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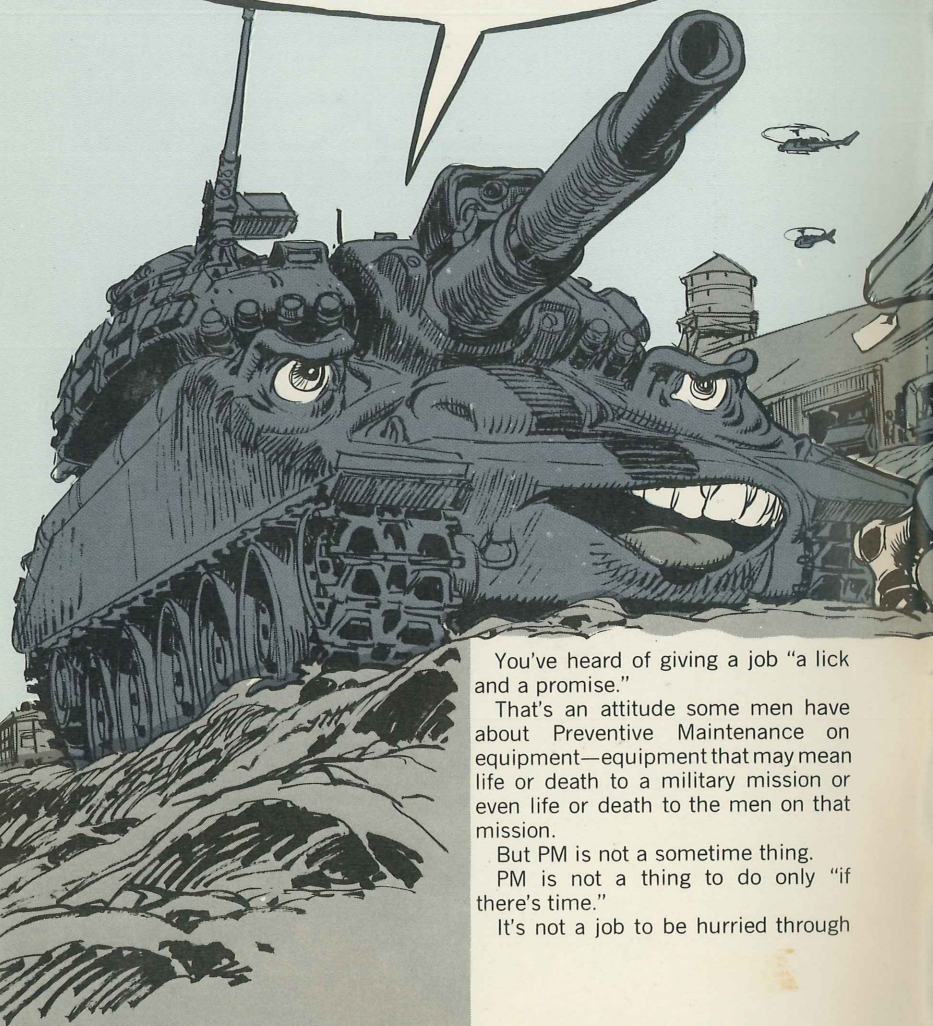
THE PREVENTIVE MAINTENANCE MONTHLY

MY WRECKER'S
IN FINE
SHAPE, SARGE.
GOOD
SHOW!

MAINTENANCE is for
Commanders, Too—page 29

EQUIPMENT PM IS . . .

NOT A SOMETIME THING!



You've heard of giving a job "a lick and a promise."

That's an attitude some men have about Preventive Maintenance on equipment—equipment that may mean life or death to a military mission or even life or death to the men on that mission.

But PM is not a sometime thing. PM is not a thing to do only "if there's time."

It's not a job to be hurried through

COOL IT, "TRACKS!"
I'LL CHECK YOU OUT
GOOD, NEXT MONDAY
AT WORK FORMATION...



before operation—or before chow or before you go off for the weekend.

PM is a job to be done with care every step of the way by the LO and the TM.

PM means prevention—prevention of damage, prevention of failure, prevention of loss.

Neglect PM—even once—and you invite damage to the equipment, failure of your mission, loss of equipment or even loss of life—maybe your own.

PS

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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RETREADED TIRES

EVERYBODY'S GOT A PIECE OF THE ACTION. AND THERE'S PLENTY OF TREAD BREAD AT STAKE IN THIS DEAL.

YES... MILLIONS OF BUCKS! IT'S THE ARMY'S TIRE RETREAD PROGRAM!

Yep, everybody from equipment operators in using units to generals in major commands has a responsibility for seeing that tires get a chance for a "second life"—maybe even a third or fourth life.

AR 750-36 (Jul 71), Rebuild And Retread Of Pneumatic Tires, calls for maximum use of retreaded tires.

In FY 71 and 72, this saved Uncle more than 19 million dollars when 627,000 tires were retreaded and put back into service.

RETREADS ARE CONSIDERED AS NEW.

Chances are, unless you've got a real sharp eye, you don't even know you've got a retread when it's issued to you. And it'll probably give you just as good service as a new tire would. If it doesn't, you should report it—by EIR—to the U.S. Army Tank-Automotive Command, same as you would with a bum new tire.



The goal is 75 percent of new tire needs met with retreads. And we're already up to 69 percent.

Maybe you didn't know that the Army considers a retread just as good as a brand new tire. Except for the front wheels of buses, retreads can be used on all equipment.

SEE THE GUIDE IN TB 750-981-1 (JAN 73) EIR DIGEST.



...ARE MONEY!

SO WHAT'S ALL THIS GOT TO DO WITH ME, THE OPERATOR OR MAINTENANCE TYPE?

WE DON'T RETREAD TIRES!

BUT YOU'VE GOT THE MOST IMPORTANT PART IN THIS PROGRAM.

That's making sure your tires are turned in for retread before it's too late. Before they're worn so far they can't be retreaded. Like when the rubber's been worn off clear down to the fabric.



USE YOUR TIRE AND RIM LUBE



Sad to see is a tire that was caught just in time for retreading—but was ruined taking it off the rim. The bead was torn up because someone didn't use tire-and-rim lube to make demounting easier. This special lube comes under FSN 2640-256-5526 (1 quart), FSN 2640-256-5527 (1 gallon) and FSN 2640-256-5529 (5 gallons). How to use it is explained in paragraph 2-20, TM 9-2610-200-20 (Jan 71).

You don't have to be an expert to tell when a tire is ready for retreading. Your tire inspection is spelled out plain and simple in para 2-1h, TM 9-2610-200-20 (Jan 71), Organizational Care, Maintenance And Repair Of Pneumatic Tires And Inner Tubes.



FOR MORE INFO LOOK AT TM 9-2610-201-14 (JULY 72) STANDARDS AND CRITERIA FOR TECHNICAL INSPECTION OF TIRES.



FLAT CHECKERS

Before you remove the tube from a flat tire, help yourself like so:

Spot the puncture on the tire with a chalk mark. Then make a couple of chalk marks on the tire to spot the location of the valve.



When you remove the tube, lay it over the tire so its valve matches up with the

valve check mark on the tire. The other mark on the tire will guide you to the damage on the tube.

Even if you've got water handy for water testing the tube, this tire check'll help you pin-point the tube damage faster.

Before you install the tube, reach inside the tire (with a gloved hand) and clean out any gravel, dirt, trash, etc.

Always remove the tube carefully to prevent further damage.

For more tube care scoop see Chap 3, Sect II, TM 9-2610-200-20 (Jan 71).

GET THE RAG OUT

A plain, ordinary ol' rag is mighty handy when you check the engine oil level on your 2½-ton multifuel truck.

You hold the rag so any oil dripping off the dipstick won't get on the air intake hose or on those wires for the manifold preheater and engine temperature gage.

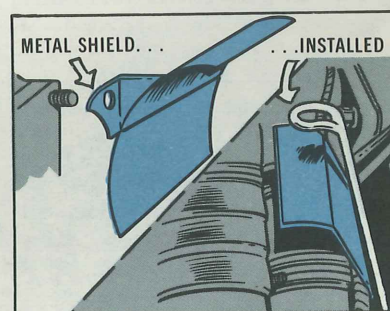


Oil rots rubber—nuff said.

Another problem—the dipstick snagging on those wires—can be solved with a

simple metal shield. Your shop can make it out of a piece of light sheet metal.

It's bent so it covers the wires, and it fastens to the upper right stud of the intake manifold. Your shop people can figure out the exact size and shape needed.



MULTIFUEL ENGINE TRUCKS ...



**MUSCLE
IS
MURDER**

"Stop! You're stripping my threads!" This scream is coming from the oil



filters on a lot a multifuel engine trucks. That's all the 2½-ton TM-209-series (M35A1, M35A2 etc.), the 5-ton TM-211-series (M54A2 etc.) and 5-ton TM-230-series (M656 etc.).

You muscle-types are putting too much torque on the bar (or bolt) that holds down the oil filter housing.

All it needs is 60 lb-ft torque.

No more.

Use a torque wrench.

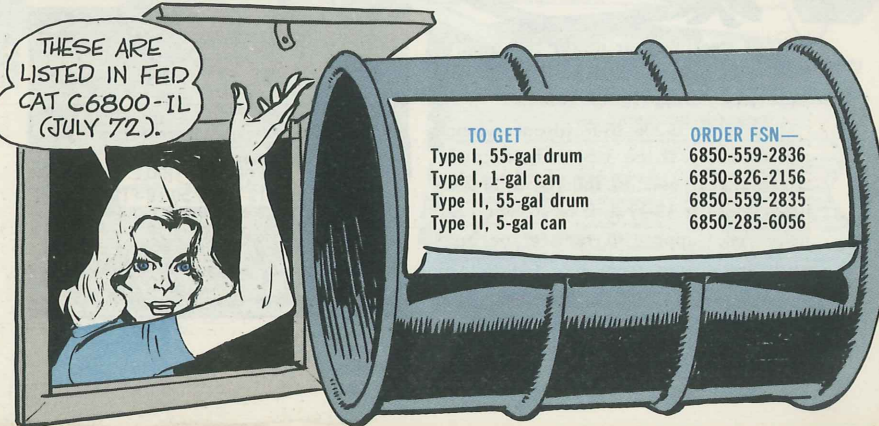
GREASE-CLEANING COMPOUND

TM 9-2320-218-10

Looking for the "grease cleaning compound" mentioned in Para 3-5 B of your TM 9-2320-218-10?

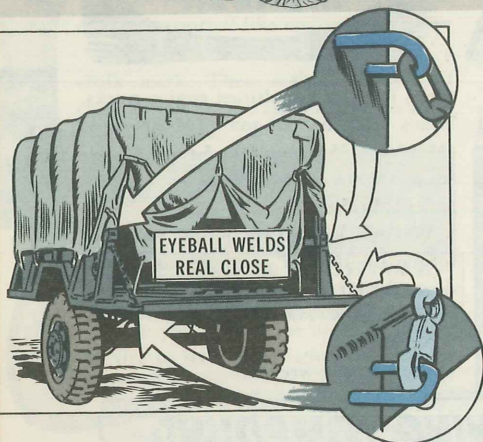
Ask for Cleaning Compound, solvent, emulsion type, Fed Spec PC 444. Type I is what you want for most jobs. Type II can be safely used only outdoors, with utmost care, while wearing gloves and goggles, on the roughest of jobs. These are listed in Fed Cat C6800-IL (Jul 72).

THESE ARE
LISTED IN FED
CAT C6800-IL
(JULY 72).



M105A2 1½-TON TRAILER . . .

LOOK AGAIN . . .



You could have a bum weld holding those "U" mounting staples for the tailgate chains on your M105A2 1½-ton cargo trailer.

You could get hurt, like when you put your weight on the open tailgate and the staples come off. Or you put something heavy on the tailgate and it drops onto your foot.

So, when you do your walk-around inspection, slow down going around those rear corners. Eyeball those welds real close.

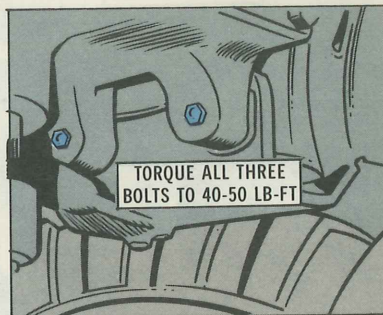
Got a bad one? Get it fixed.

ON M715 TRUCK . . .

STEER-GEAR BOLT REPLACEMENT

Your steering gear might be about to wobble or come loose on your M715 TM-244-series 1½-ton truck, so—

Take your 0-200 lb-ft torque wrench and find out. If the 3 bolts holding the steering gear case to the frame bracket break loose at 35-39 lb-ft or so, you need help. Ask support to replace the bolts with fresh ones from the TM 9-2320-244-34P (Nov 71), torqued to 40-50 lb-ft.



WHEEL REMOVAL THE EASY WAY

Dear Half-Mast,

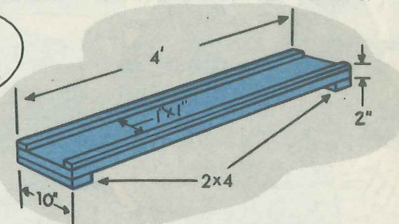
Do you have an FSN for a roller or dolly that pushes under dual wheels on a 5-ton truck to remove them?

CW2 G.W.A.

Dear. Mr. G.W.A.,

There's a wheel lift truck, FSN 4910-554-5983, but it's authorized at support level only.

Here's a homemade job that some outfits make to remove those dual wheels.



When you're ready to use the plank, spread some liquid soap, tire lubricant, or ethylene glycol on it. That'll make it easier for the wheels to slide.

Half-Mast

THIS SHOULD HELP YOU WELDERS OUT.

WELDING SUPPLIES



Dear Sergeant G.H.M.,

TM 9-237 (Nov 67), Operator's Manual Welding Theory and Application, is a must for welders. In Appendix D you find the materials used for brazing, welding, soldering, arc cutting and metallizing as well as their FSC's.

You can use SB 700-50 (Mar 71), Expendable Supplies, as your authority for getting your welding supplies and other expendable items.

Dear Half-Mast,

We've got a problem. We're authorized welding sets, but how do we get materials to use with these sets, and how do we know which materials to use?

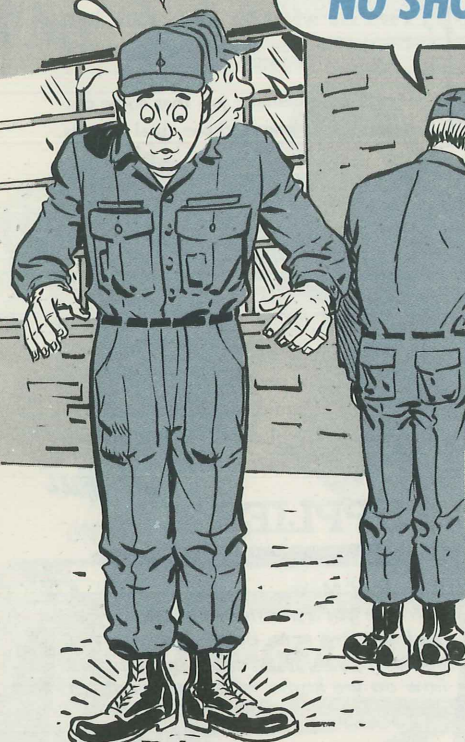
SGT G.H.M.

