

Issue 305

PS

April
1978

THE PREVENTIVE MAINTENANCE MONTHLY

YOU
MEAN
YOU DON'T
HAVE ANY
SPEAR
SHAFTS?

NAAAAH!
WE ONLY STOCK
CHARIOT PARTS!

WE DON'T
NEED SPEAR
PARTS OFTEN
ENOUGH TO
KEEP ANY
ON HAND!

PLL

SEE PAGE XXIX
"PLL DANGER SIGNALS"

MURPHY
ANDERSON



THE PREVENTIVE MAINTENANCE MONTHLY

Published by the Department of the Army for the information of all soldiers assigned to combat and combat support units, and all soldiers with organizational maintenance and supply duties.

Within limits of availability, older issues may be obtained direct from Editor, PS Magazine, c/o US Army Materiel Readiness Support Activity, Lexington, KY 40511.

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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: Or call: AUTOVON 745-3503.

MSG Half-Mast
PS Magazine
Lexington, KY
40511

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GOOD Are

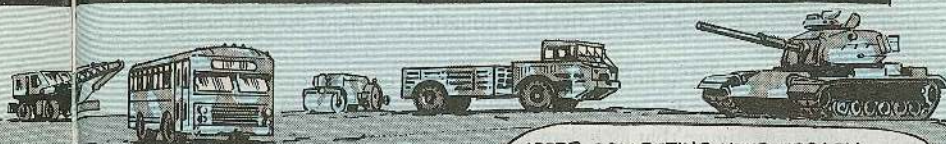
No job's finished until the paperwork's done. But, if you're rasslin' with your unit's vehicle driving and equipment operator program, paperwork's where it starts.

The best way to pin that paperwork is to start with a good library.

MAKE SURE YOU HAVE THE PUBS THAT APPLY TO YOUR EQUIPMENT!



OPERATORS Trained—Not Born



AFTER COLLECTING YOUR LIBRARY AND GETTING ACQUAINTED WITH WHAT'S INSIDE, YOU'RE READY FOR THE NEXT STEP-- PICKING DRIVERS AND OPERATORS.

LIBRARY

AR 600-55

Motor Vehicle Driver—Selection, Testing, and Licensing (Jan 68)

AR 600-58

Mechanical Equipment Operator—Selection, Training, Testing, and Licensing (Sep 74)

AR 385-10

Army Safety Program (Feb 70) Ch 1-5

AR 385-40

Accident Reporting and Records (Aug 72) Ch 1

AR 385-55

Prevention of Motor Vehicle Accidents (Apr 74)

TB 600-1

Procedures for Licensing Operators of Equipment Managed by the US Army Mobility Equipment Command (Jul 77)

TM 21-300

Driver Selection and Training (Wheeled Vehicles) (Jul 67) Ch 1

TM 21-301

Driver Selection, Training and Supervision, Tracked Vehicles (Jul 67)

TB 9-2320-218-10-1

Safe Operation of Truck, Utility, ¼-Ton, 4x4, M151 Series (Jun 74)

AR 58-1 (Chap 5)

Joint Procedures for Management of Administrative Use Motor Vehicles (May 67) Ch 1-12. (You'll need this AR if you have anything to do with Admin-use vehicles.)

AR 190-5

Motor Vehicle Traffic Supervision (Aug 73) Ch 1, 2



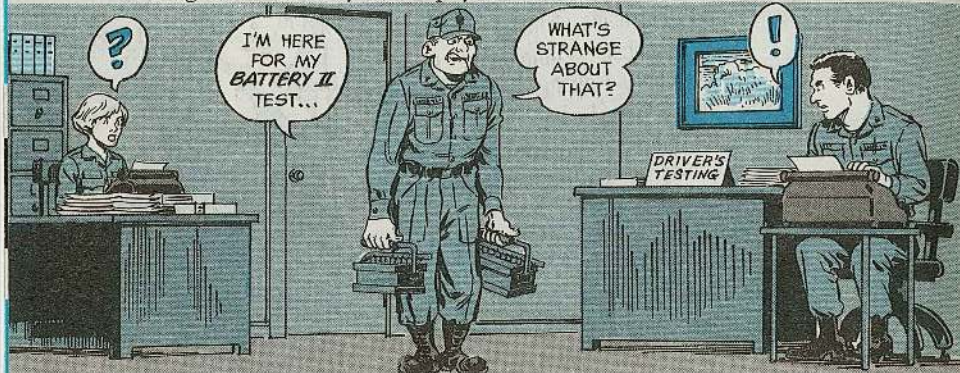
Testing

Awhile back, troops automatically took the Battery I test when they came into the Army. If they came to you with a score of 85 or higher, you just sent them to Driver's Testing for the physical evaluation and road test and the SF 46 Driver's License.

But, times change. The headshed says getting a civilian driver's license is the same as taking Battery I. The problem is, tho, that not all states give the same test. So you can't figure that a civilian license is the same as passing Battery I with a score of 85 or better.

The headshed worked it out this way: Only soldiers entering the Army with no civilian driver's license take Battery I.

After the soldier is assigned to a unit, the commander decides whether the soldier's job requires a driver's license. If so, you send the soldier to Driver's Testing to take Battery II, the physical evaluation and road test.



'Course, soldiers with Battery I scores of 85 or higher from the reception station just take the physical evaluation and road tests. With a Battery I below 85, the reg says take Battery II.

Some commands ask for higher overall scores for drivers carrying people or dangerous cargo—but, that's up to local SOP. Either way, you want quick-thinking, quick-acting people driving those vehicles. AR 385-55 says you need mature, competent people, usually at least 21 years old operating them.

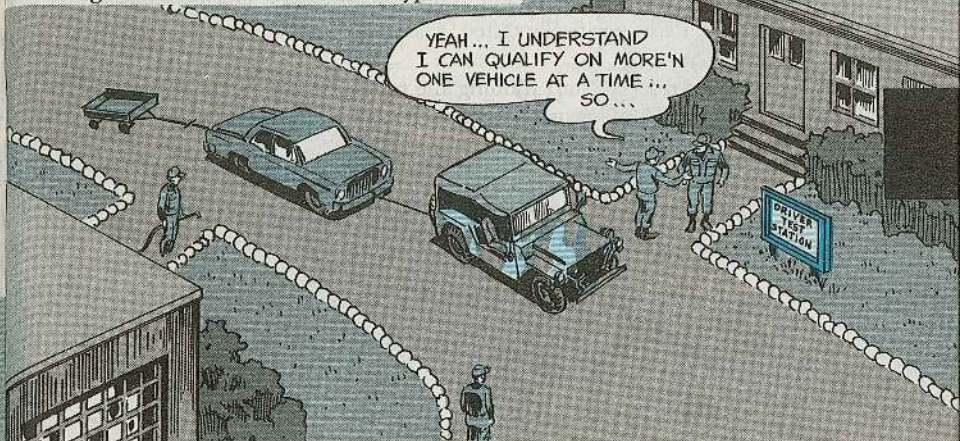
'Course, you consider more than just scores in choosing any type operator or driver. Look at their mental and physical skills, prior driving record and attitudes. A good operator or driver needs more than a warm body.

Some states do not recognize the SF 46. If your drivers operate off-post, check with your local state police. Your drivers may need a civilian license when they use state roads.



Qualifying

Your wheeled vehicle drivers may qualify for more than one vehicle at a time. Usually, passing on one vehicle automatically qualifies them on any lighter vehicles with the same type chassis.



But, there are exceptions. If your drivers pass on a vehicle with automatic transmission, they're limited to automatic transmission until they pass on a straight stick. That limitation has to be shown on the SF 46, too.

The ¼-ton truck (M151-series) has special handling problems. (A careless driver may find himself driving upside down!) Your drivers must specifically pass on the ¼-ton no matter what weight vehicles they've already qualified on.

RESTRICTIONS		
LT/Hvy w/corrective lenses		
QUALIFIED TO OPERATE		QUALIFYING OFFICIAL
TYPE VEHICLE AND/OR EQUIPMENT	CAPACITY	
Sedan	SP	M. J. Pulaski
Truck, Util ¼T	NA	M. J. Pulaski
SP Howitzer 155m	NA	John Miller
Generator 15kw	NA	Richard Wilson
OTHER RECORDS (OPTIONAL)		
Quick Thinking Award 16 SEP 77		

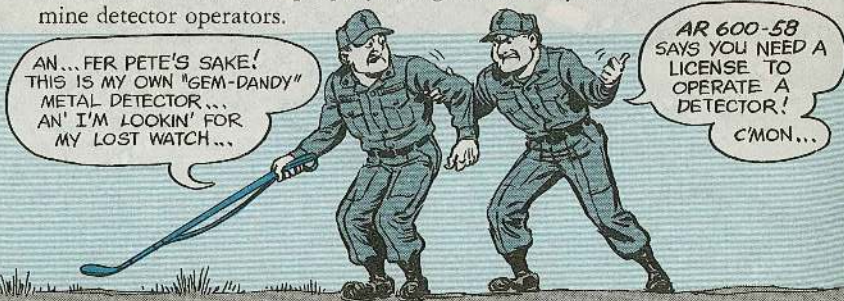
INFO ON THE BACK OF THE SF 46 SHOULD MATCH DA 348 ENTRIES!



Operators qualify for tracked vehicles one at a time. When they pass on a specific vehicle, only that vehicle goes on the SF 46. Lighter or similar items must be added as the operator qualifies specifically on them.

Special purpose equipment, like forklifts, locomotives, generators, compressors and construction equipment, count the same way. The operator only qualifies on the item specifically tested. And only those items go on the SF 46 and DA 348.

When you get ready to start training and testing, take a look at AR 600-58. You have to license some people you might not think you would—for instance, mine detector operators.



SF 46 classifies your operators as light or heavy—depending on the equipment's size—not the operator's! Straight trucks 2½-tons and smaller are light while straight trucks over 2½-tons and tractor-trailer combos are heavy. Tracked vehicles are always heavy.



Self-propelled vehicles in the special purpose family of equipment need a "command decision" on weight class. But, cranes, bulldozers, locomotives and mobile assault bridges should be heavy.

Other special purpose items are mounted on standard tactical truck chassis—fire engines, bridge transporters and water purification units, for example. The truck chassis determines the weight class.

Training

As a rule, an experienced operator is a good operator. Since new operators are usually short on experience, give 'em a substitute—training.



Before you start your training program, look for good instructors. They've got to know the equipment as well as how to handle students. FM 21-6, How to Prepare and Conduct Military Training (Nov 75) might help.

HERE ARE SOURCES OF INSTRUCTIONAL MATERIAL--



EQUIPMENT	INSTRUCTIONAL MATERIAL
Wheeled Vehicles 	Training Film (TF) 55-4167 and 55-4168—The Safe Military Vehicle Operator, Parts I and II. Maintenance, loading and driving are covered. GTA 9-1-182—Preventive Maintenance—Wheeled Vehicles. Item-by-item check of daily preventive maintenance. 26 frames. FM 21-305—Manual for the Wheeled Vehicle Driver (Apr 75)
 	Miscellaneous Film (MF) 55-8769 and 55-8770—Safe Driving in Bad Weather, Parts I and II. Both light and heavy wheeled vehicles are covered.

TAKE
ADVANTAGE
OF THESE
TRAINING
AIDS...

Truck, ¼-Ton



GOER Vehicles M520,
M553, M559



Howitzer (SP)



M88



M578 Recovery Vehicle



Tracked
Vehicles



LARC V



Generator



All equipment



TF 55-3707—Operation of the M151-Series ¼-Ton Utility Trucks.

TF 55-4247—Truck Utility, ¼-Ton M151A2, Characteristics and Handling.

DA Pam 350-32-1—Operator Training Course, Tactical and Support Vehicles:

Truck, Utility, ¼-Ton, 4x4, M151 (Jan 70).

TM 9-2320-218-10—Operator's Manual Truck, Utility, ¼-Ton 4x4, M151 (Sep 71).

OTC 55-1 GOER Operator Training Course (Extension). Order from US Army Transportation School, ATTN: ATSP-DS-

LG-S, Ft. Eustis, VA 24604.

MF 17-5934—GOER. Nicknamed the Go-Go film, it gives safe driving hints as well as before, during and after operation checks.

TF 9-3359—Howitzer, Self-Propelled M108, M109, Operation and Organizational Maintenance.

TF 9-3381, TF 9-3382, TF 9-3383, TF 9-3384—Recovery Vehicle M88.

TF 9-3783—Recovery Vehicle M578.

FM 21-60—Visual Signals (Dec 74).

TM 21-306—Manual for the Tracked Combat Vehicle Driver (Aug 64), Ch 1.

DA Pam 350-32-4—Operator Training Course: LARC V (Jan 70).

TF 9-3106—Motors and Generators—Part I—DC Motors and Generators.

TF 9-3107—Motors and Generators—Part II—AC Motors and Generators.

TM 10-1101—Petroleum Handling Equipment and Operation (May 72), Change 1.

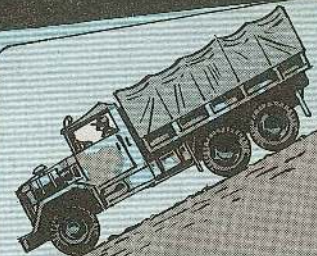
TM 9-8000—Principles of Automotive Vehicles (Jan 56).

FM 20-22—Vehicle Recovery Operations (Jul 70).

HEY! THIS
FILM IS
GREAT!!

WOW... I
NEVER KNEW
YOU COULD
BRAKE THAT
WAY...

GRR-RMMP!!
I DON'T LIKE
TH' PLOT!



DA Pam 108-1, Index of Army Motion Pictures and Related Audio-Visual Aids (Jan 77) lists many other films. You can see a copy at your Training and Audiovisual Support Center (TASC.) They'll get you the films, too. They also can tell you about new training items like TEC Lessons (Training Extension Courses.)

