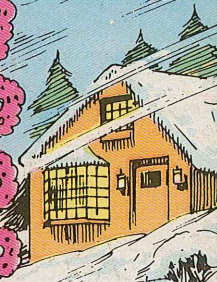


Issue 291

PS

February
1977

THE PREVENTIVE MAINTENANCE MONTHLY



MY
FAVORITE
TIME O' YEAR...

JUST KEEP UP YOUR
GREAT PM, GUYS,
AND I'LL FOR SURE BE
YOUR VALENTINE!

C. RODD

MURPHY
ANDERSON

VALENTINE
WISHES

ALWAYS

Dear Connie:
Our Bear is Ready
On the Line!!
Please be Our Steady
Valentine!
4/86 ARMOR



SHOWDOWN TIME . . .

IT'S EITHER US OR THEM!

If you're sittin' astride your unit's preventive maintenance problems like a bronc buster on a carousel pony, you're riding high, wide and handsome!

Congratulations! A rhinestone cowboy you're not and we'd like for you to give us a call.

MAYBE
PS CAN
SPREAD
SOME OF
YOUR SECRETS
AROUND...

RIGHT ON!
THE
AUTOVON
IS
745-3503



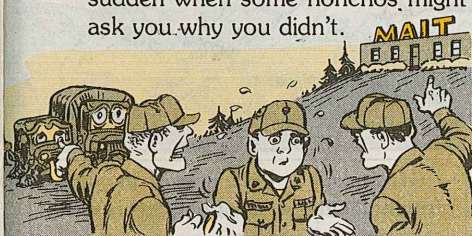
But, if your unit's readiness posture is sorta slumped . . . and you don't feel tall and firm in the saddle . . . and your mount trots your eyeballs out when you want it to canter . . . then don't call us—call MAIT!

You need not feel bashful, guilty or put down about asking for assistance. Gary Cooper would never have made it past High Noon without a little help on the side. It's no reflection on your leadership, ingenuity or ability to ride herd on your own problems.

It's more a reflection of your desire to make sure you're utilizing all the tools at your command to make sure your outfit can cut the mustard.

Just think of it this way: Nobody's ever going to ask you why you requested a visit from the Maintenance Assistance and Instruction Team.

But the time may come sure and sudden when some honchos might ask you why you didn't.



So, if you've got it made in the shade with a downhill pull, give us a call. You may make the PM Hall of Fame.



But if you're not so fortunate, call MAIT.



PS 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 Maintenance Management Center, Lexington, KY 40511.

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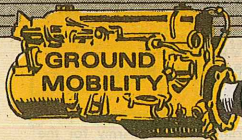
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PS wants your ideas and contributions and is glad to answer your questions. Name and address are kept in confidence. Just write to: Or call AUTOVON 745-3503

MSG Half-Mast PS Magazine Lexington, KY 40511

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IRON FIST
IN A VELVET
GLOVE . . .

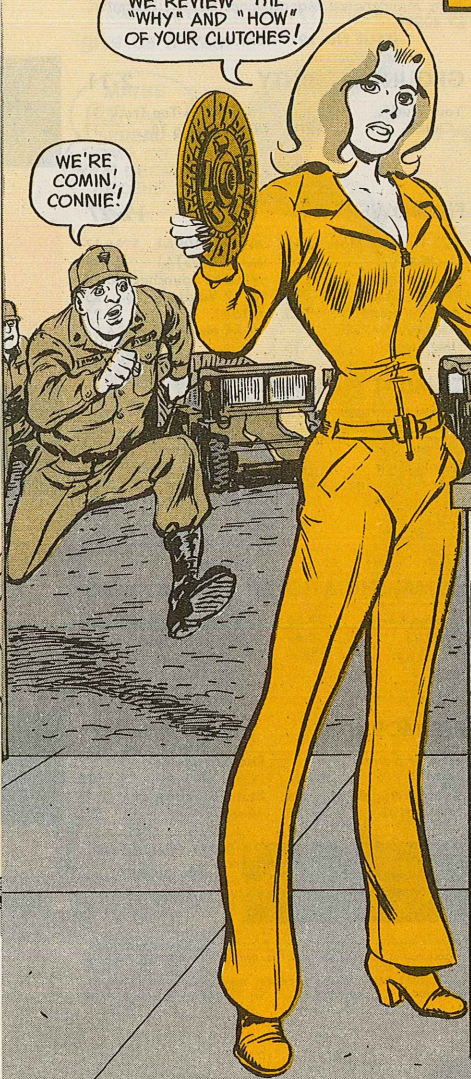
KNOW YOUR CLUTCH!

