for protection during shipping, although it used to be that you were supposed to keep the cap on the exhaust plug to keep out dust and stuff.

As of now, tho, there's nothing on the books that says you oughta use caps on either port.

So don't waste your time trying to find extra caps. They're not in the supply system.

*Half-Mast*

## TAKE THE LEAD

You say you've burned out your TS-505 multimeter while making the weekly low-voltage power supply check on your Hawk AN/MPQ-35 radar? And maybe you've burned up resistors in the radar's reference voltage regulator during the same check.

Turn to step 1d in table 19 of TM 9-1430-502-12/1 (Nov 63). Then make yourself a mental note that this step wants to say this: Insert the negative test lead into J2 (4 Fig 25) and the positive test lead into J7 (5 Fig 25).

Hold it. There's something else.

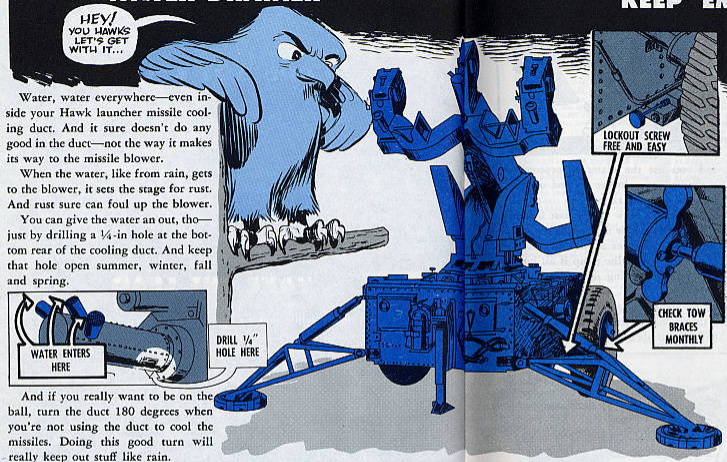
You also want to switch the J2 and J7 jacks on the reference voltage regulator. That is, put the J2 where the J7 is . . . and the J7 where the J2 is located.

From then on, when you use the test leads, run the red one to the red test jack . . . and the black test lead to the black jack.

## BEG OR BORROW

It's now in the supply system. Ready-mixed coolant for your Hawk AN/MPQ-39 radar, that is. The coolant is listed under FSN 6850-078-4459 for one gallon. If all your trying doesn't turn up the stuff, then keep mixing the coolant the way TM 9-1430-511-12 tells you until you can latch on to the ready-mixed coolant.

## WATER DRAINER




Water, water everywhere—even inside your Hawk launcher missile cooling duct. And it sure doesn't do any good in the duct—not the way it makes its way to the missile blower.

When the water, like from rain, gets to the blower, it sets the stage for rust. And rust sure can foul up the blower.

You can give the water an out, tho—just by drilling a ¼-in hole at the bottom rear of the cooling duct. And keep that hole open summer, winter, fall and spring.

And if you really want to be on the ball, turn the duct 180 degrees when you're not using the duct to cool the missiles. Doing this good turn will really keep out stuff like rain.

## KEEP 'EM CLEAN

OK . . . you know that you're supposed to keep your clodhoppers off'n the suspension lockout assembly on your Hawk launcher. The thing just wasn't made for using as a step.

That doesn't mean you're supposed to forget the assembly except for the times when you actually use it. Far from it.

It's a darn good idea—during your monthly service on the launcher—to clean the assembly and make sure the lockout screw works free and easy.

And during the same monthly service, give the same kind of going-over to the tow braces—where they fit into the outriggers.

This kind of checking sure beats finding out the hard way—like when you're emplacing the launcher—that things aren't working the way they should.

## THE RIGHT LEVEL

*Dear Half-Mast,*

*Sure . . . we're supposed to use aircraft gear lubricating oil in the gear case for the motor pump assembly on our Hawk launchers.*

*But there's still one big question—how much oil do we put in?*

*If we pour it until it comes out the fill plug hole, then when everything is battened down and the launcher is put into operation, there'll be enough oil pressure set up in the gear case to ruin different seals. The ones around the motor pump shaft are a good f'rinstance.*

**Sgt J. T.**

Dear Sergeant J. T.,

You've got a problem, all right. There's no dipstick and nothing in black and white that tells you how to check for the right oil level.