If you're interested in a defensive driving program, DA Pam 108-1 lists several series under the Miscellaneous Films (MF) section: MF 20-5280 A through H and MF 20-8948 through 8953.

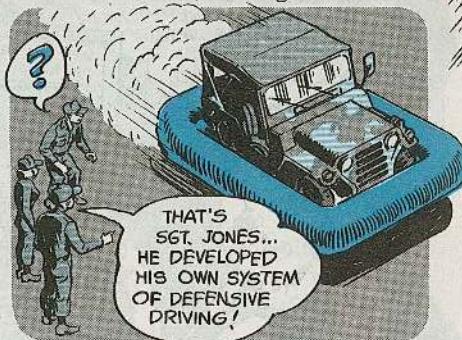
MF 20-5152, The National Defensive Driver's Test is the same program that ran on TV a few years ago. This film is not required—but strongly recommended.

Check with your Safety Office. Many posts require a defensive driver course.

Apart from the films on the M151-series, the headshed leaves training requirements pretty much up to local SOP. So before you release a driver, check your command and local SOP for film, pub and course requirements on different types of equipment.

Every operator, tho, must know when and how to use the operator's manuals. Clean, unused pubs are a sign of trouble!

Keep an eye on the way your operators fill out and use the equipment logbook DA Form 2408-1, DA Form 2400, DA Form 2404 and SF 91 Operator's Report of Motor Vehicle Accident.



NOW THAT YOU'VE
TRAINED AND TESTED
YOUR OPERATORS,
WHAT NOW?

JUST FLIP
THE PAGE...

PS MORE

Licensing

The SF 46, US Government Motor Vehicle Operator's Identification Card is the Army's driver's license. Crank up your typewriter or get out a pen and fill it out. Make future entries the same way. The SF 46 is a permanent, controlled form. Ink, stamps or typewritten entries help keep the form that way. It is good for 3 years from the day of issue.

THIS BLOCK SHOWS THE ISSUER -- USA, USAR OR NG -- PLUS THE NUMBER ISSUED AND THE LAST TWO DIGITS OF THE CALENDAR YEAR.

THIS BLOCK IDENTIFIES THE CO (OR AUTHORIZED REPRESENTATIVE) WHO ISSUES THE LICENSE. IF THE ORIGINAL EXAMINER IS GONE, CO CAN VERIFY TRAINING ON THE BACK OF THE CARD.

U.S. GOVERNMENT MOTOR VEHICLE OPERATOR'S IDENTIFICATION CARD

CARD NO. USA 165-77

DATE ISSUED 1 AUG 77

DATE EXPIRES 1 AUG 80

NAME OF OPERATOR Hanson, Ray G. Jr.

SEX M BIRTH DATE 12 MAR 47 COLOR OF HAIR Brown COLOR OF EYES Brown HEIGHT 6' WEIGHT 200

BIRTHPLACE Yankton, SD SOCIAL SECURITY NO. 504-58-0509

SIGNATURE OF ISSUING OFFICIAL [Signature]

TITLE [Signature] Company CO

NAME AND LOCATION OF ISSUING UNIT 153d Maintenance Co, Ft Carson, CO

SIGNATURE OF OPERATOR [Signature]

NOT TRANSFERABLE

Card must be carried at all times when operating Government vehicles

Standard Form 46 (December 1962) USGPO - VPM Chap. 830 16-104-02

The operator with a clean record renews his license with a new physical evaluation and a short road test. A Battery I or II score lasts a lifetime unless the operator loses the license through accidents or bum driving.

If the license has been taken away, the driver starts over. He is retrained and retested, starting with the Battery II.

If you fill up the SF 46, issue another. Assign it a new number. It's a separate license.

DA 348

Next, pull out the copy of the DA Form 348, Equipment Operators Qualification Record.

The 348 is a permanent record of the operator's driving history. The top of the form takes information from the SF 46. You enter the heavy or light restriction in the limitation block.

SECTION I - OFFICIAL QUALIFICATIONS

TYPE OF EQUIPMENT	SIZE	SPECIAL QUALIFICATION ¹	DATE QUALIFIED	QUALIFIED AT	NAME OF EXAMINER
SEDAN	5P	NONE	23 MAY 77	FT. CARSON, CO.	M. H. Pulaski
TRUCK, UTIL.	1/4 TON	NONE	25 MAY 77	FT. CARSON, CO.	M. H. Pulaski
SP MONTZER	155 MM	NONE	30 MAY 77	FT. CARSON, CO.	John Miller
GENERATOR	1.5 KW	NONE	31 MAY 77	FT. CARSON, CO.	Richard Wilson

SECTION II - BACKGROUND AND EXPERIENCE

TYPE OF EQUIPMENT	SIZE	TYPE OF DRIVING OR OPERATION ²	ADDITIONAL DRIVER'S LICENSES (State or agency)	NUMBER OF OTHER DRIVER'S LICENSES	SATISFACTORY EXPERIENCE VERIFIED BY
AUTOMOBILE	5P	URBAN/RURAL	SD 1972	031247-A	Rich Wilson
TRACTOR, FARM	NA	RURAL	SD 1972	031247-A	Rich Wilson

¹ Special equipment, special operations or conditions

² City, rural, long haul, etc.

Section I repeats the permit information. Section II lists civilian licenses and any experience the driver brought into the Army.

Training, renewals, reissues and everything else goes in Section III. It's the spot for everything of note which happens to the driver.

Traffic accidents, violations, safety citations and awards, training, revocations, new Battery II tests—all go in Section III.

SECTION III - PERFORMANCE RECORD

(List chronologically as "credits": awards, training, retraining, testing, retesting, roadtest, permit renewal, retraining, etc. and as "debits": accidents, violations, warnings, revocations, suspensions, etc.)

DATE	CREDITS	DEBITS	TYPE OR NATURE	ACTION TAKEN
27 MAR 75	X		DEF. DVG. CRSE	COMPLETED TWO WEEK COURSE AT MINDY'S DRIVING SCHOOL, TER, SD
28 JUN 77		X	VIOLATION	RAW STOP SIGN, FT. CARSON, FINED IN MAG. COURT, LICENSE REV. 22 JUL 77
29 JUL 77	X		DEF. DVG. CRSE	COMPLETED WEEK-LONG SAFETY OFFICE COURSE, FT. CARSON, CO.
1 AUG 77	X		RETESTED	PASSED BATTERY II PERF.
1 AUG 77	X		REISSUE	ORAL + ROAD TEST, COUNSELED NEW SF 46 ISSUED - USA 165-77

OPERATOR'S DRIVING HISTORY IS TOLD BY DEBITS AND CREDITS.



INK OR TYPED ENTRIES MAKE FORMS PERMANENT.

When you fill up the 348, get a new form, put the driver's name and SSN at the top and attach it to the old form. Do not cut up a new form and paste new blocks onto the original DA 348.

NAME (Last, first, middle) AND SOCIAL SECURITY ACCOUNT NUMBER HANSON, RAY G JR. 504-58-0509		NUMBER		PERMIT (NAME)		DATE ISSUED	
TYPE		CITY/STATE/ZIP/CITY OF ORIGIN		POSITION TITLE (If applicable)			
TEX	DATE OF BIRTH	COLOR HAIR	COLOR EYES	HEIGHT	WEIGHT	POSITION TITLE (If applicable)	
SECTION I - OFFICIAL QUALIFICATIONS							
SECTION II - PERFORMANCE RECORD (List chronologically)							
DATE	CREDIT	DEBITS	TYPE OR NATURE	ACTION TAKEN			
16 SEP 77	X		CITATION	CO. STATE PATROL "QUICK THINKING" AWARD - GAVE FIRST AID TO ACCIDENT VICTIM ON I-25 NEAR POST.			
EQUIPMENT OPERATOR'S QUALIFICATION For use of this form, see AR 385-55 and AR 400-55; the proper use of this form is explained in the instructions.							
DA FORM 348 REPLACES DA FORM 348, 1 AUG 68, WHICH WILL BE USED UNTIL SUPPLIED BY THE ARMY.							

NAME AND SSN ARE ALL THE INFO NEEDED TO START A CONTINUATION SHEET!

Glance over the DA 348 at least yearly so you'll know if any special training or recognition is due. Any time an operator has an accident, check the DA 348. He may need some extra training, and the 348 should clue you in.

TM 21-301 suggests a re-exam every 6 months for track drivers.

With the information you've got now, and a couple of hours spent in your new library, your rasslin' days should be numbered.

GROUND MOBILITY

Goer Fluid Fountain?

HAW! YA DIDN'T LOOSEN THE CAP SLOWLY, HUH?

'COURSE NOT! I ALWAYS TAKE A STEERING FLUID SHOWER ON WARM DAYS!

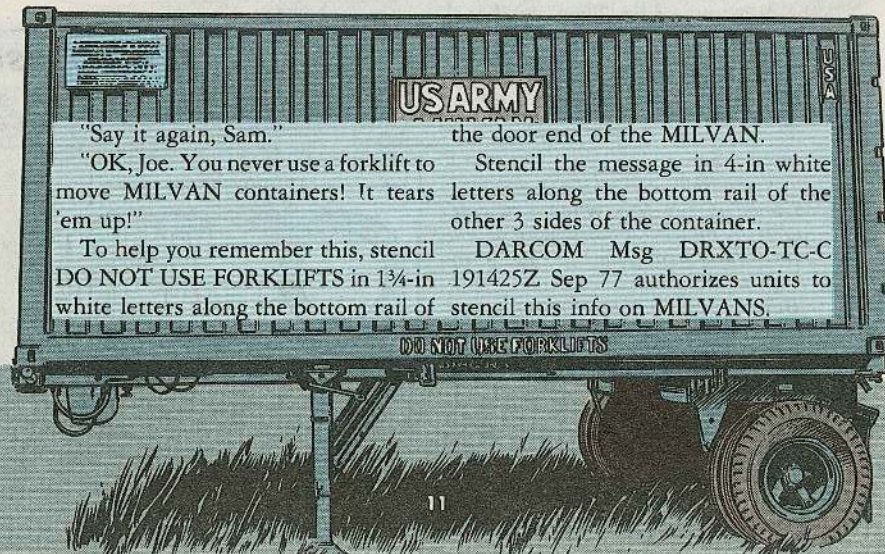
WOTTA JERK! IT AIN'T THAT FUNNY!

If pressure buildup in your Goer's power steering reservoir is pushing fluid out of the tank when you check the level, read on. You can relieve the pressure by loosening the cap slowly—the air pressure should bleed through the cap when it's removed about half-way. After about 10 seconds, or when you hear the venting air stop, you can take the cap all the way off without a messy fluid surge.



Never check fluid levels when the system's still hot after operation. That goes for the cooling system as well as hydraulics.

Mark Those MILVANS



APPLES + ORANGES = FRONT AXLE LEAKS

Y-KNOW
THERE ARE
SEALS...

... AN'
THEN
THERE ARE
SEALS!

TALK IS
CHEAP--EVEN
FROM A SEAL.

JUST TELL ME
WHICH SEALS
I NEED TO
STOP THAT
LEAKING!

Mixing front axles and seals on a 2½-ton truck will add up to trouble for sure—like gear oil leaking from the axle housing into the steering knuckle boot.

And this leads to worse trouble . . . as the oil washes the GAA out of the steering knuckle . . . and the steering knuckle poops out from poor lubing.

You hear mechanics moaning about such troubles. They've "done everything" to lick the problem—they think.

They've made sure the differential oil level is not above the bottom edge of the check-fill hole—to keep pressure down in the axle housing. They've cleaned the axle housing breather—to relieve pressure. They've even put in new seals.

But did they put in the right seals?

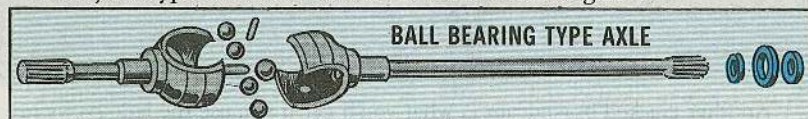
Watch it! There're 2 different types of front axles for the deuce-and-a-halves. Each type takes its own special seals. You can't use the seals for one type axle on the other type axle. They won't seal.

The newer axle is the U-joint type. You'll find the parts break-down in TM 9-2320-209-20P (Oct 76), page 231, Figure 108. The seals for this axle—and only this axle—are listed on pages 228 & 229 in the -20P.



U-JOINT TYPE AXLE

But your truck may have the older, ball bearing type front axle. It's not in your TM's—but there're still plenty of 'em around. It's interchangeable with the U-joint type axle—but the seals are not interchangeable.



BALL BEARING TYPE AXLE

When your ball bearing type axle needs new seals, you get Retainer, packing, NSN 2520-00-311-7545. For about 8 bucks, this brings you a seal and 2 different thrust washers.

...OR YOU CAN GET
'EM CHEAPER--ABOUT \$2.50--
BY ORDERING
SEPARATELY...

Seal, NSN 5330-00-291-2834
Washer, NSN 3120-00-752-1763
Washer, NSN 3120-00-066-1315

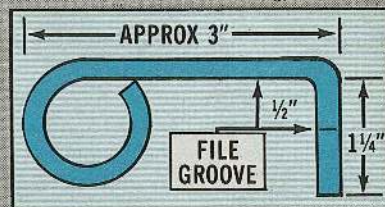
Gear Case Oil-Checker

Dear Editor,

It's generally agreed that a gear case oil level is too low when you can't touch the oil with the first joint of your index finger bent over the edge of the check-fill hole.

But all fingers are not the same size. An inspector with stubby fingers may say the oil level's low—after an operator or mechanic, with longer fingers, has checked it and found it to be OK.

A "finger equalizer" is what's needed to settle the point. The gage can be



easily made from 'most any hunk of metal rod or fairly rigid strip of metal. A piece about 3/16 inch wide (or diameter) and 6 to 7 inches long will do.