GATHER 'ROUND,
ALL YOU TRUCK
TYPES-- WHILE
WE REVIEW THE
"WHY" AND "HOW"
OF YOUR CLUTCHES!

HERE...
LET ME SHOW
YOU MY CLUTCH,
CONNIE!

BACK UP,
HOGAN...

WE'RE
COMIN',
CONNIE!



How does a hobo hop a moving freight train—without having his arm torn out of its socket?

He eases into it . . . by running alongside . . . at the same speed . . . before he grabs ahold. Then there's no shock—and he stays in one piece.

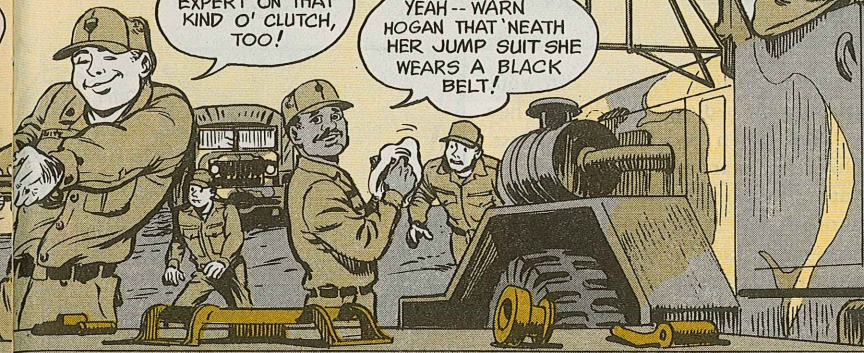


YOUR TRUCK'S CLUTCH!

RIGHT ON--
AN' SHE'S
GOT A REP
AS A REAL
CLUTCH
HITTER!

CONNIE IS AN
EXPERT ON THAT
KIND O' CLUTCH,
TOO!

YEAH-- WARN
HOGAN THAT 'NEATH
HER JUMP SUIT SHE
WEARS A BLACK
BELT!



That gives you just a little idea of the "why" and "how" of your truck's clutch. You ease engine speed and power into your transmission by using the clutch—so you don't tear your transmission and drive train apart.

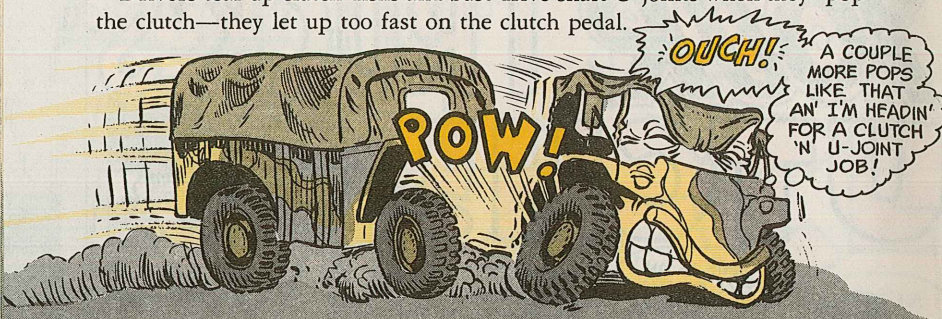
Your clutch is like an on-off switch. You turn off engine power to the transmission by pushing down on the clutch pedal—you "disengage" the clutch. Then you can change gears in the transmission. You connect the engine to the transmission again when you "engage" the clutch—by letting up on the clutch pedal.

It's a simple operation.

Trouble is, too many drivers and mechanics make a mess of it!



