

Issue 246

PS

1973 Series

May

**THE
PREVENTIVE
MAINTENANCE
MONTHLY**

THEY BLEW
IT...
CHARGE!



WE'VE FIRED
12 ROUNDS, SIR,
BUT THEY'RE ALL
DUDS!
WHAT'S UP?

CLUNK

AMMO
POWER
PAGE 14

JUST...PLAIN
LOUSY AMMO
HANDLING...
THAT'S WOT!

MEET YOUR . . .

ORGANIZATIONAL MECHANIC

Pick a guy who'd rather work than eat . . .

Stuff his head full of engines, transmissions, axles, electricity, hydraulics, carburetion . . .



Teach him to use a ton of tools and have him learn to identify hundreds of parts on sight . . .



Teach him to ignore the smell of his flesh cooking on a hot manifold . . .
And you have the makings of an organizational mechanic.



Season him to keep that jeweler's touch while his fingers are freezing . . . or when oil's dripping on his face . . . or when it's so hot his eyeballs dry in their sockets.



And on top of all that, make him into a diagnostician. Sounds fancy but that's what he has to be. It's what separates real mechanics from the parts changers. The trouble-shooting equipment in his hands is like X-ray eyes. It lets him troubleshoot the assemblies and point a greasy finger and say, "That's the guilty part."



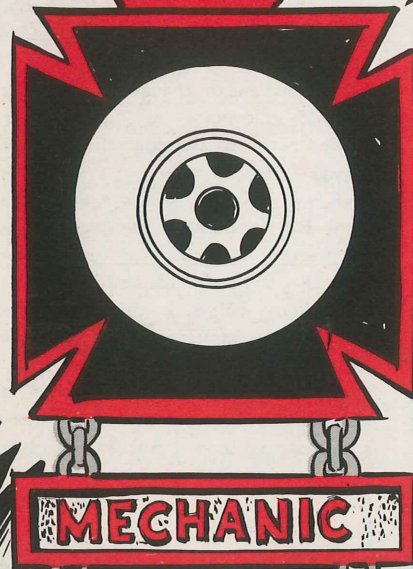
You'd think that would be enough!—but it's not! TAMMS records. Teach him to use and fill 'em in right, and you have the finished product.



Tough job? Yes!
Possible?
Not only possible, but being done. There're thousands of these rough and tough mechanics all over. They're the mechanics who perform at a high standard day in and day out. They're the dudes who keep the equipment operating in spite of the obstacles and problems that stop a lesser man.

ONLY TEN MORE TO GO!

AR 672-5-1 honors these geniuses with a "mechanic's" badge. So, next time a dude passes by with one of these awards on his chest and he's from your outfit—treat him special. And think how lucky you are to have a man with that caliber of skill working on your equipment.



THE PREVENTIVE MAINTENANCE MONTHLY

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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:

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

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COMBAT SUPPORT

FIREPOWER

COMMUNICATIONS

GROUND MOBILITY

AIR MOBILITY



MORE FORMS ZAPPED IN...

TM 38-750

THAT'S ME! I'M FULL OF LOTSA NEW JAZZ.

NEW

TAMMS RETROFIT

YOUR NEW TAMMS GUIDEBOOKS BEEN SHAPED UP. LOTS OF NEW INFO HAS BEEN ADDED.

DA MSG
282204Z
FEB 73
IMPLEMENTED
THIS TM
EFFECTIVE
1 APRIL

Retrofit, in Army terms, means action taken to modify inservice items—and that's what's happened again to TM 38-750.

The new edition, dated 21 Nov 72, replaces 2 forms with one, aligns materiel with unit readiness reports, puts extra gun tube data on DA Form 2408-4 and adds component info for ESC ratings, usage reports and warranty claims on DA Form 2408-10. A uniform rule on dates calls for Julian dates on forms that are keypunched. All others get calendar dates.

Those are major changes in the latest TAMMS guidebook, but there're more detailed revisions and streamlining page by page—cover to cover.

ONE FOR TWO—One new multiple-use form—DA Form 2408-9, Equipment Control Record—is substituted for 2 older forms that will soon fade away.

DA Form 2408-8, Equipment Acceptance and Registration Record, gets the axe but it won't disappear overnight. Those now in equipment logs remain in use. But acceptance of future equipment items (on and after 1 Apr 73—or upon

receipt of forms) will be recorded on the new DA Form 2408-9.

Up to now DA Form 2408-7, Equipment Transfer Report, has been used for reporting gains and losses, transfers and periodic usage info on equipment items. Log copies of this form remain in the logs—until the next comparable action (gain, loss, transfer or usage report period) requires completion of a new report. Bulk items are no longer required to be reported.

When the new report is required (on and after 1 Apr 73), it will be filed on the new DA Form 2408-9. And you toss out the comparable log copy of the old DA Form 2408-7.

Just keep in mind: Until you do a new DA Form 2408-9 replacement, you keep that DA Form 2408-7—old or not. Soon, though, these "old soldiers" will fade away. (Incidentally, the interval for usage data reports on combat vehicles is increased from quarterly to semi-annually.)

READINESS ALINEMENT — Materiel readiness is a part of overall unit readiness. But in the past some items report-

able on DA Form 2715 (or 2841), Unit Readiness, were not reportable on DA Form 2406 (Materiel Readiness).

The new TAMMS rules change that. After 1 Apr 73, if the equipment's reportable on one it's reportable on the other. This alinement is assured by lining up the reportable list for all 3 forms in the same column of Section II, Appendix C of the TM.

There's another bonus here when aircraft are involved. Since aircraft status reports are required on DA Form 1352 (AR 710-12), the reporting of aircraft readiness on DA Form 2406 has been dropped for now, but some changes may come later.

EXTRA GUN TUBE DATA—Use of DA form 2408-4 is expanded to include firing data on gun tubes of aircraft armament subsystems. And detailed entries for other gun tubes also are changed.

Besides a breakout by zone of rounds fired, when equivalent full charge (EFC) rounds must be computed the computation must be shown in column h on the form.

COMPONENT REPLACEMENT—Recording of component replacement data on DA Form 2408-10 has been revised to give exact details on the service life of a particular component. These details (miles, hours, rounds on the component when installed) plus end item miles and hours plus meter readings at replacement are necessary for making ESC ratings, usage reports and warranty claims.



CHANGES. FORM BY FORM

OPERATIONAL RECORDS—Neither DA Form 2400 nor DA Form 2401 is changed. DA Form 2400 is not required by administrative motor pools when dispatch is by ADP card. As in the past, it is not required where equipment is dispatched by logbook. When DA Form 2400 is used for dispatch, the dispatcher will transcribe necessary data to DA Form 2408-1 daily.



MAINTENANCE RECORDS—All of these forms remain unchanged, but there are numerous changes in entries required. These are the major entry changes—

DA Form 2402, Exchange Tag: The date and signature of the person accepting a DX item is required on the back of the "receipt" part of the form. When the priority designators 01 thru 08 are used in block 4 (after the FSN), the unit CO or acting commander is required to sign on the form's upper-right margin.



DD Form 314, PM Schedule and Record: Added details are provided on recording non-operational time and lubrication symbols. A new symbol (H) is listed for scheduling tire rotation. Visible signal tabs on DD 314 will show only services due in the current month.

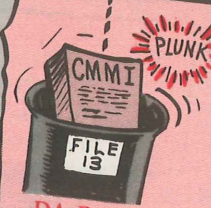
DA Form 2404, Eqpt. Inspection and Maint. Worksheet: You use the calendar date instead of Julian or DOD date.



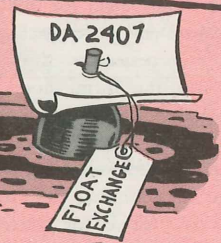
Added details on use for aircraft PMI and PMP, on recording of maintenance actions and ESC ratings, and on retention and disposition are provided. DA Form 2404 is to be used for classification inspections before equipment turn-in. CMMI use has, o'course, been dropped.

DA Form 2405, Maint. Request Register: Major change is requirement that this form be used for support's monthly reconciliation of equipment evacuated to DS for repair and return to user.

DA Form 2406, Materiel Readiness Report: Systems are reported as systems (as on DA Form 2715 or DA Form 2841). Other detailed changes align these reports with reporting under AR 220-1 and AR 135-8. New guidelines are provided on units required to report, on updating of ESC ratings, on reportable items and on reasons for RED ratings. Currently, aircraft are reported on DA Form 1352—not on DA Form 2406.



DA Form 2407, Maintenance Request and DA Form 2407-1 (Cont.): Requirement for use for float exchanges is added. Details also are added on aircraft monthly maintenance reports, sample data reports required under AR 750-37, EIR submission, MWO reports and warranty claims. For maintenance requests with priorities 01 thru 08, signature of the CO or acting commander is required at upper right in block 16. Guidelines also are provided for use by units with integrated Organizational-DS maintenance, close-out of reports upon transfer of aircraft, and installation of modified components. **Do NOT use codes on back of form. Instead, use those in Appendix A of TM 38-750.**



CHECK APPENDIX A IN TM 38-750.



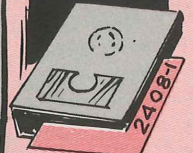


MOST COMPONENTS REPORTED ON FORM 2410 ARE EXPENSIVE...

DA Form 2410, Component Removal and Repair/Overhaul Record, and DA Form 2410-1: The only major change is dropping of the requirement for DA 2410 reports on combat vehicle engines.

... SO, ACCURACY IS FOR REAL.

HISTORICAL RECORDS—In addition to substitution of a new DA Form 2408-9 for DA Form 2408-7 and 2408-8, as detailed above, the following major changes have been made on historical records.



DA Form 2408-1, Equipment Daily or Monthly Log: Equipment status entries are changed so the daily log will show status at all times, including any limitations resulting from a circled X status. Block 3a entries will be used to match those on the equipment's DD Form 314.

DA Form 2408-4, Weapon Record Data: Besides requirement for this form for aircraft subsystems (1 for each weapon) and the requirement to show EFC computation on the form, note these changes: Calendar dates are substituted for Julian dates and rules provide for dividing column d (for recording rounds by zone) and for rounding EFC rounds to nearest whole round (or converting fractions of .5 to the nearest even round). Procedures identify rounds accumulated against tube and breech ring. ARNG and USAR submission interval is changed.

WHAT'S THAT ABOUT RECORDING ROUNDS?



IT'S BEEN MODIFIED

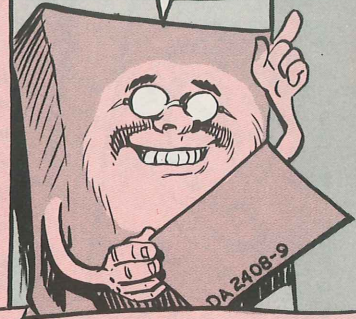
DA Form 2408-5, Equipment Modification Record: Major new requirement is that support notify users when their equipment has been modified. (Recording MWO's required and reporting MWO application becomes a support function only. Future MWO's will not be distributed to organizational level.)



DA Form 2408-9, Equipment Control Record: As a replacement for both DA Form 2408-7 and DA Form 2408-8, this new form will be used (1) for the next usage report required on the equipment, (2) for the next transfer, overhaul/rebuild or gain/loss report on the equipment and (3) as the acceptance record for new items added to the Army inventory which require this type of record. For equipment that now has a DA Form 2408-8, a DA Form 2408-9 will be substituted only if the DA 2408-8 is lost or ruined. (Note that an equipment item may have as many as 3 DA 2408-9's in the log—1 each for acceptance (or overhaul/rebuild), the latest transfer and the latest usage report.)

DA Form 2408-9 also will be used to request and assign vehicle and equipment registration numbers under AR 708-1. But these copies do not become a part of the log.

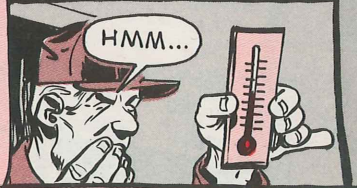
DON'T CHANGE YOUR RECORDS JUST TO USE NEW FORMS. WAIT 'TILL THERE'S SOME ACTION THAT TAKES THE NEW FORMS!



IF IT'S UNDER WARRANTY, RECORD IT.

DA Form 2408-13, Aircraft Inspection and Maintenance Record: An entry on outside air temperature (OAT), percent NI and exhaust gas temperature (EGT) or turbine inlet temperature (TIT)—if applicable—during engine checks is required in block 10c for most turbine-engine aircraft. New guidelines are provided for initialing over status symbols after corrective action on faults and after test flights.

DA Form 2408-10, Equipment Component Register: The major changes are the requirement to record all changes of components under warranty and details on recording of usage data. On components with usage prior to installation, this prior usage will be recorded in the "Reading" column just above the end item usage reading at time of installation.



DA Form 2408-14, Uncorrected Fault Record: Rules are clarified on entry of component replacements and Normal MWO's overdue, and on entries when repair is delayed because parts are not available.



DIG THESE AVIATION CHANGES.

TM38-750



DON'T FORGET THE 2410 THAT GOES WITH THE REMOVED COMPONENTS.

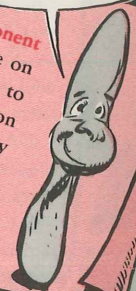
DA Form 2408-15, Historical Record for Aircraft: Major change provides for overprinting for use on aircraft turbine engines. Historical entries on aircraft will be date, unit designation and location and historical data—in that order.

I WAS BORN IN 1965... AND...



I'M AN AIRCRAFT COMPONENT. WRITE ME UP ON 2408-16.

DA Form 2408-16, Aircraft Component Historical Record: Major changes are on removal of items no longer required to be recorded on this form, identification of condition-change items, repair activity entries and DA Form 2408-15 entries when that form is used as a continuation sheet.



On other forms (DA Form 2408-17, DA Form 2408-18, DA Form 2408-19 and DA Form 2409) there are no major changes, though revised rules clarify some points.

NO CHANGES?



Nuclear items have been deleted from Chapter 5.

DA Form 2415, Ammunition Condition Report: There are no major changes, but rules in the entire chapter have been re-written for this and other forms that apply.

AMMUNITION RECORDS

CALIBRATION RECORDS

All rules have been re-written to clarify entries required on DA Form 2416, DA Form 2417 and DA Label 80. Calibration codes have been revised. The major change of interest for users is the change from Julian to calendar dates on DA Label 80.

8



APPENDIX CHANGES

Appendix A—Codes: Codes are updated to reflect changes in the TM text and latest data systems requirement. "Failure codes" are expanded for aeronautical codes only. "Action codes" are expanded and fully explained as to their usage. "Utilization codes" reduce DA requirements on number of units required to submit DA Form 2406. The equipment category code (ECC) for commercial vehicles also is changed.

Appendix B—Mailing addresses: Section I gives addresses for items listed in Table 22 (ECC Codes) Appendix A and Appendixes C, D, and E. Section II lists addresses for other items on which EIR or warranty claims may be submitted.

Appendix C—DA List of Items for Data Collection: Reportable aircraft and aircraft subsystems (that require reports on DA Form 2407 and DA Form 2715 or 2841) are in Section I, items reportable on DA Form 2406, DA Form 2715 or 2841 and on DA Form 2408-9 (Usage) are listed by ECC and SB 700-20 LIN in Section II.

Appendix D—Ammunition Items for Data Collection: Items which require reports on DA Form 2407 and/or DA Form 2415 are listed by ECC.

Appendix E—DA Items for Acceptance, Transfer, Loss and Gain Reporting: The report form is the new DA Form 2408-9.

Appendix F—Abbreviations and Brevity Codes: Spells out codes used in the revised TM.

THESE ARE THE HIGHLIGHTS OF CHANGES TO TM 38-750 WHICH ALINE TAMMS WITH THE STANDARD ARMY MAINTENANCE MANAGEMENT SYSTEM, AS IT DEVELOPS.

PS END

LOST AND FOUND

OH-WOW!
LOOKIT WHAT "CHARLIE"
LEFT...ONE OF OURS...
AN M151...

Equipment lost in combat—or cannibalized?

Equipment recaptured—or found on post?

If either of these has happened, or if there are other reportable equipment losses, the unit or activity that had the equipment on its property book or stock record account—or the unit that has recovered it—has to make a report to keep the Army's asset records straight.

That's the reason for rules on reporting equipment losses and recoveries spelled out in Chapter 4 of AR 710-3 (Sep 72). It covers all units—from users thru depots.

Report all losses and recoveries of items coded RICC 1, 2 and 6 in SB 700-20 and SB 700-20-1 (except aircraft reported under AR 710-12).

For this report you use DA Form 3906-R as spelled out in the AR.

This report is in addition to the gain and loss reports called for in TM 38-750.

LOSSES REPORTED

Losses to be reported include uncontrolled losses (such as combat losses and thefts) and controlled losses (such as obsolete item washouts and transfers to non-Army units or agencies).

Major loss groups, with codes which apply, are—

Code 1—Combat loss. Any reportable equipment loss due to enemy action, including a loss due to enemy action during shipment.

Code 2—Fair wear and tear (FWT). For items not economically repairable—whether cannibalized or transferred to PDO or to a non-Army unit.

Code 3—Theft, pilferage or storage deterioration, including shipment loss not due to enemy action.

Code 4—Crash, accident or act of God. For equipment not economically repairable as a result of these causes and not related to enemy action.

Code 5—Maintenance loss. Unserviceable equipment turned in for repair, but changed to "not economically repairable" upon inspection. This code applies regardless of disposal of the item.

Code 6—Washout. DA approved substitution of newer equipment for older models or obsolete items, regardless of disposal of "washout" items.

Code 7—Transfer out of DA if none of the codes 1 thru 6 applies. (May include transfers to other DOD services, other government agencies or to foreign military programs.)