FULL LEVEL IS AT
BOTTOM EDGE OF
CHECK-FILL HOLE

IF OIL LEVEL
IS BELOW THIS
MARK, ADD OIL
TO FULL LEVEL

Make sure the vehicle is on level ground and check the gear case when it's cold so you get a true oil level reading.

You can get your local command to put out the word in written SOP that 1/2 inch below the check-fill hole is established as the low mark for the gear case oil level.

Arthur H. Keas
Ft. Sill, OK

(Ed Note: This's great for equipment that has no specific lube level spelled out in the LO.)

I DIDN'T KNOW THE BRAKEDRUM WAS AN ENDANGERED SPECIES!

MUCH AS THEY COST, THEY SOON COULD BE!

ATTABOY! LAY IT ON 'EM, GAMA!

GAMA IS ON THE WARPATH!

GO GET 'EM, GAMA!

SAVE THE BRAKEDRUM

Another cracked brakedrum is what you'll get if you use the jackscrews to remove a Gama Goat brakedrum when the drum and axle splines are rusted together.

Believe it! Cracked brakedrums are costing US a fortune.

Here's how you can remove a brakedrum without cracking it, whether the splines are rusted or not.

Remove the screw, gasket and lockplate from the center of the drum.

Screw a ½-20 X 2½-in long bolt (grade 5 or harder) into the drum center hole till the bolt "bottoms out."

Be real careful not to hit the drum as you hammer the bolt thru the drum. Use the 3-lb ballpeen hammer from your No. 1 Common Shop Equipment.

Drive the bolt till the bolt head is almost touching the drum, and unscrew the bolt about ½ inch. Drive the bolt again. Repeat this procedure till the axle splines are clear of the drum splines. Remove the bolt.

Remove the 16 nuts and washers that hold the drum to the hub. Be sure you get all of 'em or you'll crack the drum when you turn the jackscrews.

Tighten the jackscrews in an X pattern—a half turn per jackscrew.



Tighten the jackscrews till the drum is free of the hub. And back off the jackscrews all the way. Do this so the jackscrews don't crack the drum when you put the drum back on the hub.

Home free! You saved US about 125 bucks.

Rust is the big problem when you're removing a Goat brakedrum. So to cut down on rust:

• Clean the drum and axle splines with a wire brush.



• Put a thin coating of GAA on the splines, in the groove that holds the packing, and on the parts of the drum that touch the hub.

• Never re-use a packing. A worn packing will let water come inside the



drum. So use a new packing every time you remove a Goat brakedrum.

Without rust to overcome, removing that drum next time will be easier.

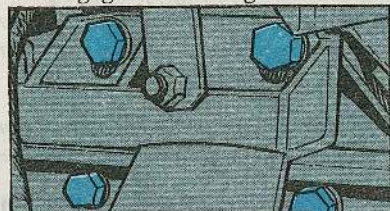
Looking For An Accident



There're still some M813's and other TM-260-series 5-ton trucks wandering around looking for something to clobber or a cliff to dive over.

Why?

Because they've still got the old steering gear mounting screws that



IF THIS IS WHAT YOU'VE GOT (AS SEEN FROM BACKSIDE) IT CAN BE DANGEROUS

loosen up. They never got the new lock-wired screws that won't loosen up.

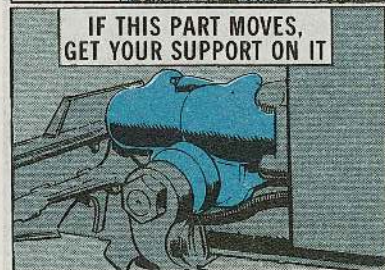
It's up to commanders and their maintenance supervisors to get these trucks fixed. This's a DS-level job. All the poop—instructions and NSNs—is in TB 43-0001-39-2 (Jul 77). It's also in TM 43-0143 (Jun 77), para 4-20.

Any trucks that don't have the steering gear mounting hardware should be sent up to support at the next semiannual service to get the job done.

Until then, it's up to you drivers to keep an eye on your truck's steering gear. After all, it's your neck—not to mention an umpteen-thousand dollar truck and whatever you're carrying in the back.

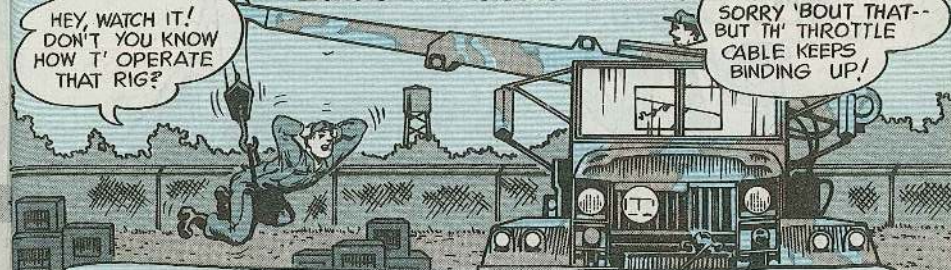
While the engine's warming up—transmission in NEUTRAL, hand-brake ON—get somebody to turn the steering wheel back and forth.

Look for movement where the steering gear mounting screws pass through the truck frame and into the steering gear box.



Loose? Get your shop to send that truck up to DS—right now—for the new hardware.

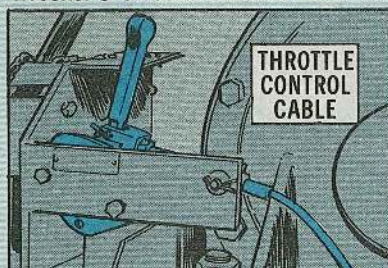
Lube Throttle Cable



Dear Editor,

We've found that the 5-ton wrecker's throttle control cable for

Pack the casing with silicone grease. NSN 6850-00-880-7616 gets an 8-oz tube. NSN 6850-00-295-7685 is for a 10-lb can.



crane and rear winch operation binds and is hard to use unless it gets lubed. So now we lube the cable during the PM service, like so:

Remove the cable from the truck. Place the crimped part in a vise. Double-nut the threaded end.



Try turning the corewire easy. Work it free slowly. When it begins to turn in the casing, slowly pull it out. Keep tension on the wire so it won't kink or bend.

Wipe the wire clean and straighten out any kinks. If it's shot, your support will have to get you a new control assembly.



—TO WORK THE COREWIRE BACK IN. LET THE WIRE RUN THROUGH A HANDFUL OF SILICONE GREASE

Lube about 4 inches of wire at a time and work it into the casing. Continue lubing until the control cable is back together.

CW2 Jerry White
AMSA 4
Newburgh, NY



Save Your 20-ton CCE Dump ... PTO

HEY, LEADFOOT--
EASY ON
THE RPM'S!

URG!

TOO LATE!
THERE GOES
MY PTO!

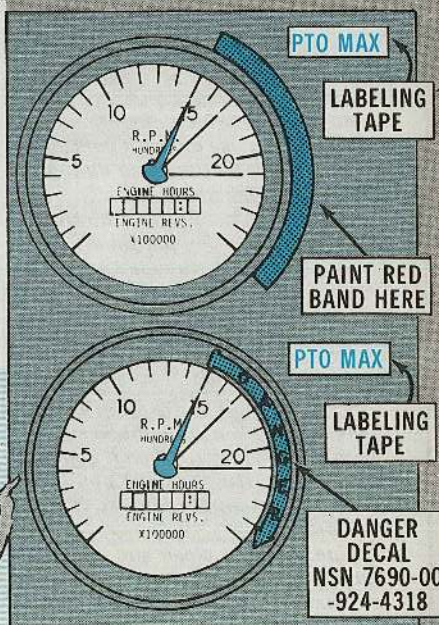
Hold engine speed down to 1,500 RPM. That's the limit for your 20-ton CCE dump truck when the power takeoff (PTO) is engaged.

Some heavy-footed drivers are revving the engine past 1,500 RPM while dumping. This's tearing up PTO's.

Stick to the limit like your operator's manual says on page 45.

And never travel between work sites with the PTO engaged.

HERE ARE
TWO REMINDERS...
AUTHORITY FOR
THE DECAL IS
APPENDIX A,
CTA 50-970
(Jul '74)



ARRGHHH!
MY REAR
LIGHTS ARE
MELTING!

LIGHTS

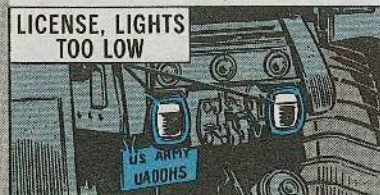
GET YOUR
MECH TO
MOVE 'EM,
OL' BUDDY!

Those rear lights on your 20-ton CCE dump can melt when you're dumping hot asphalt into a paving machine.

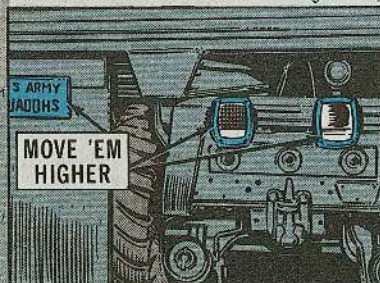
Also, the rear lights and license plate can get broken off when you dump on a stock pile.

That's because they're set too low.

LICENSE, LIGHTS
TOO LOW



Your mech can move them higher on the rear crossmember, tho. That's the word in TB 43-0001-41-4 (Jan 78).



HERE'S
HOW...

Take the lights and brackets off.

Use the light bracket as a template. Set the bracket 2 inches from the outside edge of the crossmember. Drill four $\frac{5}{16}$ -in holes.

Remount the brackets and lights using the screws, nuts, and washers from the old set-up. Reconnect the wiring.

Move the license plate to the metal strip for the left rear mud flap.

Use the license plate for a template. Drill two $\frac{1}{4}$ -in holes. Remount the plate using 2 screws, NSN 5305-00-993-1851, 2 nuts, NSN 5310-00-934-9751 and 2 lockwashers, NSN 5310-00-045-3296.

Nomex
PM...

FIRE RETARDANT

High temperature resistant Nylon twill fabric—Nomex—will not burn. But any oil, grease, grime or other gook it picks up sure will!



20

CLOTHING

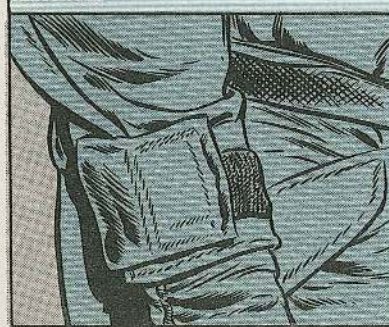
HERE ARE
SOME GENERAL
PM TIPS...

1. Nomex clothing is not a substitute for fatigues. Wear it only while operating your equipment.



Course, you have to pull some maintenance during operations, so be extra careful. Grease, oil and petroleum fuels destroy the fabric's fire retardant qualities.

2. Wear the sleeves down and cuffs fastened.



3. Keep the bottom of the trouser legs fastened.



4. Keep the shirt tucked into the trousers.



5. Never wear synthetic underwear with Nomex. Synthetic underwear melts. You could have a batch of melted underwear stuck to your backsides!

21

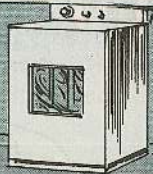
PS MORE

•Always clean out the pockets before washing Nomex. Turn 'em inside out; brush away the dirt, gunk, bits o' paper, threads, and trash collected there.

•Close the slide fasteners and hook and pile fasteners.

HERE'S HOW TO
CLEAN YOUR SKIN-
SAVING CLOTHING...

Pre-Wash



•You can dry clean, hand wash, use a home laundry or a commercial-type unit to clean Nomex.

PM

TLC
IS THE
MAGIC
INGREDIENT!

•Never
use starch.
It'll burn!

STARCH

Shirts,

Trousers, Jackets

MACHINE WASH. Set the washer on a medium hot water cycle. Add enough powder detergent to make plenty of suds. The clothes should wash at least 5 minutes. Rinse 'em for 4-5 minutes... spin dry for 1-2 minutes.

Before the last rinse cycle starts, stop the machine and add some commercial fabric softener. Follow directions on the box for the amount to use.

The softener acts as a fabric lubricant and moisture retention agent. It won't destroy the fabric's fire retardance. You'll notice that the amount of static electricity is reduced, too. This is important, and here's why:

Your body conducts electricity all the time—even while you're walking and working. In a dry atmosphere you can build up and hold a charge of

several thousand volts... like when you walk across a synthetic rug.

Most of this electricity is drained away harmlessly as fast as it's generated—thru your shoes into the ground or floor. But if you're working with fuel it could be dangerous.

Different natural fabrics like cotton and wool rubbing against man-made fabrics and your body generate static electricity that can make with the big boom!

For instance, when you take off Nomex clothing that is fuel-soaked, your movements could cause a static electricity discharge that could set the clothing on fire.

If you do spill fuel on your Nomex clothing, leave the area slow and easy-like. Get at least 50 feet clear of any fueling operation. Hose down your clothing well before taking 'em off. If

you can't soak your clothes with water, grab hold of some grounded, bare metal with both hands. Hold on to it for a few seconds. This will equalize the electricity between you and the grounded object. Remove your clothes slowly and carefully.

A little skin irritation from the fuel won't kill you; the fire following a static discharge could!

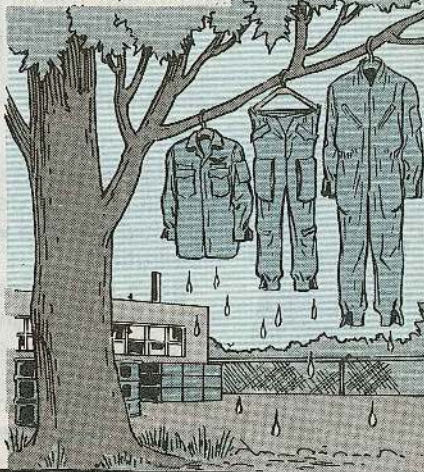
Laundry your Nomex as soon as you can after a fuel spill.