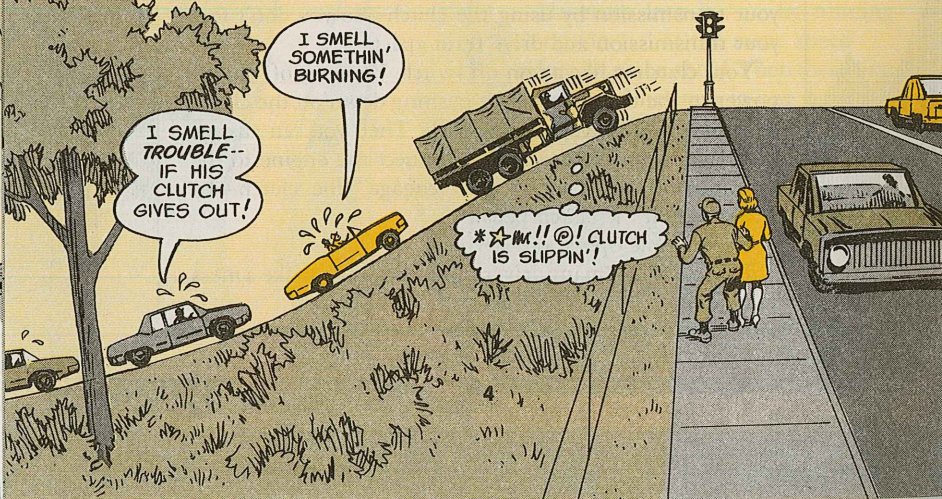
Drivers tear up clutch disks and bust drive shaft U-joints when they "pop" the clutch—they let up too fast on the clutch pedal.



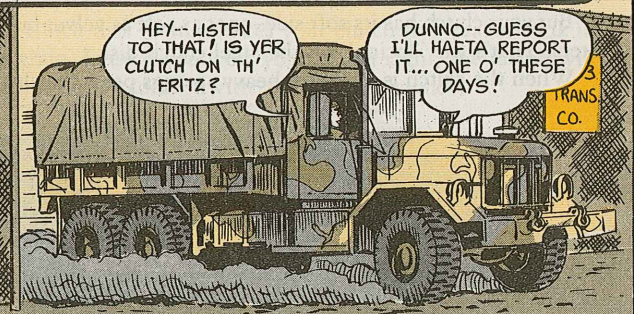
Drivers ruin clutch throwout bearings by "riding" the clutch. They use the clutch pedal for a footrest. This's like starting to disengage the clutch. It makes the throwout bearing spin. It's not built to spin all of the time—only for the few seconds you need to disengage and engage the clutch.



Drivers burn up clutch disks when they "slip" the clutch. Like they're stopped on an upgrade, and they let the clutch slip on the engine flywheel to keep the truck from rolling back—instead of shifting into neutral and using the brakes.



Drivers let little repair jobs turn into big jobs—when they fail to report clutch trouble. Like chatter, grabbing or slipping.



Mechanics let clutch parts go to pot when they fail to check clutch pedal "free travel"—so the clutch linkage can be adjusted.



Mechanics botch the job when they don't know how to adjust the clutch linkage.



Sure, your clutch is tough. All of that engine power goes through the clutch to the rest of the drive train—transmission, drive shaft, axles and wheels—to move tons of truck and payload—up hills—through mud.

But your clutch has its soft side—not as soft as velvet but not near as hard as steel. That's the "facing" on the steel clutch disk.

When the clutch is engaged, heavy springs press the clutch disk against the

engine flywheel. The facing on the clutch disk "clutches" the flywheel. So the flywheel turns the clutch disk—and the clutch disk turns the shaft going into the transmission.

Let's face it—the clutch disk facing makes your clutch the weakest link in your truck's power train. Even if you treat your clutch right, the facing will steadily wear out from on-off contact with the engine flywheel.

HERE'S A TYPICAL CLUTCH SETUP..

FLYWHEEL: Your flywheel is bolted to the engine crankshaft—so the flywheel turns at engine speed.

PILOT BEARING: The small end of the transmission input shaft rides in the flywheel pilot bearing.

CLUTCH DISK: The clutch disk moves ahead to the flywheel and backs away from the flywheel—by sliding on the splined part of the transmission input shaft. There's "facing" on both sides of this clutch disk. This facing wears down in normal operation as it gets rubbed between the steel flywheel and steel pressure plate.