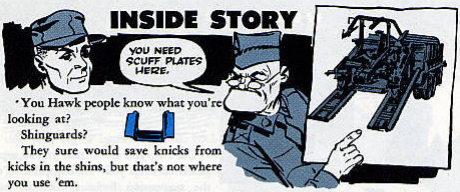
Here's what I'd do, tho.

As I pour in oil, I'd stop every so often and shine a flashlight into the fill plug hole. When I saw that the oil had reached a point on the wall of the case opposite the hole, I'd stop pouring.

That way, there's room enough in the gear case for the oil to rise under pressure instead of pushing through the seals as it looks for some place to go.

*Half-Mast*

# INSIDE STORY




"You Hawk people know what you're looking at?

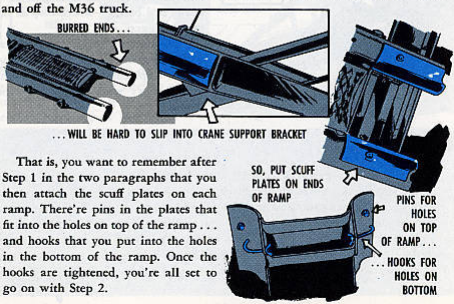
Shinguards?

They sure would save knicks from kicks in the shins, but that's not where you use 'em.

No . . . they're called scuff plates, and you use the plates to protect the forward end of the ramps when you're running your loader on and off your M36 2½-ton truck. You're issued the plates with the ramps.

Without the plates, the tracks of the loader can chew up the last few feet of the inside of the ramps. And that's bad 'cause this is the end of the ramp (no matter which ramp you use) that goes into the crane support bracket for crane rigging. The fit is mighty close and if the end of the ramp is all burred from the loader tracks, you'll have lots of trouble getting it to slip into the crane support bracket.

There's nothing in writing that tells you about using the scuff plates, but that doesn't mean you can't make some mental notes when you're doing what it says in para 22c and 22d in TM 9-1450-500-10 about driving the loader on and off the M36 truck.




That is, you want to remember after Step 1 in the two paragraphs that you then attach the scuff plates on each ramp. There're pins in the plates that fit into the holes on top of the ramp . . . and hooks that you put into the holes in the bottom of the ramp. Once the hooks are tightened, you're all set to go on with Step 2.

*A selected list of recent publications of interest to Organizational Maintenance Personnel. This is a list compiled from recent Adjutant General's Distribution Center Bulletins. For complete details see DA Pam 310-4 with latest changes.*