If some non-pro laundry type adds starch in the washing cycle, no sweat. Just run the Nomex thru the rinse cycle a couple of times... dry... and wear with confidence.

HAND WASH. If you hand-wash your Nomex, be sure you use medium hot to hot water and a good batch of suds. Rinse completely. All the detergent must be rinsed away.

Tumble dry... or hang the clothes in shade to drip dry.

You can touch up Nomex with an iron, but never iron the hook and pile—also called Velcro—or touch, and close, fasteners.



MAKE WASHING
EASIER...
WEAR YOUR **NOMEX**
GLOVES ONLY WHEN
OPERATING YOUR
GEAR!



Nomex Gloves

Wash and rinse these gloves like you do Nomex shirts, trousers, and jackets. Drip dry 'em or wrap 'em in a towel. Stretch 'em into shape. Never put gloves in the direct sun or use hot air to dry 'em.

Never wear Nomex gloves when working around your equipment. They're supposed to be worn only when operating your vehicle or equipment. Dirt and grime are hard on the fabric.

You may need a softening agent for the leather palms. Use neat's-foot oil NSN 8030-00-597-6105 or saddle soap NSN 7930-00-170-5467. The oil will turn the leather darker.



USE NEAT'S-FOOT
OIL OR SADDLE
SOAP ON LEATHER!

PS END

Subscribe on DA Form 12-5

PS Magazine Subscriptions

In case you missed the Baltimore Army AG Publications Center Bulletin 21 (Oct 77), here's its new word on PS Magazine distribution:

"Basis For Distribution: One copy for each officer, warrant officer and civilian supervisor. One copy for each five enlisted or civilian personnel who use, operate or maintain Army equipment or who are concerned with repair parts supply."

3-PRONG PLUGS



GULP!



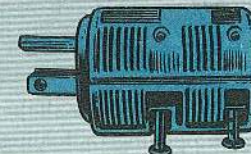
NOW--
WILLYA ORDER
US SOME
3-PRONG
PLUGS?

Dear Half-Mast,
Can you give me stock numbers for
3-prong (grounding type) electric
plugs?

SP4 S.D.F.

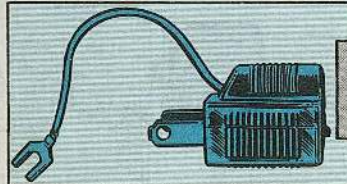
Dear Specialist S.D.F.,

Sure. The most common is Connector, plug, safety, 3-prong male under NSN 5935-00-843-7362.



One for larger cable is NSN 5935-00-280-2381.

The wall receptacle (one of several) could be NSN 5935-00-283-4003, Connector, female, electrical.



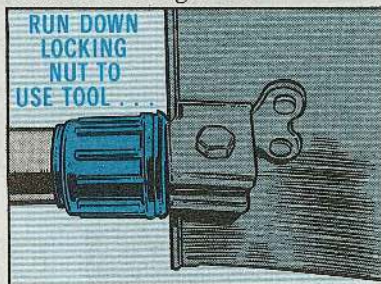
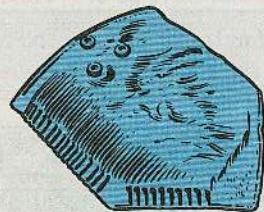
The grounding adapter for a 2-terminal wall receptacle comes with NSN 5935-00-990-2421.

Half-Mast

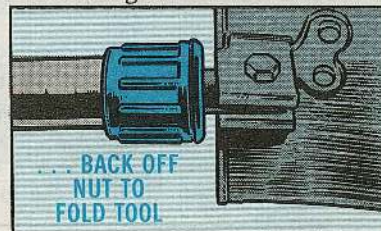
INTRENCHING TOOL TIPS



Never use your intrenching tool— it'll go. This locks the spade in place; as a hammer. makes it a stronger tool.



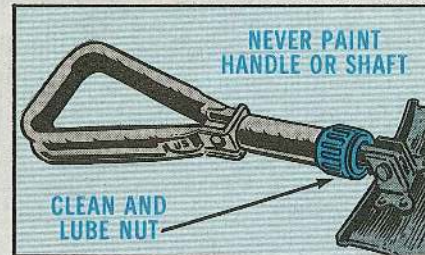
Back off the locking nut all the way when you're opening or folding the tool. If you back it off just part of the way, the handle won't clear the spade. You could break the tool when folding or unfolding it.



Like maybe you're tempted to use it to drive tent pegs into frozen or rocky ground. Forget it. You'll break the tool PDQ. Never use the tool as a pry bar, either.

After you set the blade for shovel- ing, cutting or clearing ground, be sure you run down the locking nut as far as

Never paint the intrenching tool's aluminum handle or shaft. These



parts are treated and shipped with a black anodized finish—not paint.

Keep the locking nut mechanism clean and lightly lubed. Clean off the tool before you store it.

Paint the steel spade to keep corrosion and rust at bay. Use a flat black enamel: NSN 8010-00-297-0546 gets a quart; 8010-00-297-0547 a gallon.

Keep dirt 'n' grime off the tool carrier, too. Scrape off the caked-on stuff; use warm water to rinse off a light film of dirt.

When you pack the tool, be sure the blade is at the back of the carrier.

A good eyeball treatment of Chapters 5 and 6, FM 21-15 (Feb 77) will help your PM program for all components of your load-carrying gear.

Next Month In PS

M110A1 Howitzer Handies	Chaparral Missile System
(MAB) Mobile Assault Bridge	AN/VSS-3 Searchlight PM

PUBS

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 (Oct 77), TM's, TB's, etc.; DA Pam 310-6 (Jul 77) and Ch 1 (Oct 77), SC's and SM's and DA Pam (C) 310-9 (Nov 76), COM-SEC pubs.

TECHNICAL MANUALS

Ch 1, TM 3-4240-204-12&P Nov M9A1 Mask and Accessories
Ch 3, TM 5-4330-215-12 Nov Filter Separator, 60-GPM
TM 5-5420-202-20P Aug M60A1 Tank AVLB
TM 9-2300-216-10 Jul M107 Gun, 175-MM, M110, M10A1; Howitzer 8-in
Ch 3, TM 9-2300-378-20P/2-1 Nov Turret Tank, M60A1, M60, M728, M48A3
Ch 4, TM 9-2300-378-20P/2-2 Nov Turret Tank, M60A1, M60, M728, M48A3
Ch 3, TM 9-2330-251-14 Oct Trailer 1/2-Ton, M416, M416B1, M569, M569B1, M762, M716
Ch 3, TM 9-2320-265-20 Dec M890 Series 1/2-Ton Trucks
TM 9-2320-270-10 Oct Truck Tractor, C-HET, M911
Ch 15, TM 9-2350-215-10 Nov Tank, M60A1, M60
Ch 16, TM 9-2350-215-10 Nov Tank, M60A1, M60
Ch 10, TM 9-2350-215-20 Nov Tank, M60A1, M60
TM 9-2350-258-20P-1 Nov M48A5 Tank
TM 10-3930-630-20P Nov Truck, Lift, Fork, GED, 4,000-lb

Ch 1, TM 10-5410-221-14/1 Oct Shelter, Expandable, MUST
Ch 5, TM 11-5820-590-12-1 Nov AN/PBC-74B and 74C Radio Sets
TM 11-5855-202-23P Nov Night Vision Sight, AN/TVS-2 Series
TM 11-5855-203-23P Oct Night Vision Sight AN/PVS-2, AN/PVS-2A, AN/PVS-2B
TM 11-5855-237-23P Nov Night Vision Sight, AN/TVS-4, 4A
TM 11-5895-431-20P Nov Tact Imagery Interp AN/TSO-43, -43A
Ch 3, TM 11-6230-219-12 Oct Searchlights, AN/GSS-14, AN/GSS-14A, AN/GSS-14B, AN/GSS-18, AN/GSS-18A, AN/GSS-18B, AN/VSS-1, AN/VSS-1A, AN/VSS-1B, AN/VSS-1C, AN/VSS-1D, AN/VSS-1E, AN/VSS-2 and AN/VSS-2A
Ch 3, TM 11-6825-823-15 Nov AN/PSM-13 Battery Test Set
Ch 3, TM 11-6885-230-15 Dec AN/PDR-27R Radiac Set
Ch 5, TM 11-6665-232-12 Oct IM-174/P7 Radiacmeter
Ch 1, TM 55-1600-326-24 Nov Serviceability Standards, Transfer of Aircraft
TM 55-2840-230-23P Nov Engine, Aircraft, Free Turbine T-73-P-1, T-73-P-700
TM 55-2840-231-23P Nov Engine, Aircraft, Gas Turbine T63-A-5A, T63-A-700
TM 55-2840-241-23 Nov Engine, Aircraft, Gas Turbine Model T63-A-720

MISCELLANEOUS

AR 340-2 Nov Army Functional Files

Systems
Bumper Sticker "Form 55 MPH." (For Admin Vehicles Only)
Cir 700-13 Oct Preventive Measures for Improved Logistical Support
Ch 1, DA Pam 310-6 Oct Index of SC's and SM's
DA Pam 310-7 Aug Index of MWO
DA Pam 621-91 Oct Apprenticeship for Helicopter Mechanic
DA Pam 621-92 Oct Apprenticeship for Ordnance Artificer
FM 9-45B/CM Apr Small Arms Repairman
FM 55-67G Nov Airplane Repairer Skill Levels 1/2/3
FM 55-67G/CM Aug Airplane Repairer
FM 55-67Y Aug Attack Helicopter Repairer
FM 55-68F/CM Aug Aircraft Electrical/Electronic Instru Repairer
FM 90-3 Aug Desert Operations
LO 9-2320-270-12 Oct Truck Tractor, C-HET, M911
Misc Pub 18 Oct User's Manual Publications Resupply by AUTODIN
TB 9-2300-422-20 Oct Security of Tactical Wheeled Vehicles
TC 9-45K1/2 (JB) Jul Tank Turret Repairman Job Book
TC 9-55B1/2 (JB) Nov Ammunition Specialist Job Book
TC 9-63H1/2 (JB) Oct Automotive Repairman Job Book
TC 9-63J1/2 (JB) Jul QM Equip Repairman Job Book
TC 10-76D1/2 (JB) Aug Materiel Supplyman Job Book

AUDIO-VISUAL STUFF

TEC LESSONS

Available at battalion or post Learning Center

010-071-6634-F 81-MM Mortar (Part 1)
101-113-4701-A Test-Operating Commo-Electronic Equip
101-113-4702-A Testing Power Supplies
101-113-4705-A Testing Resistors
101-113-4708-A Testing Semiconductor Devices with Ohmmeter
101-113-4711-A Testing Capacitors, Coils, Transformers with Ohmmeter

101-113-4714-A Locating Faults in Power Supplies—Part 1
101-113-4715-A Locating Faults in Power in Power Supplies—Part 2
101-113-4717-A Testing Receiver Audio Circuits
101-113-4720-A Testing Radio IF Circuits
101-113-4726-A Identifying Faulty Audio Stage
101-113-4728-A Identifying Faulty IF or Detector Stage
101-113-4732-A Checking Bias Voltages

101-113-4747-A Testing Transistor, Oscillator and Buffer Stages
201-113-4531-F Operating Radio Teletypewriter Set AN/GRC-122(1) Full Duplex
201-113-4634-F Install Doublet Antenna Using Masts AB-155/U—Part 2
221-301-7203-A AN/PPS-4A Operator Checks, Adjustments
221-301-7204-A AN/PPS-4A Telescope Alignment, Orientation, Stop Procedure, Disassembly
221-301-7207-A AN/PPS-5A

Radar
221-301-7208-A AN/PPS-5 or 5A Radar, RT Checks, Leveling, Telescope Alignment, Orientation
221-301-7209-A AN/PPS-5 and 5A: Operator Checks, Adjustments on C-1, Stopping Procedures, Disassembly
221-301-7210-A BB-643/PPS-5 Battery Assembly

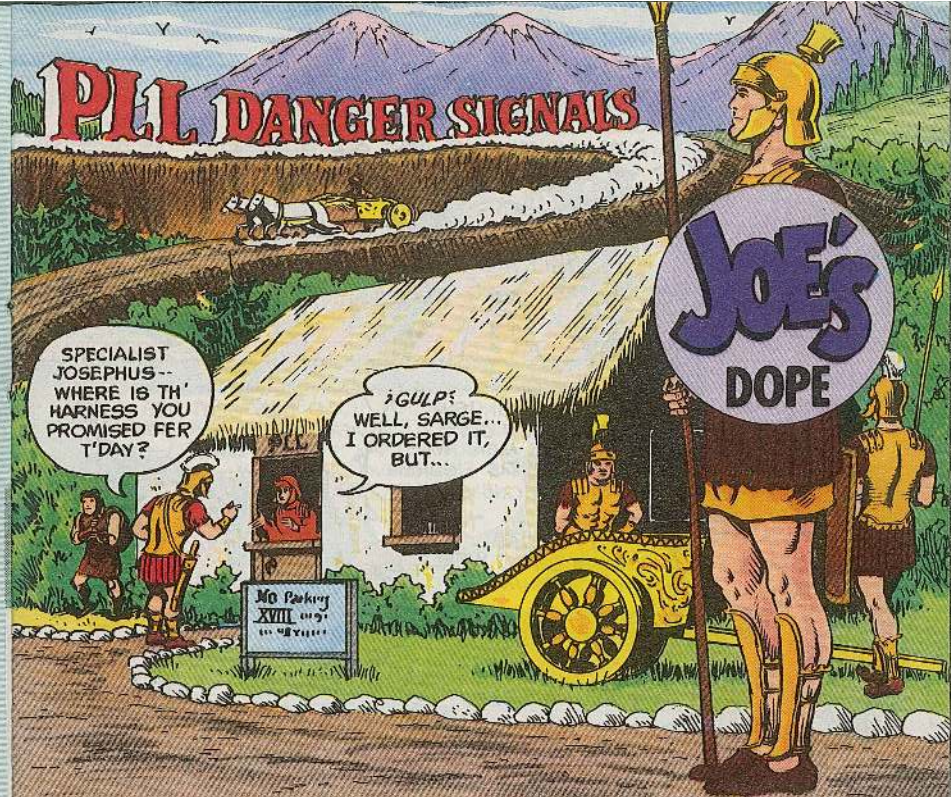
FILM

TF 5-4941 Detecting Set, Mine—Portable Metallic and Non-Metallic—AN/PRS-7

Got a Repairable Item?