RECOVERED ITEMS

Code A—Recovery code for previously lost item, reported as lost by the same unit under codes 1 thru 5 (uncontrolled losses). Also includes "found on post" recovery not previously reported as a loss.

Code B—Recovery code for previously lost item, reported as lost by the same unit under codes 6 and 7 (controlled losses).

GOTTA REPORT
IT ON DA FORM
3906-R.

FILLING THE FORM

At the time the property record is posted for a particular loss or recovery, the DA Form 3906-R will be completed. (In case of a shipping loss, the form will be completed upon receipt of either the SF 361 or SF 364, whichever applies.)

Special attention will be given to accuracy and legibility of entries in the following blocks:

Block 4—Unit Identification Code (UIC) assigned. (See JCS Pub 6.)

Block 5—Active Army: Two-position command assignment code (see code number 202, para 2-6, AR 680-29).

Reserve: RS.

National Guard: NG.

Block 7—LIN (from SB 700-20 or SB 700-20-1) that applies to item with specific FSN listed in Block 9.

Block 13—For shipping loss, enter Code 7 (ship sinking) or Code 8 (other than ship sinking). These codes are in addition to, not instead of, codes in block 11 of the form.

HERE'S HOW TO HANDLE YOUR 3906-R... REMEMBER, WE GOTTA KEEP OUR ASSETS IN BALANCE.

DISTRIBUTION

Basic distribution of the completed DA Form 3906-R is charted in Fig 4-1 of AR 710-3.

Copy 1—As directed by major Army commander.

Copy 2—File as supplemental document in property book or stock record account voucher file.

Copy 3—Forward within 1 day to command administrative processing unit. Within 1 day after receipt, this unit will either—

Send it by messenger or airmail to the command data processing installation (DPI) or (if there's no command DPI) they . . .

Send it airmail to USALDC, Lexington, KY 40507.

SOME SPECIALS

1. Neither serviceable items nor unserviceable items will be reported as loss-

es if transferred only from one property account to another within the Army.

2. But all transfers to a PDO, to a cannibalization point or to a non-Army agency or activity will be reported as losses by the property book or accountable officer of the losing property account.
3. The shipping officer reports all losses and recoveries incident to shipment. (See AR 55-38, AR 735-11 and AR 735-11-2.)
4. Reports by punched card or magnetic tape will use format shown in Fig 4-3 of the AR. When neither punch card nor magnetic tape is used for reports to USALDC (and forms must go by mail) only DA Form 3906-R will be used. (No other form is authorized for this type of report.)

Report all lost and found equipment and keep the Army's assets in balance.

FIIN'S ARE IN

That's right!

It's FIIN (Federal Item Identification Number) sequence now for your PLL records (DA Form 3318 and DA Form 2063-R).

How come?

For one, 'cause an FSN's FIIN never changes. But its FSC (Federal Supply Class) may change. For example:

YESSIEEE, BOB! WE IS TH' IN GROUP! DIG THIS NOW!

FSN

4920-212-9763

FEDERAL STOCK NUMBER

THE FSN'S FSC MAY CHANGE AS YOU SEE... BUT NO SWEAT...

BUT... THE FIIN, PART OF THE FSN, DOES NOT CHANGE! IT'S FOR KEEPS.

For two, FIIN sequence is used in cataloging supplies. See, for example, the C-ML-A (Management Data List), SB 700-25 the SISIL (Supplementary Interchangeable and Substitute Item List) and the AMDF (Army Master Data File).

FIIN sequence puts your records in line with your DSU's supply listings—and with other DA supply pubs.

SOOO... I'M THE CAT FOR YOUR PLL RECORDS... GOT THAT!

FIREPOWER

PM FOR-

YOUR

AMMO PM?
AIN'T YOU GUYS A
LITTLE AHEAD OF
YOUR TIME?

WELL, IT NEVER
HURTS TO KNOW,
EH, SINUS
DRIPPUS?

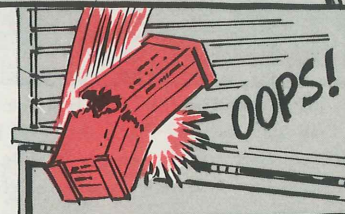
RIGHT-ON!
GLOODIUS
MAXIMUS.

KEEP YOUR
AMMO IN
GOOD SHAPE!

MAKE SURE
YOUR ROUND
IS
SOUND!

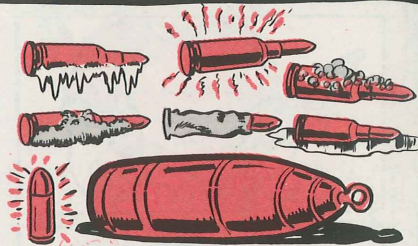
AMMO POWER

Ammo PM is spelled P-R-O-T-E-C-T-I-O-N! And that's protection from A to Z. Protection from anything that'll cause ammo to deteriorate, malfunction, damage your weapon, or go off on its own.



That means protection from cold, heat, dampness, mud, grime, rust, corrosion, oil, grease, rough handling, fire hazards, intruders, etc.

That goes wherever your ammo is—and for everything from the lightest to the heaviest stuff.

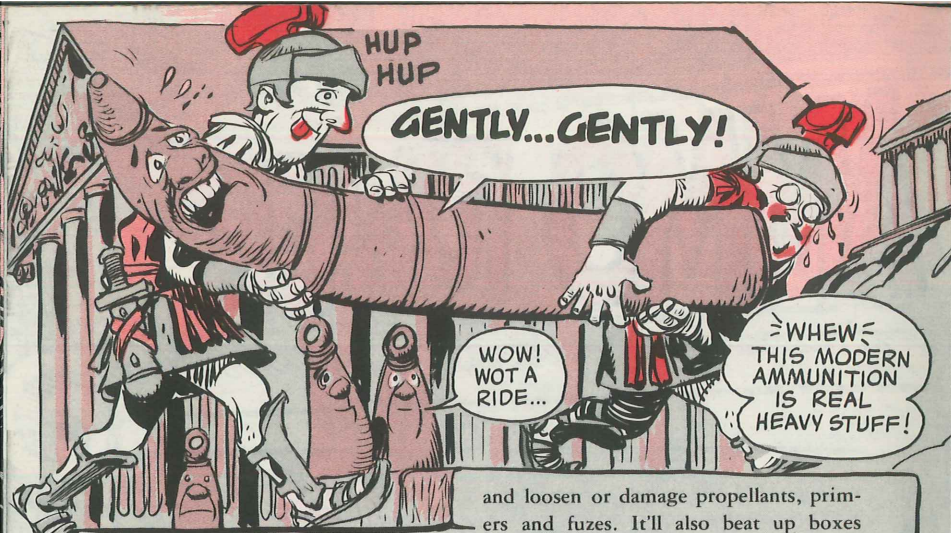


YOU'RE NEVER AUTHORIZED TO TAKE AMMO APART TO FIX IT, OR TO MODIFY IT.



If ammo doesn't look or act right—turn it in, or report it to your ammo support, or to the nearest EOD (Explosive Ordnance Disposal) outfit. See AR 75-1 (Oct 69) for SOP on reporting ammo malfunctions.





Most ammo's not all that fragile-but it's all got sensitive parts that can be easily messed up by rough handling. Treat it carefully always-whether it's packaged or not.

and loosen or damage propellants, primers and fuzes. It'll also beat up boxes and containers, damage seals and other moisture protective material.



Rough handling will dent, crease, crack, or bulge cartridge cases so they'll not chamber right; damage rotating bands so they'll not form a gas-tight seal;



STATIC ELECTRICITY

If you can help it, never handle, fire, or transport HE ammo during electrical storms. Wherever possible, eliminate metal-to-metal contact in your ammo load. That's protection in case some explosive or propellant gets exposed.

Never use nylon, wool, or other spark-happy clothing or equipment around ammo.



CLEAN AMMO/DRY AMMO/COOL AMMO

Ammo doesn't have to be shiny-just clean. Wipe it good with clean cotton rags. If any kind of crud hangs on for any length of time, it'll damage your ammo. Dirty or corroded ammo can damage your weapon, jam it, cause misfires, cook-offs, hangfires, or duds-or it can make ammo go wild, fall short, etc.

CLEAN! NOT SHINY...

WOW! THEY AIN'T KIDDIN'...

On small arms ammo, for example, grimy grease or oil can create excessive pressure in the chamber.

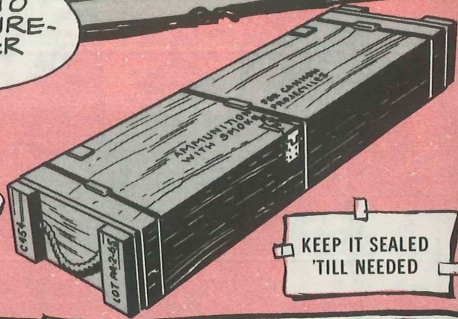
OOPS

Your basic ammo PM tool is a good supply of clean, lint-free rags for cleaning and drying your ammo. In the newer ammo TM's (like TM 9-1330-200-12, Sep 71, Operator and Organizational-Hand and Rifle Grenades) you may be author-

ized steel wool, acetone, paint, and other maintenance supplies for maintaining specific ammo.



HEY, GLOODIUS... IT SAYS TO KEEP AMMO IN ITS MOISTURE-PROOF BOX OR CONTAINER 'TILL YOU ARE READY TO USE IT...



KEEP IT SEALED 'TILL NEEDED

FIGHT RUST & CORROSION

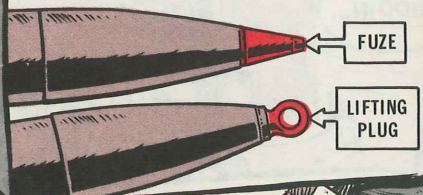
Wipe off corrosion with clean rags. If it's authorized by your TM you can use steel wool to remove light corrosion or



rusting. Do the steel wool cleaning by hand and away from your ammo load.



Before you start cleaning make sure the round is safe to handle, and that no explosive is showing anywhere.



≡GASP≡
...IT ALSO SAYS WHEN STORED OUTDOORS, KEEP IT OFF THE GROUND... AND COVERED.
≡GASP≡

I THINK HE MISSED TH' POINT...



SPOT PAINTING

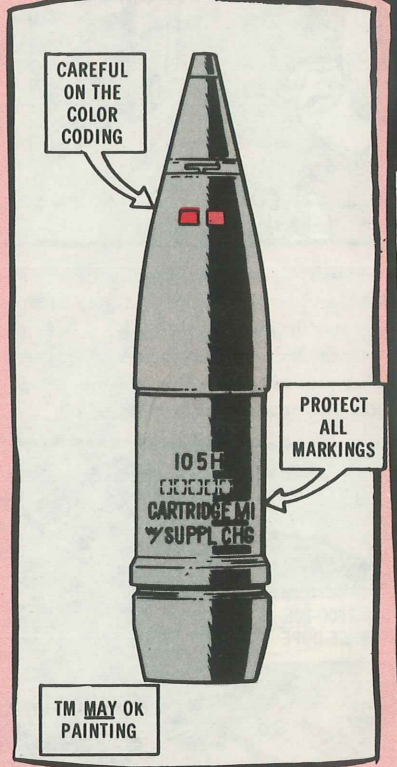
If you're authorized to spot paint your ammo, the authorized paints, thinners, brushes, etc., will be listed in your TM. Natch, you spot paint ammo carefully, and with a real light touch. No extra coats and no painting just for looks. Heavy, uneven, drippy painting could keep ammo from chambering as it should, or otherwise change its characteristics.



When painting ammo be sure to protect its color coding, lot number and other markings. They provide critical identification info. Without its ID no one knows exactly what ammo you've got. Once its ID is lost, ammo's automatically tagged unserviceable.

See TM 9-1300-200 (Oct 69) for color coding info.

The lot number is especially important for small arms ammo. So when you unpack small arms ammo, tag the batch somehow with its lot number—if the ammo isn't going to a weapon right away.



MORE

Unlike larger rounds, small arms ammo's not branded with its lot number. If the ammo's not fired, or if it has to be turned in for some other reason, there's no way to marry it up with its lot number. If possible, open only 1 lot at a time.

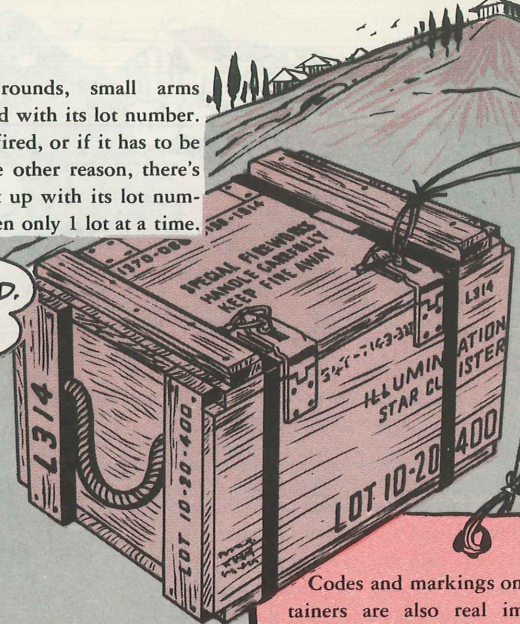


I CHECKED.
IT'S
EMPTY!

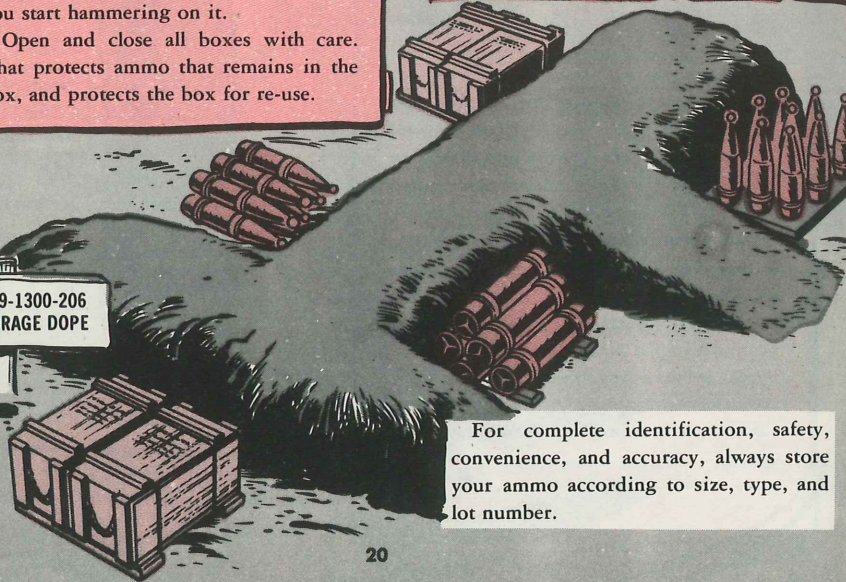
Repair boxes away from your ammo load, and be sure a box is empty before you start hammering on it.

Open and close all boxes with care. That protects ammo that remains in the box, and protects the box for re-use.

SEE TM 9-1300-206
FOR STORAGE DOPE



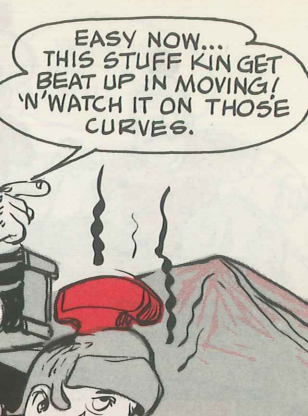
Codes and markings on boxes and containers are also real important. When you repair a box or clean a container be sure to protect the original info, or remark it soonest.



For complete identification, safety, convenience, and accuracy, always store your ammo according to size, type, and lot number.



GROAN
THIS RIDE HAS
MADE ME FEEL
UNSERVICEABLE.



EASY NOW...
THIS STUFF KIN GET
BEAT UP IN MOVING!
N'WATCH IT ON THOSE
CURVES.

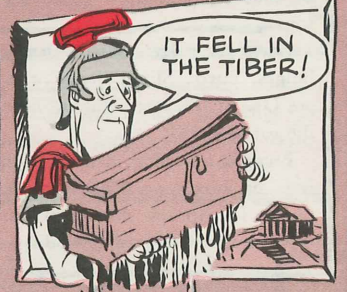
SERVICEABILITY CHECK

Ammo can get damaged during transportation, or it can become unserviceable in storage, so it's up to you to give it its final serviceability check.

First off, you have to know what ammo's been suspended or restricted. That info comes from your ammo support, and from TB 9-1300-385. If you get pubs on DA Form 12-34, you can get the TB. It's published monthly.

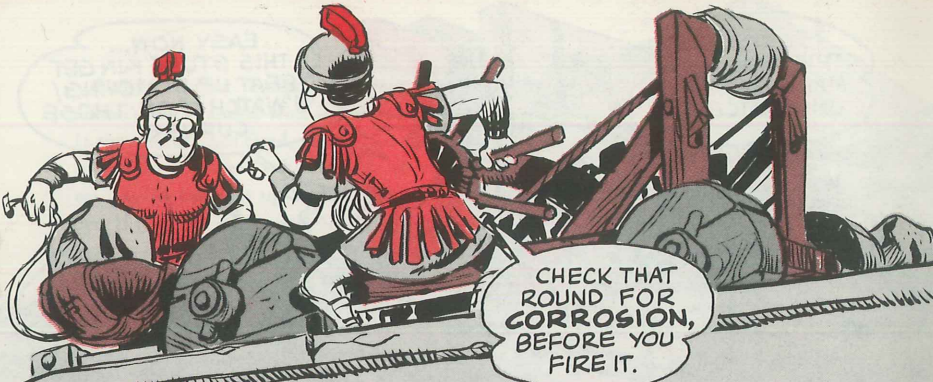


YEAH, I
KNOW...
NOW
YOU PULL
FOR
AWHILE.