APPENDIX D MATERIALS USED FOR BRAZING, WELDING, SOLDERING, ARC CUTTING, AND METALLIZING

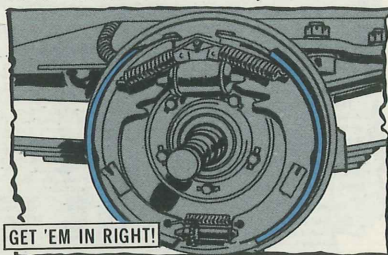
1. General	FSC	Equipment
This appendix contains listings of common welding equipment and materials, used in connection with the equipment, to perform welding operations. These lists are published to inform using personnel of those materials available for brazing, welding, soldering, cutting and metallizing; to repair, rebuild, and/or produce items requiring welding procedures.	3439	ELECTRODE, CUTTING
	3439	ELECTRODE, HEATING
	3439	ELECTRODE, OVERLAY
	3439	ELECTRODE, WELDING
	5120	FLINT TIP, FRICTION IGNITION
	5120	FRICTION IGNITER (IGNITION)
	5120	FLUX (for brazing, soldering, etc.)
	5120	GLOVES (cloth and leather)
	5120	GOGGLES, INDUSTRIAL
	5120	HAMMER, WELDERS
	5120	HELIUM, TECHNICAL
	5120	HELMET, WELDERS
	5120	HOLDER, ELECTRODE
	5120	IGNITER, FRICTION
	5120	LEAD, ELECTRICAL
	5120	LENS, GOGGLES, INDUS.
	5120	LENS, HELMET, WELDER
	5120	MANIFOLD, GAS
	5120	METALLIZING
	5120	METAL
	5120	META

Half-Mast

NO SHOE SWITCHING



Some guys are really messing up the brakes on their M715 or other TM-244-series 1¼-ton vehicle. They're switching



the primary and secondary brake shoes on the left side of the truck.

Why would they do this?

Just because para 2-105a(2) in TM 9-2320-244-20 (Aug 71) says you install the brake adjusting screw "with star wheel next to secondary shoe". They know they've got to have the star wheel lined up with the backing plate hole so that they can get in with the brake adjusting tool—so they install the secondary shoe in front to go along with the TM.

That poop in para 105a(2) goes only for the brakes on the right side of your truck. When you install brakes on the left side, you put in the adjusting screw so the star wheel is next to the primary shoe. Then the star wheel's lined up with the backing plate hole—and that's all you're really after.

And don't let Figure 2-82 in the TM confuse you on this point—it doesn't fit either side.

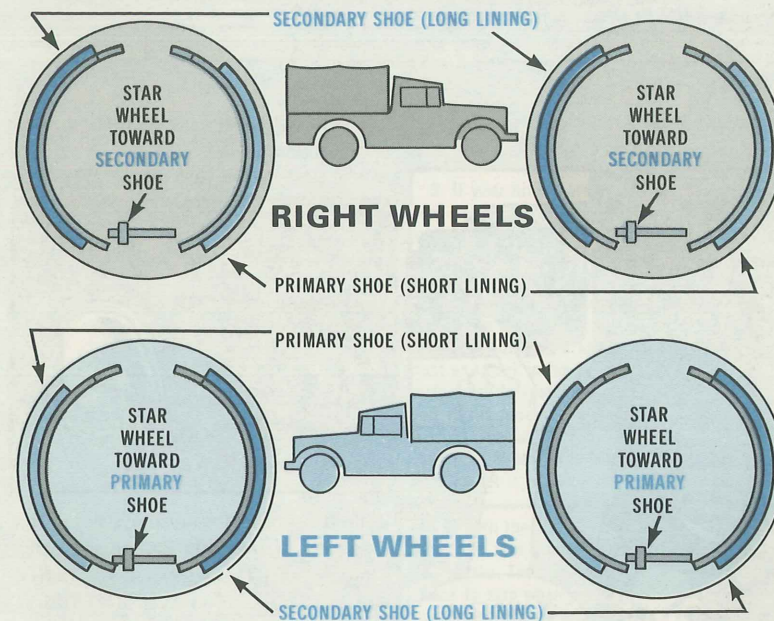
REMEMBER-

—Primary shoe (short lining) in front on all 4 wheels.

—Secondary shoe (long lining) in back on all 4 wheels.

—Star wheel next to secondary shoe on right side.

—Star wheel next to primary shoe on left side.

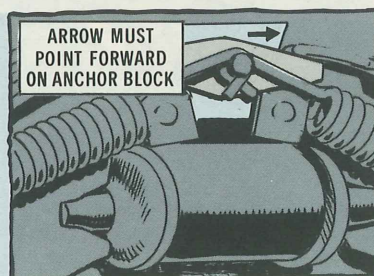


Natch, if you've got relined brake shoes with full lining on both shoes, you

don't worry about which is primary and which is secondary.

Make a note. When you're installing brakes on that M715 (or other TM-244-series 1¼-ton vehicle), make sure the little arrow on the brake self-centering anchor block points to the front of the vehicle.

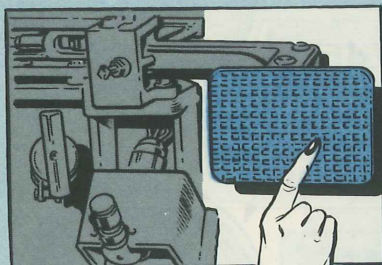
If you goof up on this, your brake shoes won't fit against the drum like they should.



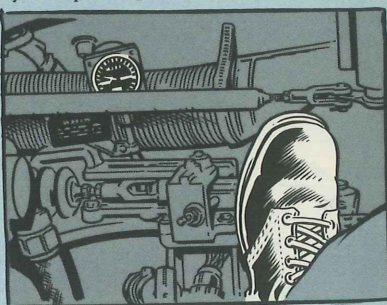
M60A1 TANK

PARKING BRAKE

Know what's wrong with the parking brake on your M60A1 tank?



That's what the brake line pressure gage is there for, to tell you how hard you're pushing down on the brake.



Your operator's manual says not to get a reading of over 900 PSI on the brake pressure gage. That's good advice. In fact, you hardly ever need over 500 (halfway between the 0 and the 1000 on the gage) unless you have to park on a steep slope.

THE SOFTER YOU SET YOUR PARKING BRAKE, THE EASIER IT WILL BE TO RELEASE WHEN YOU WANT TO GO.

On other tanks (including the M60) with mechanically operated brakes, you sometimes had to stomp down pretty hard on your brake to set it for parking.

The hydraulic brake on your M60A1 works so well that you can get in trouble by setting it too hard.

That's because (unlike the M60 and other tanks) you have to push down on your brake a little bit harder than it was set before you can release it.

TO PARK

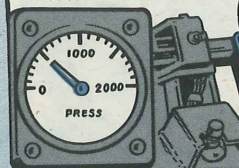
Your brake pressure gage can help you there.

Here's the way to put on your parking brake so you can release it without any problem:

1. Vehicle completely stopped. Shift lever in neutral.



2. Push down on brake pedal until you get a reading of 500 PSI on the brake pressure gage. Keep your foot steady and see if the reading on the gage stays at 500.



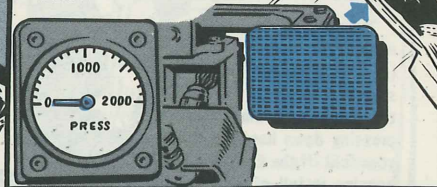
(If the gage reading falls you've got a leak in your brake hydraulic system, so tell your tank commander, your company

mechanic and anybody else who might be interested, that your brakes are bad.)

3. If your brakes are OK, keep your foot pressure and gage reading steady at 500 as you push the shift lever firmly but gently from N (neutral) to P (park). (You should have no trouble. If there's a lot of dust and gunk in the transmission shift lever housing, you might have to tap the ball of the shift lever a couple of times with your hand to get it to move.)



4. With the shift lever in P (park) take your foot off the brake. The gage will go back to zero when you take your foot off the brake but the parking brake will be locked.



Another advantage of having a standard setting (500) for your brake is that you know what kind of a reading you have to get to release it.

IF IT'S STILL STUCK

If the brake has been set too hard, here's what you can try:

1. Put your left foot on the left side of the brake pedal and press down with all your might while you try to move the shift lever from P (park) to N (neutral) with a gentle pressure.
2. If this won't do it, rapping the shift lever with the palm of your right hand may loosen it.
3. If none of this works, keep on pressing down with your left foot hard as you can while you use your right foot to give the foot brake a gentle kick. If this won't jar things loose, give the brake pedal a harder kick.

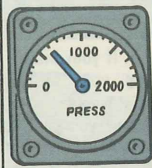
Nearly always your brake will unlatch when you try all these things.

'Course, you can avoid all this starch by being gentle when you put the brake on.

TO TOW A TANK WITH A STUCK BRAKE, FIRST DISCONNECT THE U-JOINTS.

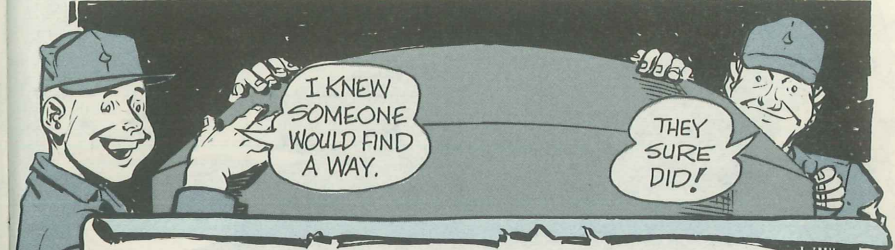
HERE'S HOW TO RELEASE YOUR PARKING BRAKE.

1. Push down on the brake pedal until you get a gage reading slightly above the reading you had when you set it. (A reading of 600 for a 500 set should do it.) Make this a steady pressure. Pumping the pedal won't do it.



2. Hold this pressure and move the shift lever from P (park) into N (neutral). This should be easy to do. If the lever won't move, try pressing down harder with your foot. If the shift lever housing is full of dust or gunk you might have to tap the shift lever with the palm of your hand a couple times to make it move.

M60/M60A1 TANK SOCKET FIX



Dear Editor,

Anybody who has ever tightened end-connector bolts on an M60/M60A1 tank knows that the $\frac{3}{4}$ -in square-drive 15/16-in socket-wrench socket, FSN 5120-232-5681, doesn't do too good a job because it only grips about half the end-connector bolt.

Any post or commercial machine shop can quickly shape up this socket by putting it on a lathe and—

1. Cut 1/16 inch off the face of the socket to make the face completely level.

2. Cut a 3/16-in wide bevel from the face at a 45° angle.



After these cuts the socket will grip the head of the connector bolt along its entire length.

Since this socket is used only to turn end-connector bolts, the changed shape of the socket will not bother anything else. Another advantage is that the socket can be recut when it wears out. This can be done at least 3 separate times, increasing the service life of the socket at least 300 percent.

MSG Gerald Russ
Fort Knox, Ky.

(Ed Note—Real good deal.)

FORGET SOMETHING? . . .

TANK FINAL DRIVE FOUL-UP

LUBE
THAT
FINAL
DRIVE!

The final drive on your M48- or M60-series tank has got to keep turning or you can't go anywhere . . . and it won't turn very long with no lube in it.

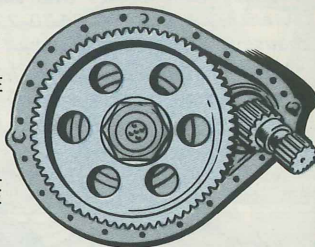
A new or replacement drive comes to you without any oil in it. 'Fact, when you put a final drive on it will be absolutely dry.

IS THIS EASY
TO FOLLOW?
WELL, HANG ON,
BECAUSE HERE
COMES THE
BRAIN
STRAINER...

You've got to put oil in a newly-installed final drive before you move the tank. You take out the fill-and-level plug and fill to level (about 8 quarts). See the vehicle LO for grade of oil based on temperature range.

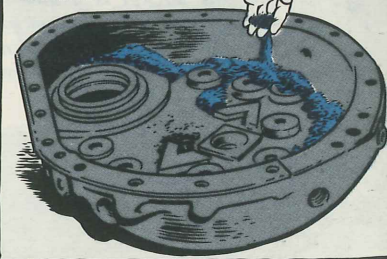
You have to do this before you go anywhere. When you smell the hot metal from the internal gears of an unlubed final drive—as you will in about 10 minutes driving—it's too late. You have already ruined a pair of \$1,619 final drives.

MAKE
SURE
THERE
IS
LUBE
IN
FINAL
DRIVE



FILL
TO
LEVEL

TOO LATE!



Here's how you assemble, hold, carry, and load 105-MM howitzer ammo with a spiral wrapped cartridge case:

1. Press the projectile easy-like into the case—until the lip of the case is flush with the projectile's rotating band.
2. To lift or move the round, place a hand at the center of the projectile itself.

And, keep your hand there until you load the round.

3. If you grab the projectile too far forward, its heavy base will make the round sag in the center. That'll spread and deform the lip of the spiral wrapped case. The deformed case won't chamber.



HOLD IT LIKE SO



CASE
WON'T
CHAMBER

YOU CAN SPOT A
SPIRAL WRAPPED
CASE EASILY BY
THE GROOVE.

NEED HELP?
GOT PROBLEMS
OR A MAINTENANCE
IDEA?
THEN, SEND THE WORD
TO:

MSG Half-Mast
PS Magazine
Fort Knox, Ky 40121

M728 CEV BOOM AND BRAKE TIPS

Perfectly good hydraulic system parts are being replaced in M728 CEV's because some inspectors don't know how the boom is supposed to work.

They expect the boom to stay in position when it is stopped past top dead center toward the stowed position.

Because the boom will not stay in this position but, instead, drifts down toward the stowed position, they gig the vehicle.

The counter balance valve is replaced because it lets hydraulic oil escape down to the reservoir for reuse. However, this is exactly what it is supposed to do.



Pages 2-134 through 2-140 of TM 9-2350-222-10 (Aug 65) have the dope on winch operation.



The traverse gear box magnetic brake keeps the turret from moving when you turn the turret power ON. You take this brake off when you hold down on the palm switch on either the gunner's or commander's control handle.

The M728 is not like any other member of the M60 tank family because only on the M728 can you traverse the turret by accident if you move the gunner's handle without pressing in on the palm switch.

Reason?

Only on the M728 is the traverse gear box output torque greater than the holding capacity of the magnetic brake. On other members of the M60 family, torque is less than the capacity of the magnetic brake. That is why the M728 turret will

move when the others won't.

Accidentally hitting the commander's handle in any of the M60 family vehicles will not result in turret movement.

All kinds of things can happen because of this, including people getting hurt. At the very least you'll wear out your magnetic brake in a hurry.

Get supply to order decals to stick on the gunner's handle to remind you.

Order it as FSN 2590-940-8817.

**CAUTION
MAGNETIC BRAKE
SWITCH MUST BE
DEPRESSED BEFORE
AND DURING
POWER TRAVERSE**



PUT DECAL
ON GUNNER'S
CONTROL
ASSEMBLY

WHAT YOU DON'T KNOW CAN HURT YOU . . .

M60/M60AI GUN MOUNT PROBLEM



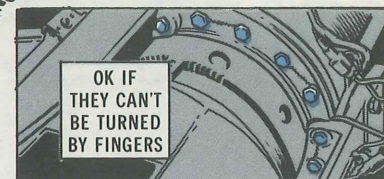
Tank commanders and gunners—
Listen up on this.

The 16 screws that attach the cover to the gun mount look harmless, but if they break off, you could get hurt.

If these screws are broken or loose, the gunner's shield could be torn off the next time your gun recoils . . . and who needs a shield in the shins?

So, check out the screws before you fire.

Let your fingers do a little walking. If the screws can't be turned with your fingers they're safe for you to fire the gun. (Your support should have 'em torqued to 70-90 ft lbs.)



If you can move 'em with your fingers—or if the lockwire on any 2 screws is broken—get your support to put 'em in shape before you fire.