DA Poster 750-29 shouts it out: "Turn in Repairables!" If you and others don't turn 'em in, right now, supply of repaired parts can fizzle. Tack up the poster. A DA Form 17 order to Baltimore gets it.

PLL DANGER SIGNALS





DON'T GIMME EXCUSES SPEC... JUST RESULTS!

MY MATER SAID THERE'D BE DAYS LIKE THIS!

SOUNDS LIKE YOU HAVE **PLL** PROBLEMS, TROOPER...

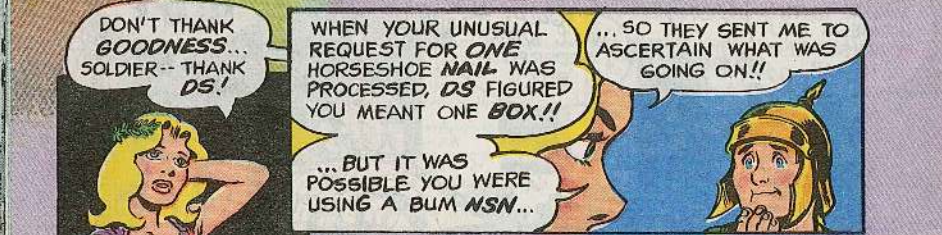
WHY, IT'S **DOMINA CONSTANCE RODDUS!**

THANK GOODNESS YOU'RE HERE!



YOU KNOW YOUR EQUIPMENT CAN'T MOVE, SHOOT OR COMMUNICATE WITHOUT REPAIR PARTS...

ER... RIGHT ON!



DON'T THANK **GOODNESS**... SOLDIER-- THANK **DS!**

WHEN YOUR UNUSUAL REQUEST FOR **ONE** HORSESHOE **NAIL** WAS PROCESSED, **DS** FIGURED YOU MEANT ONE **BOX!!**

... SO THEY SENT ME TO ASCERTAIN WHAT WAS GOING ON!!

... BUT IT WAS POSSIBLE YOU WERE USING A **BUM NSN**...



WELL, THESE CHARIOT PUBS BOTH LIST THAT **NSN** FOR THE HARNESS!

NO WONDER!! THOSE PUBS ARE...

OUTDATED PUBS



... AT LEAST 10 YEARS OLD!!

LET'S SEE THE REST OF YOUR LIBRARY...

GREAT JUPITER-- THEY'RE **ALL** OUT OF DATE!!

HOW COME?

HEH-MEH-- THEY CAME WITH TH' JOB...



... AND AS YOU'VE JUST FOUND OUT, YOU NEED THE LATEST VERSION OR CHANGE TO EACH PARTS PUB COVERING YOUR EQUIPMENT IF YOU ARE TO BE SURE OF GETTING THE RIGHT PART WHEN YOU'VE **GOT** TO HAVE IT!

IT PAYS **ANY PLL** TYPE TO CHECK HIS PARTS PUBS AGAINST **DA PAM 310-4** (Oct 77).

YOU CAN SPIN A LOT OF WHEELS-- AND WASTE A LOT OF EFFORT-- TRYING TO ORDER ITEMS WITH **BUM NSN**'S...



... OR ITEMS NO LONGER AUTHORIZED AT YOUR MAINTENANCE LEVEL!

UNDERSTOOD, **DOMINA!**

THEN, GET YOUR UNIT ON PINPOINT DISTRIBUTION, SOONEST, SOLDIER!



HOLD ONE! BEFORE YOU START, WE'VE GOT OTHER POINTS TO COVER!

YOU ALSO NEED THE LATEST **ARMY MASTER DATA FILE (AMDF)** FOR **NSN** CHANGES, SUBSTITUTE ITEMS AND OTHER INFO.

HERE... HANG THIS POSTER TO HELP REMIND YOU HOW IMPORTANT THESE THINGS ARE!

Joe's Dope Sheet



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

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

OK, OUT-OF-DATE PUBS ARE ONE **PLL** DANGER SIGNAL. HERE'S ANOTHER...

MINIMUM **PLL** STOCKAGE & CONSOLIDATED REQUESTS

IF YOU NEED AN ITEM REGULARLY-- EVEN IF IT'S JUST A FEW TIMES A YEAR...

GET IT ON YOUR **PLL**!

LIKE CHARIOT HARNESS GEAR, EH?

YOU'RE CATCHING ON, SPEC JOSEPHUS!

BUT YOU CUT DOWN ON PAPERWORK...

...BY ORDERING A SLEW OF ITEMS ON ONE REQUEST FORM, DOMINA CONSTANCE!

NOT A GOOD IDEA...

...YOU WAIT A LOT LONGER FOR NON-STOCKED ITEMS.

ANY PART YOU ORDER AT LEAST 3 TIMES IN 180 DAYS QUALIFIES FOR **PLL**...

AFTER THAT, ONE REQUEST EVERY 180 DAYS KEEPS IT ON **PLL**!

34

HEY-- THAT MEANS SWORD GUARDS **COULD** HAVE BEEN ON OUR **PLL**! I NEEDED 4 IN THE LAST COUPLE OF WEEKS-- BUT I PUT 'EM ALL ON 1 REQUEST.

RIGHT ON... IF YOU'D PUT THEM ON SEPARATE REQUESTS RIGHT THEN YOU COULD ADD 'EM TO YOUR **PLL**... AND KEEP STOCKS ON HAND. AND, THAT BRINGS US TO THE LAST **PLL** SIGNAL.

ZERO BALANCES

EVEN YOUR **PLL** REPAIR PARTS ARE NOT IN STOCK!

TO GET RIGHT DOWN TO BASICS, TROOPER... YOUR OUTFIT'S GEAR MUST BE ABLE TO MOVE, SHOOT AND COMMUNICATE AT ALL TIMES...

WHICH MEANS KEY PARTS MUST **ALWAYS** BE AVAILABLE-- WITHOUT DELAY!!

NEVER WAIT UNTIL ALL **PLL** PARTS HAVE BEEN USED BEFORE ORDERING MORE!

AS SOON AS YOU ISSUE A PART-- ORDER ANOTHER!

ONCE AN ITEM GOES ON YOUR **PLL**...

...YOU **MUST** HAVE THE TOTAL NUMBER AUTHORIZED ON THE SHELF OR ON ORDER AT ALL TIMES!

GOTCHA... BUT...

35



I LOOKED UP YOUR BUM *NSM* IN AN OLD CHARIOT PUB-- AND BROUGHT A HARNESS... JUST IN CASE...

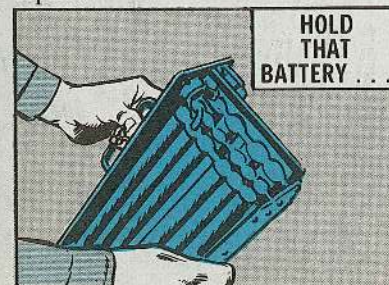
THE MORAL TO THIS EPIC IS: IF THE BALLOON GOES UP, YOU AND YOUR OUTFIT WILL SURVIVE ONLY AS LONG AS YOUR EQUIPMENT KEEPS ON MOVING, SHOOTING AND COMMUNICATING, AND THAT DEPENDS ON HOW LONG YOU KEEP 'EM SUPPLIED WITH REPAIR PARTS.



Flip the MODE switch, install a battery and save your TOW M70 instructor console from costly and lengthy repairs.

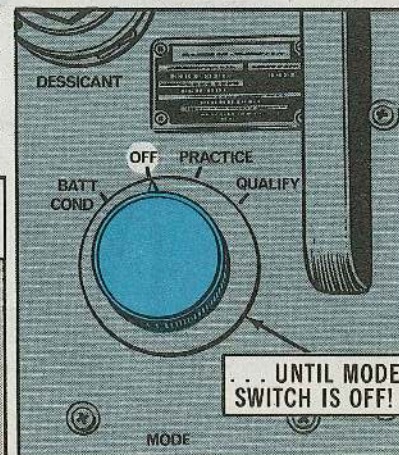
Howzat?

Well, TM 9-6920-470-12 doesn't go into any detail on it, but if you put a charged battery in the console without first putting the MODE switch on OFF, you can blow some parts (like relays and resistors) that'll send your console all the way back to depot for repair.



Since chances are good that the switch will be in PRACTICE or QUALIFY position, chances are also good that you'll damage the console when you install a new battery.

So always put the MODE switch on OFF before you install a new battery.

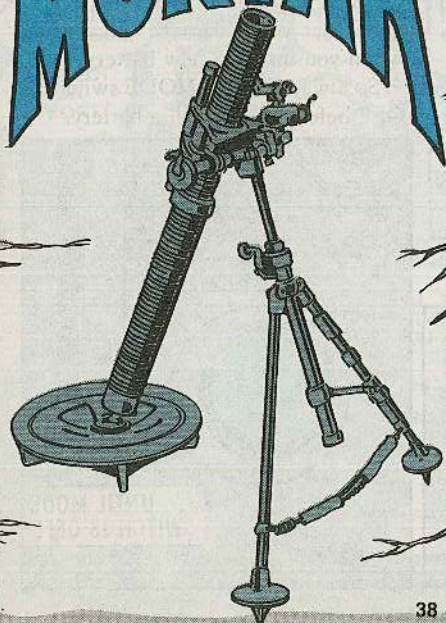


MAYBE YOU
CALL IT YOUR
STOVEPIPE--

OR, IF YOU'VE HAD
TO SET UP AND FIRE
IN THE WET AND DARK
ON SOME MUDDY NIGHT,
YOU MAY HAVE CALLED
IT WORSE NAMES...

Be-Your-Own-Inspector ...

YOUR 81-MM MORTAR



38

EMPEROR CALIGULA
SAYS WITH THIS NEW
WEAPON--EVEN THIS
MIGHTIEST BARBARIAN
FORTRESS WILL
FALL!

IT IS REPUTED
TO BE A GIFT
FROM
JUPITER!

HE MUST TRULY BE
MAD--FOR EVEN OUR
MIGHTIEST CATAPULTS
HAVE PROVEN TO BE
INADEQUATE!



But, one thing's for sure: that 81-millimeter mortar of yours is a real target killer if you just keep it in good health. These maintenance tips will help.

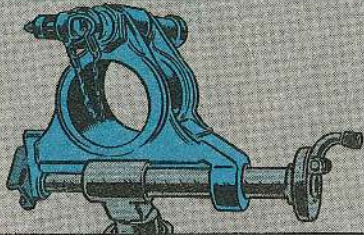
39

BIPOD

Watch out for rust or damage that could keep your rig from free and easy operation.

Make sure there's nothing missing, rusted up, frozen, or bent so as not to work right. Damaged or burred bushings or threads can mean big trouble.

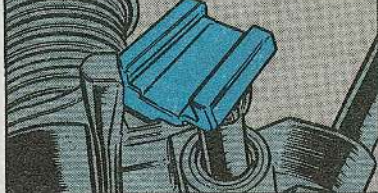
YOKE ASSEMBLY—Screws burred, cross-threaded; oil cups dry, damaged or clogged.



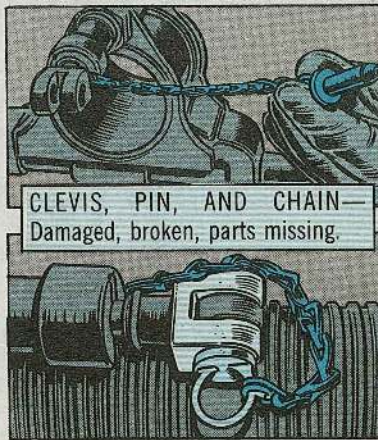
SHOCK ABSORBER—Corroded painted over, binding; spring weak or broken; bushings damaged or binding.



SIGHT MOUNT—Dovetail gashed, bent, burred; won't let sight group slip on or off easily.



CLEVIS, PIN, AND CHAIN—Damaged, broken, parts missing.



CARE

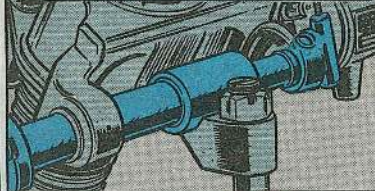
HERE ARE POINTS TO LOOK OVER AND TROUBLES TO WATCH FOR!

WO'VE YOU WAITIN' FOR?
FIRE!

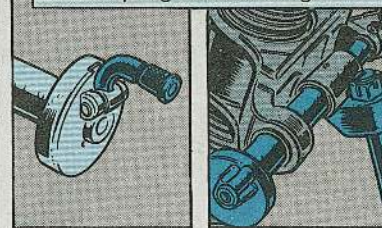
'GULP!
HURRY, MARCUS!

TRAVERSING
TUBE IS
BUSTED!

TRAVERSING MECHANISM—Traversing screw spring weak, broken; mechanism binds/rattles; damaged, worn, loose.



TRAVERSING CRANK & TUBE—Broken, tube dented, rusty, binding; handle spring weak/missing.



ELEVATING CRANK—Damaged, broken; parts missing.

ELEVATING MECHANISM—Binds, skips, not meshing right; lube cups clogged, dry, missing; assembly rusty, damaged.

LEGS—Won't lock or adjust right; rusty, bent; won't operate freely.