TECHNICAL MANUALS

TM 1-110-1A-1040, May.
TM 1-110-1A-1042, May.
TM 5-735-1, Mar Rigging.
TM 5-3431-209-37P, Mar Welding Machine, Arc: Gas; (Valentine Mdl 263B1).
TM 5-6115-398-35P, Apr Gen Set, Gas Engine (Hallingworth Mdl JHGV38).
TM 5-6115-501-12, Mar Gen Set (Hobart CE-50-AC/WE1).
TM 5-6665-202-35P, Mar Detecting Set, Mines (Fisher Model F153—Oregon Tech Products Model MD-M).
TM 9-1005-217-12P, —20, Apr SM3.
TM 9-1240-204-12P, Apr Little John Ammo.
TM 9-1410-302-12P/2, Apr Sergeant Oper & Maint.
TM 9-1410-375-12P/2, Apr Pershing, Ammo & Mal Oper & Maint.
TM 9-1430-250-12P/10/2, Apr Nike-Herc (Imp), Ground Cen Equip.
TM 9-1430-252-12/4, Mar Nike-Herc (Imp), Ground Cen Equip.
TM 9-1440-350-12P/5, Apr Nike-Ajax, Nike-Herc; Nike-Herc (Imp), Test Equip (Ord).
TM 9-1440-301-12P/2, Apr Sergeant, Ground Handling Equip.
TM 9-1440-375-12P/2, Apr Pershing, Ground Handling Equip.
TM 9-1550-200-20/1, Apr Target Mal, Ground Con Equip.
TM 9-4910-203-12/2, Mar Test Set, Microwave Cali, AN/USM-129.
TM 9-4935-203-10P/3/1, Apr Nike-Herc, Nike-Herc (Imp), Test Equip (Ord).
TM 9-4935-303-12/2, Apr Sergeant, Test Equip (Ord).
TM 9-4560-211-12, Apr Binocular M18.
TM 9-8140-375-12P/2, Apr Pershing, Ground Handling.
TM 10-500-29-1, Apr Rigging 7-35-Ton, Road Roller (Pneumyank).
TM 10-500-34-3, Mar Rigging Two M274 1/2 Ton Carriers.
TM 10-500-43-2, Apr Rigging Two 762-mm Rockets (Honest John).
TM 10-500-61-1, Mar Rigging M416 Cargo Trailer.
TM 10-500-61-2, Apr Rigging M416, 1/4-ton cargo trailer
TM 10-500-96-3, Apr Rigging M114 Armored, (Command and Recon).
TM 10-1670-215-23, Mar Chute, Cargo, 100-ft Dia G-11 and G-11A.
TM 10-1670-223-23, Mar Chute, Cargo, 24.25 ft G-13.
TM 10-3930-231-20, —35 Mar Truck, Lift, Fork, 4000 lb. Cap; Army Model M-HE-144; Clark Model C40B-1615138-100; Clark Model C40B-1615159-144.
TM 10-3930-232-20, Apr Truck, Lift, Fork, Gas, (Allis-Chalmers Model FF-24PS, Army Model MHE-183).
TM 10-3930-241-20P, Apr Truck, Lift, Fork; Gas; Rough Terrain, 10,000 lb. 24 inch Load Center (Clark Model M100, Army Model 179).
TM 10-3930-252-35P, Apr Truck, Lift, Fork; Clark Model EC 40, Army Model MHE 185.
TM 10-4230-201-13, Apr Chamber, Fumigation, Methyl Bromide Portable, Type 1.
TM 10-8240-208-13, Apr (Pre-rated) Test, Vehicle Maintenance, with Cover Pins and Support.
TM 10-8240-210-35P, Mar Test, Power, Type Sectionalizer M-1948.
TM 11-2841-241-12, Mar U-8 & CV-2.
TM 11-5874-200-12, Mar Recorder-Repro Set, Sound (UNH-10).
TM 11-5895-344-12/2, Apr USD-1.
TM 11-5895-205-12P, Mar Intermediate Frequency Cali Set AN-450/GRC.
TM 11-6125-216-12P, Mar Meter Gen PU-322/MPM-35.
TM 21-200, Mar Driver Selection and Training (Wheeled Vehicles).
TM 55-1100-209-12/P, Apr C-1A.
TM 55-1510-201-20P, Feb U-8.
TM 55-1510-203-20P, C2 Mar U-6.
TM 55-1510-204-20, Feb CV-1.
TM 55-1510-206-20P, C2 Mar CV-1.
TM 55-1520-201-10, Mar UH-19.
TM 55-1520-202-10, C1 Apr CH-34.
TM 55-1520-204-10, Apr OH-13.
TM 55-1520-204-10, C2 Mar OH-13.
TM 55-1520-204-20, Apr OH-13.
TM 55-1520-204-20, C5 Feb OH-13.
TM 55-1520-205-20P, Mar CH-21.
TM 55-1520-206-20, C2 Jan OH-23.
TM 55-1520-210-20, C2 Apr UH-1D.
TM 55-1520-211-20P, C1 Feb UH-1.
TM 55-2510-200-10/1, Apr Trans Guidance Tri, Stake, 5 Ton.
TM 55-6930-200-24P, Feb. (CA-1
TM 55-6930-201-20P, Mar 28-2.
TM 55-2300-254-10-1, Mar Trans Guidance M113.