M60 TANK TUBE BLOWUP

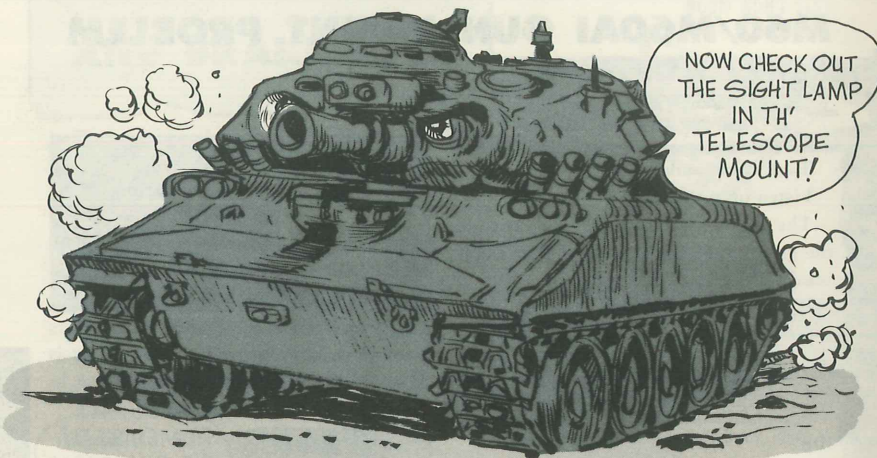


A little dirt or gravel in your shoe could hurt. But the same dirt or gravel in the 105-MM gun tube on your M60 series tank could make the tube blow the first time you fire a round in it.

To keep things out of the gun tube, 'specially when traveling cross country and on dirt/gravel roads, use the muzzle cap, FSN 1015-769-9846, from your basic issue items.

If there's any gunk in the tube, get it out before you fire . . . It can be a real tube-splitter.

AND THE LIGHT GOES ON . . .



The bounce of the track over terrain and the shock of firing conventional ammo can shake loose the check sight lamp in the telescope mount of your Shillelagh missile system.

Which is one reason why you perform steps 13 through 19, Table 2-12, of TM 9-2350-230-12. That little ol' tracker alignment test zeros the light to the cross-hairs . . . which is where it should be.

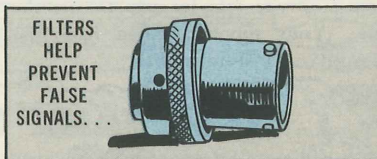
And, the fact that the lamp can get bounced is one reason why you don't skip steps 13-19 and go right on to 20 . . . the system self-test. You could get a false tracker "NO GO" or signal data converter reading by skipping.

So, do it by the numbers.

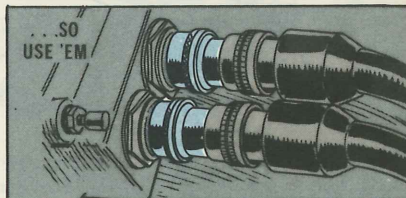
KEEP THE FILTERS

Those rounded gadgets that look like cable extensions on the tracker connectors have to stay with you when you change a tracker. Actually, they're new

filters, which ward off stray electromagnetic interference to the G&C system.



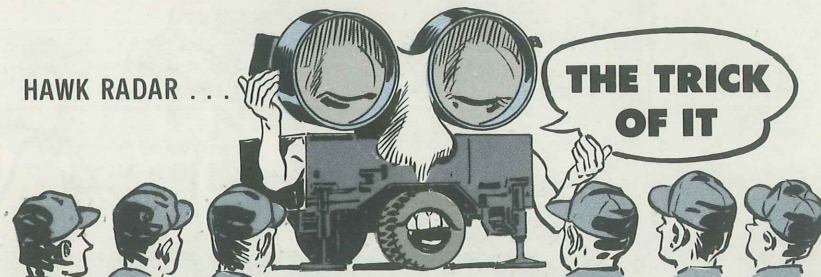
Keep them, and install them on the next tracker. That way you help prevent false error signals going to the missile.



NIGHT FIRING

To prevent brief night blindness when firing the missile, shut your eyes for a couple seconds after launch. The flash of the gun in the dark blinds you.

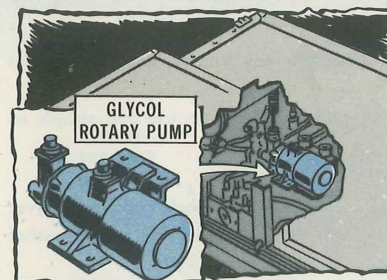
HAWK RADAR . . .



Stay a jump ahead of the rotary glycol pump on the AN/MPQ-39 radar.

Catch any fault in time so the pump can be repaired.

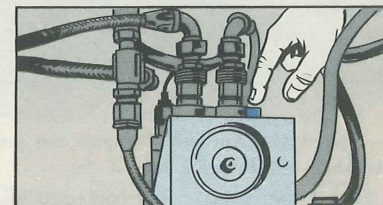
Once the coolant fluid damages its motor, you can kiss it good-bye.



Follow Step 2, Table 2-7 of TM 9-1430-513-12/2 (Jun 69) with Ch 6 (Feb 72).

Here's what you do every week.

1. Check the glycol filter. If the red plunger doesn't go over $\frac{1}{8}$ inch, it's OK.



2. If red plunger goes over $\frac{1}{8}$ inch, clean the filter cells of the glycol filter assembly.

3. Inspect the rotary pump for leakage. If you see more than 5 drops per minute, remove it. Exchange it at your DSU for a good one.

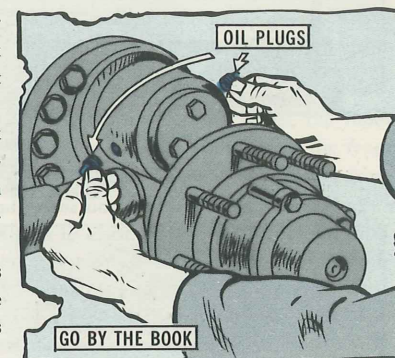
It's a sure-fire procedure.

IDLER WHEEL LUBE

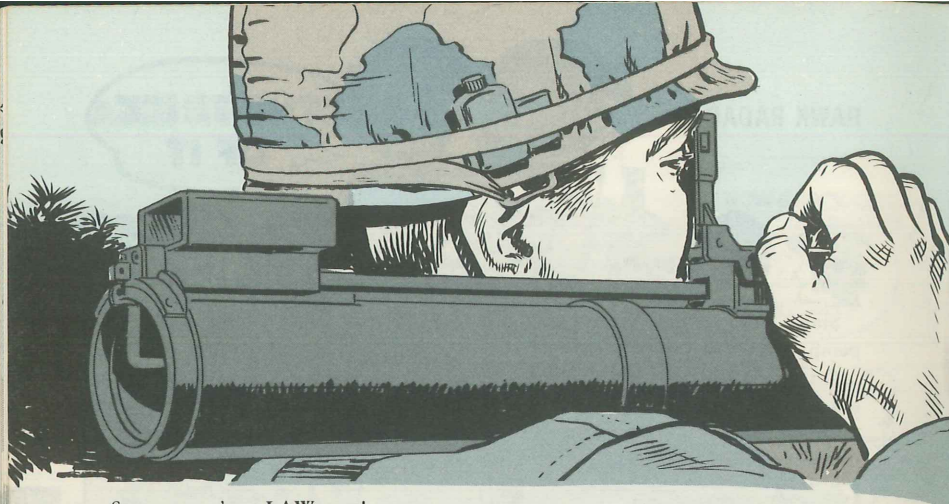
Forgetting to check the oil in the idler wheel support arm housing of your Hawk SPL XM727 carrier can make for a fast burn . . . on the bearings.

The idler arm support needs a check every 1000 miles of operation . . . or quarterly, whichever comes first. Low lube can burn out the bearings and put your carrier down.

Note 1, LO 9-1450-501-12 (Jun 68) tells you how, and "A" panel of Fig 3-5, page 3-7, TM 9-1450-501-10 (Nov 67), shows you. The rest is up to you.



GO BY THE BOOK



So now you're a LAW man!

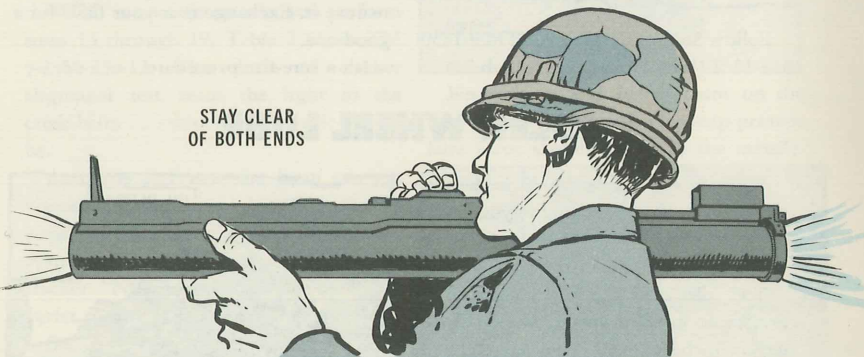
This Light Antitank Weapon can punch through any known tank armor and will help you keep the peace.

The LAW rocket, a self contained weapon system, is easy to use and simple to maintain.

SAFETY PRECAUTIONS

1. Remember that the LAW is a package with a sting in both ends. Whenever you're handling, unpacking or inspecting the LAW, never stand in the way of either the down-range or the back-blast end of it. Both ends are dangerous.

STAY CLEAR
OF BOTH ENDS



2. Like any other rocket, you store the LAW with the nose pointed away from other types of ammo. The noses of all LAW rounds should be pointed in the same direction.

3. Check your LAW often for damage. Don't try to fire any damaged weapon.

4. Make sure the launcher is extended and locked before you fire. (Listen for the "click" that the detent makes when it falls into the locked position.)

YOUR M72-SERIES LAW

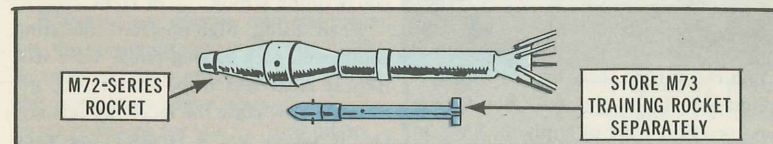


EXTEND
AND LOCK

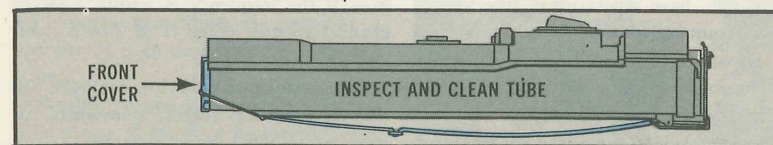


KEEP TRAINING
ROCKET LAUNCHER
CLEAN

5. The subcaliber training launcher is handled much the same as the real thing, except that the subcaliber rocket and the launcher are stored separately instead of as a unit.



6. Because the training Rocket Launcher M190 is used many times, the inner tube assembly must be kept clean. This launcher should be stored with the front cover and sling assembly installed on the launcher. This keeps dust and dirt from entering the inner rear tube assembly.



KEEP FRONT COVER AND
SLING ASSEMBLY ON
WHEN NOT IN USE



ARE YOU COMPATIBLE?

"Compatible . . ."

"Incompatible . . ."

Sounds like a marriage counselor making noise, right?

Well, hang in there, friend. It's counseling, and more, and it can help you keep your cool and your electronics equipment, too.

The name is electro-magnetic compatibility (EMC for short), and it's aimed at anybody who operates or maintains radiating electronics equipment. It's really your bag if radio and radar occupy your hours.



You can get the story on EMC by eyeballing AR 11-13 (Jul 69). But here're some practical ways of applying EMC to get better performance out of your equipment . . . and to prevent damage, or worse:

HERE'S HOW

If you have operational interference with your equipment, whether it be a jammed frequency or whatever, report the problem to your outfit's commo officer. Use the standard interference form, DA Form 3534R, if you can get it. Other-

wise, jot your problem down on a piece of paper or anything else handy, and get it to the commo officer.



Your commo officer can tell you what you're doing wrong . . . or right.

When using high-powered radiating equipment, such as long-range radio sets, tactical radar and tropo-scatter sets, get a fix on how close the receiving sets are. Or, if you've got a receiver operating check on the high-powered stuff. If it's within a kilometer of you, get permission to use frequencies that're safe from interference by the power transmitter. Same goes if the frequency is within adjacent channel splatter range (1 to 3 or 4 channels away, generally).

Otherwise, that radiation can burn out the receiver RF stages, transistors, or cause other damage to mixer stages.

"SPOTTED DOG" CHART

A mighty handy reference when operating radiating equipment near other radiating or receiving equipment is the "Spotted Dog" chart (retransmission interference chart) in your TM. If the chart's in your manual, use it.



A good EMC practice when testing radio equipment is use of a dummy antenna. It saves a lot of unnecessary radiation and interference to other equipment.

Wherever you operate your equipment, use the minimum power that you need to accomplish your mission. You can get the word out without wasting radiation. Saves problems for you . . . and others.

One place where it's not ideal to communicate is near a motor park. The competition is too great.

Use good grounding on your equipment. Peel an eye on past and upcoming PS issues on grounding, use your TM . . . and maybe even do a little side research. It pays.

Finally, coordinate frequencies and time of use, if assigned frequencies inter-

fere with each other. Your commo officer is the man to see here.

BUG SMOOTHING

By helping iron out the bugs in the reporting system, you can help accomplish the goal of the EMC program: compatibility of all communications-electronics equipment in your region.

By remembering a couple of "don'ts," you might even be around to enjoy the results of your efforts.

Such as:

Don't operate transmitters near ammunition storage areas. Compatibility desirability is obvious—if you don't want to blow yourself away.

Don't operate radiating equipment near live ordnance. Even a 1-watt transmitter like the AN/PRT-4 can detonate a squib, if you get close enough.

And, try to avoid operating tactical radar sets AN/PPS-4A and PPS-5A any closer than 50 meters to a radio set. The odds are high that your radio receiver will be damaged.



CAUTION: GRC-103 AT WORK

Maybe it's because it's not in red. Or maybe some people just don't read the book.

Whatever the reason, operators are ignoring the TM caution before turning on their AN/GRC-103 (V) radio sets. And bad things are happening to the equipment.

Like, that big, bold caution on page 4-5 of TM 11-5820-540-12 tells you to be sure all connections are made before you turn on the set. That includes the antenna or dummy load connection.

Otherwise, you're gonna burn up your transmitter. You'll burn it up, too, if you let the filter get dirty.

There's an interesting "Note" on page 4-5. Observe it and you won't be transmitting on unauthorized frequencies . . . or giving other people big headaches.