CONNECTING ROD—Damaged, broken, missing, bolts gone.

FEET—Spikes broken, missing; feet loose.

SPREAD CHAIN—Spring or hooks missing, broken; chain broken, untaped. Chain less than 35 inches long.

@*☆!!
SPREAD
CHAIN IS
TOO
SHORT!



CANNON

By now, you should be able to say "rusty, dented, cracked" even in your sleep.

SO, WATCH FOR THOSE CONDITIONS HERE ESPECIALLY...

BORE— Dirt or powder-fouled; excessive oil puddle; pitted badly.

FIRING PIN— Cracked / broken, deformed; threads jammed, stripped; does not seal gas-tight.

BARREL— Exterior badly nicked/dented; threading burred, rusty; white marks 17 and 21 inches from muzzle missing, obscured; out of round (dummy round must pass thru tube freely); barrel ring won't screw on easily; ring damaged.

BASE PLUG— Ball projection rough or burred; leaking gas, threads stripped; loose, cracked, dented (look for powder burns around firing pin and brazing seal).

(NOTE: Basic parts of one mortar are not mixed with those of another. Color-coding can help keep 'em apart, but be sure inspector types understand the deal.)

BASE PLATE

You probably have the newer M3 plate; you could have the M23A1.

THE GEN'RAL'S COMING!! C-CAN WE FIRE NOW, PLEASE?

N-NOT YET, SIRE-- WE STILL GOT ROPES T' REPAIR!

BUT THAT'S MOX NIX....YOUR CONCERN IS RUST, DAMAGED PARTS AND ITEMS BROKEN OR MISSING! SO, EYEBALL THESE!...

SOCKET, CUP—Damaged, bent, broken, sticking (inner ring cap and socket have to move freely), greased too heavily (no oil, please).

OUTER RING—Latch missing, broken, won't turn freely; shoulder bolt damaged; ring warped; data plate painted over, missing, unreadable. Ropes painted, frayed, broken (use Nylon!).

RETAINER—Broken, loose; retaining sleeve bolts out/loose.

SPADES—Rusted; feet bent, broken, cracked.

SIGHT UNIT

EYESHIELD—Rubber eye cup rotting; lens dirty, scratched, cracked, moisture visible inside; elbow 'scope M109 turns hard.

You really want this tiptop. Repairs on it are DSU (direct support unit) or higher, but your job is to prevent any need of repair. The first thing to scan is your telescope support. If it's cracked, rusted and giving interference, damaged or broken, has the reference marks painted over or scraped off, or if dust cover and chain are missing, call DSU at once.

LAMP/LIGHTING—Dirty, won't work; light off center.

LOCKING CLAMP—Pin/cotter key missing. Clamp broken, rusty.

DOVETAIL BRACKET—Nicked, burred, painted over.

M128 'SCOPE MOUNT—Data plate painted over, unreadable; clamp defective.

M53

STILL WON'T FIRE, SIRE--

THEN SEE CONNIE AND CENTURION HALF-MAST!

YOU'LL NEVER HIT YOUR TARGET IF YOU CAN'T ZERO IN ON IT, SO...

...CHECK YOUR SIGHT UNIT WELL!

DEFLECTION, ELEVATION KNOBS—Broken, spring-loaded pins weak/missing; locking knobs too tight/broken/missing; turn too tightly; grinds with dirt/sand.

CONTROLS—Broken, spring-loaded pins weak/missing; locking knobs too tight/loose/broken/sticking.

BRACKET—Dovetail face nicked, painted, burred. Data plate unreadable, missing.

LEVEL VIALS—Glass broken, painted over, metal covers stuck/missing.

ELEVATION/DEFLECTION SCALES—Screws missing; scale plates loose; locking latches broken or binding; locknuts or retaining washers missing or pins out/loose; setscrews damaged; marks painted over or otherwise unreadable; segments of scales binding on each other; micrometer scales defective. (Check boresight also.)

NOTE: You do not use either angle of sight scale with the 81-mm mortar, and you do not use the light projector for angle of sight scales. But do keep them all in good shape; you may not keep that particular M53 sight unit all your life.

Paint is **not** included in the things you use on sights and optics. The only people who paint these items are at DSU or higher. You never paint anything on this weapon except the base plate and bipod where rust hits—and even then you spot paint.

ACCESSORIES

FUZE SETTERS—Rusty, painted too heavily; unserviceable thru rust, crushing; illumination round fuze wrench notches full of paint or rust.



AIMING POST LIGHT SET—Lenses dirty, obscured; battery dead (take out batteries after each drill or use); bulb broken/burned out; switch not working; clamp or nut broken/missing; battery case damaged, rusty. Posts damaged, joints won't fit; parts missing. Case rotting, torn, won't close right.



Free Back Issues

PS Magazine back issues are for free. Drop a note to Bonnie, PS Magazine, Lexington, KY 40511. Many of the issues since PS 247 are still on the shelf.

M16A1 Dirty Dozen

One dozen ways to keep your M16A1 rifle in working order are featured in DA Poster 750-44. A unit DA Form 17 to Baltimore Pubs Center gets it.



THE WALLS ARE CRUMBLING!

CHARGE!

YOUR MORTAR ACCESSORIES NEED CAREFUL INSPECTION AND PM, TOO, B'LIEVE IT!

AT LAST!

THE ROMAN SENATE WILL BUILD AN ARCH IN OUR HONOR!

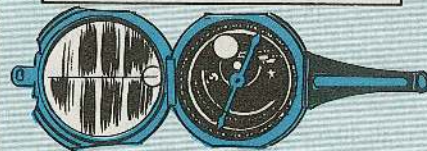
THANKS, TO CONNIE... AN' PM!

WE'RE ALL DUE SOME R+R NOW...

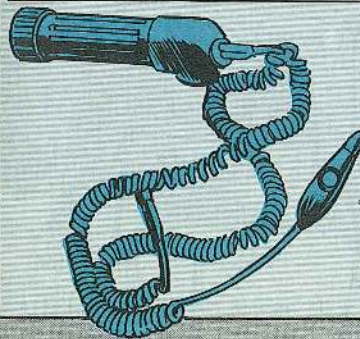
MAY I ACCOMPANY YOU?

NO WAY, MARC!

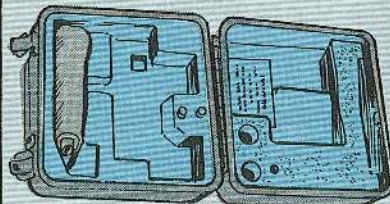
COMPASS—Glass broken, needle damaged, rusty, scale unreadable, cover/hinge out of order. Level vial broken.



M53E1 INSTRUMENT LIGHT—Weather ring missing, hardened; cord broken, shorting out, frayed; switch button not working on deflection hand-held lamp (a definite CLICK! is the test) rheostat on reticle lamp out of order; reticle light not working, lamp missing, dust cover gone; system clogged by paint; batteries weak, dead (take out batteries after each use.)



M166 CARRYING CASE—Padding missing, rotting, wet (It's disastrous to pack your sight unit in a wet case; same for M78 case on the M34A2 sight unit.) Damaged, won't seal.



LIGHT EQUIPMENT CHEST—Same precautions as for sight cases. For M53 sight accessories, use M14 light chest; for M34A2, use M21 light chest.

NOTE: Light and sight cases are not for you to paint; neither are toggle switch retainers, deflector shields, or female receiver sections.

SOME HANDY

For things you may not have your P-Manual or stock list around to check, these numbers can be your social and maintenance security—

NSN

1240-00-084-0277
5120-00-240-8716
1290-00-535-7617
1290-00-535-7629
1290-00-653-7993
1240-00-654-6089
4933-00-723-1161
1015-00-723-7701
1290-00-764-7761
1240-00-823-5611
1290-00-966-9318
1290-00-089-1876
1090-00-699-0633
5120-00-262-8491

NOMENCLATURE

Cover
Screwdriver
Post Aiming: 2 each
Light Aiming Post: 2 each
Cover, Aiming Post
Chest: M14
Wrench, Fuze: M18
Cover Muzzle
Fuze Setter: M27
Case, Sight Unit: M166
Fuze Setter Set: M63
Light Instrument: M53E1
Staff Section, cleaning
Wrench Strap

THESE ITEMS SHOULD
BE RECEIVED AND TURNED
IN WITH YOUR **81-MM** MORTAR...

THAT WRAPS
UP THIS
CAPER,
CHIEF!

GREAT,
NOW TO
EGYPT FOR
SOME R+R...

STOCK NUMBERS

THESE ITEMS
ARE REQUESTED
SEPARATELY FOR USE
WITH YOUR **81-MM**
MORTAR...

HEY! I CAN
USE A NEW
SHOULDER
PAD!

NSN

1005-00-610-8828
1010-00-656-9375
5120-00-240-5274
5120-00-180-0728
5120-00-240-5232
4930-00-287-8474
9150-00-231-6689
6850-00-224-6663
6810-00-201-0906
6640-00-597-6745
8305-00-222-2423

NOMENCLATURE

Brush Cleaning
Pad, shoulder
Key, socket
Screwdriver
Screwdriver
Oiler Hand
PL Special, 1 qt
Rifle Bore cleaner
Alcohol
Paper, lens cleaning
Cheesecloth

HIT THE

And last, but never least, is the
Word... the printed word. Believe it,
follow it, depend on it in—

HMMM

VURR-RY
INTER-ESTIN'!

TM 9-1015-200-12
Operator, crew, and
organizational main-
tenance for Mortar,
81-mm.

TM 9-1220-204-14
Plotting board M16,
including parts.

TM 9-1240-278-12
Optical boresight M45.

TM 9-1590
Fuze Setters M14, M22,
M23, M25, M27.

BOOKS

I
DIDN'T
KNOW
THAT!

WOT
WE
NEED
!!

HMMM...
HOPE I
DON'T GET
A **DO** ON
THIS PUB!

OK...
NOW HAVE
AT IT!

YOU HAVE
A REAL GREAT
WEAPON
THERE!

TM 9-6015
Aiming Post Lights
M14, M41, M43.

FM 23-90
81-mm Mortar, M29.

PS END

RIPSY POINTERS

HI-YO, SOLDIERS!!

HELP IS HERE!

Heading the bad guys off at the pass with your AN/PPS-5 or 5A radar sets may not take a Secretariat or a Silver. But, try it without horse sense or PM and you're done, buddy, done.

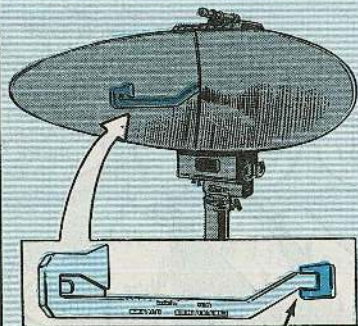
FEEDHORN

To avoid inaccurate readings, eyeball the feedhorn before operation to be sure it's not bent.

If it's bent, get it replaced.

To avoid bending it, hold the feedhorn at the base or flange (where it connects to the captive coupling) when you take it down.

DON'T GRAB FEEDHORN . . .



HOLD FLANGE TO REMOVE IT

Never, but never, grab the feedhorn itself . . . either to install or take it down. And, sure as a mule's kick, you'll bend the feedhorn if you try to lift or move the RT-692 with it.

SETTING IT UP

Set up your Pipsy in dirt or gravel, and seat the tripod legs firmly. Unless you've got something special going and can't avoid it, never set 'em up on concrete or asphalt. The legs slip, and just about anything on the set can get damaged.

REMOTE CABLE

Both the CX-8666 and CX-12004 remote cables have a natural coil, and forcing the roll against it might kink or break the wiring.



USE THE NATURAL COIL

GREAT -- NOW WE'LL BE ABLE TO GET ACCURATE READINGS!

NOT T' MENTION SOME CABLE ADVICE!

The idea is to rewind the cable so that the coil falls naturally, applying no force against the coil.

A good way is to rewind either cable on the ground, letting the coils fall in place. That way, if you get a kink, you can swing the cable to the natural coil. Another way is to wind it on one hand.

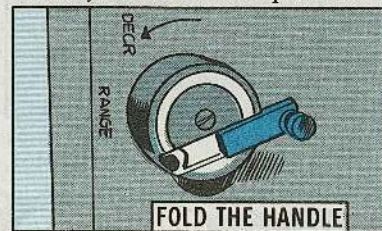
One way not to do it is to roll the cable over your hand and elbow. Kinks or breaks come often like that . . . since it's easy to force the cable against the coil.



THIS IS A NO-NO!

RANGE CRANKS

Range crank handles on the receiver-transmitter and the control-indicator of either set must be recessed before you store the components.



FOLD THE HANDLE

If you leave the handles in operating position and store them, they'll break off.

HEADSET

The H-251/U headset connector on the Pipsy-5A gets balky as a mule at times when you try to connect it to the receiver-transmitter or the control-indicator.

The connector, female type, has an O-ring in it that needs lubing... or you can push all day and not get a hook-up.

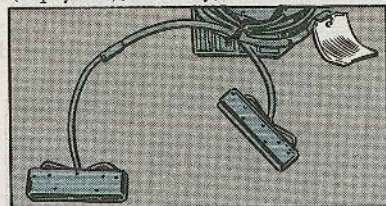
In the field, you can dab the visible part of the O-ring with spit... and it should slip in easily enough. Then, first chance you get, dab it with silicone compound, NSN 6850-00-880-7616 (8-oz tube).



**DAB
O-RING
WITH
SILICONE
COMPOUND**

MK-980 CABLES

Been having trouble getting a couple of cables for your MK-980 (Pipsy-5A), namely, the CX-10441,



NSN 6625-00-937-0462, and CX-10442, NSN 6625-00-937-0461, trouble-shooting cables?