LUBRICATION ORDERS

LO 3-4230-206-12, Mar M3A3 Decontaminating Apparatus.
LO 5-2695-207-15, Mar Saw, Chain Whitehead 207M.
LO 5-2815-220-15-1, -2, and -3, Mar Crane-Shovel, Gasoline Driven (Gar Wood Model GW7) w/Engine Wau-kesha Model 195 (Gar Wood Model 155-1A), w/Engine Waukesha Model 195 GDL.
LO 5-4110-205-15, Apr Refrig Unit, Thermo King OU3BL.
LO 5-4310-245-15, Mar Compressor, Gas Driven (Kellogg-American Model C-321-P8) less Mt Tnd Engine.
LO 5-1000-228-12, Apr Small Arms Cleer Service Vehicles.
LO 9-1025-200-10, Mar 155-MM, M114, and M114A1 and Jeep Projectiles, 155-MM, M122A1.
LO 9-1025-212-10, Mar Lime John, Ground Handling Equip.
LO 10-3930-231-20-1, Mar Truck, Lift, Fork, (Army Model MHE-184, Clark Models C40B-1615158-100, C40B-1615159-144).

MODIFICATION WORK ORDERS

MWO 9-2300-215-20/2, Mar Gun Fld Arty, M107 and How Heavy, M110: Servicing of Air Lever on Fixed Fire Extinguisher.
MWO 9-2300-216-30/5, Apr 8 Inch, M110, Installation of Deck Cover Tie-Down Kit.
MWO 1-1589-246-30/1, Mar USD-1.
MWO 55-1510-202-34/7, May 0-1A.
MWO 55-1510-204-34/7, Apr OH-13.
MWO 55-1520-204-34/17, Apr OH-13.
MWO 55-1520-204-34/22, Apr OH-13.
MWO 55-1520-204-34/25, Apr OH-13.
MWO 55-1510-204-34/56, Apr OV-1.
MWO 55-1520-206-34/4, Apr OH-23.
MWO 55-1520-206-34/14, Apr OH-23.
MWO 55-1520-209-20/26, May CH-47.
MWO 55-1520-209-34/25, Apr CH-47.
MWO 55-1520-209-34/39, Mar CH-47.
MWO 55-1520-209-34/51, Apr CH-47.
MWO 55-1520-210-20/1, May UH-1D.
MWO 55-1520-211-20/9, Apr UH-1.
MWO 55-1520-216-34/1, Apr OH-23E.
MWO 55-2840-218-30/2, Apr UH-1.

MISCELLANEOUS

AR 735-35, C5 Apr Organ Supply.
DA Cir 55-2, Apr Trans Movements Guides.
DA Cir 55-3, Apr Improper Mouseover of Adobe Use Motor Vehicles.
DA Cir 385-4, Apr Local Handling, Storage and Disposal of Unwanted Hazardous Material (Active Army, NG & USAR; DA Form 13-9 Logistics Responsibilities, Functions and Procedures — A).
SB 3-39, Apr Basic Loads of Chemical Non-Toxic Ammunition.
SB 11-497, Mar Depot Cal Support.
SM 11-1-5825, Mar FSC Group 58-Communication; (desc 5825 — Radio Navigation Equip Except Airborne.
SM 11-4-6780-LO1, Mar Tool Kit, Still Picture Camera Maint 15-4FA.
SM 11-4-6780-LO2, Mar Tool Kit, Camera Adjustment and Alignment 15-4FA.
SM 55-4-4920-AOB, Apr, Org Maint Tool Set.
SM 55-914, Mar Individual Safety and Protective Clothing and Equipment.
TA 50-935, Mar FB, Type Vessels.
TB 9-1005-213-10/1, Mar .50-cal machine gun: identification and application of parts.
TB 9-6650-226-13/1, Apr Carrying Case for Binoculars.
TB AVN, 23-2, Mar TCP.
TB CML 100, Apr Smoke Pot, HC, 10 lb.
M1, and 30 lb. ABC-M5; Smoke Pot, Floating, HC, M4A2; SGF2, AN-M7; and SGF2, AN-M7A1.
TB 9-1300-246/1, Apr Identification of Ammunition Employing the New Color Coding Standard.
TB 55-1520-201-34/2, Apr UH-19.
TB 55-2900-200-20/1, Mar 0-1A, U-8; OH-13, OH-23.