... IT SHOWS HOW POWER GETS FROM YOUR ENGINE TO YOUR TRANSMISSION...

... AND HOW YOU TURN THAT POWER ON 'N' OFF!!

RELEASE LEVERS: Powerful springs push the inner ends of the release levers back—so the outer ends of the release levers are forced forward. The levers push the pressure plate forward—toward the engine flywheel. This squeezes the clutch disk between the pressure plate and flywheel. And this makes the clutch disk turn the transmission input shaft.

RELEASE FORK: Your clutch pedal is hooked up to the release fork by "linkage". When you press hard on the clutch pedal, you press the throwout bearing against the release levers. This pulls the pressure plate back—and takes the squeeze off the clutch disk. So the clutch disk quits turning the transmission input shaft.

THROWOUT BEARING: The throwout bearing rides free on the big smooth part of the transmission input shaft—until you put it to work. Then it moves forward to the release levers—and starts spinning as soon as it touches the release levers.


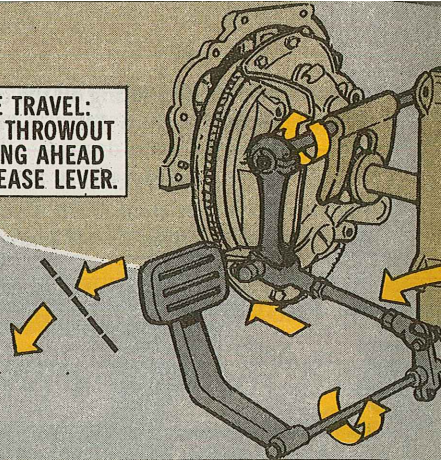
PRESSURE PLATE ASSEMBLY: This is bolted to the flywheel. It turns all the time your engine is running.



HERE'S A COMPLETE CLUTCH SYSTEM IN ACTION...

FREE TRAVEL: MOVES THROWOUT BEARING AHEAD TO RELEASE LEVER.

THEN LEVERS PULL BACK PRESSURE PLATE—AND CLUTCH DISENGAGES.



CONTROL ROD NEEDS ADJUSTING WHEN FREE TRAVEL IS TOO SHORT. THIS PULLS RELEASE FORK AND BEARING BACK FROM RELEASE LEVERS, THEN THERE'S MORE FREE TRAVEL.

SPECIALLY NOTE THE CLUTCH LINKAGE AND HOW IT ACTIVATES THE SYSTEM WHEN YOU DEPRESS THE CLUTCH PEDAL!

WEAR CHANGES

Your clutch pedal goes down real easy when you start pushing it. Then it gets harder to push.

That first part is "free travel." You're only moving the clutch throwout bearing toward the clutch release levers. As soon as the bearing touches the levers, the bearing starts spinning. Then, when you push the pedal harder, you're disengaging the clutch from the engine flywheel.

As the clutch disk facing wears

down, the release levers move back toward the throwout bearing. This shortens the clutch pedal free travel—the bearing doesn't have so far to go to reach the release levers.

If you don't keep the right free travel, the release levers will get back to the bearing... and keep it spinning... and wear it out.

Worse, you get weaker pressure on the clutch disk. It'll slip on the flywheel. This makes heat—so much

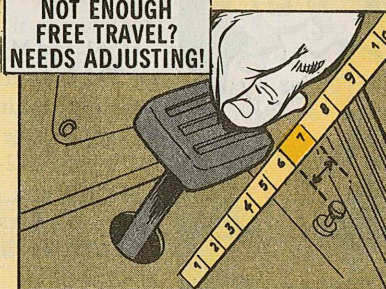
"FREE TRAVEL"

heat that the clutch disk and pressure plate and even the flywheel can crack.

That's why you mechanics have to check clutch pedal free travel at every semi-annual PM service. It's easy. It's quick.

Use a ruler—long enough to reach from the floor to the clutch pedal. Push the clutch pedal down with your hand. Measure the easy part—the free travel. If free travel is less than what your truck's TM calls for, you adjust

NOT ENOUGH FREE TRAVEL? NEEDS ADJUSTING!



the linkage.