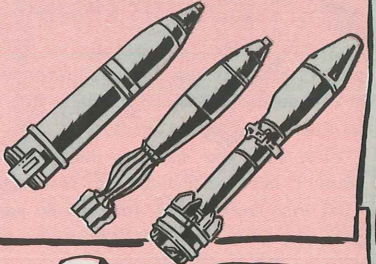
IT FELL IN
THE TIBER!

Turn in ammo that's been water-soaked or exposed to extreme heat.



CHECK THAT ROUND FOR CORROSION, BEFORE YOU FIRE IT.

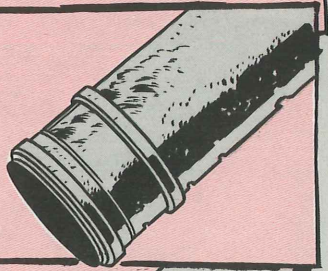
Check ammo pubs and ammo boxes and containers for restrictions on firing artillery ammo, mortars, rockets, fuzes, etc., at given temperatures, and other weather conditions.



Clean up any propellant, chemical or other explosives spills immediately.

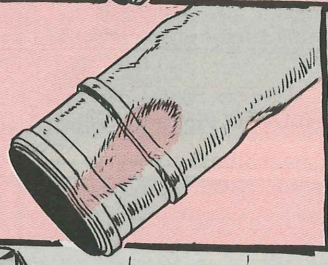


Eye all cartridge cases for corrosion. Light brown staining is natural oxidation. But, black, green, yellow or white stains mean heavy corrosion, and must be cleaned off soonest. If you can wipe the stuff off easy, the round's OK. But corrosion deposits or pitting make a round unserviceable.



Check cartridge cases for dents, cracks, bulges, burrs. Slight dents or scratches are OK. If it'll seat right in the weapon, the round's OK.

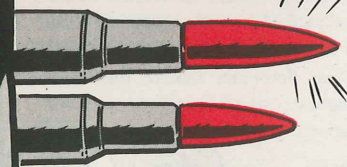
Freshen up faded identification markings on boxes or containers. A waterproof, felt-tip ink marker is handy for this important serviceability check.



WHEW! WISH THEY'D START USING MODERN AMMO.

YEAH! WE JUST GOT... SMALL ARMS.

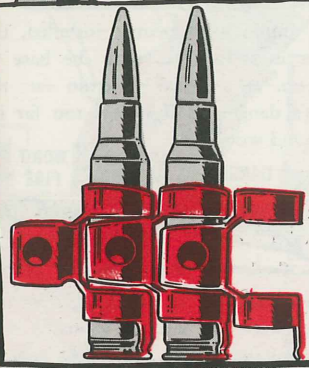
SMALL ARMS AMMO



Watch for short or long rounds (the bullet seated too far in, or sticking too far out of the case). They'll give you an uneven belt or clip, and will jam your weapon.



Reject a round if the bullet is loose, split or has a lopsided point.



Check belted machine gun ammo for link alinement, broken, cracked or stretched links. Eye rifle clips and magazines for dents, bulges, cracks, weak spring.

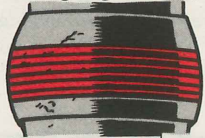
Clean small arms ammo carefully. It's waterproofed to protect its primer. Hard scrubbing may hurt the waterproofing.

MORE

NOW, HERE'S A NICE ROUND, "ROUND" IT'S GRANITE I THINK.

ARTILLERY AMMO

Check separate-loading ammo for cracks on the base cover; look for loose, missing or damaged grommets, damaged



or corroded rotating bands.

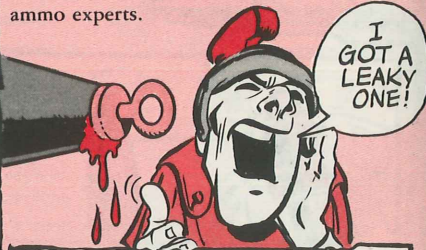
Rounds with loose, wobbly, rusty or corroded projectiles are defective.



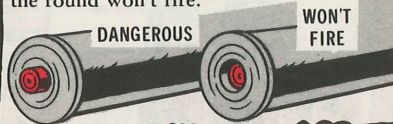
A perforated-cartridge round is unserviceable if it's banged up, or if its propellant container is split or has holes in it.



Check carefully for exudation (brownish goo) oozing around the threads in the nose of a projectile, or around the fuze cavity of a round. The stuff is flammable . . . it can detonate. Isolate the leaky round soonest; stand back and yell for ammo experts.



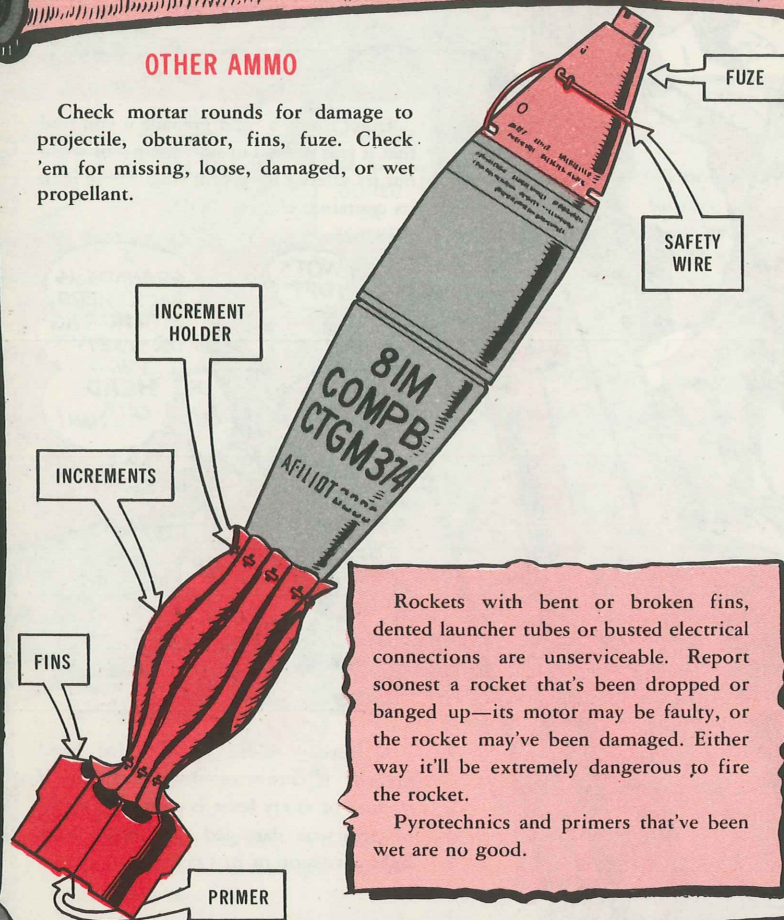
On ammo with primer installed, the primer must be flush with the base of the case. If it sticks out too far, the round's dangerous—if it sets too far in, the round won't fire.



When loading a round with primer installed, check its base for damage, and use its container cap to protect the primer as you move the round to the weapon and load it.

OTHER AMMO

Check mortar rounds for damage to projectile, obturator, fins, fuze. Check 'em for missing, loose, damaged, or wet propellant.



Rockets with bent or broken fins, dented launcher tubes or busted electrical connections are unserviceable. Report soonest a rocket that's been dropped or banged up—its motor may be faulty, or the rocket may've been damaged. Either way it'll be extremely dangerous to fire the rocket.

Pyrotechnics and primers that've been wet are no good.

CHECK YOUR RIFLE GRENADES CAREFULLY BEFORE FIRING.



Don't touch a hand grenade if you find that it was packed upside down—or without its safety pin or pull ring. Leave it in its container and call EOD.

WOT'S UP?



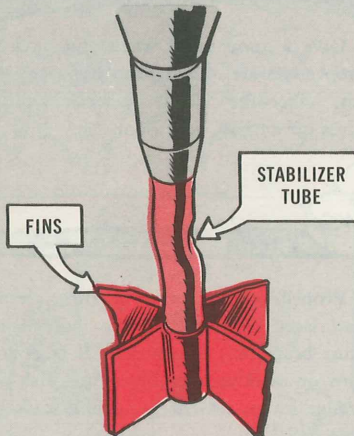
A heavily rusted or corroded hand grenade is unserviceable. Same goes if its fuze or safety lever is corroded, pitted or otherwise damaged. A grenade with light corrosion or rust is OK.

BUT, BUT, IT'LL NEVER FIT IN OUR CATAPULT...



DENTED OR CRUSHED

Never fire a rifle grenade if its nose cap is dented, or if its stabilizer tube and fin assembly is damaged.

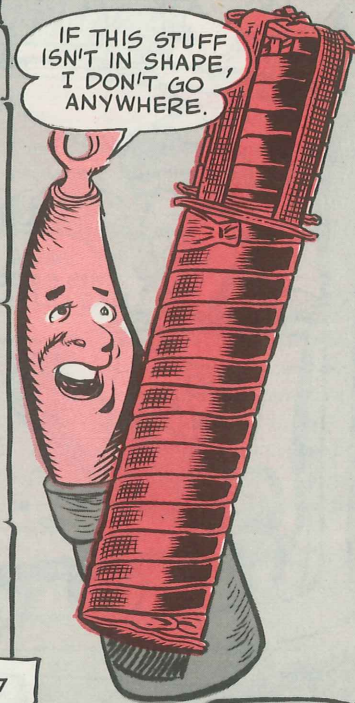


Turn in mines that've been dropped or banged up. Keep 'em packaged and covered till they're needed.


PROPELLANTS - FUZES - PRIMERS

Propellants, fuzes and primers are especially sensitive to moisture, heat, high humidity and shock. Keep 'em packaged and covered until you need 'em.

IF THIS STUFF ISN'T IN SHAPE, I DON'T GO ANYWHERE.




PROPELLANT CHECK



MY ARMOR
MAY RUST,
BUT THIS
"PROP" IS
GOOD 'N'
DRY.

Keep prop charge containers closed tight—to keep out moisture.



SNIFF-SNIFF

Give a good whiff when you open a prop container. Good prop has a sweet-ish, ether-like smell. Defective prop gives off a harsh, sour odor.

WOW...
THIS SMELLS
LIKE OLD SOCKS.



NO
WAY!

Propellant bags must be firm, clean, well laced or tied, and the increments must be in proper sequence. If bags are torn or marked with blue, brownish or orange stains, the charge is more'n likely defective.




ZOOM

ZIP

NO
SMOKES IN
THE "PROP"
AREA!



HANDLE
IT LIKE A
BABY.



HMM...
HOW TO
GET RID
OF EXCESS
"PROP".

SOP

With separate-loading ammo make sure you load the prop charge so its igniter is at the rear of the charge. The igniter end of the charge may be padded, or marked "igniter". Also, the igniter is packed in red cloth. The igniter must be clean and dry, and its powder must move easily to your touch. Lumpy, caked igniter is no good.

A faulty igniter, or damp, defective propellant may produce erratic flight, a hangfire or misfire.

Keep propellant for separate-loading ammo, away from the breech of the weapon, and protect it from all flames, sparks and heat.

If propellant doesn't look or smell right—turn it in, or ask your ammo support to check it.

On semi-fixed and separate-loading ammo protect the exposed charge as you handle it and prepare the round for firing. Keep it clean and dry and make sure all increments are in proper order.

You can adjust (remove) exposed prop as authorized for zone firing. But you're never authorized to add to a prop charge. That's dangerous.

Collect the prop you remove in some safe place—follow your outfit's SOP on getting rid of it.

FUZE

On fuzed ammo make sure the fuze is fully seated. The fuze shoulder must be seated smack on the projectile's nose—no threads or space showing. On rounds with a wavy washer, be sure the washer's fully flattened by the fuze.

Make sure the safety pins, pull wires or any other safety devices on fuzes are in place and in good shape. Leave safety devices on until you're ready to load a round.

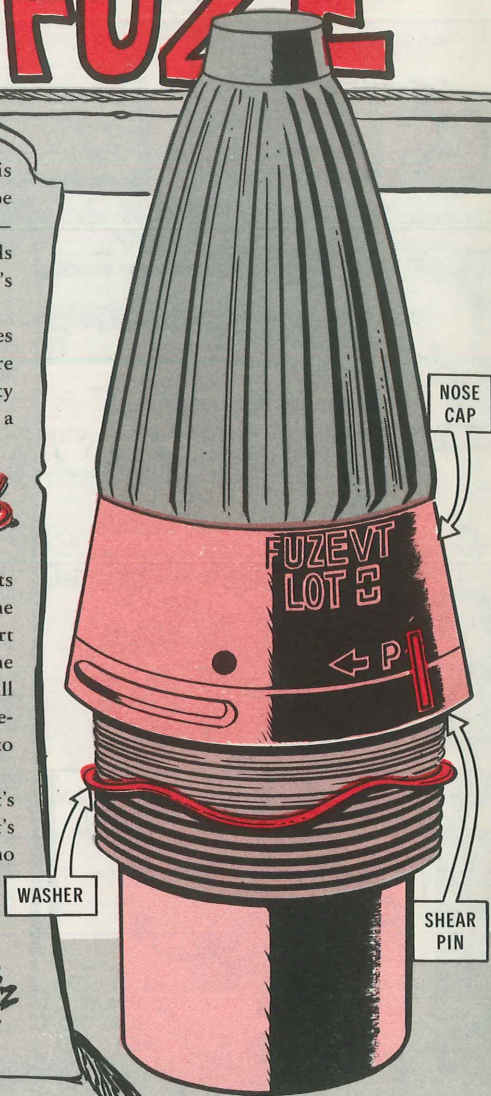


If a fuze buzzes when you remove its safety—stop right there! Replace the safety devices carefully, and gently cart the round off to an isolated spot. Tag the round unserviceable so no one else will use it. If you can't replace the safety device, carry the round gently (nose up) to a safe spot, and call EOD.

Once you replace its safety devices it's usually safe to transport a fuze that's buzzed. Turn it in, or call your ammo support.



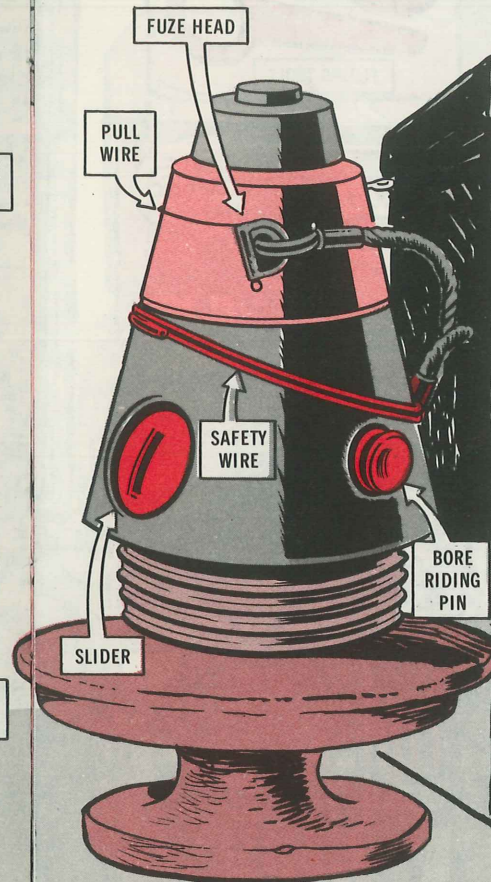
But never fire a fuze that's buzzed.



WASHER

SHEAR PIN

CHECK



FUZE HEAD

PULL WIRE

SAFETY WIRE

BORE RIDING PIN

SLIDER

For complete details on handling buzzers see your ammo and weapon's pubs and TM 9-1300-203.



Turn in or report a fuze if it's corroded or dented, or its safety devices are busted.

On mortar fuzes the bore-riding safety should be flush with the fuze ogive. If the bore-riding safety is missing, or pops out, when you remove the safety—the fuze is unserviceable. Isolate the round and call EOD soonest ... it may be armed.

Never handle a fuze by the cord attached to the safety wire.

Know your fuzing tools—the fuze wrench and fuze setter authorized for specific fuzes. Use 'em genty, keep 'em clean and in good shape.

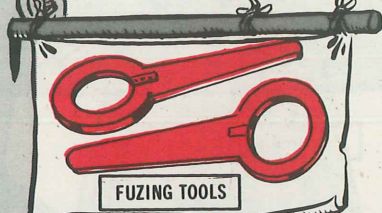
Screw a fuze on easy-like. Never force it. And, never spin, roll, or drop a fuze. Fast, careless rotating can cause a fuze to arm—if the round or fuze is later dropped or mishandled.

Never unfuze a round that's issued fuzed—unless your ammo pubs authorize a 'different fuze for the round.

If a round takes a fuze—never fire it without a fuze. Unauthorized or altered fuzes are also taboo. The ammo can blow up in the bore. Any questions . . . ?

When fuzing, make sure the fuze cavity is clean. Use a clean, lint-free cloth and a wooden stick (not metal) to clean the fuze cavity. The fuze and projectile threads must also be clean for the fuze to seat right. Never use a fuze or a projectile with bugged threads. Turn it in.

Keep fuzed ammo away from your weapon's recoil path, and from anything else that may ram it. If a round is hit, put it off to itself with a tag telling what rammed it. Report it soonest. Same goes for rounds rammed out of your weapon.