A HASTY CONNECTION

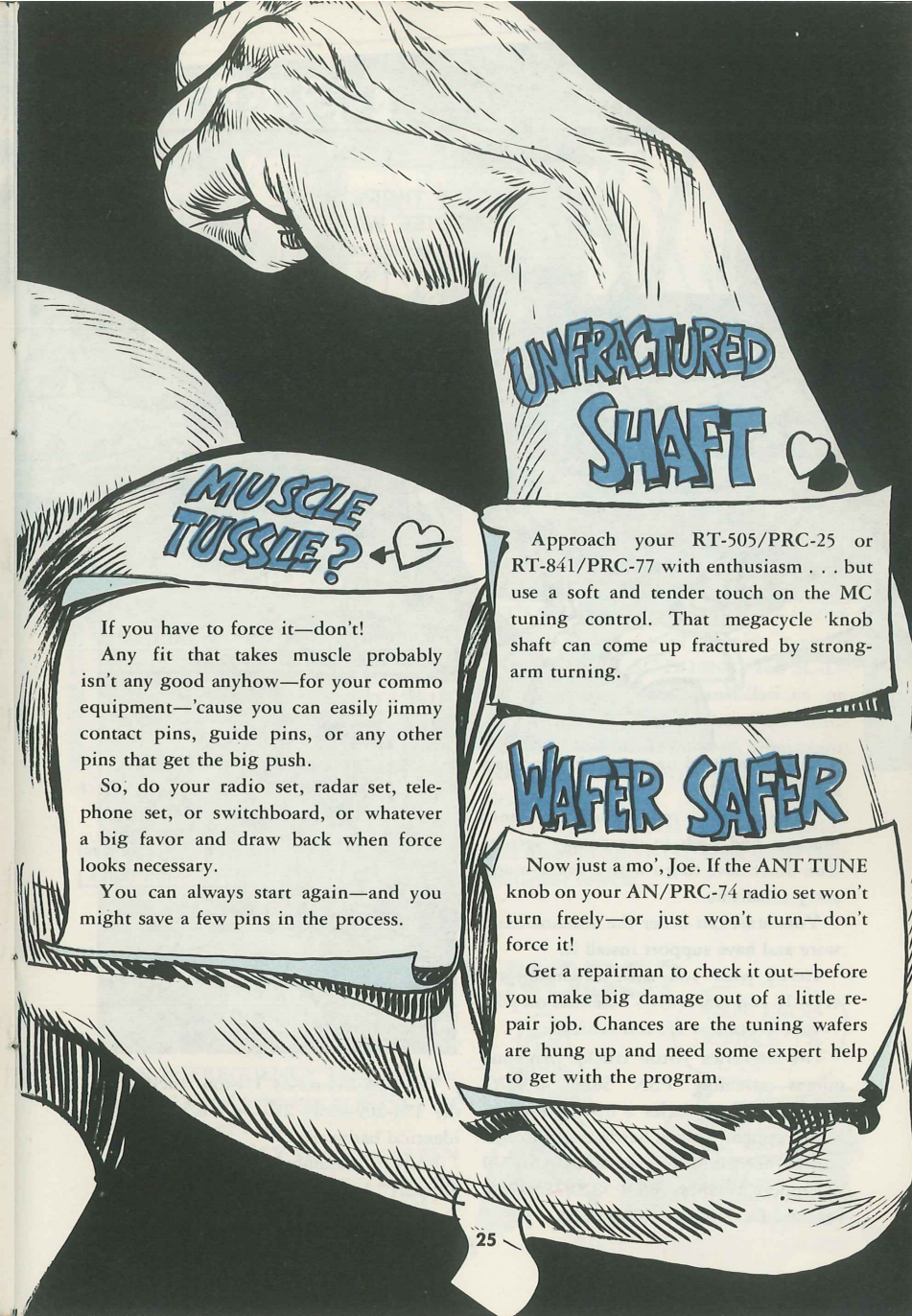
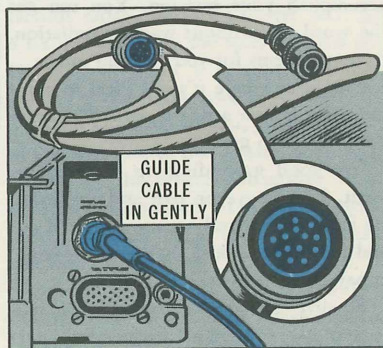
If you jab that matching unit cable connector at the AM-2060/GRC amplifier-power supply's antenna control receptacle without taking time for a line-up—

Then, you're bound to get pinned.

Broken pins and mangled connectors are the only pay-off you get from hit-or-miss action.

So-o-o-o, be gently guided.

And when you disconnect the matching-unit cable, you need to use more caution than biceps . . . too much muscle can tear out the rubbery receptacle base.



Approach your RT-505/PRC-25 or RT-841/PRC-77 with enthusiasm . . . but use a soft and tender touch on the MC tuning control. That megacycle knob shaft can come up fractured by strong-arm turning.

WAFFER SAFER

Now just a mo', Joe. If the ANT TUNE knob on your AN/PRC-74 radio set won't turn freely—or just won't turn—don't force it!

Get a repairman to check it out—before you make big damage out of a little repair job. Chances are the tuning wafers are hung up and need some expert help to get with the program.

MOUNTING ANTENNAS?



HOLD IT! THERE'S A BETTER WAY.

Hey, man, hold one with that hacksaw and blowtorch!

There are ready-made antenna brackets and such in the supply system. You don't have to go with a home-made, sorry substitute.

Your unit can order the antenna hardware and have support install it.

Here's what you need to mount the AT-912 and AS-1729() antennas on your ¼-ton, 1¼-ton or 2½-ton vehicles:

TM-218-series ¼-ton trucks: Antenna mount assembly FSN 5820-930-3876. The assembly includes a brace, support, reinforcement and a hardware package.

Also needed if you have an AS-1729 is support assembly FSN 5820-740-1780, for the MX-6707 matching unit.



The TM-244-series 1¼-ton trucks and the TM-209-series 2½-ton trucks use the identical hardware.

Bracket assembly FSN 5820-763-2462
Support Assembly FSN 5820-740-1780
Reinforcement FSN 5820-763-2463

USE READY

MADE BRACKETS



REINFORCEMENT
FSN 5820-763-2463

BRACKET ASSEMBLY
FSN 5820-763-2462

SUPPORT ASSEMBLY
FSN 5820-740-1780



USAECOM drawing SC-D-446058 comes with the mount assembly to show how it's set up. SC-D-189021 and SC-D-189022 show sample installations on the ¼ and 2½-ton vehicles. FSN 7610-856-0621 and 7610-900-8040, installation poop on the above, include the 2 drawings.

The stock numbers are in installation kits listed in SB 11-131. Look under your particular vehicle.

TS-510 KNOBS?

If you're struggling to identify the GAIN or FREQUENCY knobs on your TS-510() signal generator by FSN's, your troubles may be over.

The FREQUENCY knob goes by FSN 5355-616-9604. You can go after the GAIN knob with FSN 5355-616-7824.



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 1 (Aug 72), TM's, TB's, etc.; DA Pam 310-6 (Jul 72), and Ch 1 (Oct 72), 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 5-4940-225-20P Sep Repair Parts and Shop Equip, Trk Mtd Mds SEORL and SEORIT

TM 5-6115-586-20P Sep Repair Parts and Power Plant Mdl LPU-71

TM 9-450 Aug Metal Body Repair and Related Operations

TM 9-1005-205-12 Oct .30 Cal Rifle M1903A4

TM 9-1005-249-10 May M16A1 Rifle

TM 9-1005-249-20 Sep M16/M16A1 Rifles

TM 9-1005-304-12 Sep Door Mtd XM59

TM 9-1240-372-12P Jul Repair Parts for Binoculars M3, M7, M13, M13A1, M15A1, M16 and M17A1

TM 9-1300-203 C18 Sep Arty Ammo for Guns, Howitzers, Mortars and Recoilless Rifles

(C) TM 9-1425-525-1 Sep Description of Imp HAWK, Air Defense Guided Msl Sys

TM 9-1425-525-12-1 Sep Employment of Imp Hawk

TM 9-1425-525-12-2 Sep Functional Diagrams, Imp Hawk

TM 9-1430-526-12-1 Sep Msl Btry Control Central AN/TSW-8

TM 9-1430-527-12-2-1 Sep Info and Coord Central AN/MSQ-95

TM 9-1430-527-12-2-2 Sep Coord Central AN/MSQ-95 (XO-1)

TM 9-1430-527-12-2-3 Sep Info and



Coord Central AN/MSQ-95

TM 9-1430-527-12-3 Sep Coord Central AN/MSQ-95

TM 9-1430-532-13P Sep Simulator Station AN/TPQ-29

TM 9-1430-534-12-1 Sep Radar Set AN/MPQ-50

TM 9-1430-534-24P Aug Radar Set AN/MPQ-50

TM 9-1440-531-12-3 Aug Schematics for Launcher XM192E1 and Control Box AN/GSA-132 (XO-1) Imp Hawk

TM 9-1440-531-24P Sep Launcher, Zero Length, Guided Msl XM192E1

TM 9-1450-486-20P Sep M688 Loader-Transporter, Hoisting, Sling, Tripod (LANCER)

TM 9-2330-213-14 Aug Trailer: 1 1/2 Ton, 2-Wheel, M103A1, M103A2, M103A3 M103A3C, M103A4, M103A4C, M104, M104A1, M105A1, M105A2, M105A2C, M107A1, M107A2, M107A2C, M448

TM 9-2350-232-ESC Oct Tank, Combat, FT 152-MM Gun M60A2

TM 9-2350-300-20/1 C2 Oct M163 20-MM SP Gun, M168 Cannon, M157 Mount, M61 Sight, and AN/VPS-2 Radar

TM 9-4931-204-20P Jul Repair Parts Test Set, Computer Logic Unit AN/GSM-70

TM 9-4935-548-14 Sep Periodic Tests Using Calibrator Standard and Microwave Calibrator, Imp Hawk

TM 9-4935-587-20P Aug AN/TSM-95

TM 10-8340-221-13 Sep Shelter-Half Tent and Two-Man Mountain Tent

TM 11-474-1 Aug Telephone Substation Install

TM 11-5805-549-15 Aug Relay Rack Type 337 Mdl 1

TM 11-5826-235-24P-1 Sep Tacan Navigational Set AN/ARN-52(V)

TM 11-6625-601-20P Sep MK733/ARC-54 Maint Kit

TM 11-6625-1650-20P Oct Test Set, Radio AN/ARM-22A

TM 11-6760-239-12 Sep Test Set, Analyzer, Camera LS-80A

MISCELLANEOUS

DA Cir 310-39 Oct Rescissions
LO 9-1430-533-12 Sep Radar Set AN/MPQ-46 (XO-1) IHPIR

MWO 9-2320-218-30/8 Sep Instal of Transfer Rear Output Shaft Snap Ring Retainer on 1/4 Ton Trucks:

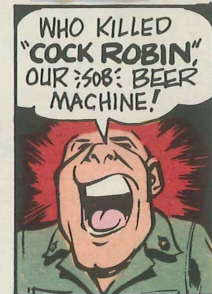
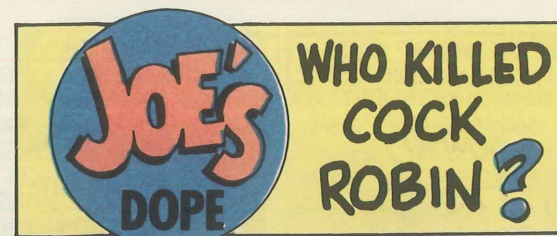
M151, M151A1, M151A1C, M718 SB 700-20-1 Sep Reportable Items List, ESR Sys

SB 700-25 Sep Interchangeable and Substitute Item List (SISIL)

SC 4933-95-CL-ET9 Aug Field Arty Repairman Tool Kit

TB 10-1670-206-20-10 Oct Insp of 24-Ft-Diam Pers Chute Assy

TB 750-97-38 Aug Maint Expend Limits for FSC Op 38

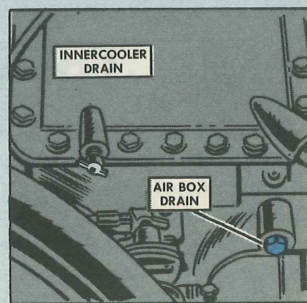


Fair Warning Again

A later word to a wise 290M tractor operator.

PS 240, page 43, told about checking the intake manifold air box for possible oil—oil that may have leaked by a bad turbocharger seal. Make this check by removing the plug at the base of the air box—not the petcock to the inner cooler.

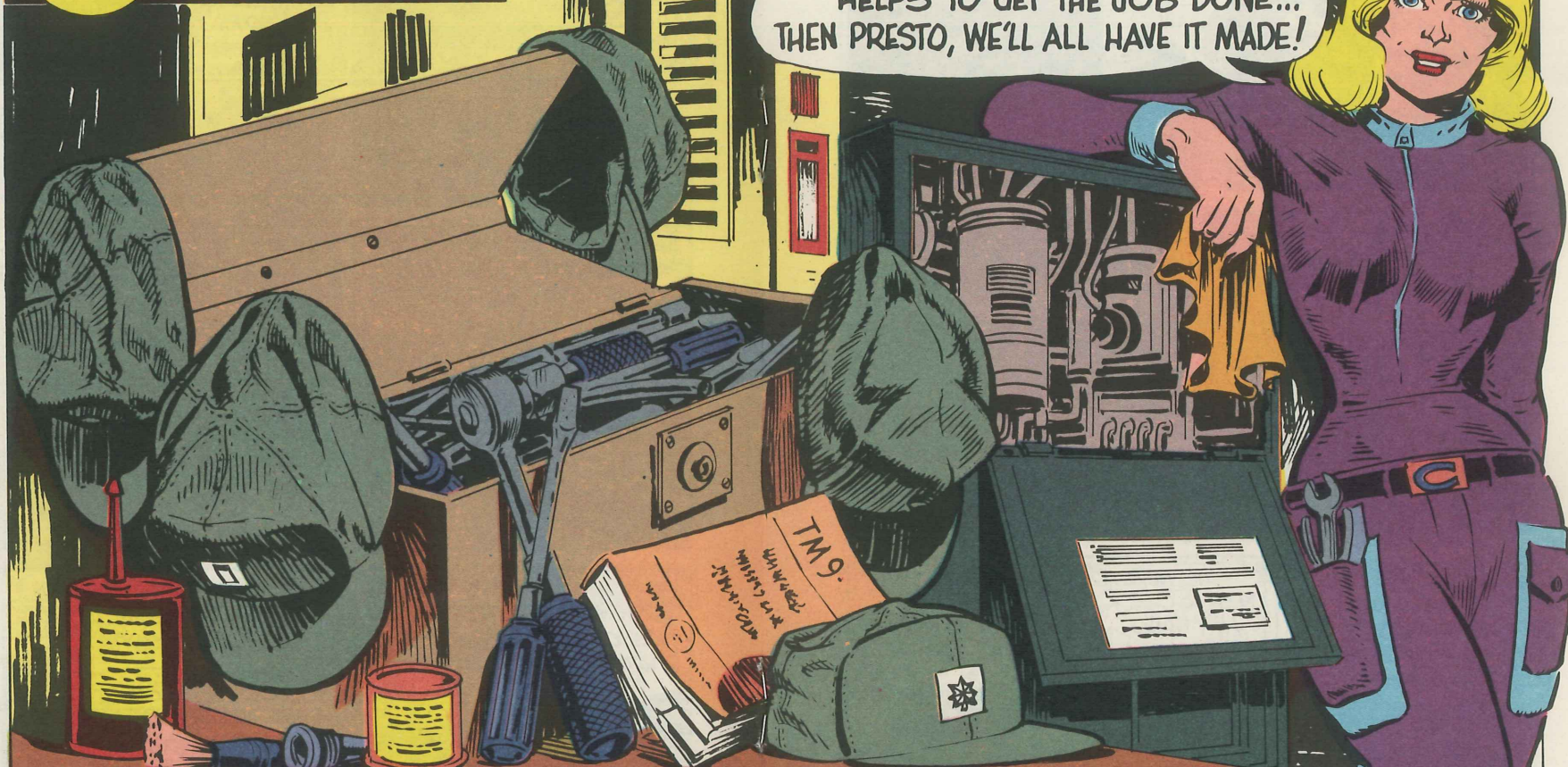
Any sign of oil in the air box means possible turbocharger trouble. Let your mechanic or DSU look it over.





Joe's Dope Sheet

PM ON OUR GEAR HAS NO GRADE...
ALL RANKS JOIN THE PM "PARADE"--
AND WHEN EVERY LAST ONE
HELPS TO GET THE JOB DONE...
THEN PRESTO, WE'LL ALL HAVE IT MADE!



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.



YEAH, WE GOT A WAR TO WORK AT... WE'VE GOTTA BE COMBAT READY...

BUT :CHOKE: WE :GASP: WERE NOT... NO, SIR.



FOR A UNIT TO BE COMBAT READY, ITS 'GEARS' GOTTA BE READY TO GO... NOW!



YOU GOTTA MAINTAIN Y'R GEAR! EVERY DAY.



...AND FOR PM TO BE DONE RIGHT, THE PUSH HAS TO COME FROM THE TOP! TH' COMMANDER!

HMM... LOOSE END CONNECTORS.



IF HE WON'T TAKE AN ACTIVE PART IN IT... THERE IS NO STEAM... AND SO EVERYTHING GETS DONE HALF-GASSED... IF AT ALL.