**HANG IN THERE!
BACK ORDERS
ARE BEING FILLED,
FOR THOSE
CABLES!**

PS END

X-Mode Or Norm Know-How

**ALRIGHT, CLASS!
THIS IS TODAY'S
SUBJECT...**

**TO HELP YOU
UNDERSTAND THIS
PUZZLING
SITUATION...**

Forget that info in PS 298 on X-Mode-Norm switching for your AN/VRC-12 series radio set. Instead, go this route to see if your set's in X-MODE or Normal.

For the R-442 receiver...

•Remove any connector from the J-12 receptacle on the MT-1898 radio mount.

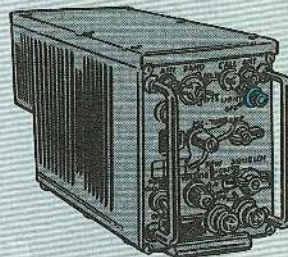
**J-12
RECEPTACLE**



•Set the SQUELCH switch to OLD SQUELCH ON.

•Set the receiver POWER switch to ON-RESET.

If the CALL light comes on, the switch is set for X-MODE. If the light stays off, the switch is set for NORMAL.



Note that on the R-442, the X-MODE/NORMAL switch must be in NORMAL for communication in the normal mode.

**WE HAVE THAT
LEADING EXPERT,
SGT. SPARKS!**

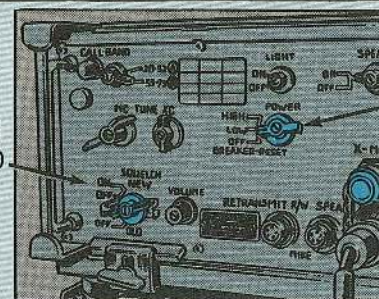
**TAKE OVER,
MACON!**

**MY PLEASURE,
CONNIE!**

**HERE'S THE LATEST
WORD FROM THE
HEADSHED.**

For the RT-246 or -524 receiver-transmitter...

**1 Set the SQUELCH
selector switch to OLD
ON.**



**2 Turn the POWER
switch to LOW.**

**3 Remove the
X-MODE cap.**

If the CALL light comes on, the mode switch inside your set is set for X-Mode.

If the CALL light does not come on, the mode switch is set for normal.

Note that while the X-MODE/Normal switch must be in X-MODE for X-MODE operation, you do not have to set the switch to NORMAL on the RT-246 or -524 to operate in the normal mode. Just make sure that the cap, which contains jumper wires to take care of the mode switching, is screwed on to the X-MODE connector.

O'course, you need to make sure the call light is all right and your set has had a 30-second warmup.

Also, your radio needs to be set to unused channels with the antenna disconnected to avoid outside interruption.

This info can save you some unnecessary maintenance downtime.

RADIO GROUP POOP

HEY! WHAT WAS THAT?

FORGET IT! THIS OL' TRAP IS ALWAYS MAKIN' WEIRD SOUNDS!

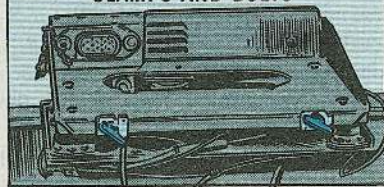
NO LITTERING
\$50.00 FINE

BONK

Here're some pointers that'll help keep your OA-3633() amplifier-power supply group on the ball—and on the vehicle!

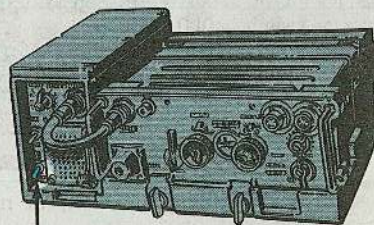
After you've locked in the RT-505 or -841 receiver-transmitter with the clamps and bolts, you also need to lock your amplifier-power supply into the MT-1029 mount with clamps and bolts.

LOCK OA-3633
TO MOUNT WITH
CLAMPS AND BOLTS



If you fail to fasten in the RT or OA-3633, either one or both can go flying out of the mount and get damaged.

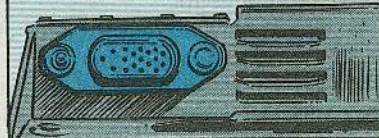
Remember, when you're pushing that gear into the mount, make sure the power switch is in the OFF



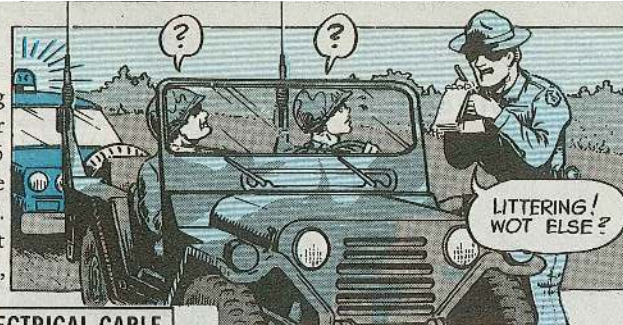
POWER OFF WHEN MOUNTING . . .

position. If you leave the switch on you can wind up with a burnt junction box connector.

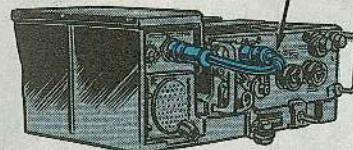
. . . OR CONNECTOR CAN BURN



Another thing to watch out for is the CX-4655 special purpose electrical cable. When you're not using the cable,



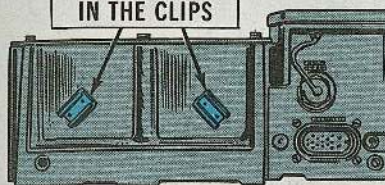
CX-4655 ELECTRICAL CABLE



The clips will keep the cable handy for your next hookup. They'll also keep the cable from getting knocked around or dropped in the way of big feet.

always stow it in the cable clips on the back of your amplifier-power supply.

STOW THE CABLE
IN THE CLIPS



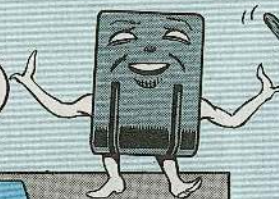
REMOVE
BATTERY
FROM
BATTERY
BOX



One other tip is to take the BA-4386 or -386 dry battery out of the CY-2562 battery box—before hooking into a vehicle-radio setup. If you leave the battery in it'll damage your radio set.

1 Thing Replaces 2 Springs

SORRY!
OLD SPRINGS
ARE OUT...
AN' WE'RE IN...



...WE'RE
REPLACING
BOTH OF 'EM!



NEW
ASSEMBLY

A retaining assembly for your TA-43 or -312 telephone set takes the place of the 2 helical torsion springs that hold the handset in place. You can get it now with NSN 5805-01-025-8891.

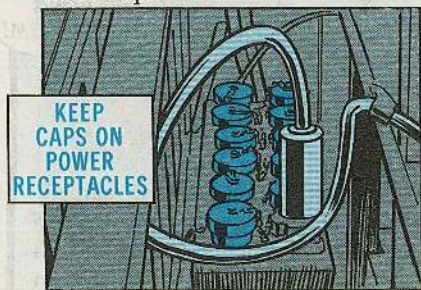
Cables, Connectors Cater to Care



Give your radio set's cables and connectors a protecting hand when they're in your M880-type truck.

That's because a couple of thoughtless actions on your part can cripple your communications.

For example, you leave the cover off a power distribution box receptacle when you don't have a cable connector hooked up.



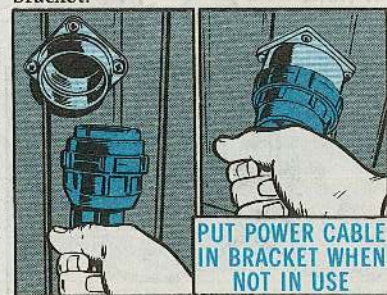
This'll let dirt and dust gang up on the receptacles. If there's no cover

over the truck bed, water can get in the connector and short out the 60-amp power system.

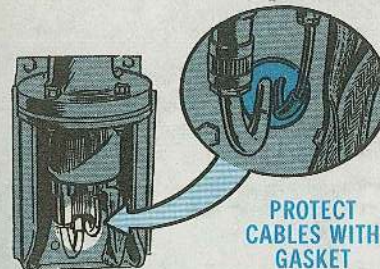
So, keep the cap on the receptacle.

Also, take care of the battery power cable connector when it's not connected to the distribution box. You need to keep it from knocking around in the truck bed.

Be sure to fasten the power cable connector into the truck bed wall bracket.



When you're tying your CG-1773() coax cable and CX-4722() remote control cable to your MX-6707 matching unit, make sure the gasket in the truck bed wall is in place. If the

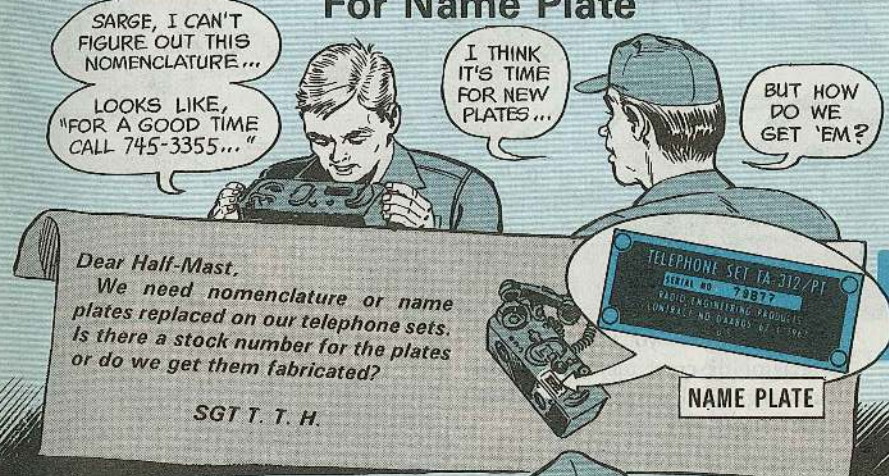


gasket is missing, the cable can scrape on the metal and get cut.

If you're putting the cable through the gasket for the first time, avoid cutting a slit in the gasket. It can let the gasket keep splitting. Cut a round hole instead.

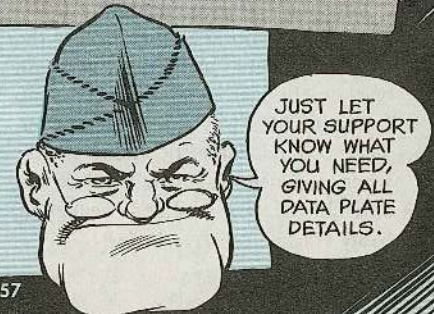
SB Tells It ...

For Name Plate



Dear Sergeant T. T. H.,

There's no stock number for the name plates for your telephone—or any other electronics equipment for that matter. However, you can get the plates like it says in SB 11-631 (May 73).



GET 'AHEAD' with SPH-4 PM



NOW
HERE
THIS,
BIRD
TYPES...

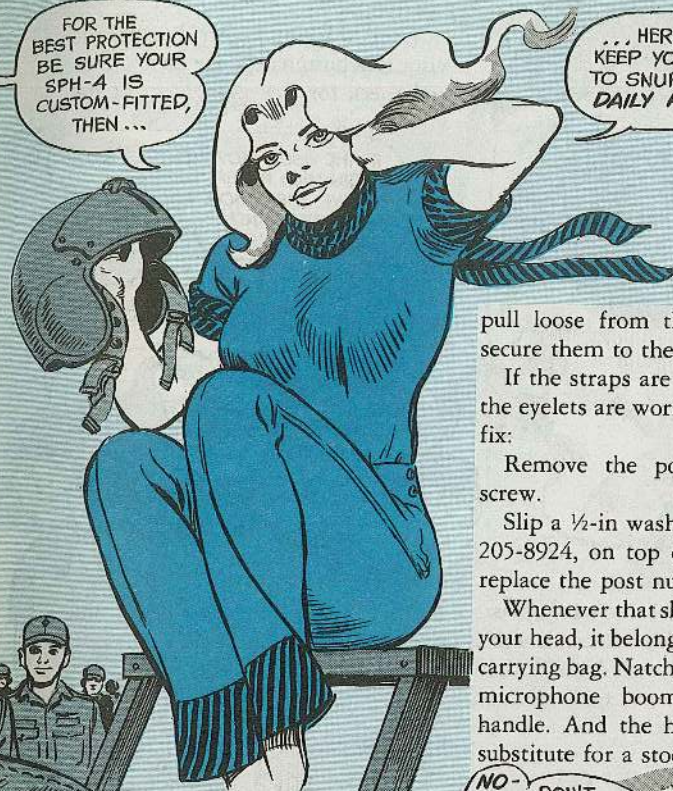
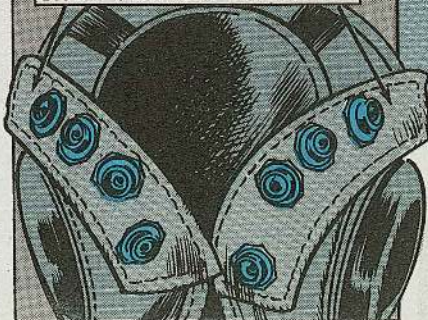
FOR THE
BEST PROTECTION
BE SURE YOUR
SPH-4 IS
CUSTOM-FITTED,
THEN...

... HERE'S HOW TO
KEEP YOUR HELMET UP
TO SNUFF WITH A FEW
DAILY PM CHECKS!

You really need your head if you're an aviator or crew member. So use your noggin and protect it with good flight helmet PM.

eyeball and feel the leather portion of the retention assembly around the snap fasteners. Age and use can weaken the leather and let that snap fastener tear away from the leather. That could loosen the helmet right when you need it most. Replace the assembly if the leather's weakened, badly cracked or stretched.

LEATHER WEAKENED?
BADLY CRACKED? STRETCHED?



pull loose from the post nuts that secure them to the helmet shell.

If the straps are not badly torn but the eyelets are working loose, here's a fix:

Remove the post nut from the screw.