FUZING TOOLS

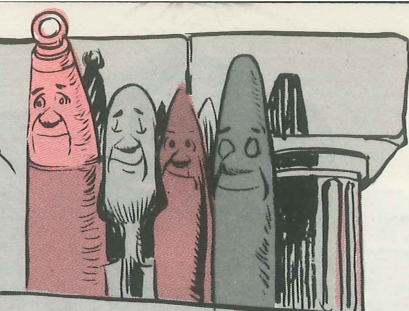
FUZING TOOLS

GRUNT IT WON'T GO IN!

BE SURE CAVITY IS CLEAN

THIS IS WOT THEY CALL P.M!!

32



On separate-loading ammo keep the lifting or closing plug on until you're ready to use the round. The plug must be tight, but it should give to a good, strong turn. Turn in rounds with frozen plugs. If a lifting plug has rusty threads—clean 'em and give 'em a light coat of silicone grease (FSN 6850-702-4297).

Prepared ammo that's not fired needs extra handling. First off, clean it good, re-pack it, and seal it in its box. On separate-loading ammo, remove the fuze, pack it carefully, and replace the projectile's plug. Note on the box the date the ammo was re-packed. And use that ammo first on your next firing mission. That cuts down on your opened boxes.

Save the large (4x8 ft) plastic sheet that's packed with some ammo. It's a handy cover for your standby ammo at the gun site.

DOES EVERYBODY READ PS?

If your outfit does not get enough copies of PS Magazine every month, have your unit clerk send in a change to your order. Put it in Block 45 of DA Form 12-4 and send it to the pubs center at Baltimore.



33

PS END



Dear Half-Mast,
Is there a load test for materials handling equipment? If so, who does it?

WHO LOAD

SGT M.O.L.

YOUR SUPPORT TESTS IT--BUT YOU'RE RESPONSIBLE FOR OPERATIONAL INSPECTION.

Dear Sergeant M.O.L.,

Good questions.

Any way you look at it, load testing of MHE is a touchy deal. It's a lot like your different girl friends . . . each type has to be treated just so . . . no same-same treatment.

Hold one on load testing, though. It's strictly for your support outfit. If your equipment requires testing, you'll schedule it with your support.

Safe load capacities are fixed by the Army technical manual or by the manufacturer for each piece of equipment.

So, eye your data plate for this info. Or, check out what the Army TM or the manufacturer's manual says about your particular item.

Load tests are used to re-certify that your equipment retains those safe working capacities.

But, back to your girl friend . . . er, equipment. Some do, some don't . . . require load testing, that is.

To find out, check the TM on the equipment, check the safety rules for the commodity to be lifted; look up your local command regulations and ask the local safety office.

Lots of guys ask questions about load testing when they're going to lift conventional ammo. There is no Army directive that lift equipment must be load tested specifically for ammo.

HOW'S THAT FOR LOAD TESTING?



TEE-HEE... HELPING THE GOVERNMENT ISN'T THAT TOUGH.

Here are some other pubs that may help:

TB 9-352 (May 72) and TB 9-356 (Oct 60) cover load testing wrecker trucks used for lifting missiles and rockets.

For example, if you use your 2½-ton wrecker truck to unload conventional ammo, you'll be safe if it's load tested first according to TB 9-352. And don't forget the final inspection. Check for twisted, bent or cracked frame members, damaged bolts or pins and frayed cable.

TESTS WHAT?



TM 5-725 (Oct 68), is the engineer's TM on rigging. It also has tables covering safe limits for wire, hooks and blocks and safe working loads for chain, wire and rope slings.

TM 5-331B (May 68) covers lifting, loading and hauling equipment. It has an example of a lifting-limit table and gives factors affecting the lifting capacity.

TB 9-1000-216-30 (Apr 72) is used for inspecting and load testing the Honest John missile handling sling.

TB 9-1000-216-30 (APR 72)

TM 5-331B (MAY 68)

TM 5-725 (OCT 68)

Half-Mast

DRAINING THE 20-TON CARRIER'S CRANKCASE . . .

WHY MAKE IT TOUGH?

Plain horsesense is all you need to drain the carrier engine oil from the Models 2380 and 2385 rough terrain 20-ton cranes.

With it, you can forget about getting burned, battered and bewildered while you're unscrewing the out-of-the-way drain plug.

First off, park the crane on a ramp or a hillside to give yourself plenty of working room. This'll save you from busted knuckles, scraped elbows and head bumps.

Now, be sure the engine exhaust pipe is cool before you creep underneath the crane. This'll save you from nasty burns.



Then control the oil as it comes out. Use a piece of thin sheet metal . . . or cardboard or newspaper . . . shaped like a trough, to divert the oil away from the crossmember that's in the way. This'll save you and your equipment from getting splashed with oil.

This is a selected list of recent pubs of interest to organizational maintenance personnel. This list is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pam 310-4 (Jun 72), and Ch 2 (Oct 72), TM's, TB's, etc.; DA Pam 310-6 (Jul 72), and Ch 2 (Jan 73), SC's and SM's; DA Pam 310-7 (Aug 72), MWO's; and DA Pam (C) 310-9 (Nov 71), COMSEC Pubs.



TECHNICAL MANUALS

TM 5-4210-217-12 Dec Oper and Org Maint for Truck, Fire Fighting: Mdl 0814
 TM 9-1340-201 Ch 1 Jan 2.75-In FFAR
 TM 9-2320-209-20P Oct Truck, 2½-Ton
 TM 9-2320-235-14 Nov Trailer, 1-Ton, M514 XMS45 and Trailer, 2-Ton M390 and M390C
 TM 9-2350-300-10 Ch2 Mar 20-AM M163
 TM 11-1510-209-20P-3 Jan Electronic Config, RU-21E Actf
 TM 11-5810-272-12P Jan TSEC/KG-31/35
 TM 11-5895-453-14 Jan AN/TRC-145(V) and AN/TRC-145A(V)
 TM 11-5895-795-24P Jan RU-21E Aircraft
 TM 38-750 Nov The Army Maint Mgmt Sys (TAMMS)
 TM 55-1510-209-10/3 Jan U-21G, RU-21E

TM 55-1520-210-20P-1 Nov UH-1B, C, D, H, M
 TM 55-1520-210-20P-2 Nov UH-1B, C, D, H, M
 TM 55-1520-221-20P Nov AH-1G, TH-1G

MISCELLANEOUS

LO 5-4320-218-12 Nov Pump, 350 GPM, Gorman-Rupp Mdls 0412-MVG4D, 04A12B-MVG4D
 LO 5-5420-202-12-2 Oct Launcher, M60A1 Tank Chassis, AVLB
 LO 10-3930-620-12 Nov Forklift, Elec, 6,000 Lbs Mdl FE-60-EE, Mdl MHE 214
 LO 10-3930-628-12 Nov Forklift, EMD, 2000 Lbs, Mdl MHE 219, Mdl FE20-24EE
 SB 700-20 Nov Army Adopted and Other Items of Materiel Selected For Authorization

SC 4920-99-CL-A71 Ch 1 Jan Tool Set, Org Maint Army Actf
 SC 4935-95-CL-A82 Dec Sets, Kits and Outfits CHAPARRAL
 SC 8465-90-CL-P02 Ch2 Nav Survival, Kit, Indiv, Hot Climate
 SC 8465-90-CL-P03 Ch1 Feb Survival Kit, Individual, Cold Climate
 TB 703-2 Nov Identif of Gov Owned Petrol Products

NEW MOVIES

MF 38-5698 Calibration
 TF 10-4488 Supply Economy
 TF 10-4492 6,000 and 10,000 Lb. RT Forklift (Operator PM)
 TF 38-4438 Packaging: Containerization (MILVAN)
 TF 38-4524 Cushioning, Blocking, Bracing in Packaging
 TF 38-4466 Packaging Items
 TF 55-4277 Driving Tractor, Semitrailer
 TF 55-4436 T63-A-5A Helicopter Engine Storage

War Between Pubs

When 2 publications from the same command level are "at war" with each other, para 1-26 of AR 310-1 has the answer. In such conflicts, the pub with the later date governs. Pubs from higher level commands rule even if they have earlier dates.

Decon Fuse Blues...?

Need a replacement fuse for the ON-OFF switch on the M2 water heater on your modified M9 decon? FSN 5920-681-4353 will get it. It's a 25 amp, 125 volt, ferrule type fuse. As of now it's in Ch 3 (Apr 71), TM 3-4230-203-35P.


MWO of the Month

For the beefed-up hydraulic tube assembly and check valve on your Huey D and H Models, be sure MWO 55-1520-210-30/31 (Aug 71) has been applied. The mod will cut chances of hydraulic tube failure and loss of fluid because of high-freq vibrations set up by the pump.






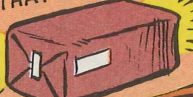
1 TAKE IT OFF.



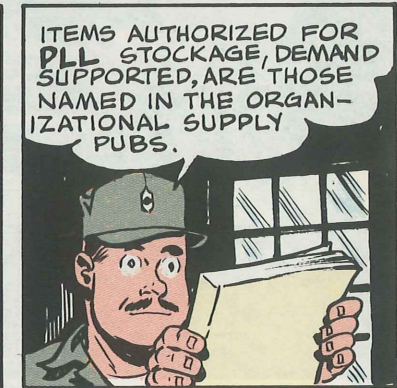
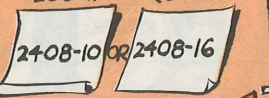
2 TAG IT WITH A DA FORM 24-02.



3 EXCHANGE IT AT DX FOR A LIKE ITEM THAT WORKS.



4 INSTALL IT! MAKE AN ENTRY IN THE LOG IF REQUIRED.



Joe's Dope Sheet



SOBE IF I ONLY HAD THAT ONE PART... SOBE

To be able to maintain your gear
In a way you'll be proud of all year,
Get supply right down pat,
--Nothing's better than that!--
And you'll always end up in the clear.

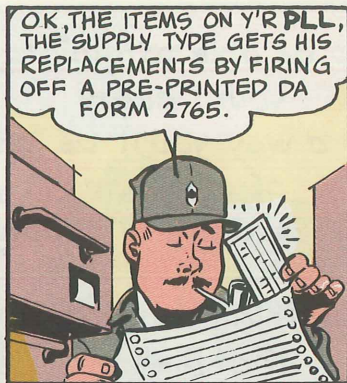
WE HAVE THE WORLD'S BEST EQUIPMENT ... *Take care of it*

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



PUBS!
WOT
PUBS?

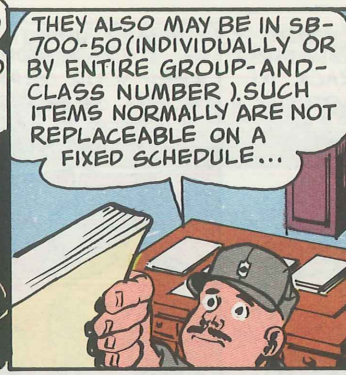
-IOP THROUGH -25P'S.
USUALLY, THEY'LL BE ITEMS
TO BE REPLACED WITHIN
A SCHEDULED OR
PREDICTABLE TIME.



OK, THE ITEMS ON Y'R PLL,
THE SUPPLY TYPE GETS HIS
REPLACEMENTS BY FIRING
OFF A PRE-PRINTED DA
FORM 2765.



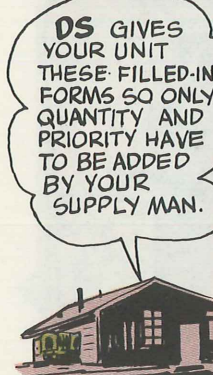
THESE TOO
MAY BE
AUTHORIZED
IN P-PUBS.
(-IOP-25P)



THEY ALSO MAY BE IN SB-
700-50 (INDIVIDUALLY OR
BY ENTIRE GROUP-AND-
CLASS NUMBER). SUCH
ITEMS NORMALLY ARE NOT
REPLACEABLE ON A
FIXED SCHEDULE...



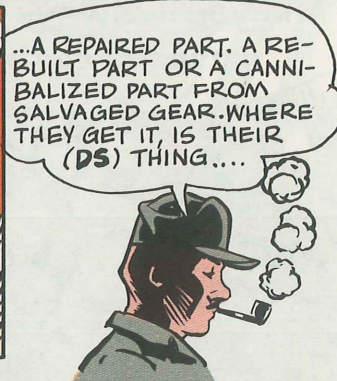
...SO YOUR SUPPLY
TYPE WON'T FIND ANY
2765'S (PRE-PRINTED)
FOR THESE ITEMS.
SO, HE FILLS OUT AND
SENDS A NEW 2765
FOR EACH CASE.



DS GIVES
YOUR UNIT
THESE FILLED-IN
FORMS SO ONLY
QUANTITY AND
PRIORITY HAVE
TO BE ADDED
BY YOUR
SUPPLY MAN.



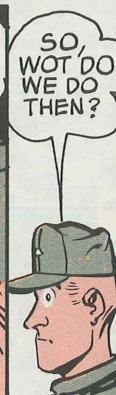
DS MAY FILL A PLL
REPLACEMENT REQUEST
IN A LOT OF WAYS...



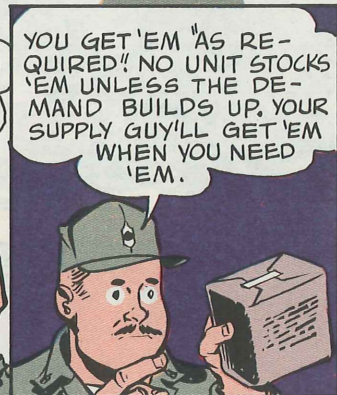
...A REPAIRED PART. A RE-
BUILT PART OR A CANNI-
BALIZED PART FROM
SALVAGED GEAR. WHERE
THEY GET IT, IS THEIR
(DS) THING....



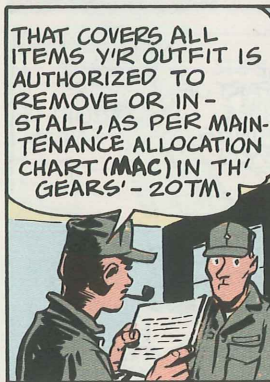
NOW, THERE'RE LOTS OF
ITEMS FOR REPAIR 'N'
PM THAT DX, QSS, 'N'
PLL DON'T HANDLE.



SO,
WOT DO
WE DO
THEN?



YOU GET 'EM 'AS RE-
QUIRED' NO UNIT STOCKS
'EM UNLESS THE DE-
MAND BUILDS UP. YOUR
SUPPLY GUY'LL GET 'EM
WHEN YOU NEED
'EM.



THAT COVERS ALL
ITEMS Y'R OUTFIT IS
AUTHORIZED TO
REMOVE OR IN-
STALL, AS PER MAIN-
TENANCE ALLOCATION
CHART (MAC) IN TH'
GEARS' - 20TM.



Y'R DS MAY FILL
YOUR OUTFIT'S NEEDS
FOR THESE "AS
REQUIRED ITEMS"
FROM ITS OWN
AUTHORIZED
STOCKAGE LIST
(ASL).



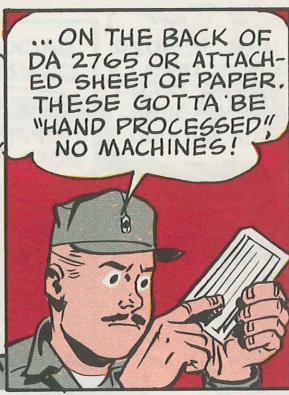
BUT... DS MAY
HAVE TO GET 'EM
FROM DEPOT OR
COMMODITY
COMMAND. DE-
LIVERY THEN
TAKES A BIT
MORE TIME.



WOT IF I NEED SOME-
THIN' WHERE THERE'S
NO AUTHORIZATION?
IT WON'T BE AVAIL-
ABLE FROM ALL
THE SOURCES YOU
MENTIONED, RIGHT!



DON'T SWEAT
IT! GIVE YOUR
SUPPLY GUY AN
ACCEPTABLE
JUSTIFICATION,
IN DETAIL...



...ON THE BACK OF
DA 2765 OR ATTACH-
ED SHEET OF PAPER.
THESE GOTTA BE
"HAND PROCESSED"
NO MACHINES!

YOUR SUPPLY GUY SHOOT'S IT OFF TO DS, WHERE IT'S CONVERT-ED TO AN "EX-CEPTION DATA" REQUISITION.



WHO GETS FIRST CRACK AT STUFF?



Y' MEAN PRIORITIES? OK! ALL ITEMS NEEDED TO KEEP YOUR GEAR OPERATIONAL GETS FIRST CALL. ALL ELSE IS RATED ON ITS IMPORTANCE.



WHO DECIDES IT?

YOUR CO SETS THE PRIORITY, BASED ON A FORMULA IN SUPPLY REGULATIONS. SO COOL IT IF SOME REQUEST GOES AHEAD OF OTHERS.



REMEMBER... IT'S ALL PART OF THE RULES. FIRST THINGS FIRST... YOU DIG?



RIGHT-ON SARGE.

HMM...WONDER HOW OL' DWELL-TIME IS DOIN'? HAVEN'T SEEN HIM AROUND.



BACK AT THE NCO QUARTERS...

OOOPS...ALMOST TRIPPED OVER THIS BOX... WOT'S IN IT?



HI THERE SARGE...

HERE'S THAT ENGINE BLOCK... AND ALL SET TO GO! I GOT ALL THE PARTS FOR IT... IT'S FOR YOU, SARGE...



GULP- IT'S THE NICEST THING I EVER GOT.