... WE WERE TOO BUSY TO CHECK OUT ANYTHING...



CRITICAL OIL LEVELS, ANTI-FREEZE, WEAPONS, PM, NOTHING...



PM IS ALWAYS IMPORTANT, AND AT THIRTY BELOW, MAN, IT'S A MATTER OF STAYIN' ALIVE!

I'LL CHECK 'ER TH' NEXT TIME.



OUR WEAPONS FROZE UP, 'CAUSE NO ONE CHECKED...

BOLT WON'T OPEN! :GRUNT:



...AND OUR COMMO GEAR FAILED... NOBODY CHECKED TH' BATTERIES.

:GASP: IT'S DEAD 'ER N' A DOORNAIL.



...OUR VEHICLES WERE WORTHLESS JUNK! NO PM, PLUS WEATHER DID TH' JOB...

RRRR :CLICK:

CAN'T START 'ER UP... ZERO.



...AND WHEN WE NEEDED 'EM, :CHOKE: LIKE 'OL 'COCK ROBIN', THEY DIED! 'N' WE DID, TOO.



I WAS... LUCKY I WAS LEFT FOR KIA... THE TURKS FOUND ME 'N' HAULED ME OUT.



SO YA SEE, SIR. I'M HUNG UP ON THIS PM STUFF... AND I'M NOT ALONE!



EVEN HQ DA IS PUSHIN' THIS. IT'S CALLED COMAINT, FOR COMMAND MAINTENANCE PROGRAM.

OK, SARGE, YOU MEAN THAT ALL COMMAND PEOPLE, OFFICERS 'N' NCO'S ALIKE, GOTTA GET THEIR HANDS DIRTY TO INSURE PM IS DONE, RIGHT?



RIGHT ON, SIR.

THEY GOTTA GET PERSONALLY INVOLVED, RIGHT? 'CAUSE IF THEY DON'T CARE, NOBODY CARES! RIGHT?



YOU'RE REALLY WITH IT, LOOTENANT!

SO! WHEN 'OL 'COCK ROBIN' FOLDED... IS HE REALLY TO BLAME?



DIDN'T YOU SAY PM IS EVERYBODY'S BUSINESS, ESPECIALLY COMMAND TYPES?



I GUESS EITHER YOU DO PM OR SEE THAT IT GETS DONE! RIGHT, SARGE?



'SCUSE ME, SIR...

HEY! YOU LOOK WIPED OUT... I'LL SPELL YA ON CARRYIN' THAT SACK... AFTER ALL, AH-EM! 'OL 'COCK ROBIN' FOLDIN' UP IS PARTLY...ER...MY FAULT.



HUH?

...ER I HEAR YOU'LL BE PICKIN' UP ANOTHER STRIPE SOON... THEN WE'LL HIT TH' NCO CLUB AND TALK ABOUT COMMAND RESPONSIBILITIES, OK?



IF YOU SAY SO, SARGE.

MURPHY WAS HERE!



AIR MOBILITY

I'M TAPPIN' IT... THAT RT IS STILL OUT...



TAP HARDER!

Troubleshooting a faulty Huey avionics component can be a painstaking chore for radio types.

Sure, TM 11-1520-210-20 (Jul 70) has a troubleshooting chart that nails down most symptoms you'll come across.

Except when an airframe mech pulls a Murphy by switching the FM radio and VHF navigation antenna cables during a Huey B model tail boom change. It happens!

Your FM is then transmitting loud and clear on the ground thru the handle bar antenna instead of the whip antenna. The trouble is, when the bird gets up in the blue . . . nothing!!

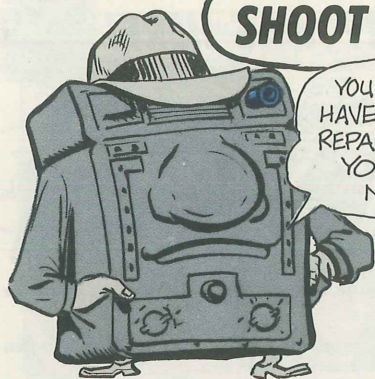
So, before you change the RT on a B model bird new to your flock, eyeball those cables at the tail boom to make sure they're not switched.



STABLE AND ABLE

Keep your Huey up to snuff by making sure MWO 55-1500-206-30/2 with Ch 2 (Apr 69) has been applied. The tie rod in the stabilizer bar tube is replaced with a stainless steel cable—which will do a better job of keeping the bar weight in case the tube breaks. Stabilizer bars modified carry FSN 1615-689-6307 for B, D and H models and FSN 1615-689-6306 for C and M models.

SHOOT FIRST--TALK LATER



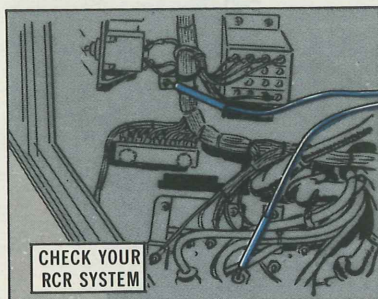
YOU MAY NOT
HAVE TO ORDER
REPAIR PARTS
YOU DON'T
NEED.



So-o-o-o, you've spotted trouble in your Huey's Direct Current (DC) generator circuit?

Wait one, Knucklebuster! Pull a good systems by-the-book check before you order a bunch of parts you don't need.

Start by troubleshooting the Reverse Current Relay (RCR) system.

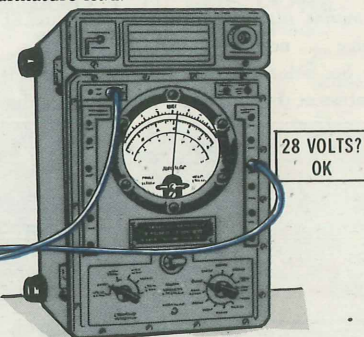


CHECK YOUR
RCR SYSTEM

A generator in A-1 condition gives you a 28-volt readout on all RCR terminals. No sweat. But . . .

A 2 to 4-volt readout at the reverse current relay GEN terminal means trouble in the shunt field circuit. Check voltage from GEN terminal through the voltage regulator to terminal A on the generator.

Zero voltage at the GEN terminal calls for a check of the generator or main armature lead.



28 VOLTS?
OK

A 28-volt reading at the GEN terminal, but no voltage on the SW terminal means trouble in the switch circuit.

Got 28-volts at the GEN and SW terminals? Then you should have the same voltage on all RCR terminals. If you don't, your problem is in the reverse current relay.

Now—order the part you need.

And, Birdkeepers, never shoot water into the aft electrical compartment when hosing down your birds. Wet parts rust, corrode, stick together . . . guaranteed to cause a malfunction or short.

AVOID THE RUB, BUB!



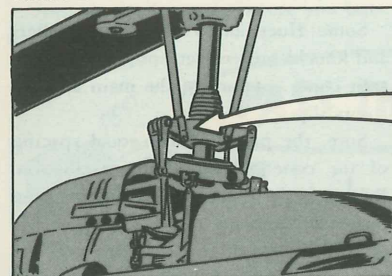
YOU'VE
GOT YOUR
COTTER PIN
BENT WRONG.



When installing the stabilizer bar on your Huey (UH-1), hold one—when connecting the control tubes to the scissors levers.

You're operating in close quarters, between the levers. Any hardware sticking out could damage the scissors and sideline the bird.

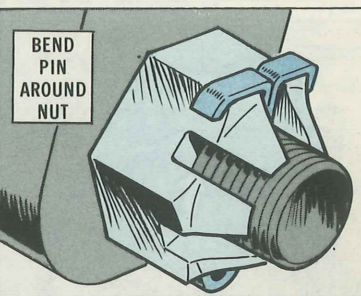
Use 2 washers under the head of both upper and lower attaching bolts. Insert each bolt with the head in direction of rotation.



Add one washer under the nut. Torque the nut to the standard value and add the cotter pin. That's the rub . . . the cotter pin.

If there's any possibility of the cotter pin chafing the opposite scissors lever, put the cotter pin in with the head horizontal to the slot in the nut.

In other words, bend the cotter pin ends around the nut, not over the end of the bolt.



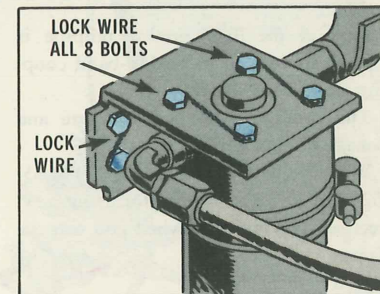
BEND
PIN
AROUND
NUT

DO YOURSELF A FAVOR

Any time you Huey (UH-1D/H) mechs remove the transmission external oil filter head from the bracket, the 4 mounting bolts have to come off. No sweat.

When you put the head back, tho, lockwire the 4 bolts. That's the word in para 7-10 of TM 55-1520-210-20 (Sep 71). Make sure the bracket retaining bolts are also safetied.

Otherwise, vibration will loosen the bolts and crack the bracket.



LOCK WIRE
ALL 8 BOLTS

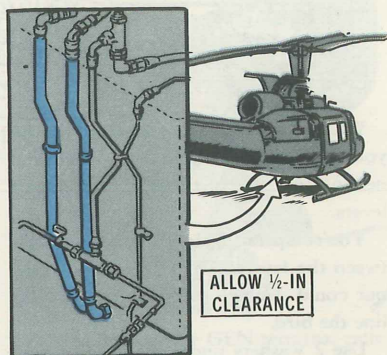
LOCK
WIRE

IT'S A STANDOFF

If your Delta or Hotel model Hueys have the crashworthy fuel system per MWO 55-1520-210-50/1, look at the main fuel lines. Could be lines FSN 4720-176-4612 are about to chafe and wear a hole in the transmission sump.

Head off downtime by using clamps or rerouting the lines for 1/2-in minimum clearance.

A flashlight and mirror will make your inspection easier.



THE SPLIT CONE BIT



Some Huey and Cobra pitch pullers and knucklebusters get uptight when the split cones supporting the main and tail rotors slip.

Sure, the pubs call for equal spacing of the cone halves during installation. But the pubs don't call for maintaining that spacing during inspections.

So, don't sweat it if the cone gaps are not equal or one half of a cone touches the other half.

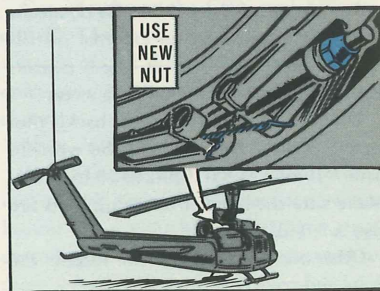
IN THE HOT SEAT?

Heat at the T-53 engine tailpipe is enough to weaken re-used V-band coupling clamp nuts, Huey mechs.

The result can be clamp failure and damage to your bird.

Which is why para 5-16e(2) of TM 55-1520-210-20 (Sep 71) calls for using new, steel self-locking nuts when you seat the clamps.

You better believe it!



CLOSE THE LATCH, NATCH

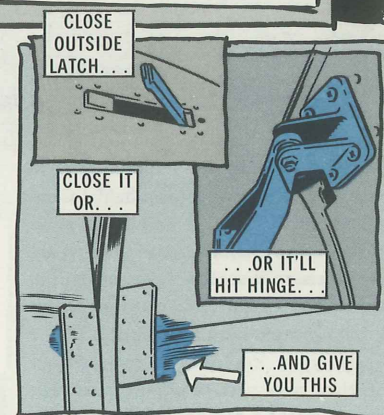
When you Cobra mechs open up the engine compartment and leave the upper rear latch open, it hits the hinge on the inside of the cowl.

The cowl is then forced into the mating airframe skin. Keep that up, and your bird will soon have to be grounded for sheet metal repair.

There is a better way.

Just close the latch before you swing wide the cowl, and you'll have clearance . . . no skin damage.

Open the latch, natch, before you button up your bird.



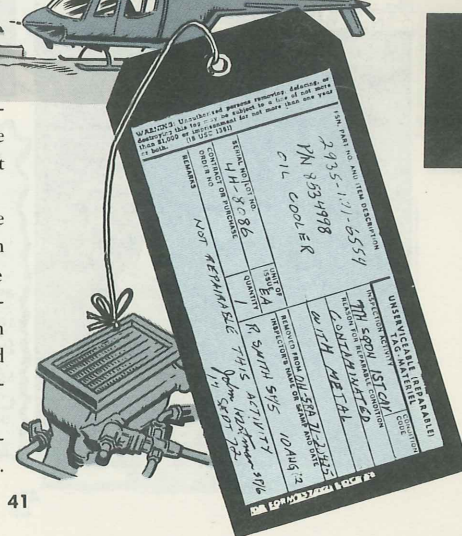
PASS THE WORD

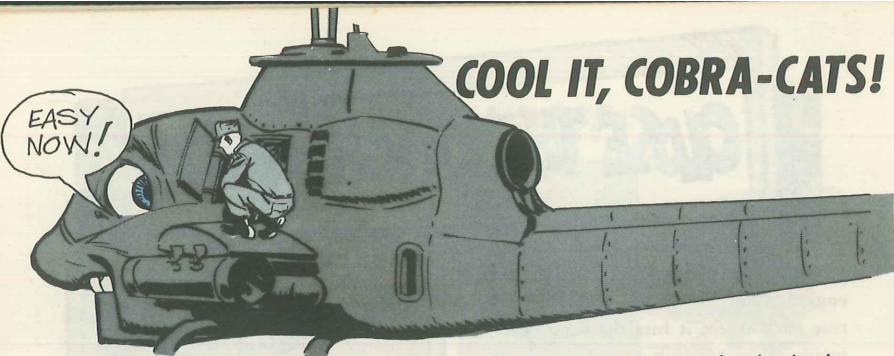


When you mechs remove a contaminated oil cooler from your bird, and the parts pub shows it's recoverable; tag it with a DD Form 1577-2.

When you fill out the unserviceable (repairable) tag, show in the "reason for repairable condition" block that the cooler is being returned for decontamination. The cooler also gets an aluminum tag stamped—METAL CONT. That word is in para 3-275, Ch 8 (Apr 72) to TM 55-1500-204-25/1 on general practices.

The overhaul types will then disassemble the cooler and remove the metal chips.





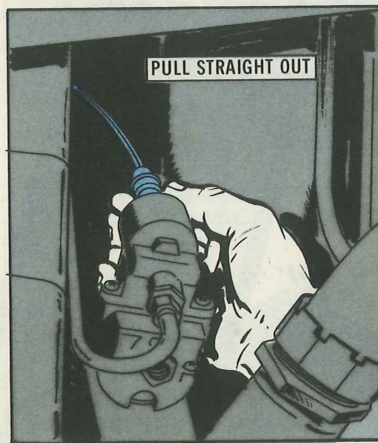
COOL IT, COBRA-CATS!

'Specially when you're unhooking the electrical lead from the regulating valve on the HueyCobra's Environmental Control Unit (ECU).

Would you believe some mechs are using pliers to disconnect this push-pull, no thread electrical connector! It's busting 'em up something fierce-like.

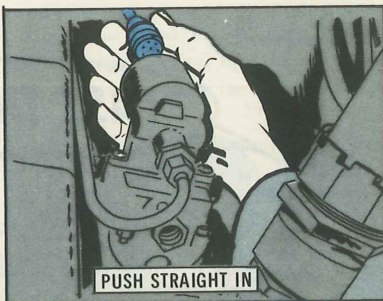
Keep your cool. Save maintenance downtime and parts and never use the twist-off method to unhook this connector from the electromagnetic control valve of the air conditioning system.

All you do to unhook this plug — MS3137E7-50S—is grip the conduit with thumb and finger and pull straight out. No twist, no tools.



To connect it, line up the slot in the coupling with the key in the receptacle and push straight in. You'll feel it seat—maybe hear a solid click—as the balls lock in place.

Check by grasping the conduit on the shell and tug away . . . gently.