The way you store the antenna of your AN/MRC-95 radio set can mean the difference in whether you stay on the air . . . believe it or not!

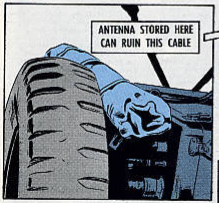
That antenna, which is vital to the set, can put you out of business as fast as a sledge hammer—and in pretty much the same way as a sledge.

So, what's the angle?

Well, that ol' angle, man, can be horizontal, vertical, or diagonal, but diagonal does fine, thank you. Just fine. It beats digging around for the hard-to-get final word on just how the antenna should be stowed.

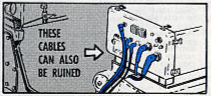
Here's what experience has uncovered:

The "simplest" way (which is not the best) is to put the antenna sections in their canvas bag and store the whole works across the rear of the ¼-ton truck. Horizontal-like between the spare tire and the transceiver/converter of the Mark-95, that is.

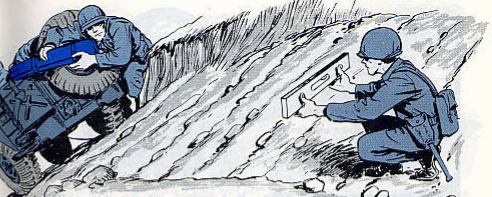



Makes a handy arrangement, it does. BUT—it's a cable and connector killer; especially the cable running from the transceiver/converter to the teleprinter.

And see those other cables jutting out of the transceiver/converter? If you're not careful when you lay the antenna down, you can bust 'em quick-like.



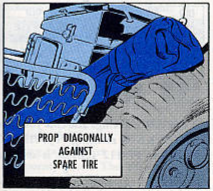


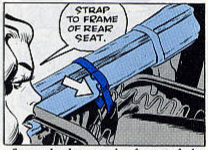
Same deal when you're bouncin' along in your ¼-ton. The antenna bounces with you, and what happens to the cables and connectors underneath shouldn't even happen to your mother-in-law.

Furthermore, it's harder to replace those parts than it would be to get a new mother-in-law. What's more, your support won't exactly welcome you with open arms. There's a lot of work involved in repairing connectors.

So what to do?




Go diagonal, that's wot'. Prop the bagged antenna sections between the rear seat of the ¼-ton and the transceiver/converter. Let the rear end of the bagged sections rest on the spare tire. The front end stores between the two front seats.

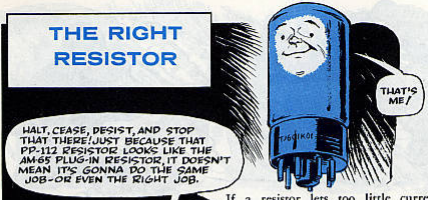



Strap the bag to the frame of the rear seat, and you're set. The antenna is out of the way and secure. What's even better, there's nothing near it that it can batter.

Ah, so.

One other reminder on the Mark-95: The fuse clips are a little brittle and can break with rough handling. Easy does it is the word when removing or installing fuses.

# THE RIGHT RESISTOR




So, set it down and eyeball the following words of PM wisdom for a minute or three.

Sure, the R32 resistor of the AM-65 amplifier has the same shape and size as the one for the PP-112 power supply. And, sure, they both plug in and fit each other's sockets.

And, natch, since the PP-112 and AM-65 often are used in the same configuration, their resistors are right handy. But that's where the similarity stops. The resistors are built to do different jobs—to resist just so much current.

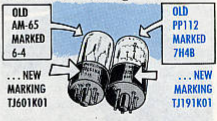
If you use the wrong one and let too much current through, you got damage.

If a resistor lets too little current through, your equipment won't do its job.

Which is why you shouldn't be tempted to interchange the resistors of the PP-112 and the AM-65. They don't do the job they're supposed to when they're switched.

'Course, if a man took a minute to look at either of the two resistors, the difference would be as clear as that between a curve and a straight line.