SMIFF SMIFF

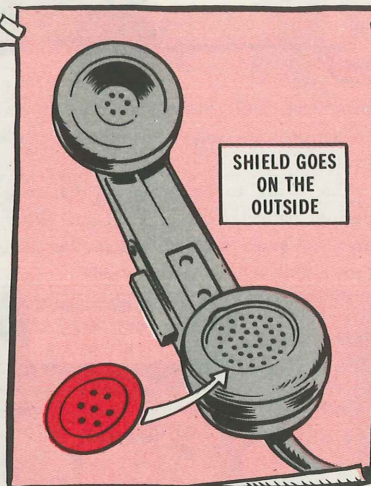
DE-ICER IS NICER OUTSIDE

Dear Half-Mast,

We've got a flap goin' over where to put the moisture shield on the H-60 handset of our TA-312 telephones.

Some say it goes inside the mouthpiece, which is screwed down over it. Some say it stays on the outside. What gives?

SFC J. D. O.



IT GOES ON THE OUTSIDE.

Dear Sergeant J.D.O.,

The shield (or de-icer), FSN 5805-392-7628, stays outside.

You press the metal rim in place with a knife or screwdriver, being careful not to puncture a hole in the screen. There's a bevelled edge the shield fits under, with a recess so you can pry it up.

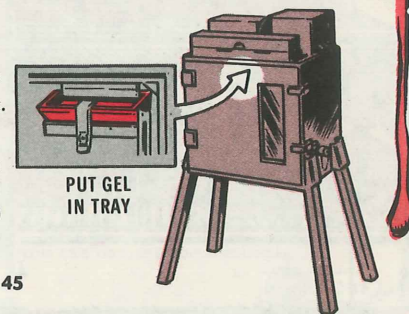
Screwing the mouthpiece down over the shield cuts down on its effectiveness.

Half-Mast

GEL YOUR GMM-I

Silica gel now has the nod for use in the AN/GMM-1 radiosonde baseline check set. It controls humidity levels.

The gel is cheaper than calcium chloride, can be re-used, and is available with FSN 6850-263-8640. This gets you a can of 50 8-unit packages.



PUT GEL IN TRAY

HOW TO STORE 'EM; USE 'EM . . .

SAGA OF THE DRY BATTERY



Dry cell batteries make your equipment go . . . or put it down.

The good or the bad in them comes out, depending on the guy who's storing them, using them, or maintaining them.

So, breathe deep, and read on for a short course in how to get the most out of what you've got:

STORAGE

Dry batteries should be stored at as close to zero degrees F as you can get. Anything between 0 and 35 degrees F is

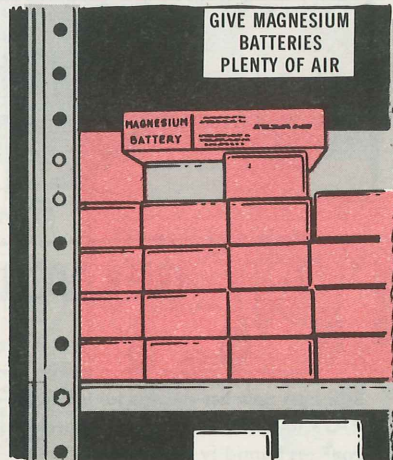
REFRIGERATE--
IF YOU CAN



beneficial. Cold storage reduces chemical action, cuts decay . . . and adds to the lifespan.

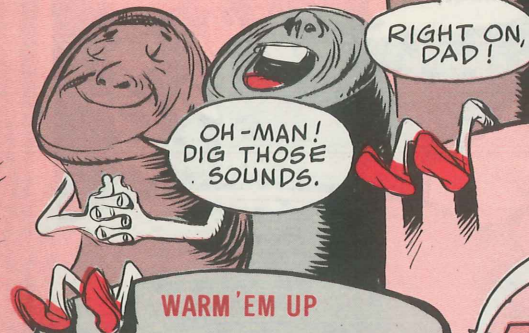
One thing to remember is that magnesium batteries can give off gas. Whenever you store them, air the storage place thoroughly at least once a week.

GIVE MAGNESIUM
BATTERIES
PLENTY OF AIR



If you can't refrigerate your other dry cells, a well-aired storage place is the next best bet. Naturally, the cooler the better. Cool, dry and well-aired.

WARM 'EM UP



WARM 'EM UP

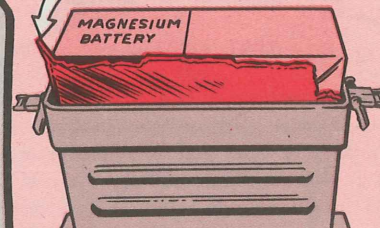
Before you put cold-stored batteries in your equipment, warm the batteries to about 70 degrees. And, use your oldest batteries first.

PSST... DOLL...
WANNA WARM
MY BATTERIES?



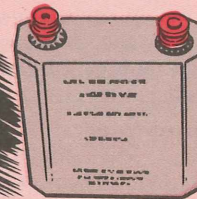
You can use body heat for battery warm-up—before use and during use—if the situation calls for it. Some batteries will fit into the pocket of an inner garment; others have special carrying vests when used with portable items like the AN/PRC-25 radio set.

USE A
CARDBOARD SHIM



The batteries should fit snug in the battery box. If you need cardboard shims—or, for that matter—shims of any material, use 'em to wedge the batteries. Loose, wobbly batteries can get shake or shock damage, and the equipment itself could be damaged.

DON'T OVER-
TIGHTEN
TERMINAL NUTS



Never overtighten the battery terminal nuts. Tighten no more than needed to make a good connection. Too tight, and you can damage the terminals.

AFTER YOU WARM THEM UP, IT'S TIME TO TEST THEM.

EASY ON THAT TESTING JAZZ, DOLL... I'M STILL TOO HOT FROM THE WARM-UP!

TEST 'EM

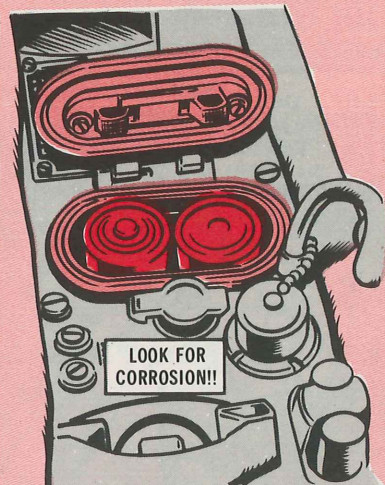
If your warmed-up battery shows low voltage under tester load after long storage, keep it under load for a minute or so, to help fire up the cell chemicals. If this doesn't bring the battery around, get rid of it. Better you should find out with your tester than when you're out in the boonies. Normal test time required is about 30 seconds.

Almost every unit is authorized battery test set AN/PSM-13 by TOE or by SB 11-623. You can use it to test many of your dry cell batteries.

In case you've had to operate your equipment in the rain, and its battery caught the wets, wipe the battery dry and test it to see if it's still good.

CORROSION? TOSS

Corrosion's mighty bad. If you spot a corroded battery, say, in the TA-312/PT telephone set, get rid of it fast. Corrosion has a way of spreading and chewing on all metal that's handy.



It's the same ticket for leaking batteries. Throw 'em away, clean up and put in new ones. Mercury and alkaline batteries, especially, need watching.

Rough handling can kill batteries. Heavy-handedness also can break plastic receptacles.

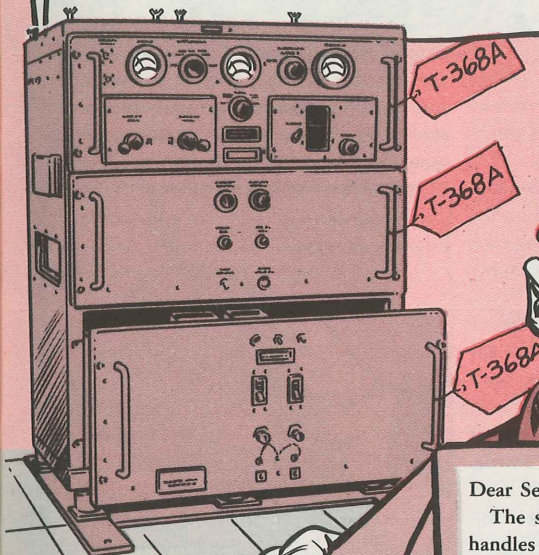
T-368 IDENTIFIERS

Dear Half-Mast,

How do we identify the three decks of the T-368 transmitter when the decks are removed from the chassis? Only the top deck has an ID plate, and this makes for a problem when we remove the decks for repair.

In some of our equipment, such as the AN/MRT-9, we have as many as 3 transmitters. Since decks of the various models are not compatible, we'd sure like to know how to tell the deck of one model from that of another.

SGT S. S.



IT'S THE OLD, "TAG THE COMPONENT" TRICK... MAKE SURE ALL THE INFO IS READABLE.

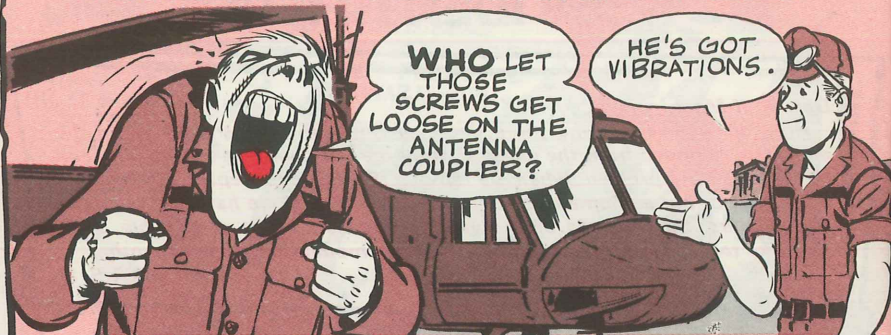
Dear Sergeant S. S.,

The simplest way is to tag the drawer handles of the modulator and power supply decks whenever you remove them. Be a good idea to add the contract numbers on the B and C model modulators, too, since they differ somewhat.

You can also identify the basic, A, B and C model decks by checking them against the tube location drawings on pages 22-27 of TM 11-809-20 (Jul 58). Unfortunately, the newer models aren't included . . . so tagging seems to be the best bet.

Half-Mast

AIRCRAFT ANTENNA TALES



WHO LET THOSE SCREWS GET LOOSE ON THE ANTENNA COUPLER?

HE'S GOT VIBRATIONS.

An insect without its antenna will go around in circles trying to find its way home. An aircraft with a damaged antenna can put the pilot in the same fix.

Crew chiefs and mechs can make sure of good antenna reception and transmission in the following cases with a quick look, a minimum of work or a minute's self control:

The VOR antennas on Hueys and some other aircraft are in great locations for the job, but they are not, (repeat, not,) rotor tie-downs. You'll damage them.

No antenna is a hand hold, either. If you need a boost, grab something sturdy.

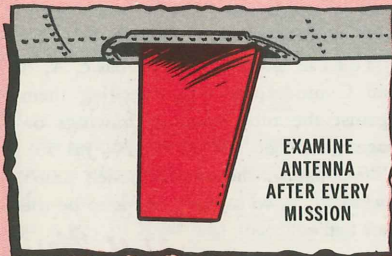
If your unit is flying AH-1G's with MWO 55-1520-221-30-17 applied, jot this down. The relocation of the UHF antenna to below the tail boom rates a look-see after every mission. Seems the relocated

antenna can hit the ground before the tail stinger (especially on '67 and '68 models). Look for damage . . . and get the antenna replaced, if necessary.

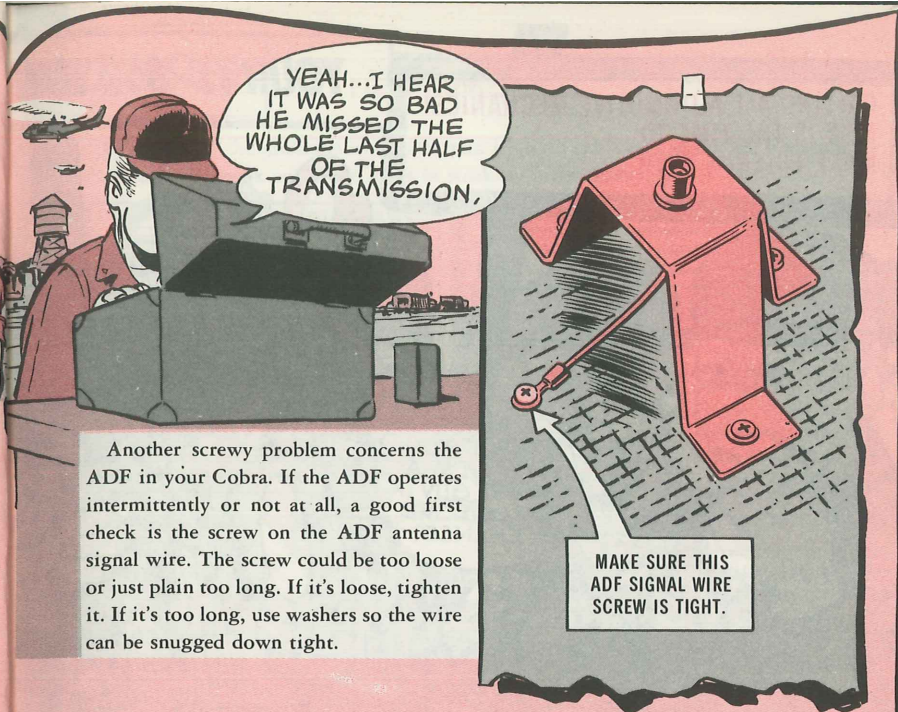


ALL SCREWS MUST BE TIGHT ON ANTENNA COUPLER

Loose screws in the CU-942 antenna coupler on your Huey cause high-frequency vibrations. The vibrations play unpleasant games with your FM communications. To beat 'em, simply tighten the screws in the FM coupler.



EXAMINE ANTENNA AFTER EVERY MISSION



Another screwly problem concerns the ADF in your Cobra. If the ADF operates intermittently or not at all, a good first check is the screw on the ADF antenna signal wire. The screw could be too loose or just plain too long. If it's loose, tighten it. If it's too long, use washers so the wire can be snugged down tight.

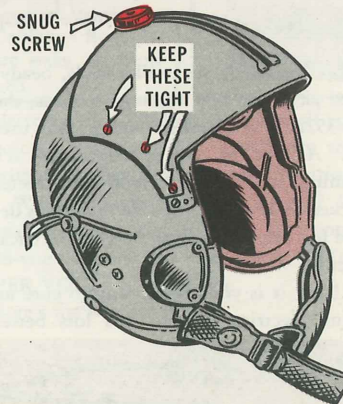
MAKE SURE THIS ADF SIGNAL WIRE SCREW IS TIGHT.

FLYING HELMET CHECKLIST

A minute's PM on the visor screws of your flying helmet keeps things ready for the big slide.

Tighten the side visor screws. This stops the whole visor assembly from sliding off when you lower the visor. It also prevents jamming.

If you've got 'em, snug the screw on the release button. A snug screw keeps the button from coming off in your hand . . . or getting lost.



**CALLING ALL AUTOMOTIVE MECHANICS!
NOW IS THE TIME TO
MAKE FRIENDS WITH . . .**

YOUR TS-352 B/U MULTIMETER

FIRST THINGS FIRST



HEY...
COOL IT, YOU
GUYS... I'M A
GREAT GUY IF
YOU GIVE ME
A CHANCE.

A man usually steers clear of a thing he doesn't understand.

When the first TS-352B/U multimeter arrives in shop a couple of mechanics stand well back and regard it with suspicious eyes. One dude prods it with a forked stick to see if he can make it snap back.

But for all its snake-like leads, beady-eyed jacks and bewildering switches, the TS-352B/U is harmless—and mighty useful. As far as you're concerned it's nothing more than a volt-ohm meter packed in a rugged box—an ingenious device for troubleshooting 28-volt electrical circuits.

Using it is your better way to cure an ailing electrical system. It's lots better

than blindly replacing alternators, switches, bulbs, batteries and wiring harnesses in the hope that the trouble will disappear.

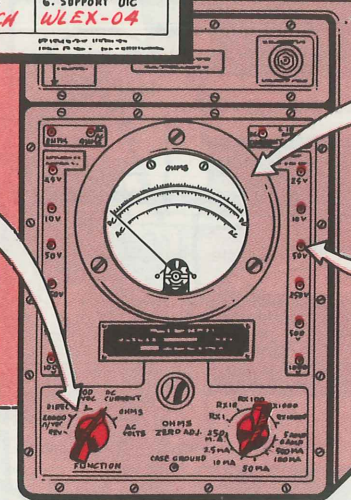
Several automotive -20 TM's give good rundowns on checking out automotive circuits with a less complicated-looking commercial type multimeter. But since the TS-352B/U, a military design job, is about the only meter available in your automotive maintenance organizational No. 1 and No. 2 common tool sets, it's time to dispel any hocus-pocus beliefs that keep you from using it.

When making voltage, resistance and continuity tests that're spelled out in your automotive -20 TM's, rig your TS-352B/U multimeter like this . . .

Before using the multimeter make certain it's been calibrated in the last 6 months. Then give it a hawk eye to see if it's in working order. Like . . .

| U. S. ARMY CALIBRATION SYSTEM (TM 38-750) | |
|--|----------------------------------|
| 1. JAN TYPE/MFR & MODEL <i>TS-352 B/U</i> | 2. CALBR DUE <i>1 NOV 73</i> |
| 3. SERIAL NUMBER <i>4132</i> | 4. DATE CALBR <i>1 MAY 73</i> |
| 5. NAME/REPORT NUMBER <i>SFC JOHN WELCH</i> | 6. SUPPORT UIC <i>WLEX-04</i> |
| DA LABEL 00 1 JAN 70 | |

CALIBRATION LABEL



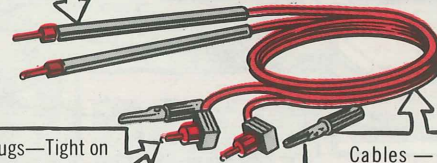
Meter — Glass and pointer not broken. Pointer should be resting over the zero marks at left side of the scales.