HIGH-TIME CHECK

If your HueyCobra (AH-1G) has been around a spell, there's a new, detailed inspection due your baby when the air-frame time hits 2200-hrs. The special inspection section of TM 55-1520-221-20, Ch 3 (Mar 72) has the word.

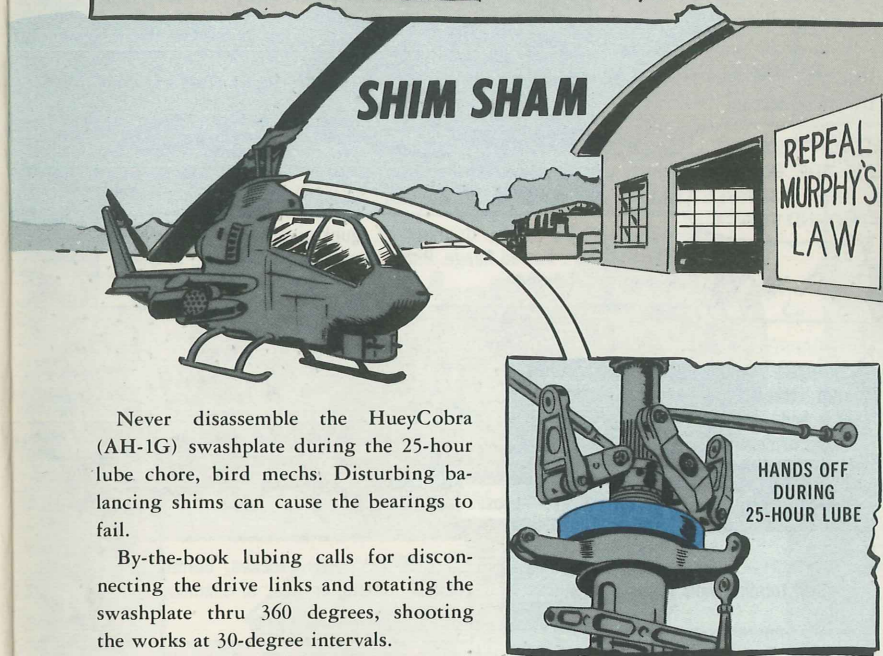


When you mechs check your M35-equipped Cobra (AH-1G) for loose hardware, caused by firing vibration, look in every nook and cranny.

REMOVE FAIRING
AND CHECK YOUR RIVETS

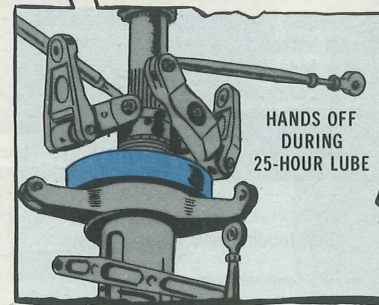
For example, take off the sectional fairing on the skid cross tubes and eyeball the upper cross tube panels for loose rivets.

Replace any loose hardware, pronto.



Never disassemble the HueyCobra (AH-1G) swashplate during the 25-hour lube chore, bird mechs. Disturbing balancing shims can cause the bearings to fail.

By-the-book lubing calls for disconnecting the drive links and rotating the swashplate thru 360 degrees, shooting the works at 30-degree intervals.



FIREPOWER - WHEN IT'S NEEDED!

Mission-bound "high-bird" pilots have their hands full from the minute they pull pitch. The 'Cobra's armament subsystems have to work right.

Armament types can ease the load.

Find and correct any defects on the minigun and grenade launcher. Here's a fast rundown on what to check daily.

UNLOADING—Aim weapon toward clear area. No ramp-to-ramp people in the firing area. These aircraft electrical power switches off: Master arm; override pilot; circuit breakers.

Follow the poop in paras 2-24 and 2-25, TM 9-1090-203-12 (Apr 70) for unloading the 7.62-MM and 40-MM feed systems, ammo chutes, magazine assemblies, electrical connectors.

AND DON'T FORGET
TO USE THE BULLET
TRAP WHEN YOU PULL
A LIVE ROUND CHECK.

M134 MG AND GUN DRIVE ASSEMBLY

GUN BARRELS—Dirty, dripping oil, gunk-covered, powder-fouled. Cracked, broken, burred flange. Pitted, scored, excessive wear of lands. Bulges in barrel bores.

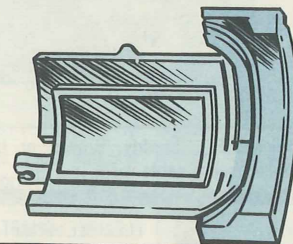
BARREL CLAMP—Worn, stripped, damaged spline nut threads. Distorted, cracked, broken barrel rings or central shaft

MOUNT—Loose.

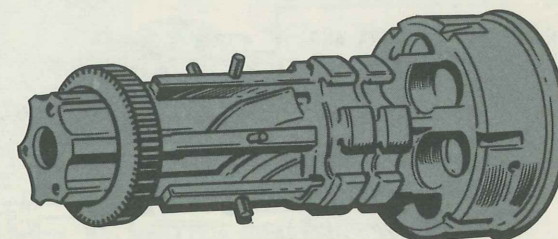
SUPPORT—Broken, dented, galled, cracked tubular walls. Warped face.

GUN HOUSING—Nicked, burred, unusual rubbing or wear of camming surfaces.

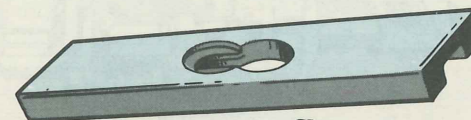
SAFING SECTOR AND HOUSING COVER—Dirty, loose. Nicked, cracked, broken, bent, distorted. Pins missing. Attaching points deformed. Cam path surfaces won't line up with gun housing.



ROTOR, ASSEMBLY—Dirty, powder-fouled, too oily. Bent stud. Front or rear gear teeth burred, pitted, chipped, cracked.



REMOVABLE BOLT TRACKS—Cracked, broken, distorted. Galled edges.



BOLT HEAD—Worn or elongated firing pin holes. Damaged, broken extractor lip. Worn or burred pins and locking surfaces.

FIRING BOLT ASSEMBLY—Nick- ed, burred, galled trackways. Worn, damaged roller.

SPRING—Broken, cracked. Com- pression gone kaput!

PINS—Bent locking pin; spring pin ends battered.

GUIDE BAR—Nicked, cracked, or bent, won't control rounds.

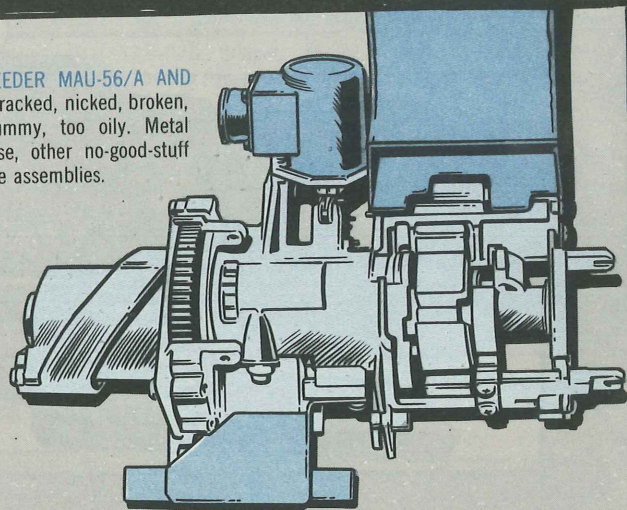
BEARING—Won't rotate free 'n' easy.

GUN DRIVE ASSEMBLY—Dirty, cruddy. Broken or bent pins on electrical connectors. Broken, loose cable wires.

TIMING PIN—Bent, broken parts.

FLEXIBLE SHAFT ASSEMBLY—Loose.

DELINKING FEEDER MAU-56/A AND AMMO CHUTE—Cracked, nicked, broken, scored. Dirty, gummy, too oily. Metal filings, dirt, grease, other no-good-stuff in ammo magazine assemblies.



BARREL—Bore and chamber too oily, dirty. Powder-fouled barrel. Outer sur- face too greasy. Eroded, pitted, damaged, worn lands. Deformed, bulged barrel.

FRONT SUPPORT ROLLERS—Worn, damaged, needs oil. Retaining rings loose.

BARREL CONTROL CAM—Too greasy.

DRIVE ASSEMBLY—Burred, nick- ed, broken, dirty spur gears.

RECEIVER—Dirty, needs lubing.

FIRING PIN STRIKER—Tip burred or broken.

FEED LEVER—Worn, cracked.

FEED GEAR—Worn, broken teeth.

FOLLOWING GEAR—Worn, broken teeth.

FEED SLIDE—Burred.

FEED SLIDE ASSEMBLY—Missing or damaged pin. Cartridge feed actuator bearings, positioners, springs, retainers, plunger, cartridge stop, lever, feed pawl and plunger need lube. Burred, binding guides 'n' slots.

YOKE GUIDE—Deformed, burred.

FIRING PIN—Damaged, worn, chipped.

BREECH INSERT—Eroded.

GUN CRADLE, MAGAZINE, AMMO CHUTE—Dirty, excess grease, oil. Grem- lins like solder, metal filings, dirt, gravel that cause FOD. Broken, frayed wires. Any component marred, scarred.

Hold one, Knucklebusters! This 40- MM scatter gun has upteen spring pins. Be extra c-a-r-e-f-u-l that nary a one of 'em is bent, broken, or has lost its pizzazz!

Hydraulic hoses and fairings get a 20-20 look for security, leakage.

GROUND EQUIPMENT

CAP

SCREW

LANGUAGE LESSON

SPEAK IN DASHES

Capscrew reading is one talent every ground equipment mechanic should have. What he reads on the head of the cap-screw tells him how strong it is.

ME
HEAP
STRONG!

THIS CAP SCREW KNOW-
HOW IS IMPORTANT TO
YOU "GREASY
FINGERS" TYPES.

If the head of the capscrew is blank or just has some manufacturer's marks on it, it's low-carbon steel. This is OK for light work, but you can't use it in place of a high-strength capscrew in a tank, for example.

The language of capscrews is dashes. The more dashes, the better the quality and the higher the applied torque. Capscrews are made with all kinds of markings for special uses, but a truck, tank or tractor mechanic just has to know about 3 kinds and how the dashes match up with the Society of Automotive Engineers (SAE) Grades.

The dashes give you the SAE capscrew Grade code which is nice to know because quite a few manufacturer's handbooks use it.

Some (but not all) capscrews are marked on the head with the SAE grades in addition to the dashes.

The dashes (or SAE grade numbers) tell you what the capscrew is made out of and how much torque it will take . . . F'rinstance, no dash (Grade 2) capscrews are made out of low-carbon steel which take a low torque. Three dash (Grade 5) screws are medium-carbon steel and take

No dashes = SAE Grade 2



3 dashes = SAE Grade 5



6 dashes = SAE Grade 8



a medium torque. Six dash (Grade 8) capscrews are made out of carbon-alloy steel. They're the strongest kind you're likely to see in ground equipment and take the highest torque.

Follow the torque values given in your TM, but use this chart as a general guide when the TM gives no torque. The minimum and maximum values for both coarse (UNC) and fine (UNF) screws are given.

DIG THIS!
THE SCREWS SHOWN IN **COLOR** ARE UNIFIED NATIONAL COARSE, THE OTHERS ARE UNIFIED NATIONAL FINE.

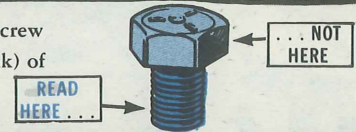
SCREW DIAMETER	TORQUE FT-LBS NO DASHES (SAE GRADE 2)	TORQUE FT-LBS 3 DASHES (SAE GRADE 5)	TORQUE FT-LBS 6 DASHES (SAE GRADE 8)	SOCKET SIZE
1/4-20	3-5	6-8	10-12	7/16
1/4-28	4-6	8-10	9-14	7/16
5/16-18	7-11	13-17	19-24	1/2
5/16-24	7-11	14-19	23-28	1/2
3/8-16	14-18	26-31	39-44	9/16
3/8-24	15-19	30-35	46-51	9/16
7/16-14	23-28	44-49	65-70	5/8
7/16-20	23-28	44-54	69-79	5/8
1/2-13	32-37	65-75	95-105	3/4
1/2-20	34-41	73-83	113-123	3/4
9/16-12	46-56	100-110	145-155	13/16
9/16-18	47-57	107-117	165-175	13/16
5/8-11	62-72	140-150	200-210	15/16
5/8-18	67-77	153-163	235-245	15/16
3/4-10	106-116	260-270	365-375	1 1/4
3/4-16	115-125	268-278	417-427	1 1/4
7/8-9	165-175	385-395	595-605	1 5/16
7/8-14	178-188	424-434	663-673	1 5/16
1-8	251-261	580-590	900-910	1 1/2
1-14	255-265	585-634	943-993	1 1/2
1 1/4-7	451-461	1070-1120	1767-1817	1 7/8
1 1/4-12	488-498	1211-1261	1963-2013	1 7/8
1 1/2-6	727-737	1899-1949	3111-3161	2 1/4
1 1/2-12	816-826	2144-2194	3506-3556	2 1/4

This chart is based on using clean, dry, threads. Reduce torque by 10 per cent when engine oil is used as a lubricant. If new capscrews are used, reduce torque by 20 per cent. Capscrews threaded into aluminum may require a reduction in torque of 30 per cent or more unless inserts are used.

IF YOU GUYS USE OIL ON ME, COOL OFF 10% ON YOUR TORQUE.



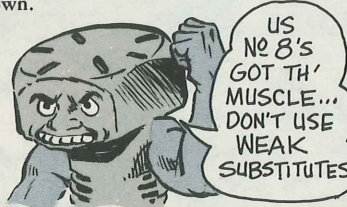
You can get the size of the capscrew by measuring it on the bottom (shank) of the bolt.



What you don't do is measure the head and use that reading for the size. Some mechanics have been doing this and, of course, they over-torque and cause problems.



If you have to substitute (as you sometimes will) you can do it in only one direction—up. When a No. 5 capscrew is called for and you don't have it, you can use a No. 8. However, if a No. 8 is called for, that's what you gotta use. Never go down.



One other thing: If you have nuts of different thicknesses, always use the thickest with No. 8 bolts. You need it because of the higher torque that these bolts take.

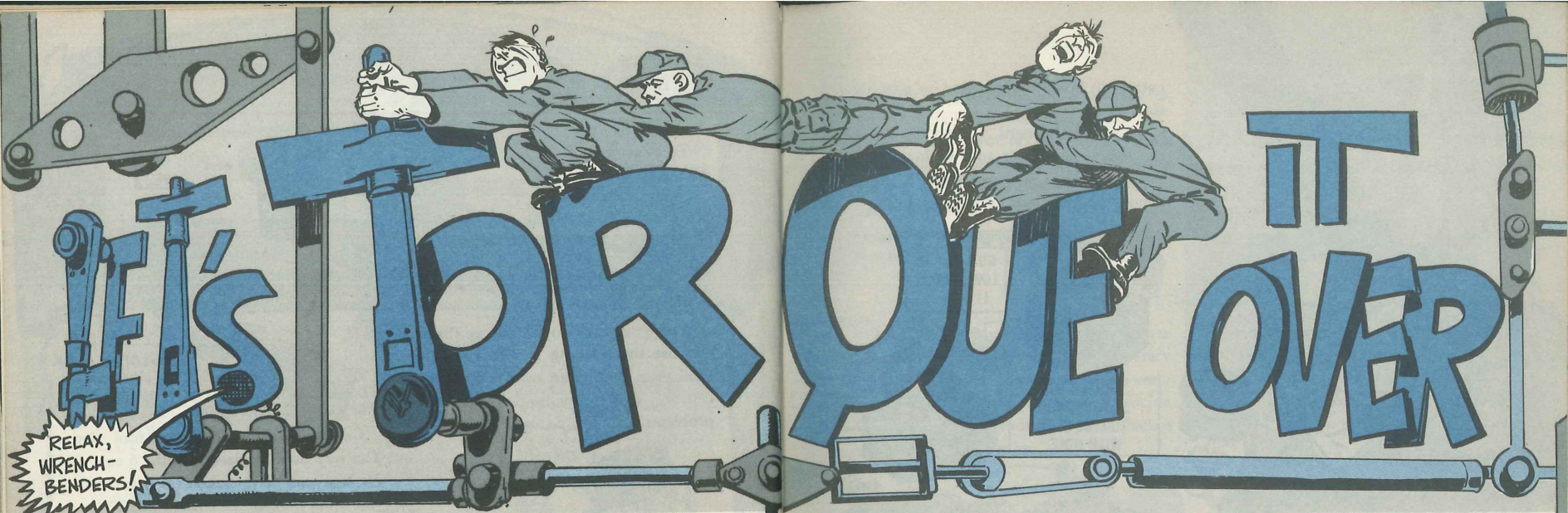


Castellated capscrews can fool you. The way they are designed, the 6 cuts on the head can be mistaken for 6 dashes so you think they are all SAE Grade 8's.