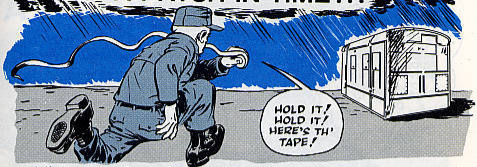
The old R32 for the AM-65, f'rinstance, is marked "6-4." The old PP-112's has the marking: "7H4B."




The new markings also clue you. The AM-65's has the marking "TJ601K01", while the PP-112 resistor is marked "TJ791K01."

If you've got FSN's handy, the PP-112 resistor is FSN 5905-299-1748. The R32 of the AM-65 is FSN 5905-258-0794.

# A PATCH IN TIME...



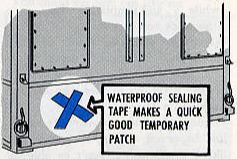

A little moisture hurts a long way in a communications shelter.

Which means that a patch in time—any kind of moisture-seal patch—can save a healthy outlay of cash for shelter repair.

Since rain or moisture murders the shell and equipment inside a shelter, you gotta slap that patch on the minute you discover a puncture in the skin. Soonest! And that's important.

Most of the time you can apply the patch with a kit as per TB SIG 354 (Jul 63). If you can't use the patching kit, or don't have time, then waterproof sealing tape makes a quick, top-notch temporary patch. The TB also authorizes you (para 14b, page 8) to use **any** available, usable material to make an emergency repair in a tactical field situation.

It could pay to keep a roll of the tape in your shelter—just in case you need a patch in a hurry. You can have it in place almost as fast as you can peel it from the roll.




You get the tape from GSA like so:

Tape, Waterproof Sealing, FSN 8135-269-8092 (4-in. wide, Green)

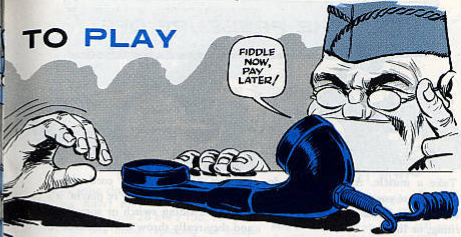
FSN 8135-269-8094 (6-in. wide, Green)

It's under Tape, Pressure Sensitive, in the GSA Stores Stock Catalog.

If you do discover a puncture, don't wait till a rainstorm to put on the patch.

When you do put on a temporary patch, get the shelter in for repair as soon as you can. Otherwise, water can make your shelter look like a practice target that's just two fingers right of the lone pine tree.

# YOU PAY TO PLAY




So you're human. So idle hands and opportunity are too much once in awhile . . . and temptation wins.

So wot's new?

So you're operating a piece of communications equipment, that's wot's new. And, quick-like you may have to get the word out to Joes who are depending on you.

And if those temporarily idle hands just happened to bug somethin' up, like a handset, you won't be able to get the word to those other Joes. Depending on what you had to tell them, you might get real unpopular.

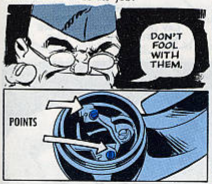
So you're human. Which means, too, that you're a thinking animal, and thinkers let temptation carry them just so far. Knowing when to stop, or when not to start, gets mighty important, 'specially with military equipment.

With the H-33/PT handset, fiddlin' hands could give you even more problems. Like, you can't hardly get new ones these days.

Seems that idle hands gravitate toward the mike element of the H-33, and some Joes have been known to take out everything that's removable.

Since they've already gone too far, they go even further and poke around the contact points inside the handset. A little pressure can bend the points, which means the mike element can't make proper contact when it's replaced.

In which case—you guessed it—the handset can't do its job.




Maybe, too, one of those removable items got lost . . . or reversed when it was time to put the mike end back together. Which means, that minus a washer, or screen, or shield, there's not enough pressure on the mike element for it to make contact.

Now, supposin' you found a buddy who got suckered into that kinda' fix. You could get him out like so:

When replacing those removed parts, put the plastic cap upside down. Put the moisture shield in the cap and the washer over the shield. That black gasket with the hole in it goes on top the washer. The wire screen goes in next, and the mike element is last.