Switches — Work freely without binding or scraping.

Jack sockets — Open and dirt-free.

Test prods — Tight on cable, tip free of paint or anything that may be an insulator.

Batteries — Not corroded or leaking; installed right.



Jack plugs — Tight on cable, prods clean.

Cables — No cuts, sharp kinks, nor badly frayed.

AT EASE

Don't let the many jack and switch positions throw you. Although the TS-352/BU is made for testing a wide range of electrical and electronic circuits, you can ignore most of them when it comes to dealing with 28-volt DC automotive

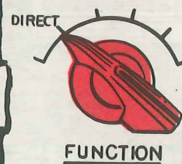
electrical circuits. You can make all your voltage, resistance and continuity tests with only a few jack and switch positions.

Which column of jacks to use? No sweat. When testing any automotive 28-volt circuit, use the 20000 OHMS PER VOLT DC (left) side. Here's the way it's done . . .

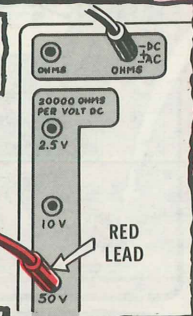
DC VOLTAGE TESTS

Used to measure battery voltage, charging system output voltage and voltage drops at various test points

1. Set the FUNCTION switch on DIRECT.

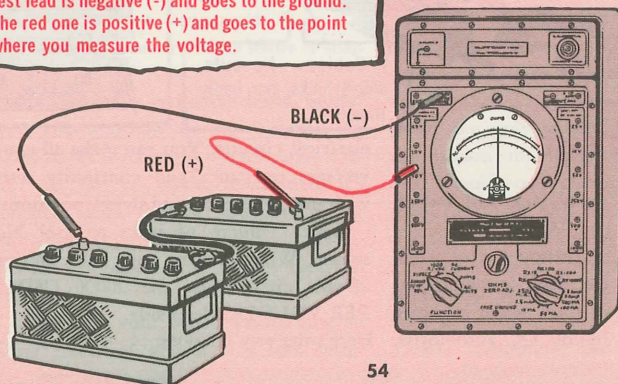


2. Plug the black (-) test lead into the OHMS -DC \pm AC jack. It's at the upper left. This jack is the meter circuit's common ground.



3. Plug the red (+) test lead into the 50V jack that's in the 20000 OHMS per volt DC column.

4. Now you can make all the DC voltage tests outlined and shown in your tactical or combat vehicle -20 TM's. Just keep in mind that the black test lead is negative (-) and goes to the ground. The red one is positive (+) and goes to the point where you measure the voltage.



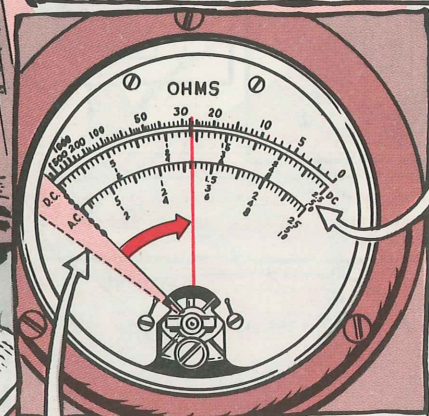
54

OH-WOW!
THAT'S SOME
VOLTAGE TEST!

WOWEE
LET'S DIG
THIS LESSON,
MAN...
IT'S HOT
STUFF.

BE SURE YOUR
CIRCUIT POINTS ARE
AS PER YOUR TM.

5. Make your readings on the DC scale using the figures in the middle row—the one that ends with a 5. Now read this row of figures as 10, 20, 30, 40 and 50.



6. If the meter pointer moves in the opposite direction, reverse your test leads at the point of contact to correct the polarity. Or you can turn the FUNCTION switch to 20000/VDC rev.

7. All contact points, especially the ground (vehicle chassis) must be bare metal and clean.

Bad connections, poor wiring and dirty switch contact points will cause errors in your voltage readings. To get accurate readings, measure at the exact circuit points given in the TM's electrical circuit troubleshooting diagrams. In short, avoid reading across connections and switches. (Unless you're testing for a high resistance point, or testing a complete circuit.)

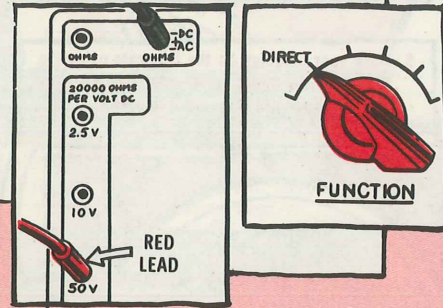
55



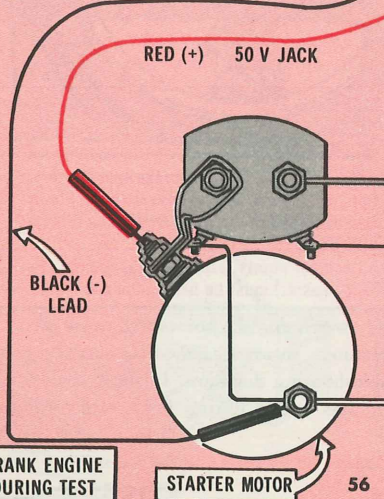
HIGH-RESISTANCE OR DROP TEST VOLTAGE

Use to find any voltage loss due to a bad part or faulty connection.

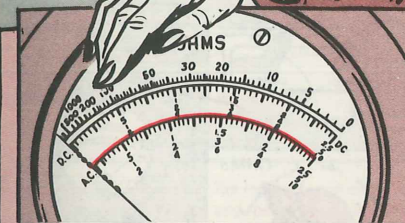
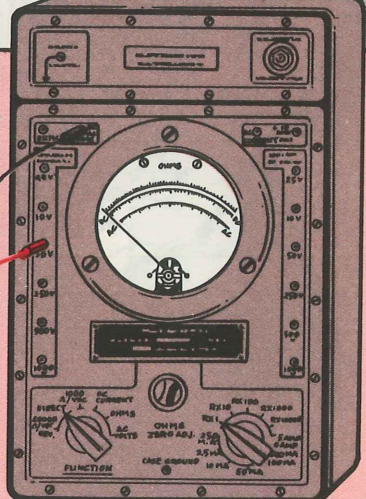
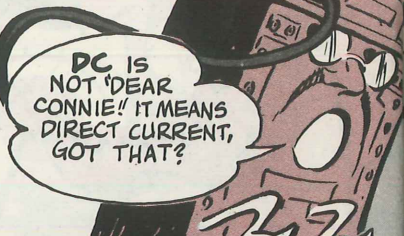
1. Leave the red (+) test lead in the 50v jack and the "FUNCTION" switch on DIRECT. Leave the black (-) lead plugged into OHMS-DC±AC jack.



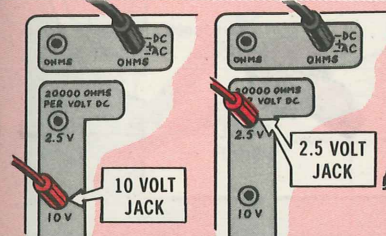
2. Place your test leads across the suspected connection or part (red on the + side and black on the - side).



3. Now load down the circuit either by turning on the headlights, the ignition switch, or by cranking the engine (first, disconnect the distributor's primary lead to keep the engine from starting. On diesels use the emergency fuel cut-off.) What you do depends on the circuit being tested.



5. If you only got a flicker on the 50v scale, move the red lead to the 10v jack and try again. Still a flicker? Then move to the 2.5v jack. No voltage reading on the DC 25 (2.5) scale means connection or item is OK. But anything over 1 volt means trouble.



6. In all tests, stick to the equipment's -20 TM for specifics. Don't guess.

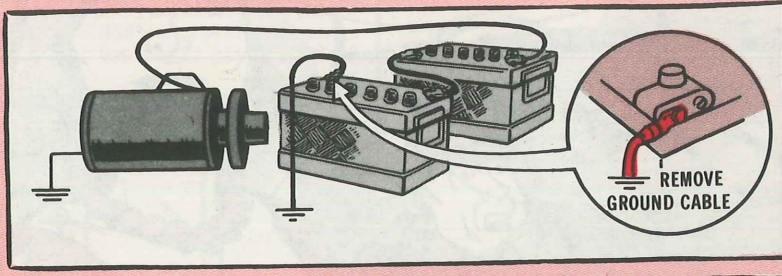


MORE

RESISTANCE (OHMS) TESTS

Used to measure resistance of coils and resistors

Before you start—make sure no battery voltage is connected to the circuit to be tested. Use the meter to see if any voltage is present. Or better yet—disconnect the battery ground cable. This'll stop a possible meter burnout.



To test . . .

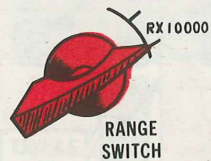
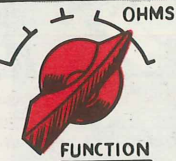
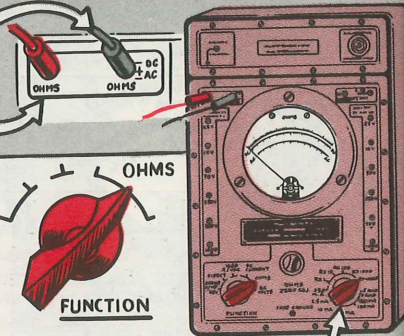
1. The black (-) lead goes into the OHMS -DC ± AC jack.

2. The red (+) lead into the OHMS jack.

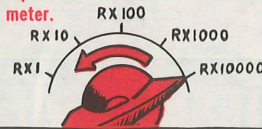
3. FUNCTION switch to OHMS.

4. If you know the approximate ohms rating of the circuit to be tested, set the RANGE switch to that RX-value.

5. If you don't know the rating, set the RANGE switch to RX10000.



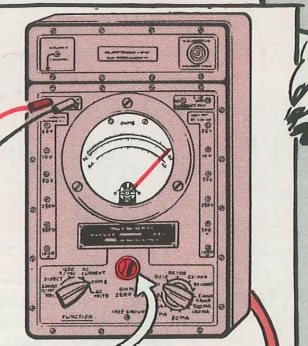
6. Connect the test probes across the item to be checked.
7. Turn the Range switch counterclockwise one range-step at a time until the needle centers on the meter.



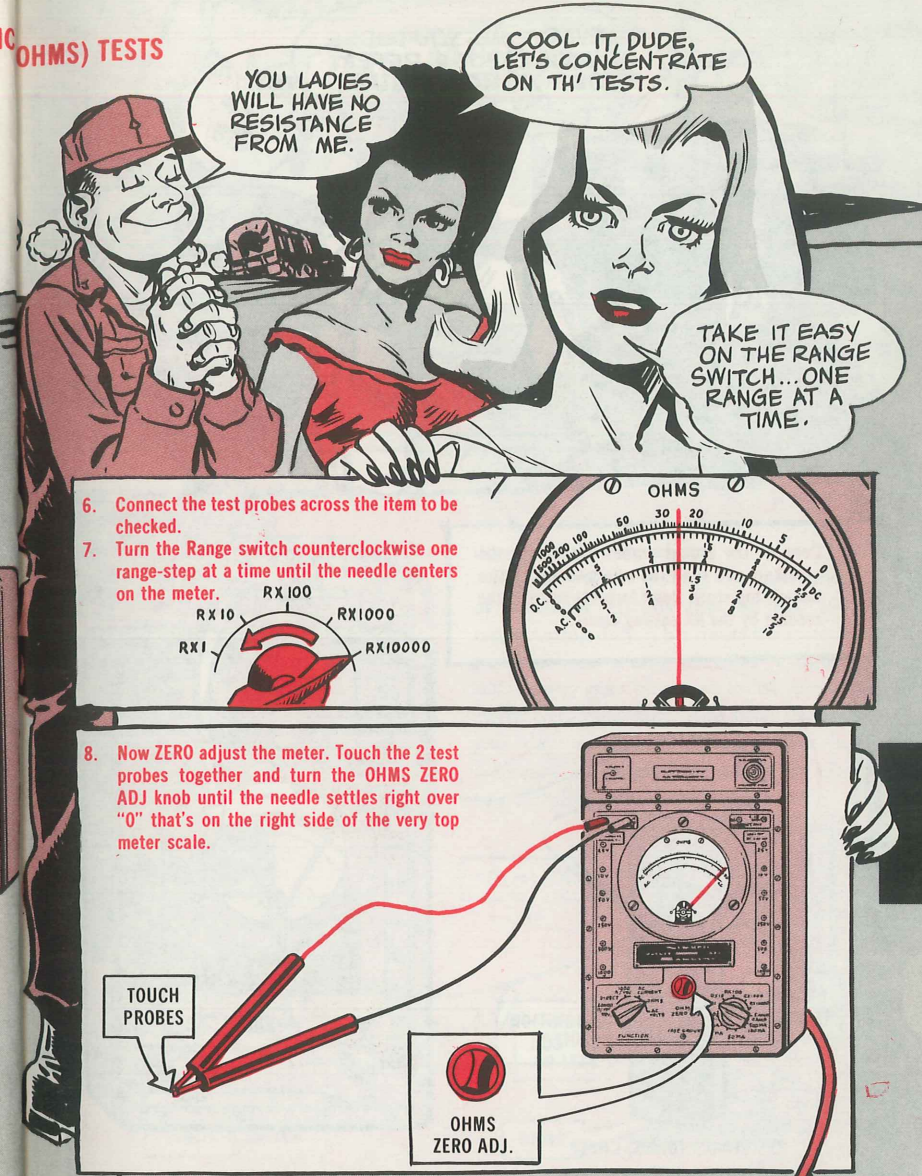
8. Now ZERO adjust the meter. Touch the 2 test probes together and turn the OHMS ZERO ADJ knob until the needle settles right over "0" that's on the right side of the very top meter scale.

TOUCH PROBES

OHMS ZERO ADJ.



MORE



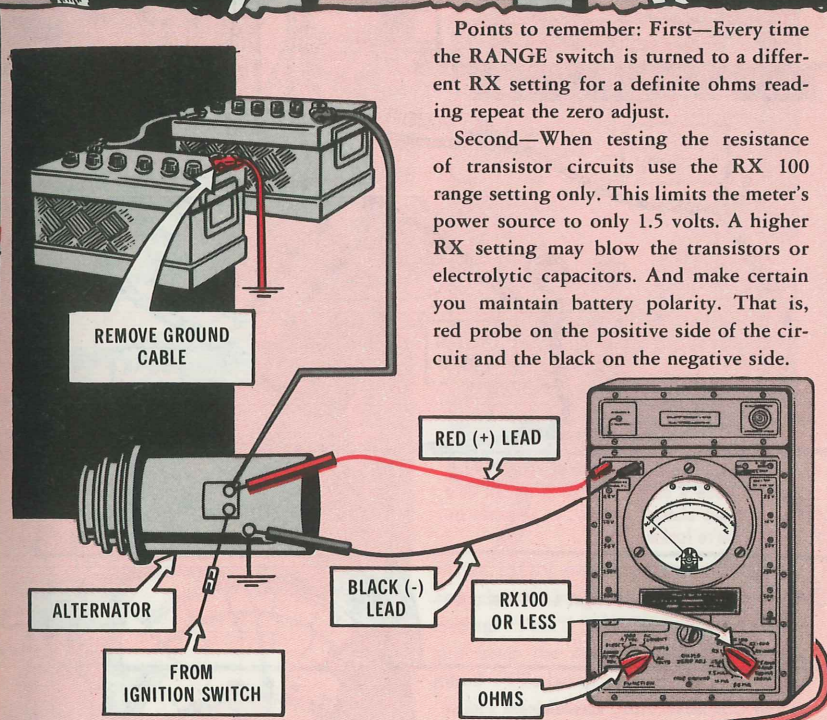
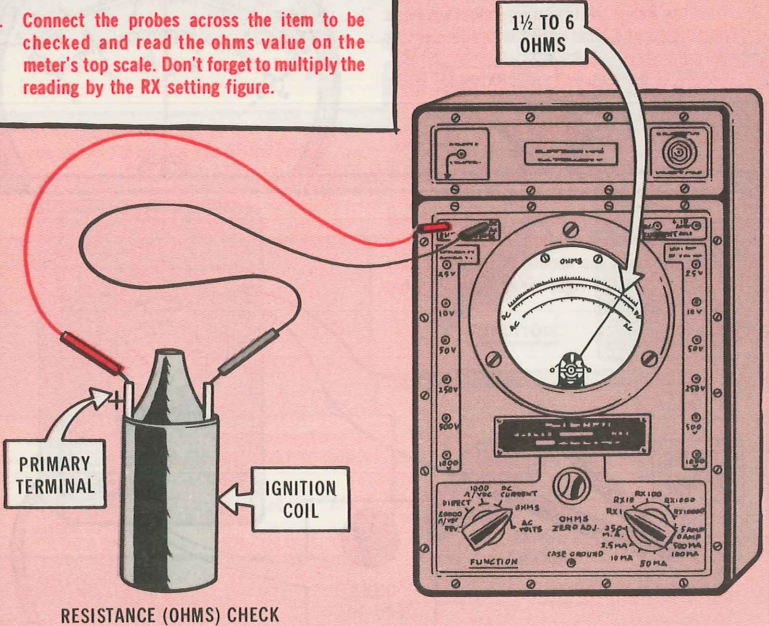
EVERYTIME YOU DUDES SWITCH RANGES, REPEAT YOUR ZERO ADJUST. DIG IT?

ZERO ADJUST

9. Connect the probes across the item to be checked and read the ohms value on the meter's top scale. Don't forget to multiply the reading by the RX setting figure.