'Course, some of them are. On'tuther hand, some of them are No. 5's so look real close. You'll always find a figure, either No. "5" or "8" to clue you.





You don't have to climb walls to understand torque laws, torque wrenches or how to figure the amount of torque to use.

However, a classic torque job calls for basic metal-to-metal know-how and tender loving care of wrenches.

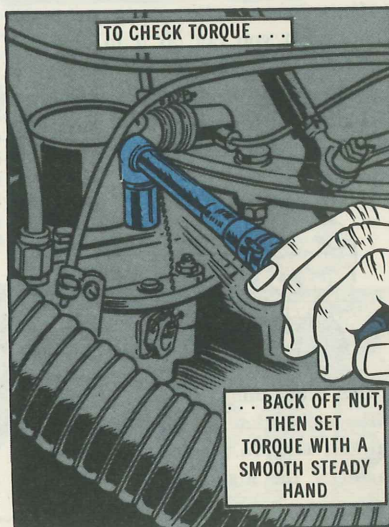
TORQUE TIPS

To get correct torque, you gotta have 3 things going for you—clean threads, undamaged threads, and clean mating surfaces.

One point to remember, Podner. After x number of hours, metals "set" when mated — drawn together — under torque pressure. It takes up to 10 per cent more power—torque—to break this set and get the fastener moving than it took to get the original torque.

When you have to "check" torque, or retorque, back off on the nut, bolt or screw—then bring it back to the original torque.

A fastener has to be turning with a steady, smooth force to get accurate torque. Any herky-jerky, yankityank force ruins a torque reading every time.



Another kind of "set" bug the Pro squashes right here is seizure.

It happens like so. About the time you reach correct torque reading, during the last few turns, you may get a popping effect . . . the wrench stops turning.

If this "set" happens, back off the nut or bolt and do your torque thing again.

Slow 'n' steady does it until you get the correct torque reading.

Hold one! Never, like n-e-v-e-r, use a torque wrench to back off a fastener or for tapping or hammering. It ruins calibration, for a fact.



Unless the TM says otherwise, always use the torque wrench on the nut end, and stop turning when the torque is reached.

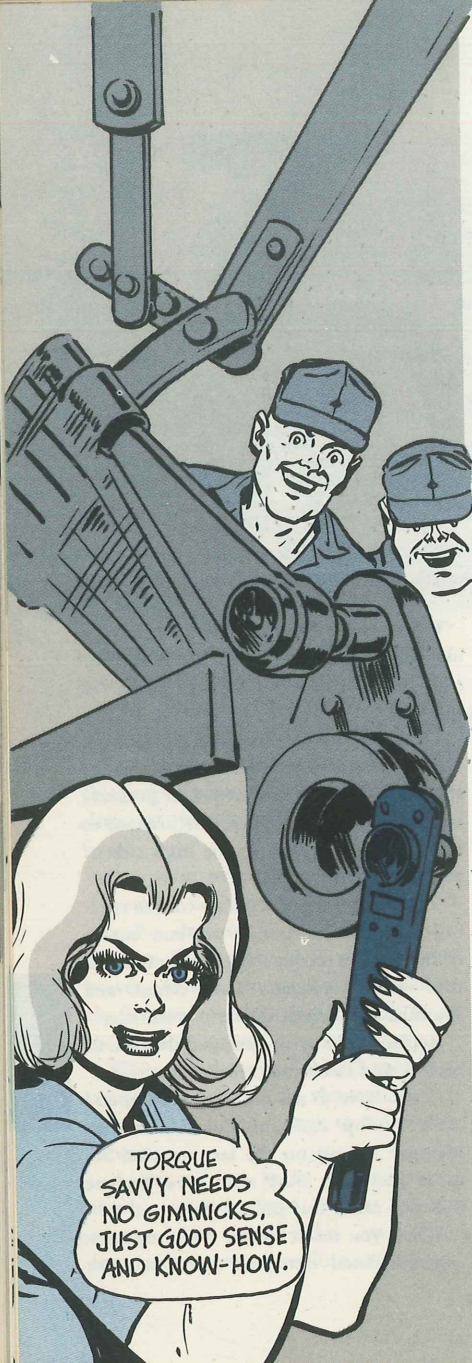
Once in awhile, because of a tight space deal, you'll have to tighten a bolt at the head end. It takes torque or pressure to get the bolt moving in the hole, or to align parts, so torque to the high side of the torque range.

You'll get a more accurate torque reading with new fasteners if you run 'em up to the correct torque—back 'em off a half turn—then retorque. This cleans and smooths the threads slicker'n a whistle.

Replace bolts with damaged threads, or rechase and clean the threads.

If you have to use a damaged bolt, add extra run-up resistance to the torque. Measure run-up on the last rotation because rust or a burr may have become polished off at this point.

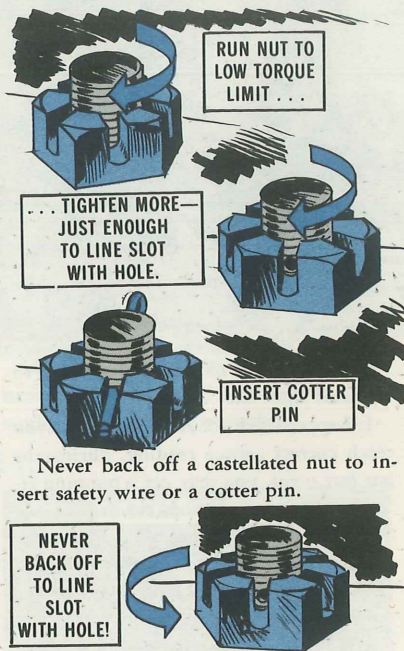
When you reach torque while tightening castellated nuts, the safety wire or



TORQUE SAVVY NEEDS NO GIMMICKS. JUST GOOD SENSE AND KNOW-HOW.

cotter pin holes may not line up with the slots in the nut.

When this happens, run-up the nut to the low torque limit and, without stopping, tighten a smidgen more . . . just enough to get a hole or slot lined up.



RUN NUT TO LOW TORQUE LIMIT . . .

... TIGHTEN MORE—JUST ENOUGH TO LINE SLOT WITH HOLE.

INSERT COTTER PIN

Never back off a castellated nut to insert safety wire or a cotter pin.

NEVER BACK OFF TO LINE SLOT WITH HOLE!

Never grease or oil a fastener unless your equipment's pub says so. Lubed threads roughly means you're increasing the upper torque limits since there's less run-up friction.

On dry-bolted connections tightened from the nut side, about 50 percent of the torque is used to overcome friction. The other half is responsible for the built-in tension put on the bolt. Torque tables are for "dry" applications.

Never use guesstorque if a job calls for tightening a single item of a series.

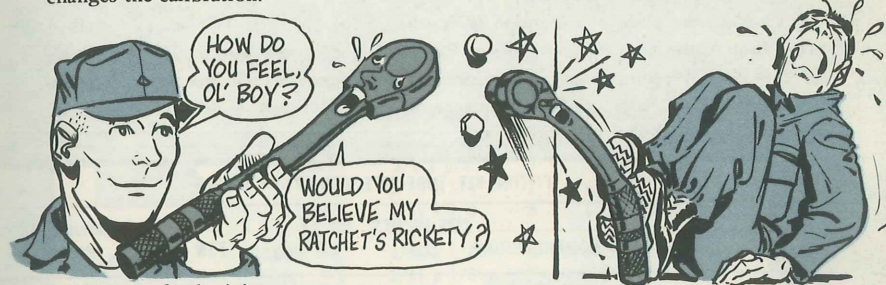
Like maybe you're replacing a spark plug. Use a torque wrench for correct reading on each plug or you're likely to get a change in the spark gap, or you could wind up with a busted plug—or worse.



TORQUE TOOL TIPS

Like all precision tools that get a lotta use, a torque wrench needs an accuracy checkup, regular like. Scratching, etching, or denting the torque-measuring beam on direct reading type wrenches changes the calibration.

Overloading will also permanently deform the torque sensing element. Set all torque wrenches back to zero after using 'em. Check those in storage. If they are not zeroed, tag 'em for calibration.



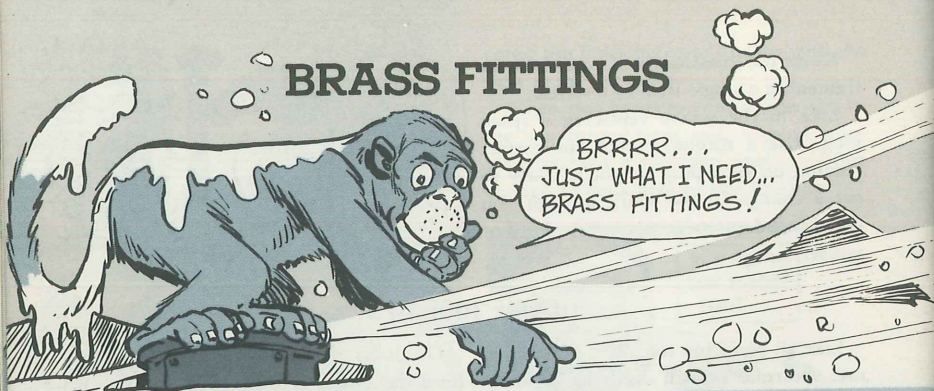
TLC—tender lovin' care—means never dropping or carelessly tossing wrenches about. Stow 'em in a dry place and protect 'em from shock or damage. If you should accidentally drop a torque wrench, have it re-calibrated, pronto. Make sure its DA Label is on, readable and up-to-date.

A final word.

As tight as you can get it plus one turn won't hack it in MVA!



BRASS FITTINGS




















One simple digit can make a difference in the size of the brass fitting that you get. Seven different digits can bring you a flock of differences in a kit.

















So, if you want to be "in the know" here's a breakdown of the fittings in the tube-pipe fitting kit (brass fitting kit), FSN 4730-470-6625.











It's taking the place of tube-pipe fitting kit, FSN 4730-203-0398, that's found in your Shop Equipment, Organizational Repair, Light, Truck Mounted, SC 4940-97-CL-E04 (Oct 70), Shop Equipment, Contact Maintenance, Truck Mounted, SC 4940-97-CL-E05 (Mar 70), and Shop Equipment, General Purpose Repair, Semitrailer Mounted, SC 4940-97-CL-E03 (Nov 69).

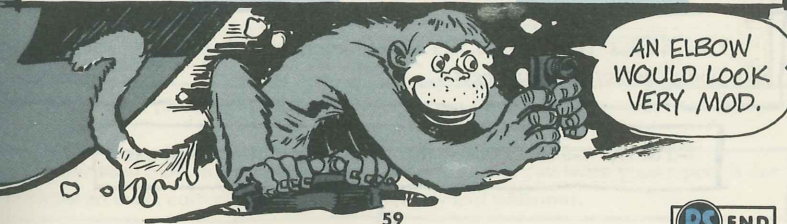
FITTING KIT, TUBE-PIPE, FSN 4730-470-6625

	NOMENCLATURE	SIZE INCHES O.D.	NO. IN KIT	FSN	Imperial-Eastman Part No.
	SLEEVE	3/8	24	4730-278-8765	60-F
		5/16	24	4730-278-8764	60-F
		1/4	24	4730-278-8763	60-F
		3/16	20	4730-701-7737	60-F
		1/8	15	4730-278-8761	60-F
	NUT	3/8	12	4730-287-1537	61-F
		5/16	12	4730-278-8829	61-F
		1/4	12	4730-011-4627	61-F
		3/16	6	4730-203-3194	61-F
		1/8	5	4730-067-9801	61-F
	NIPPLE	3/8	3	4730-278-3222	62-F
		5/16	1	4730-278-5691	62-F
		1/4	2	4730-278-8717	62-F
		3/16	1	4730-278-3206	62-F
	ADAPTER	1/4 x 1/8	4	4730-278-4357	68-F
		3/16 x 1/8	2	4730-289-0388	68-F
		1/8 x 1/8	2	4730-288-9928	68-F

	TEE	1/4	2	4730-287-1690	64-F
	NUT	1/4	3	4730-288-8567	87-F
	TEE	1/4 x 1/8	2	4730-274-9258	76-F
		3/16 x 1/8	1	4730-374-8142	76-F
		1/8 x 1/8	1	4730-288-9482	76-F
		3/16	2	4730-947-9547	64-F
	NIPPLE	5/16	6	4730-764-8770	42-F
		1/4	6	4730-764-8771	42-F
	NUT	3/8	6	4730-902-8990	41-FS
		5/16	6	4730-240-1739	41-FS
	ADAPTER	1/4 x 1/4	2	4730-278-4575	68-F
	ELBOW	1/8 x 1/8	1	4730-263-4976	69-F
	ADAPTER	3/8 x 1/4	3	4730-273-8561	68-F
		5/16 x 1/4	2	4730-880-3053	68-F
		5/16 x 1/8	3	4730-270-4613	68-F
	ELBOW	5/16 x 1/4	4	4730-278-4741	69-F
		5/16 x 1/8	6	4730-278-4740	69-F
		1/4 x 1/4	6	4730-277-7621	69-F
		1/4 x 1/8	6	4730-287-1766	69-F
	ADAPTER	5/16 x 1/4	4	4730-766-9009	48-F
		5/16 x 1/8	6	4730-142-2177	48-F
		1/4 x 1/4	6	4730-391-3771	48-F
		1/4 x 1/8	6	4730-900-3296	48-F
	ELBOW	3/16 x 1/8	2	4730-278-0187	69-F
	ELBOW	5/16 x 1/4	1	4730-060-9241	49-F
		5/16 x 1/8	2	4730-964-1565	49-F
		1/4 x 1/4	2	4730-766-9000	49-F
		1/4 x 1/8	3	4730-231-5632	49-F
	ELBOW	3/8 x 1/4	4	4730-263-4983	69-F

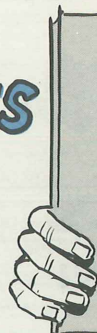
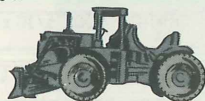
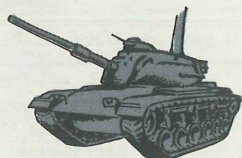
	NOMENCLATURE	SIZE INCHES O.D.	NO. IN KIT	FSN	Imperial- Eastman Part No.
	NUT	1/4 3/16	3 3	4730-013-7397 4730-288-9390	41-W 41-W
	ELBOW	3/8 x 1/4	3	4730-639-9676	49-F
	NUT	1/4	3	4730-011-6452	41-FS
	ADAPTER	5/16 x 1/8 1/4 x 1/8 3/16 x 1/8	6 6 3	4730-277-8768 4730-540-2612 4730-289-1930	48-W 48-W 48-W
	NIPPLE	3/8	4	4730-071-3187	42-F
	ADAPTER	1/4 x 1/8 3/16 x 1/8	6 6	4730-288-9930 4730-278-8253	188-D 188-D
	NUT	5/16 1/4	6 6	4730-289-1956 4730-142-1593	181-D 181-D
	NUT	5/16	3	4730-013-7398	41-W
	ELBOW	5/16 x 1/8 1/4 x 1/8 3/16 x 1/8	2 2 2	4730-011-4920 4730-767-8076 4730-278-3811	189-D 189-D 189-D
	ADAPTER	5/16 x 1/8	6	4730-011-4919	188-D
	ELBOW	3/16 x 1/8	4	4730-865-8239	49-W
	PLUG	1/8	6	4730-011-3175	109-B
	COUPLING	1/4 1/8	3 3	4730-277-5736 4730-277-5735	103-B 103-B
	ADAPTER	3/8 x 1/4	6	4730-081-7537	48-F
	NUT	3/16 1/8	6 2	4730-278-5551 4730-278-5490	181-D 181-D
	ELBOW	5/16 x 1/8 1/4 x 1/8	2 4	4730-640-1051 4730-277-8273	49-W 49-W