The beveled centerpiece of the mike element should be looking at you. That's what makes contact with the points . . . providin' your buddy didn't bung up the points.

The simplest thing woulda' been to keep the mike element screwed in place. It saves explaining how a washer, or screen or what not worked its way through that smaller opening of the cap and got lost.

# KEEP THE PRESSURE OFF

Take a muscle. Any muscle'll do. Now, the one you took is made to do a certain job, right. Like maybe walking, writing, or lifting.

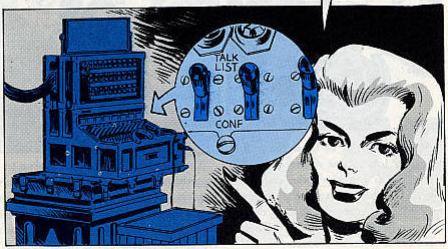
Now take a switch. Any switch'll do. Sometimes it takes a leg muscle, a finger muscle or an arm muscle to throw said switch. It depends.

So now you're on. So hang on.

Those cord circuit switches on the SB-86/P switchboard, f'rinstance, are strictly finger muscle types. Just crook a finger, push or pull easy-like, and you got it made.

Some men have been known to use an arm muscle on the cord circuit switches. Seems like they're playin' it's a railroad siding switch or somethin', and they really throw the muscle to it. Natcherly, this kinda busts up the mechanism below the surface of the cord pack.

Either that, or they're putting railroad ties or the like on the cord pack surface . . . which also helps to bust up the switches.



# Connie Rodd's BRIEFS

## OOPS! SORRY!

Please close your eyes and make like you didn't see that sentence in that article on page 26 of PS 136. You know—the one about replacing the cockpit light, fluorescent type, in the Bird Dog (0-1) cockpit. Confusion is what did it. No need to disconnect the leads at the rheostat just to replace the lamp itself. So please forget I ever mentioned Para 9-81 in the -20.

## ROD CARD SWITCH

The right way to make entries on DA Form 2527 "Record of Demands" is per Fig 7, AR 735-35. See paras 30b(2) and 31a.

Keep a monthly running total in the cumulative demands column . . . draw a line under the last entry for each month, and don't carry over. The record of demands for each month starts from scratch.

Kindly line-out the entries which slipped in on the card on page 63, PS 136.

## FRET NOT!

That's just a misplaced paragraph in Change 4 to AR 735-35. The "remarks" info on whatever you stock still goes on the title insert (DA Form 1543) . . . not on the Record of Demands Card (DA Form 2527), itself. The instructions in the AR's Change 4 belong under para 30b (1) (e). That's the paragraph which covers the title insert in the basic AR. See pages 18-19.

## FSN'S FOR PIN-UPS

Sorry, these FSN's are for Julian and not Connie. If you've been having trouble trying to figure out the Julian dates, then here're a coupla wall calendars that should help. They give both the day of the month and the Julian dates for 1965.

FSN 7510-205-2312 gets you one 8-1/2 x 7-3/4 inches from GSA for 18 cents. For one 11-5/8 x 9-5/16 inches, use FSN 7510-256-2341. It costs 30 cents.

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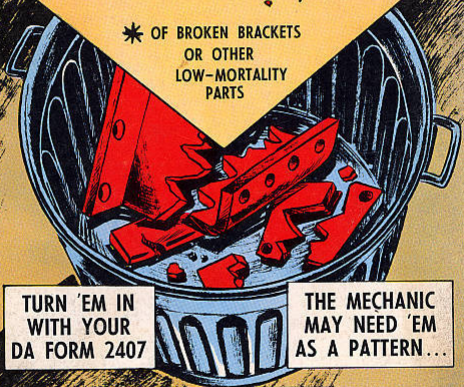
# HEY!!

## SAVE THE *PIECES



* OF BROKEN BRACKETS OR OTHER LOW-MORTALITY PARTS

TURN 'EM IN WITH YOUR DA FORM 2407

THE MECHANIC MAY NEED 'EM AS A PATTERN...

...TO MAKE A...

## REPLACEMENT PART