Points to remember: First—Every time the RANGE switch is turned to a different RX setting for a definite ohms reading repeat the zero adjust.

Second—When testing the resistance of transistor circuits use the RX 100 range setting only. This limits the meter's power source to only 1.5 volts. A higher RX setting may blow the transistors or electrolytic capacitors. And make certain you maintain battery polarity. That is, red probe on the positive side of the circuit and the black on the negative side.

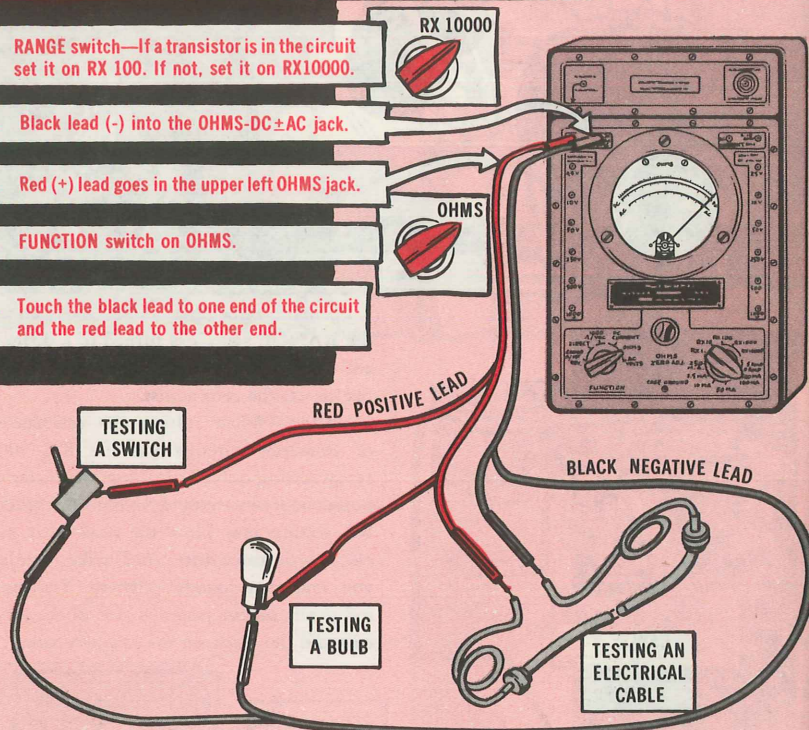


MORE

CONTINUITY TESTS

Used to test for broken or loose wires, closed or short circuits and burned-out lamps

1. RANGE switch—If a transistor is in the circuit set it on RX 100. If not, set it on RX10000.
2. Black lead (-) into the OHMS-DC±AC jack.
3. Red (+) lead goes in the upper left OHMS jack.
4. FUNCTION switch on OHMS.
5. Touch the black lead to one end of the circuit and the red lead to the other end.



6. If the needle swings to the extreme right it could mean a closed but good circuit or a closed but shorted circuit . . . Depends on what you're looking for.

7. If it doesn't move you've got a break or open circuit.

8. A jumping or flickering needle means a loose connection.

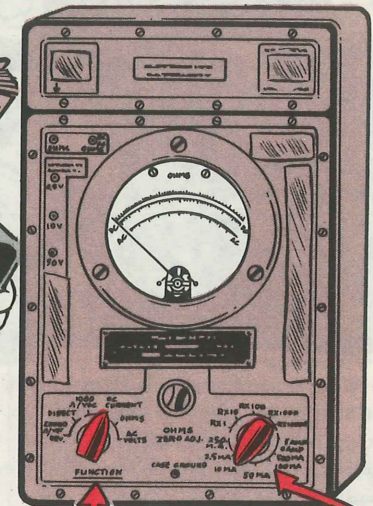
MULTIMETER TIPS

REMEMBER YOUR MULTIMETER IS DELICATE. NO STRONG-ARM JAZZ... AND KEEP WITH TM 11-6625-366-15 (JAN 67)...IT'S REAL STRAIGHT STUFF...

If you're only going to use the TS-352B /U on 28-volt automotive circuits, tape over these jacks.

TM 11-6625-366-15 (Jan 67) is the bible for the TS-352B/U. If you want to make other tests, check this TM first.

When putting the multimeter away, stow all the test leads in their proper compartment—neatly. And set the



FUNCTION switch on DC CURRENT and the RANGE switch on any MA setting. This'll stop any battery drain and keep the meter needle from being jolted while being carried.

The multimeter has delicate mechanisms so be gentle. No rough handling, please!

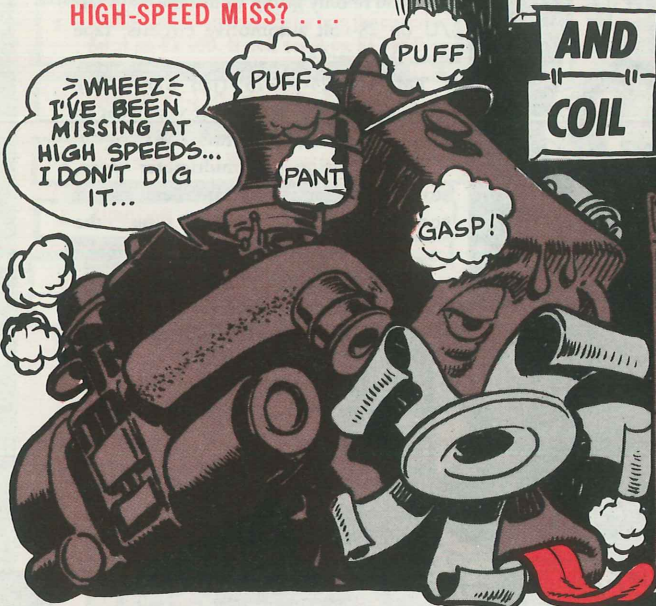


HIGH-SPEED MISS? . . .

TEST CONTACT SPRING

AND COIL

DON'T FREAK OUT... KID... WE'LL DO OUR THING... NO SWEAT!



RIGHT ON, DOC!

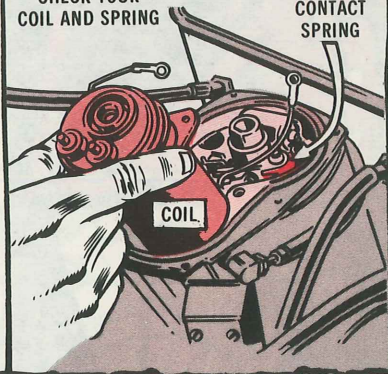
When a gasoline engine starts to miss at high speed, especially after a tune-up, it can be frustrating. And the most likely culprit is the distributor's contact spring tension or the coil.

Most tune-up hotshots will test the spark plugs, cables, connections, change points, condenser, and compression. They skip testing the spring tension and coil because they're least suspect. But just about every time they're not tested, trouble brews.

Any time you take off the distributor cover and work on the ignition points, nail the job down by making these tests:

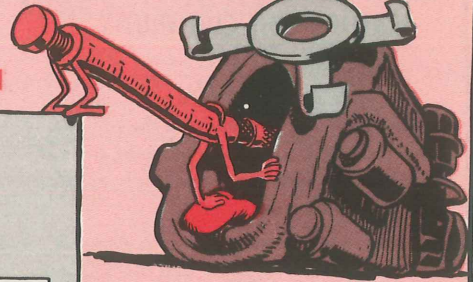
CHECK YOUR COIL AND SPRING

CONTACT SPRING



Rx

CONTACT SPRING TENSION

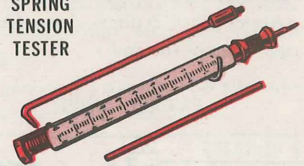


POINTS

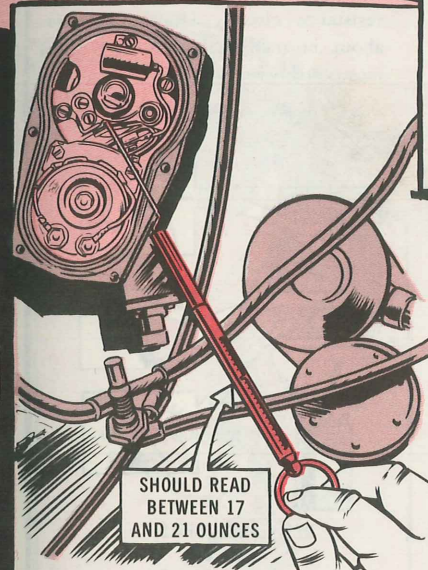
SCREW

1. After you've adjusted the points, turn the engine—a little at a time—with the starter with the ignition OFF. Turn until the distributor breaker cam rests with the points closed.

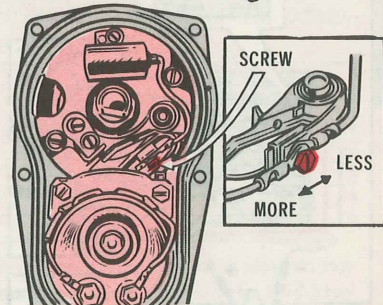
SPRING TENSION TESTER



2. With the spring tension tester, FSN 6635-449-3750, hook the scale on the breaker lever as close to the points as possible.



3. Now pull on the scale until the points just open. The scale should read anywhere between 17 and 21 ounces.

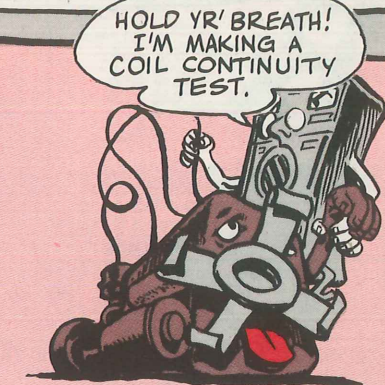
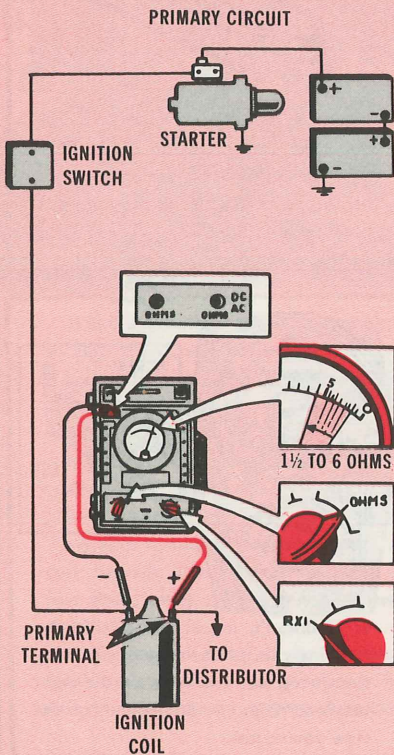


4. If it doesn't, adjust the tension by bending the spring or by positioning the spring slot until you get the right tension. What you do depends on the type you've got.

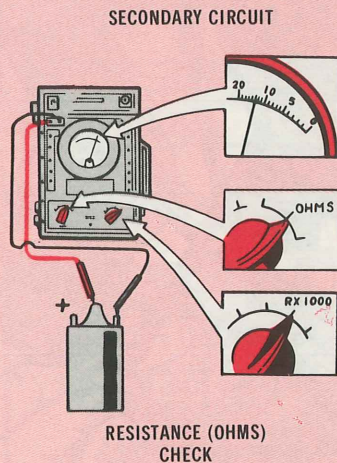
IGNITION COIL CONTINUITY TEST

For these tests you'll need your multimeter. They can be made with the coil on or off the vehicle. If made while the coil's in the vehicle, the ignition must be OFF and the points open.

1. Primary circuit—Set your multimeter on Ohms and RX1 and connect it across the primary terminals. The ohmmeter should show a low reading. (About 1½ to 6 ohms, depending on the make of the coil.)



2. Secondary circuit—Set the multimeter on Ohms and RX1000, and connect it to either primary terminal and the secondary terminal. The ohms reading should be less than 20,000. A higher reading indicates an open or high-resistance circuit. 14,000 ohms is about normal. A real low reading means a shorted winding.



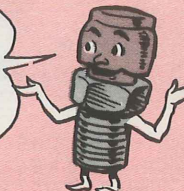
3. If the coil does not fall within these resistance readings, replace it. But turn it over to your DSU for a complete test.

BRAKE MYSTERY SOLVED



IT'S YOU, BREATHER!

YES, KANIN, TELL 'EM TO KEEP ME CLEAN--NOT CLOGGED.



So you mash down on your brakes to stop. You stop OK, but then your brakes won't release. They're locked on.

This can happen when you're jockeying an M54 or M813 5-ton truck—or any other truck in the TM-211-series or TM-260-series.

The answer to your problem may be real simple.

Probably you've got the wrong dummy coupling on your front air brake service connection. That's the one on the right side. If this dummy coupling has no breather on it, the piston in the hydraulic cylinder can't release after you put on the brakes.

Or, if you've got the job with a breather, it's clogged with paint or dirt.



BREATHER IN PLACE AND CLEAN



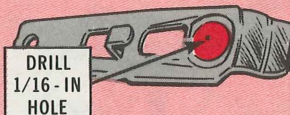
Get the right dummy coupling-with-breather, FSN 2530-740-9445. If you just need a new breather, get it with FSN 4730-604-0777. They're in TM 9-2320-260-20P (Jun 70).

IT MUST HAVE A GOOD CLEAN BREATHER

DUMMY COUPLING



DRILL 1/16-IN HOLE



In a pinch you can make that wrong dummy coupling do the job. Just have your mechanic drill a 1/16-in hole through the center of the bulge. But get the right job on there ASAP or you'll find dirt getting inside.



AIR MOBILITY

USE YOUR PREFLIGHT CHECKLISTS, PLUS . . .

PILOT PRIDE — BEFORE THE RIDE

BATTERIES...CHECK?
LIGHTS...CHECK?
TONSILS...CHECK?
EYES...CHECK?
ASHTRAY...CLEAN?
CHECK?

CHECK 'N' DOUBLE CHECK.

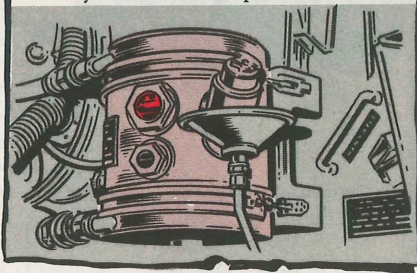
OK...OK...
HOW ABOUT CHECKING MY BIRTHMARKS.

A Pitch Puller is a professional breed o' cat. He preflights his UH-ID/H bird c-a-r-e-f-u-l-l-y before takeoff.

Are you a pro?

Take a look at the log book DA Forms 2408-12, -13, -14, and -18. Could be trouble aloft if a flight control, radio or engine problem develops from a fault that wasn't corrected.

Check all fuel and oil levels. If service is called for, the bird can be serviced while you finish the inspection.



GETTING DOWN TO IT

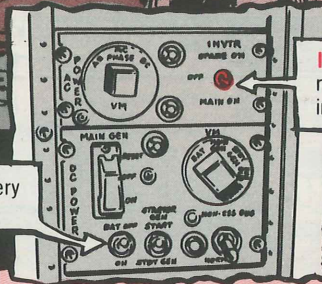
A heap o' safeties, wires, connections, mounts, rivets, screws, pins and lines hold your bird together, feed it and keep it in the air.

So, doublecheck all of 'em on your inspection. Be sure they are present, on tight, and will do the job. Same goes for cowlings and doors.

68

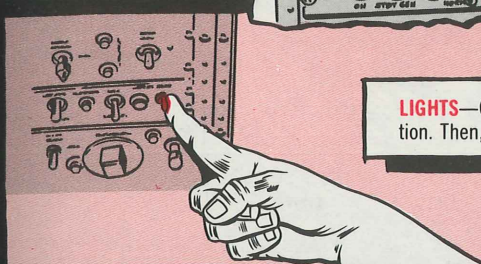


BATTERY—Switch loose. Flip battery ON and OFF for operation test.

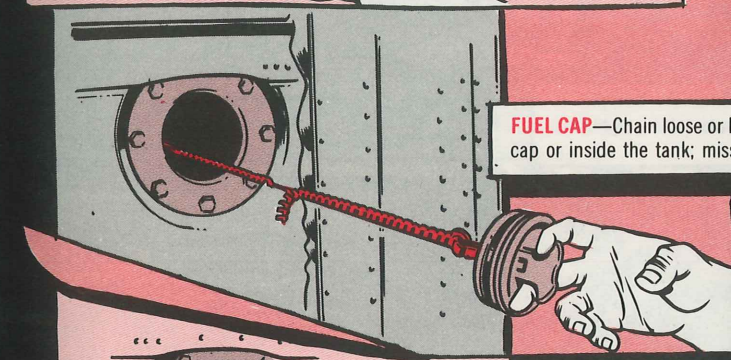


INVERTER—Flip it ON. Fuel gage reading should match fuel quantity in tank.

LIGHTS—Check 'em all for operation. Then, turn 'em OFF.



FUEL CAP—Chain loose or broken at cap or inside the tank; missing.



Turn fuel tank cap aft—hinge forward. Then, if latch doesn't snap snugly into the cap and the cargo door is slammed open, the latch is pushed down—not ripped off.

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EXTERIOR—FUSELAGE FRONT

ROTOR BLADES — Holes, dents, gouges; bond separation.

CHECK!

DOUBLE CHECK!

CHECK!

CHECK!

UNITED STATES ARMY

CABIN, LOWER AREA—Spoilers bent, broken, missing.

LIGHTS—Operate for nighttime mission?

CHECK!

ANTENNA—Damaged, loose, missing.
FUSELAGE—Damaged. Rivets loose, missing. Glass dirty, scratched, blurred.