	SHUT-OFF COCK	1/8 x 1/8	1	4820-274-3646	48-E
	SHUT-OFF COCK	5/16 x 1/8	1	4820-272-3360	29-SAE
	SHUT-OFF COCK	1/4 x 1/8	1	4820-263-3024	27-SAE
	SHUT-OFF COCK	5/16 x 1/8	1	4820-430-5602	29-EF
	PLUG	1/4	6	4730-011-2578	109-B
	NIPPLE	1/4 1/8	6 6	4730-222-1837 4730-230-1996	112-B 112-B
	BUSHING	3/8 x 1/4 1/4 x 1/8	3 3	4730-880-4860 4730-828-0171	110-B 110-B
	DRAIN COCK	1/8	2	4820-752-9040	200-E
	REDUCER	1/4 x 1/8	2	4730-834-4941	120-B
	STREET ELBOW	1/4 1/8	2 2	4730-277-5553 4730-277-5552	116-B 116-B
	SHUT-OFF COCK	1/4 x 1/8	1	4820-812-9029	27-EF
	DRAIN COCK	1/4	1	4820-287-4268	42-EH
	DRAIN COCK	1/8	1	4820-555-9761	41-EH
	DRAIN COCK	1/4	2	4820-684-0880	320-E



MR. PROPERTY-BOOK KEEPER—

REPORTING REPORTABLES



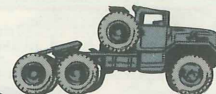
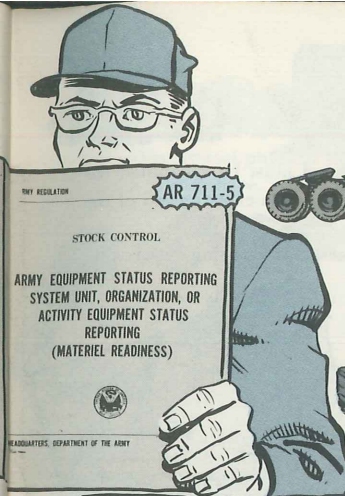
You're the Army's top man when it comes to reporting equipment in your unit. The quarterly status report (called for by AR 711-5 and your local equipment status reporting SOP) is a mighty important planning tool for the top brass. The report tells equipment providers and managers just about everything they must know about equipment in the field. In some commands the report is monthly.

HERE ARE THE IMPORTANT PUBS
YOU NEED TO CRANK OUT A
GOOD REPORT.



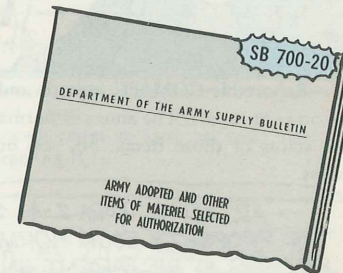
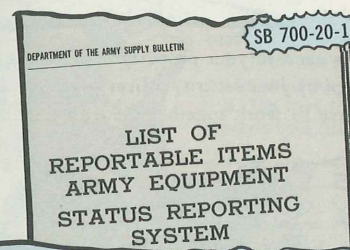
—Your outfit's TOE, MTOE, CTA's and equipment density list. They call out your outfit's authorized equipment.

—The GO (General Orders) that keeps your outfit in business.

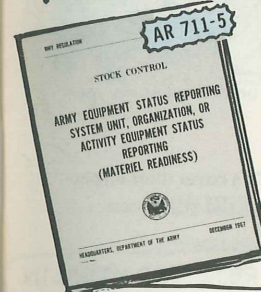


—SB 700-20 Army Adopted Items.

—SB 700-20-1 List of Reportable Items.



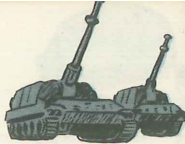
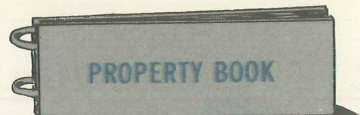
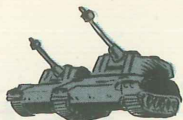
—AR 711-5 (Dec 67) Equipment Status Reporting, with its 2 changes gives details on reporting, and lists reporting codes in its App H.



APPENDIX H CODE STRUCTURES	
H-1. Special designation codes. This series of codes will appear in column 1 of the applicable card.	
a. Item Detail Card.	Codes
(1) Organization property (as accounted for in the organization property book maintained by the TOE/TDA/JTA unit, organization or activity as required by AR 735-35)	A
(2) Station property (as accounted for in the installation property book maintained by the TOE/TDA/JTA units, organization, or activity, as required by AR 735-35)	J
(3) Unit property located in equipment pools	F
(4) Property in equipment pools not accounted for on unit property books; and any other ARNG/USAR property not held under unit accountability or reported under J above	G

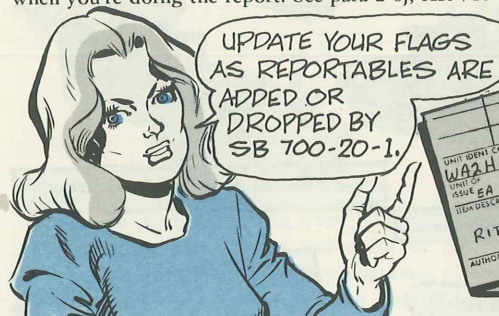
—DA Pam 710-14 Equipment Status Reporting System, gives step-by-step info on reporting.

—Your local SOP on equipment status reporting tells you when your report is due and how to make corrections, changes, deletions and additions.



—All authorized (and unauthorized) equipment on hand must be accounted for in your property book. Your equipment status report must be an exact record of the reportable items in your book.

—Flag property book pages covering reportables. That helps you spot reportables when you're doing the report. See para 2-6j, AR 710-2.



DA FORM 3328	
UNIT IDENT CODE WAZHAA	TOTAL ALW 536
UNIT OF MTC EA	MODIFIED ALW 1005-073-9421
ITEM DESCRIPTION RIFLE 5.56MM	UNIFORM NO. A94977
AUTHORITY MTC 6-4350	PRICE 106.00

—Reportable COMSEC, missile and other items in your property book annex also go on your report. The annex is normally kept by your security officer—and he knows the status of those items. So, you both have to work together on reporting those items.

--- AR 710-2, PARA 2-4, SAYS THE PROPERTY BOOK NORMALLY BELONGS AT THE PARENT UNIT. WHERE'S YOURS LOCATED?

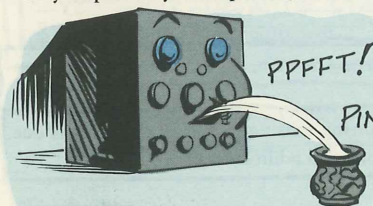
ADDS AND DELETES MUST BE MADE, OTHERWISE YOUR REPORT'LL BE WRONG.



—Check your property book carefully for reportables added or deleted since your last report.

LIN'S

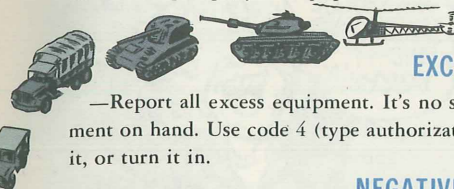
—One LIN may cover more than one FSN. Make sure your LIN's cover their respective FSN's. The right LIN with the wrong FSN's will confuse the computers ... they'll spit out your reporting info. Your report'll be useless.



INVENTORY



—The annual physical inventory (AR 710-2, para 2-10d) is a must. If your property book is shipshape, your equipment status report will be accurate.



EXCESS

—Report all excess equipment. It's no sweat. Just report it as unauthorized equipment on hand. Use code 4 (type authorization) for it—until you get authorization for it, or turn it in.

NEGATIVE REPORT



---KNOW YOUR NEGATIVE REPORT CODES AND RIGHTS. YOU CAN SEND A NEGATIVE REPORT IF:

1. Your outfit has absolutely no reportables authorized or on hand.
2. There's no change whatsoever in your authorized or on-hand equipment (since your last report).
3. You have reportable equipment on hand, but some other property book (UIC) is reporting it.

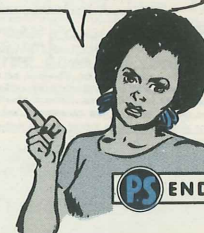
SEE APP H, AR 711-5, PAGE H-6 FOR NEGATIVE REPORT CODES.

ORGANIZATIONAL CLOTHING AND EQUIPMENT—On reportable clothing (listed under para 2-1, commodity manager F, SB 700-20-1) you report items by LIN only. On those items forget the FSN's for different sized items. Report the works under the LIN that covers 'em and use zeros in your report's FSN column for those items.

OUTSIDE HELP

—Got questions or problems on equipment reporting? MIDA (Major Item Data Agency, Letterkenny Army Depot, Chambersburg, PA 17201), will help you. Its tech assistants make scheduled visits to field units and commands.

YOUR OUTFIT CAN CHECK WITH ITS HEADQUARTERS ON GETTING MIDA HELP SEE DA CIR 710-4 (MAY 72).



Use This Green Machine Ticket for . . . EXTRA CASH

Nope—this ticket that's good for extra cash is not your boarding pass for the Freedom Bird. But it is a form.

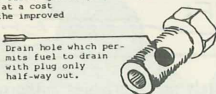
SUGGESTION

The only existing means of draining contaminated fuel from the multifuel-engine vehicles, as directed in TM 9-2320-209-20, is a common pipe plug. This must be completely removed to allow fuel to flow out of the tank.

Suggestion for improvement: Replace fuel tank drain plug with a special drain plug which can be withdrawn far enough to permit fuel drainage without removing the plug completely. See drawing of suggested plug to be used.

Adoption of this suggested substitute plug would result in elimination of contaminants before they enter the fuel lines and by a means that is both quick and simple.

This will result in a saving of time and expense in fuel filter servicing, a reduction of fuel injector pump damage and a reduction in the down time for trucks at a cost of only a few cents for the improved drain plug.



DA FORM 1045
REPLACES EDITION OF 1 JUN 51, WHICH HAS 25 ARMS

It's DA Form 1045 and Chapter 2 of AR 672-20 tells you all about it. It can bring you some extra bucks—long, green and legal.

But to collect any of that cool cash in the Army's suggestion plan, accept no substitutes.

Neither an EIR on equipment, sent on DA Form 2407, nor a suggested publication change, submitted on DA Form 2028, goes thru the right channels to trigger a cash payment.

INCENTIVE AWARD DA FORM 1045 948390 CO 8, 9th TRANS BN TRUCK M155A1 2320-502-2520 2302		SUGGESTION NO. 123 - 72
SECTION II SUGGESTION FOR IMPROVEMENT THE ONLY EXISTING MEANS OF DRAINING CONTAMINATED FUEL FROM THE MULTIFUEL-ENGINE VEHICLES, AS DIRECTED IN TM 9-2320-209-20, IS A COMMON PIPE PLUG. THIS MUST BE COMPLETELY REMOVED TO ALLOW FUEL TO FLOW OUT OF THE TANK. SUGGESTION FOR IMPROVEMENT: REPLACE FUEL TANK DRAIN PLUG WITH A SPECIAL DRAIN PLUG WHICH CAN BE WITHDRAWN FAR ENOUGH TO PERMIT FUEL DRAINAGE WITHOUT REMOVING THE PLUG COMPLETELY. SEE DRAWING OF SUGGESTED PLUG TO BE USED. ADOPTION OF THIS SUGGESTED SUBSTITUTE PLUG WOULD RESULT IN ELIMINATION OF CONTAMINANTS BEFORE THEY ENTER THE FUEL LINES AND BY A MEANS THAT IS BOTH QUICK AND SIMPLE. THIS WILL RESULT IN A SAVING OF TIME AND EXPENSE IN FUEL FILTER SERVICING, A REDUCTION OF FUEL INJECTOR PUMP DAMAGE AND A REDUCTION IN THE DOWN TIME FOR TRUCKS AT A COST OF ONLY A FEW CENTS FOR THE IMPROVED DRAIN PLUG.		
SECTION III RECOMMENDATION CO 8, 9th TRANS BN M155A1 2320-502-2520 2302		



There's a reason. Many EIR's on DA 2407 and reports on DA 2028 just call attention to faults or errors. Only accepted solutions to faults or recommended improvements in pubs and materiel call for cash payments to the suggester.

Any equipment change you recommend on DA 2407 or any publication change you recommend on DA 2028 may be worth money. But to get that cash, you've got to file your DA 1045 with your command's Incentive Awards Committee. There're no shortcuts.

Once the Incentive Awards Committee reviewers "buy" your suggestion, you can start your count-down on the payoff. (Can't hold your breath while you wait, tho. Those reviews sometimes take a while to get thru the mill.)

And don't stop sending those EIR's just because you've recommended a solution. An EIR is called for each time a fault develops or shows up on equipment—not just the first time. Several identical failures can be reported on one EIR.

Make sure, too, that you give the EIR emergency handling if the conditions call for it. Follow TM 38-750 guidelines—using TWX, phone, airmail or whatever special handling you need.



Bye, Bye Asbestos

Never Chuck A Lug!

Asbestos breathing is bad for your health. Could even be cancerous.

Maybe you know a better reason for not using the shredded asbestos packing material that comes under FSN 9390-174-0983. Maybe, but health hazard is a No. 1 reason in any book.

Same caution goes for powdered asbestos brake lining residue. It's bad stuff, so avoid blowing it around. Wipe it off brake drums slow and easy like, after dampening it.

A good rule for powdered or shredded asbestos is avoid it if you can. If you can't, be careful.

It's all well and good to get the lead out from time to time—but this is ridiculous!

Battery terminal lugs — FSN 5940-549-6581 (positive) and 5940-549-6583 (negative)—are in short supply and back-ordered from here to the moon. So never, but never, let a good terminal lug go out to salvage with a used-up battery or cable . . . and no requests for new lugs except as last resort.

Pinpoint Request Forms

Hold one—

Your file copies of DA Form 17 (Request for pubs and blank forms) can be tossed out 1 year after the request is completed—or sooner. See App E, File No. 101-17, AR 340-18-1.

But that doesn't go for the copies of your DA Form 12-series requests. You have to hang on to those file copies until you update your requests for pinpoint distribution of pubs. See para 3-8c, AR 310-2.

USAREUR Comes First

MWO 9-2320-244-20/2 (Jun 72) may not be for you. Paras 7b and 7c mean that the free governor and air cleaner kits are available only to U.S. Army Europe.

'Ear! 'Ear!

All you M139 and M85 gun operators need to use ear plugs—even tho your CVC helmet is commo-equipped. Noise from these weapons'll damage your ears. PM—Preventive Medicine in this case—calls for a trip to the medics for the right ear plug fitting. So-o-o-o, hop to it, ya 'ear!

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

TURN

THE
BIG

FLICK OFF
YOUR
COMMO RIG

THEN...

START OR STOP
YOUR VEHICLE
ENGINE.



OFF

SAVE A RADIO FROM **TV***

*TRANSIENT VOLTAGE