This lets the throwout bearing back away a little from the release levers.

BEYOND OUTER

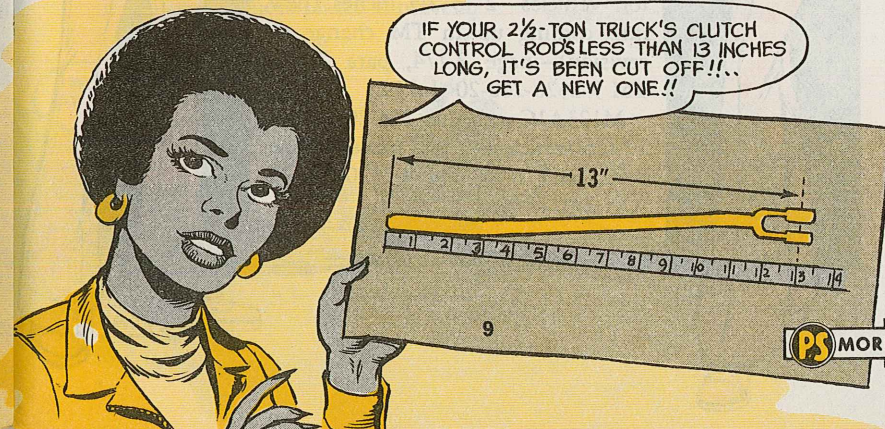
Never try to stretch your clutch linkage adjustment. The right limit is built in. When you reach that limit, the clutch disk facing is worn down to its safe limit. If you go beyond the limit, the clutch disk rivets—and then the steel disk—will rub the flywheel. That's when big trouble comes!

Some mechanics think it's cute to cut off the end of the 2½-ton truck's clutch adjusting rod—to stretch the limit for free-travel adjustment. That trick backfires when the truck has to come back for a new clutch pressure plate—and maybe a new engine flywheel.

HERE'S THE RIGHT WAY TO MEASURE THE ADJUSTING ROD'S LENGTH...

LIMIT—DISASTER!

IF YOUR 2½-TON TRUCK'S CLUTCH CONTROL ROD'S LESS THAN 13 INCHES LONG, IT'S BEEN CUT OFF!!!... GET A NEW ONE!!



HERE'S A HANDY CHECK LIST SHOWING THE CLUTCH PEDAL FREE TRAVEL MEASUREMENT FOR YOUR TRUCK-- AND WHERE TO FIND THE INSTRUCTIONS FOR LINKAGE ADJUSTMENT...

WHAT 'N' WHERE

M151A2 and other TM-218-series ¼-ton vehicles—1½ to 1½ inches—page 9, para 2-4lb, Ch 4 (Dec 75), TM 9-2320-218-20.

M37B1 and other TM-212-series ¾-ton vehicles—1 inch—page 2-151, para 2-137, TM 9-2320-212-20 (Nov 73).

M715 and other TM-244-series 1¼-ton vehicles—¾ to 1 inch—page 50, para 2-31, TM 9-2320-244-20 (Aug 71).

M561 and M792 Gama Goats (1¼-ton TM-242-series)—¾ to 1½ inches (new info, coming up in TM change or revision)—page 2-115, para 2-44d, TM 9-2320-242-20 (Aug 70).

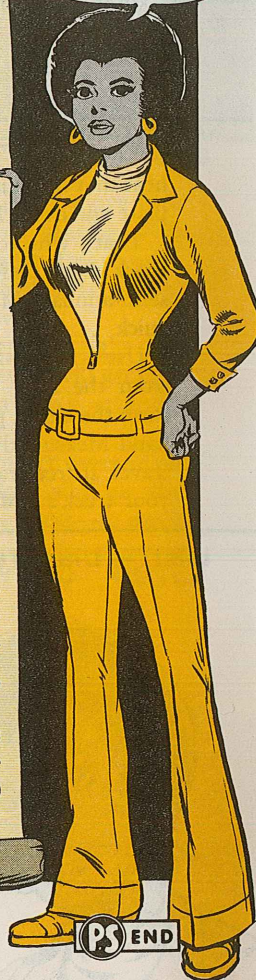
M35A2 and other TM-209-series 2½-ton vehicles—1½ to 2 inches—page 261, para 150a, TM 9-2320-209-20 (Apr 65).