Slip a 1/2-in washer, NSN 5310-00-205-8924, on top of the strap, then replace the post nut.

Whenever that skull bucket's not on your head, it belongs in the protective carrying bag. Natch, you never use the microphone boom as a carrying handle. And the helmet itself is no substitute for a stool.

Got a loose cup harness? On some early model helmets, the nylon ear cup retention harness strap eyelets can

CUP
HARNESS
LOOSE?



NO-
NO-
NO!
DON'T
CARRY YOUR
HELMET BY
ITS MIKE
BOOM!



?
WONDER
WHAT SHE'D
SAY IF SHE WAS
AROUND WHEN
HE SITS ON IT?



Visor working right? Loosen the visor lock button no more than 1/4-turn and check for free movement of the visor in the tracks.

IF THE VISOR MOVEMENT IS BALKY OR BINDING, NEVER LUBE IT. REMOVE THE VISOR LOCK ASSEMBLY AND CHECK IT OUT!

HERE'S HOW...

A WORD TO TH' VISOR, HUH?

YUP! I DIG HER ADVISORIES!

—Remove the button screw, plastic button head and plastic washer. If they're in the right order and don't show signs of wear or rubbing, check the visor assembly.

LOCK ASSEMBLY OK?

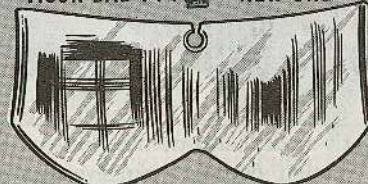


—Gently rotate the threaded lock button stem a quarter-turn either way. That'll let you slip it out of the slot in the visor itself, and then remove it through the slot in the visor housing.

Eyeball the visor and its attached spacers. If either's bad, order a new assembly. NSN 8415-00-490-1196 gets you the neutral (tinted) visor, and

NSN 8415-00-490-1197 brings the clear one.

VISOR BAD ... ASK FOR NEW ONE



If the problem seems to be in the visor tracks or spacers on the shell or the visor cover, the helmet goes to support for a fix.

TRACKS OR SPACERS WORN? SEND HELMET TO SUPPORT



HUH? COME AGAIN, TRIGGER-6... I DO NOT READ YOU!

TRIGGER-6 TO TRIGGER-4... I SAY ABAIN... CHECK YOUR EARPHONES FOR DAMAGE!

Eyeball the retention assembly: Any torn fabric or damaged fasteners? Does the chin strap buckle work right? Replace a defective assembly with NSN 8415-00-411-0113 (regular) or NSN 8415-00-411-0114 (extra large).

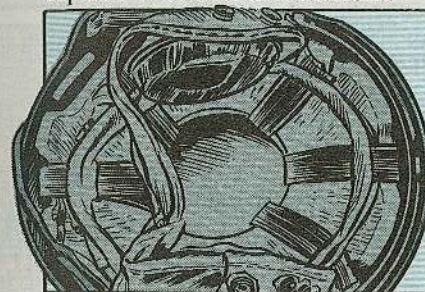
TORN FABRIC-DAMAGED FASTENERS?

GET NEW STRAP



Headband and suspension assembly—check for proper fit and adjustment, but if you spot signs of wear the helmet goes to support.

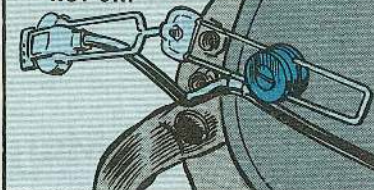
Liner—Same thing goes: Support replaces or re-fastens a loose one.



Check the ear cups, ear cup cross straps and sponge rubber spacers (if you need 'em) for wear or looseness. If the spacers are pulled away from the ear cups, use rubber cement to fix 'em to the cups again. Replacement spacers come four to a kit. Use one or two spacers per ear cup for the best fit you can get.

Check the microphone, boom and cord for obvious damage and try the operation of the adjusting nut.

MICROPHONE ADJUSTING NUT OK?



Make an operation check of the electronics. Bad reception could point to earphone damage. Poor transmitting means problems with the microphone head or cord. Check the connections; are the rubber boots keeping moisture out?

Connecting plug corroded? Clean away light corrosion with a plain rubber eraser.

TM 10-8415-206-13 (Apr 72) with Changes 1 and 2 gives the run-down on the helmet and its parts.

See TM 11-5965-279-13P (Sep 76) for the avionics equipment.

BOTH PUBS INCLUDE PARTS LISTS... AND THE HELMET PUB LISTS NECESSARY DAILY PM CHECKS!



Phase Number Only

Never let the "cycle" phase you when pulling phased maintenance inspections, bird types.

There is no point in listing cycles on your checksheets since the headshed (TSARCOM) does not plan any inspections for a certain cycle and phase.

Your phases are numbered 1 thru 8 for the Huey—1 thru 4 for the Chinook. When a cycle is complete just start over again with number 1.

No Murphy, Please!

B-BUT, SARGE... HOW WAS I T'KNOW OL' HUEY-BIRD'S GROUND HANDLING WHEELS WERE ON BACKWARDS?

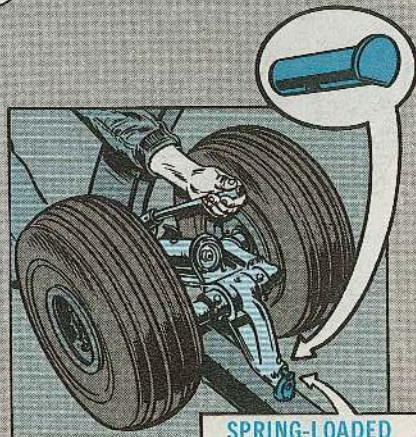
...I'LL PUT YER HEAD ON BACKWARDS!

IF I CAN ONLY CATCH YOU...

Always install the UH-1 ground-handling wheels on the skids with the fixed pin in the rear eyebolt and the spring-loaded pin in the forward eyebolt.

If you put the wheels on backwards, you can get knocked bass over teakettles when they accidentally depart the bird. That's the reason for the caution in para 2-8 of FM 55-14 (Oct 74) on transporting supplies and equipment.

Course, the forward eyebolt interlocks with the spring-loaded pin so the wheels stay put.



SPRING-LOADED PIN IN FORWARD EYEBOLTS

T-T Strap A-OK!

HEY... NO! DON'T PITCH THAT STRAP JUST BECAUSE IT'S WHITE!

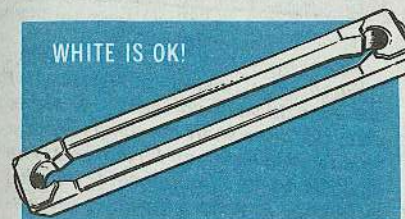
? BUT DON'T THAT MEAN IT'S WATER DAMAGED?

If you're in the business of tearing down the rotor head on a Huey, Cobra or Kiowa and are concerned about the appearance of the T-T strap, hold one!

A new manufacturing process adds a white epoxy concentrate to the urethane wrap, coloring the strap milky white.

Some mechs believe this is a faulty condition, caused by water. Not so—the strap is acceptable.

The white straps are:



NSN	AIRCRAFT
1615-01-044-5510	(UH-1)
1615-01-045-8542	(AH-1)
1615-01-041-5070	(OH-58)

Needle Nose Adapter

SPECIALIST, DO WE HAVE A NEEDLE NOSE ADAPTER IN STOCK FOR MY GREASE GUN?

NOPE... BUT CONNIE TOLD ME THE CURRENT ISSUE OF PS WOULD TELL HOW TO GET ONE!

Have a hand-operated grease gun without an adapter to use on small internal-style lube fittings? Ask for NSN 4930-00-200-1841, Coupling, Grease Gun.

It's listed in SC 4920-99-CL-A90 (Sep 76) for units authorized AVUM No. 1 Tool Set and SC 4920-99-CL-A92 (Feb 77) for the No. 2 Tool Set.





Dear Editor,

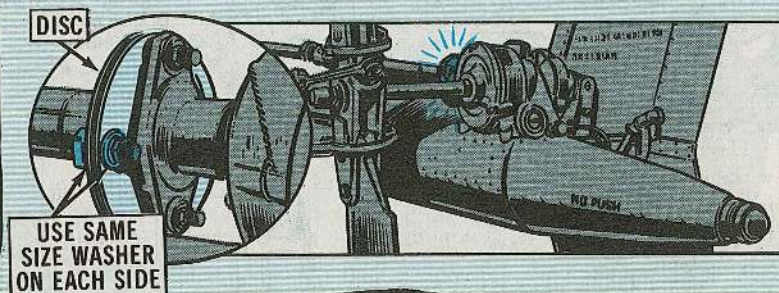
We recently discovered the cause of a persistent high frequency vibration in the tail rotor drive system on our OH-58A. Other mechs may benefit by our experience.

There're 2 different thicknesses of beveled washer, NSN 5310-00-131-2665, that are being used on the tail rotor drive shaft couplings.

When you install a washer of different thickness on each side of the disc, the drive shaft couplings are not able to slide back and forth freely. The disc flexes to compensate for this difference in washer thickness, causing the vibration.

To head off the problem, we simply use washers of the same thickness on each bolt.

SSG T.R.



(Ed Note: Right on! The washers are made from a primary and alternate steel stock with a tolerance of ± 0.006 inch. You are correctly compensating for the difference in size and weight.)

Connie's Mini Minis



Revised TM 38-750

Hold off on putting the info on the revised TM 38-750 in PS 304 to work. Do not order new forms or use that information until you have a copy of the new TM 38-750 in your hand. Even after the book arrives, wait for word on when to implement it. The headshed wants you to have time to read and understand the revised book—and the revised AR 220-1—before you put 'em into effect.

Case Closed

Ammo cases—LIN D70550—for your M16A1 rifle are nonexpendable. Close your mind about 'em being expendable per page 10, PS 302. The magazines are expendable, tho.

No. 1 Common Goof

The charger illustrated in SC 4910-95-CL-A74 (Jul 77) as item 1, page 9, is a Battery Charger, PP-1451/G. It's not a part of the set. What was meant to be illustrated was the battery charger distribution panel, NSN 6130-00-940-7866.

A Pub's Pub

Lost in electronics? Get the one book that identifies all the others. TM 11-5800-213-L (Aug 77) lists your commo-electronic gear and then shows the pubs—TM's, TB's, SB's, etc.—needed for its operation and maintenance. Don't have it? Get your pubs clerk to order it, like now.

☆ U.S. GOVERNMENT PRINTING OFFICE: 1978 — 757-081/6

New Pump NSN

All tank and pump unit operators who work in frigid climes should get their requests in now for the new electric motor-driven petroleum pump NSN 4320-01-047-1927. Any tank and pump unit issued under LIN V12141 is authorized the pump as required. The Headshed will buy the electric pumps when they get an idea from your requests how many are needed. Their costs will depend on how many are bought, but right now you can figure about \$1,350 per.

Holddown Washer

The washer listed as item 2, Fig 85, TM 9-2320-209-20P (Oct 76) is too small for the battery holddown on your deuce-and-a-half. Use 5310-00-953-8628.

Gasket for M880-Series

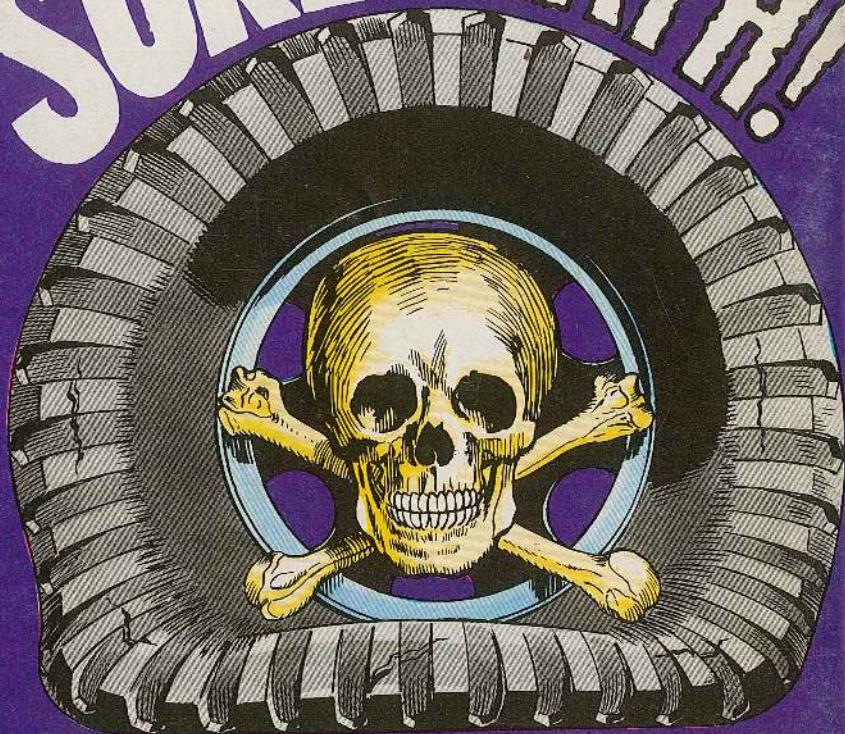
The PN is wrong for the cover gasket, item 21, page 2-65, Change 1, TM 9-2320-266-20P (Oct 76) for the brake master cylinder on your M880-series trucks. Use FSCM 86403 PN 2881512.

Throttle Cable, 10-Tonner

The P/N and SMR code listed for throttle cable, item 1, Fig 27, TM 9-2320-208-20P (Dec 71) are wrong. NSN 2590-00-693-0612, P/N 7373341 and SMR code PAOZZ will be added to the -20P in an upcoming change.

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

SURE DEATH!



TOO MUCH

AIR IS

BAD...

NOT ENOUGH

AIR IS

WORSE!

CORRECT YOUR TIRE PRESSURE
(WHEN COOL)