CHECK!
CHECK!

PITOT TUBE—Cover left on. Double-check tube for dirt build-up.

AH AH!

RADIO COMPARTMENT DOOR—Damaged, won't close; loose.

STATIC PORTS—Dirty, clogged, mud-caked.

VENTILATORS—Damaged, bent, loose.

RADIO COMPARTMENT — Battery safety wire loose, missing (non-armored birds). Circuit breakers out. Wires, lines chafing. Electrical connectors loose.

PITOT TUBE—Clogged, bent, loose.

HMM

BATTERY VENTS—Slanted sides face in same direction?

If both vents face in same direction, hydrogen gas is trapped inside the battery. Any arc from cell to battery case can cause an explosion. Right installation creates a draft that keeps the battery purged of dangerous gas build-up.

LANDING AND SEARCH LIGHTS—Lens broken, dirty. Unstowed. Check for operation if part of mission will be in darkness.

HMMM... MUST LOOK INTO THIS.

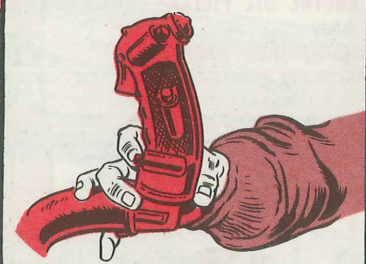
LEFT SIDE - FUSELAGE



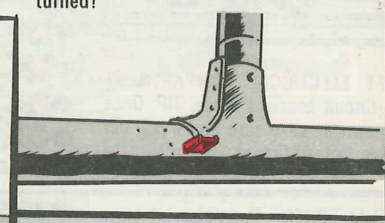
CARGO DOOR (Small)—Top 'n' bottom hinge pins damaged, missing. Forward cargo door must close completely. If it's out of track or bent, it won't close flush with the small door.

The emergency exit window handle not in line with skids. Safety missing.

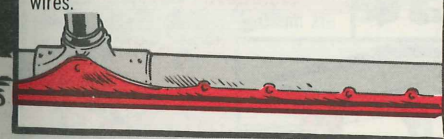
CARGO SUSPENSION—Hook won't work—either manually or by electrical impulse.



GROUND HANDLING WHEELS—Removed? Lug bolt missing or turned?



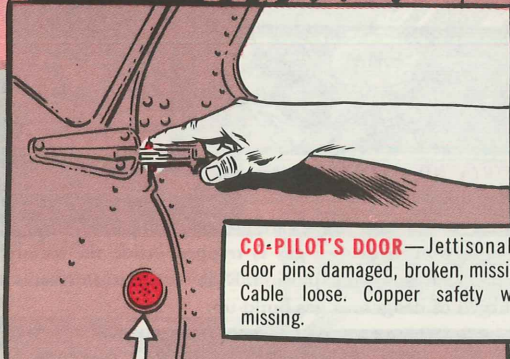
LANDING GEAR—Damaged, bent, out of line. Skid bracket cushions missing. Skid shoe bolts broken. Skid shoes overlap the wrong way . . . could catch on PSP or ground wires.



LEFT SEAT BELT/SHOULDER HARNESS—Ripped, torn, frayed. Belt hanging outside door.



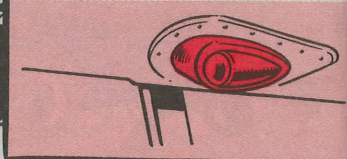
CO-PILOT'S DOOR—Jettisonable door pins damaged, broken, missing. Cable loose. Copper safety wire missing.



STATIC PORT—Dirty, clogged. You can make this check from the ground on birds with side-mounted static ports.



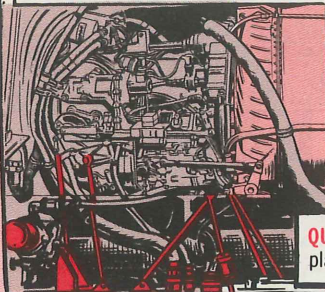
NAV LIGHT—Cracked, broken, missing lens.



FUSELAGE—AFT CABIN, LEFT SIDE

DROOP CAM—Opening too large.

DIFFUSER—Leaks, cracked.



BATTERY AND MAIN FUEL SWITCHES—Gotta have power to drain fuel and check for water contamination at fuel filter and sump drains.

Leaks at fuel filter.

ENGINE TRANSMISSION—Tripod, linear actuator, throttle linkage control loose, chafed, binding.

QUICK DISCONNECTS—Loose; pins playing hide 'n' seek.

FUEL FILTER—Loose; line twisted, chafed, damaged.

ENGINE OIL FILTER—Negative safety.

ELECTRICAL COMPARTMENT—Radio and slave gyro loose, damaged. Ground wire missing.

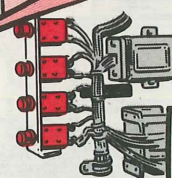
DESICCANT—Miscolored.

Check your bird's baggage compartment for oily rags, grease guns, oil cans, tools. Anything that could cause a short or fire has to go!



AFT ELECTRICAL COMPARTMENT

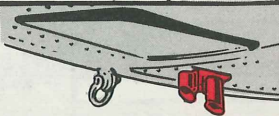
—Circuit breakers stuck. TIP: Once in awhile, make sure they'll pop out—in case of fire.



APU RECEPTACLE—Door open.
ACCESS DOORS—Damaged, fasteners missing.

FUEL FILTER—Drain clogged, loose, damaged.

RIGHT, LEFT FUEL PUMPS, SUMPS—Lines clogged.



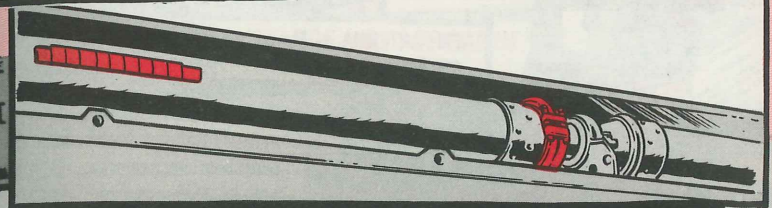
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AFT FUSELAGE—LEFT SIDE

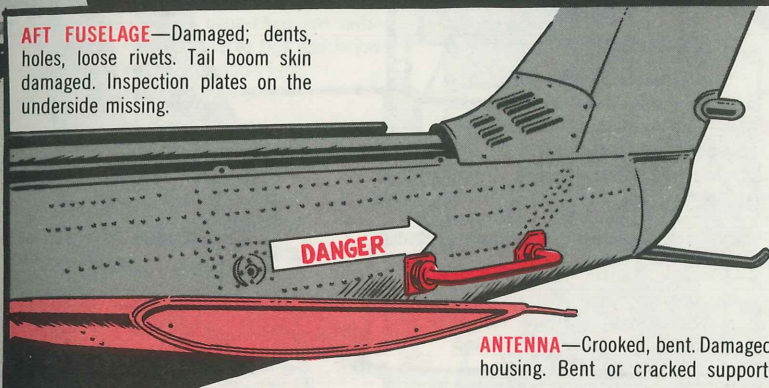
VERY INTERESTING.

TAIL ROTOR DRIVE SHAFT COUPLING—Out of position; loose. Tail rotor drive shaft bolt heads turn clockwise. Drive shaft weights missing? If so, be sure there's a stamp saying shaft was made that way. Could be the shaft was reworked by a depot.

Slippage marks on nuts missing. Drive shaft access door Dzus fasteners crooked, missing.



AFT FUSELAGE—Damaged; dents, holes, loose rivets. Tail boom skin damaged. Inspection plates on the underside missing.



ANTENNA—Crooked, bent. Damaged housing. Bent or cracked support.

SYNCHRONIZED ELEVATOR—Too loose. Missing rubber guard on trailing edge—corner.

MAIN ROTOR BLADES—Close eye-ball treatment called for here. Tied down.

75

FUSELAGE - FULL AFT

NAV LIGHT—It's not a handhold! Make sure it's riveted on tight. Lens cracked, broken, missing.

FM ANTENNA — Mount damaged, cracked.

PITCH CHANGE LINKS—Damaged, bent; bearings centered.

STINGER COVER—Damaged, loose.

STINGER—Dented, bent, paint missing. This could be telltale sign of a hard landing.

DUST BOOT—Ripped, torn.

TAIL ROTOR — Blades dented, cracked; bond separation. Installed backwards. Blade hits vertical fin. Binds. Cotter pins missing.

AFT FUSELAGE - RIGHT SIDE

TAIL ROTOR GEARBOXES—Leaks, cracked. Oil levels down. Spring loaded caps at wrong gearboxes.

They'll fit either oil reservoir, but the 42° gearbox gets the non-vented job; 90° gearbox gets the vented one.

ANTENNA—Loose, cracked.
SYNCHRONIZED ELEVATOR—Same as for left side.

AFT FUSELAGE—Skin gouged, buckled, ripped; rivets missing.

FUSELAGE—AFT OF CABIN, RIGHT SIDE

BATTERY VENT TUBES — Slanted sides should not face in same direction.

DOOR STOP—Missing, bent.

OIL COOLING FAN, COMPARTMENT—Rigid connecting link missing. Tail rotor servo bolt just below "T" connection won't turn.

If your bird is heaterless, double-check the area for rags, tools, clothing. Keep it clean, man!

Pinpoint your eyes where the fuselage and tail boom join. Any wrinkles on the skin might be a clue to a hard landing.

If battery is not installed, circuit breakers should be pulled.

OIL COOLER FAN — Loose. Screen mount damaged.

Same-same sharp inspection of doors, skids, lights as on left side.

CABIN TOP

CHECK, CHECK.

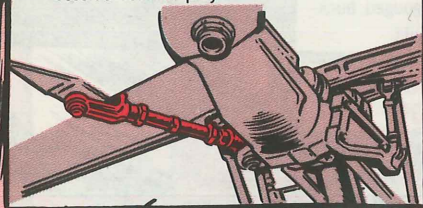
PITTO

I'M STILL LOOKING!

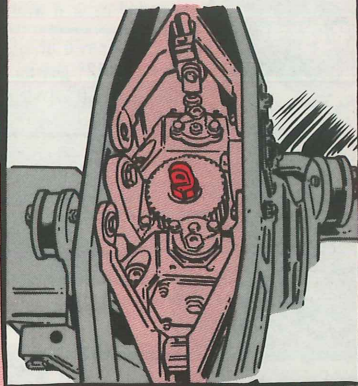
PITCH CHANGE LINKS—Too much bearing wear?

Check for lateral play in mixing lever by placing finger between mixing lever and stab bar.

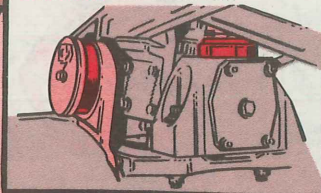
Grab a drag brace, place finger in pitch change links to check for excessive vertical play.



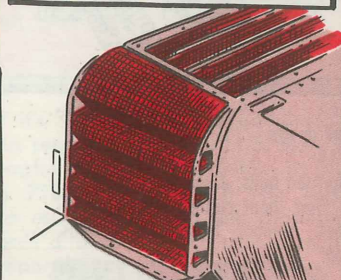
MAIN ROTOR SYSTEM—Retaining lock—Jesus nut—safety missing.



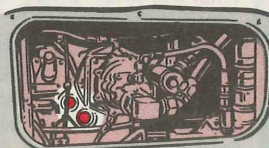
BLADE GRIP, PILLOW BLOCK, DAMPERS—Oil levels low.



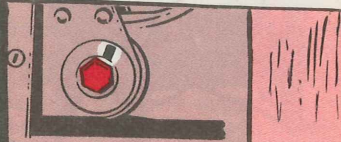
COLLECTIVE SLEEVE ASSEMBLY—Too much lateral play on collective sleeve.



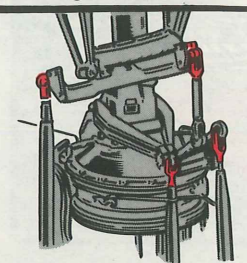
TRANSMISSION—Leaks; housing cracked; mounts loose; oil low, cap missing; access doors won't lock.



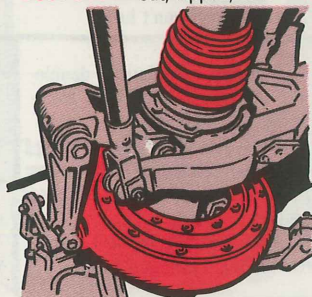
INLET SCREENS—Dirty, gunk-filled. Maxi-size holes in screen.



Eyeball split cones for movement. It's OK if they butt together. Cracks in mast. Movement in drive link scissors bearing not allowed.

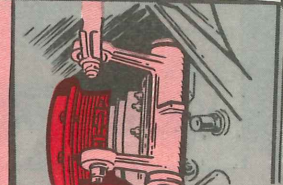


DUST BOOT—Cut, ripped, torn.



WASHPLATE—Up or down movement not allowed. Too much lateral movement?

SHORT SHAFT—Loose. Too much oil in transmission area.

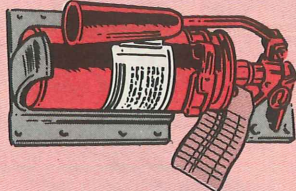


Slippage marks on transmission mount bolts missing. Check with unit SOP.

In or out play on trunnions not permitted.

INTERIOR CABIN

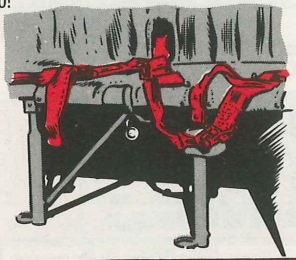
FIRE EXTINGUISHER—Pin missing. Inspection tag missing; out-dated. Valve assembly loose at bottom. Un-charged.



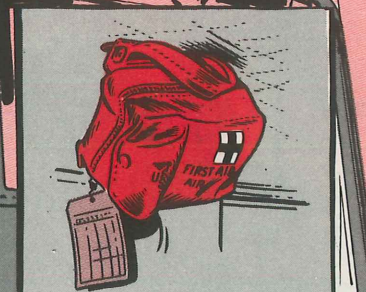
SEAT BELTS—Unbuckled; over-the-hill in age.

PASSENGER SEATS—Loose. Unbuckled belts; dangling.

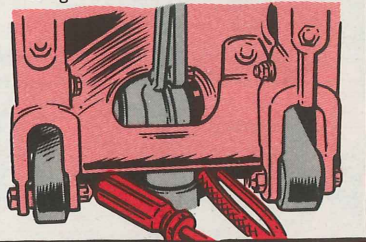
How 'bout clipboards, tools, helmets, ammo? They're FOD items, too!



FIRST AID KITS—Missing; safeties, inspection tags missing.



What's down under the T/R pedal controls? Anything that could jam 'em? How 'bout the 4 tail rotor pedal nuts. Missing, loose. Safeties missing.



One last tip: Any bolt or nut you can hand turn is suspect. Just be sure that you doublecheck any that's not supposed to turn.

PASS THE WORD

Ready to crank 'er up? Not yet. Clue your passengers about using safety belts and shoulder harnesses; also about keeping feet and hands off flight controls. Caution them about getting into—and out of—your whirlybird when the blades are turning. Keep heads low.

Yessir-e-e-e, preflight complete—the professional approach.

Light the fire!

*Connie's
Mini Mini's*



AR 710-2, Change 1

Change 1 (Jan 73) to AR 710-2 is out. Look for it. It's loaded with supply scoop . . . PLL, property book, records, forms, the works.

6th Inning Stretch

Never just ignore an M 349 type refrigerator van if it's not in use a long time. Operate it at least every 6 months to keep the refrigeration unit seals from drying out. It's like the air conditioning unit in a car. It's gotta be exercised to stay in shape.

Instant Horsepower

Want to get 60-80-100 more horsepower out of your ailing turbine engine, crew chiefs? You can with just a little extra effort. The secret is, spelled backwards, NAELC EHT ROS-SERPmoc.

Straps for M151

No need to get a whole new bow assembly for your TM-218-series ¼-ton truck when you want only the tie-down straps. Your support can make 'em for you, using Webbing, FSN 5340-791-5361, and Buckle, FSN 5340-057-6956, listed in their TM 9-2320-218-34P (Jan 72).

☆ U.S. GOVERNMENT PRINTING OFFICE: 1973 - 759-505/10

True Grit

A spark plug cleaner is only as good as its grit. For best cleaning jobs the abrasive should be replaced after 350 plug blastings. Ask for Grain, abrasive FSN 5350-222-0581, and you'll get a 10-oz can. SB 700-50 lists the abrasive as an "authorized as needed" item.

Status Report Guide

If it's your job to file equipment status reports under AR 711-5, there's a bagful of helpful guidelines in DA Pam 710-14 (Dec 72). It tells how these reports relate to unit property records and covers such special rules as reporting substitute items.

Both Needed

Aircraft materiel condition tags and labels, listed in TB 750-126 (Oct 70), should be used in addition to TAMMS forms when parts are shipped. Then, important historical info won't be lost. That's the word in para 5f of TB 55-1500-307-25 (Nov 72) on components requiring historical data.

Survival Kit Pub

For PM checks and services on aircraft kits—hot and cold climate, over-water and vest—eyeball Chap 2, Sect II of TM 55-8465-206-23 (Sep 72), bird men. It's the latest!

Would You Stake Your Life ^{right now} on the Condition of Your Equipment?

MAINTENANCE

YOU CAN ALWAYS TELL WHEN PM IS NOT BEING PULLED.

PUT THE "M" BACK IN MAINTENANCE! PUL-EEZE...

YEAH, THE WORD'S MAINTENANCE NOT "AINTENANCE!"