M54A2 and other TM-211-series 5-ton vehicles—2 to 2½ inches (new info, coming up in TM change or revision)—page 2-80, para 2-49, TM 9-2320-211-20 (Jun 73).

M813 and other TM-260-series 5-ton vehicles—2 to 2½ inches (new info coming up in TM change or revision)—page 2-174, para 2-40b, TM 9-2320-260-20 (Jul 72).

M123A1C and other TM-206-series 10-ton vehicles—1 to 2 inches—page 2-60, para 2-50, TM 9-2320-206-20 (Oct 71).

CAREFUL WHEN YOU'RE ADJUSTING FOR CLUTCH PEDAL FREE TRAVEL. IF YOU GET TOO MUCH, YOU WON'T BE ABLE TO DISENGAGE THE CLUTCH--THE GEARS WILL CLASH WHEN YOU TRY TO SHIFT YOUR TRANSMISSION!



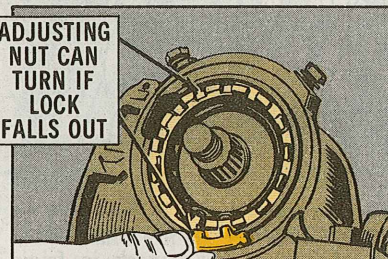
PS END

TM-218-SERIES ¼-TON TRUCK . . .

CURE LEAK—KILL DIFFERENTIAL

Keep a sharp eye out when you're replacing differential seals on your M151A2 or other TM-218-series ¼-ton vehicle. You can lose that little lock that keeps the bearing adjustment nut in the right position.

ADJUSTING NUT CAN TURN IF LOCK FALLS OUT



LOOKIN' FER THIS?

HEY, GREAT! YOU FOUND TH' LOCK!



You lose more than you gain when your seal job causes the bearing to go to pot. If the lock falls out, the adjusting nut can turn—and then the bearing's not long for this world.

Make sure that lock's in place—like it says in TM 9-2320-218-20 (Sep 71), Ch 4, page 12, para 2-136a(2), Note.

If the lock's missing, your support will have to put in a new one—after they recheck the bearing adjustment.

TACTICAL VEHICLE . . .

TB for RUSTPROOFING

Now you can head off rust problems in most trucks and small trailers.

Your support does the job as spelled out in TB ORD 401 (Jun 76). They'll drill holes in channels and other places where water gets in and sits. Then they'll shoot rustproofing compound in and around these places to prevent further rusting.



WOW! LOOK AT TH' RUST!

WHERE'S THAT NEW TB??

DEPARTMENT OF THE ARMY TECH *TB ORD 401

RUSTPROOFING PROCEDURES FOR

TRUCK, UTILITY, ¼-TON, M51, M51A1, M51A2

TRUCK, AMBLANCE, M51A1C, M51A1, M51A2

TRUCK, CARGO, 2½-TON, M35, M35A2, M35A1

TRUCK, CARGO, 5-TON, M37, M37A1, M37A2

TRUCK, TRACTOR, 18-TON, M53, M53A1, M53A2

TRAILER, CARGO, 10-TON, 2-WHEEL, M101

TRAILER, CARGO, 10-TON, 2-WHEEL, M102

ARTS, DEPARTMENT OF JUNE 1976

THAT CO-OLD FILTER . . .



YOUR NEW CREWMAN KNOWS HOW TO KEEP HIS COOL, EH?

NAAAH! HE FAILED TO LET HIS PERSONAL AIR HEATER WARM UP FIRST BEFORE PUTTING ON HIS MASK!



WARM UP AIR BEFORE CONNECTING MASK TO PARTICULATE FILTER UNIT

When you tankers put on your M25 or M25A1 tanker's mask in frigid weather, avoid connecting it immediately to your vehicle's gas-particulate filter unit.

In a cold tank, the filter unit can force cold air into the mask and cause frostbite on your face. Even if you get no frostbite, you may wear a pretty cold face for awhile. Your personnel heater may help a little, but it'll take time to warm up the vehicle.

Without the forced air from the filter unit, it'll be a little tougher to breathe—but chances of a frosted face are cut 'way down.

If you're a crewman on an M60-series tank or M728 engineering vehicle, you have your personal air heater. Turn it on and let the the air warm for 15-20 minutes before connecting your mask to the gas-particulate filter unit. This gives you pre-heated forced filtered air.

IN YOUR COMBAT VEHICLE

Baby Those Connectors



YOU SURE TREAT ME GREAT, MACON!

NOTHING'S TOO GOOD FOR YOU, BABY!

Baby the electrical connectors in the turret and cupola of your combat vehicle—that way they'll stay in shape to take extra good care of you.

Some connectors are hard to see and reach, but take your time and feather-finger 'em together.

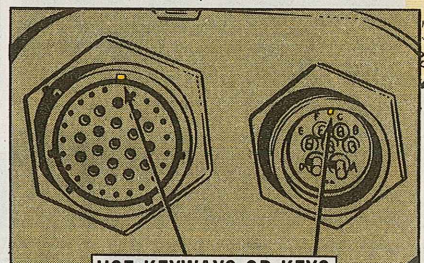
That means you mate those bayonet or threaded connectors very carefully . . . with feel, finesse and delicacy.

Both the threaded and bayonet types of connectors have a key or keyway for location and alinement of the mating parts.

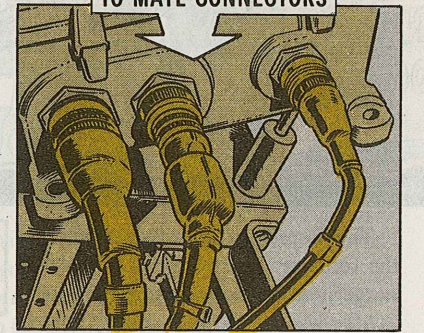
When you've got the keys lined up, they slide right into place. However, if you rely on force to make up for misalinement of keys, you'll get bent, broken or shorted connections.

With either type of connector: Gently match up the alinement keys. Then, tighten the locking collar or sleeve to complete the connection.

If the connecting box assembly, module or part is mounted on the



USE KEYWAYS OR KEYS TO MATE CONNECTORS



slant, take this oblique mounting into consideration when you match up your 2 connections.

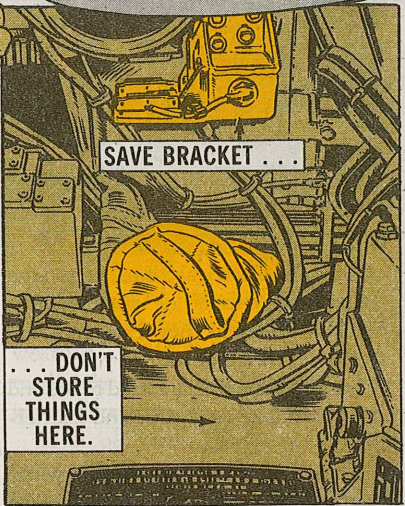


WE NEED AN **M60A2 TANK MOUNTING BRACKET SAVER!**

Storing the ballistics covers from the 7-round ammo vertical rack on top of the 8-round rack is a real Nothing idea.

Sure, it makes a nice flat place to pile the covers (or helmets, C-rations, etc.) But, when you elevate the main gun, the mounting bracket for the closed breech scavenge system (CBSS) on the breech mechanism gets damaged.

Stow the ballistics covers from the 7-round ammo vertical rack in the space left by the removed round. That way you can elevate the main gun without any problem.

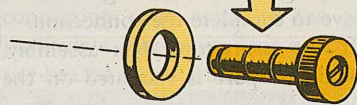


BETTER SCREW FOR M60A2

The boresight adjusting screw on the receiver-transmitter of your laser rangefinder is not doing a good job.

It's screw, socket head, (P/N 10548096), Item 28 on page 2-237 of C2 (Jul 75) to TM 9-2350-232-20P (Feb 73).

Get your turret mechanic to put in the improved socket head screw, NSN 1240-00-591-0692 (P/N 11733671).



M60A1 TANK

... DOOR SPRING ASSEMBLY IS GOOD AND STRONG... GREAT!!

GOTTA KEEP IT THAT WAY!



M36 PERISCOPE INSIDE JOB

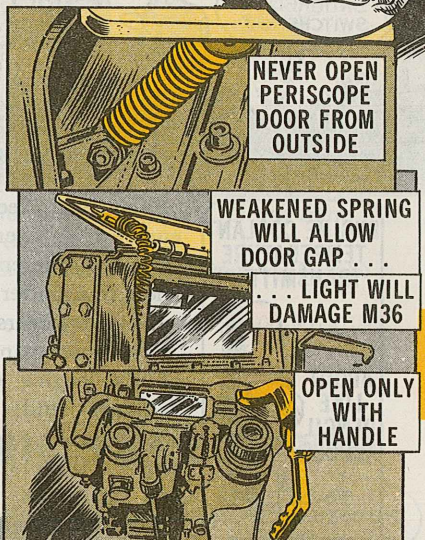
Operation of the M36 infrared periscope is strictly an inside job for the M60A1 tank commander.

He never—but NEVER—opens the periscope door from the outside or lets one of his crewmen open it that way.

The door spring assembly, NSN 1240-00-910-8053, will soon get weak if it's opened from the outside. This lets the door gap open and sunlight can get in and damage the M36 sight in the M119 mount.

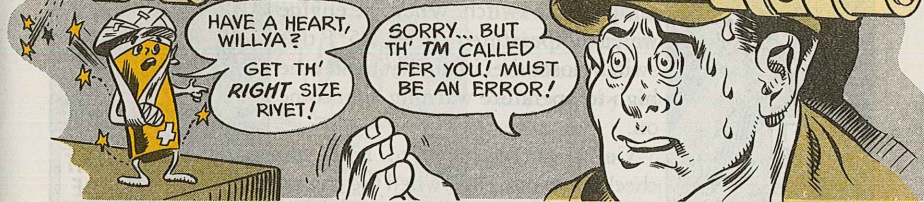
If the door is already flopping open, only your direct support can fix it.

If the door is OK, keep it that way by opening and closing it only with the operating handle. Para 3 on page 2-93 of C13, TM 9-2350-215-10 has the word.



M48/M60 TANKS, M728 CEV ...

SMALLER RIVETS NEEDED



When you use TM 9-2300-378-20P/2-2 (Feb 70) to get a steel rivet to repair the manual traverse drive linkage, rivet NSN 5320-00-959-6249 (96906-MS20613-8P24) is what they'll send you.

This rivet is too big— $\frac{1}{4}$ -in diameter by $1\frac{1}{2}$ inches long.

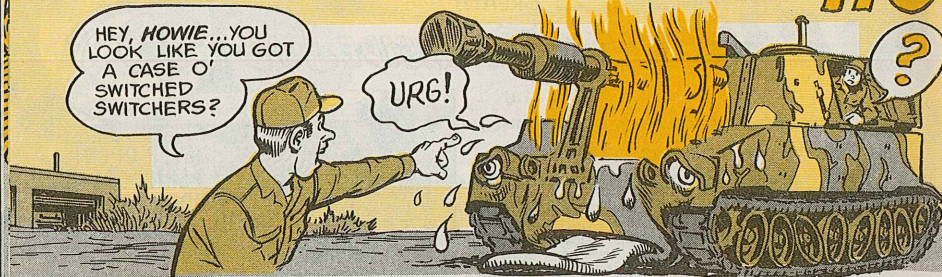
What you need is a steel rivet $\frac{7}{32}$ -in by $1\frac{3}{8}$ -in. This comes as NSN 5320-01-015-8810(102661). Order it by exception data supply request.



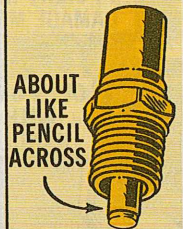
PREVENT



ENGINES



ENGINE COOLANT TEMPERATURE TRANSMITTER



ABOUT LIKE PENCIL ACROSS

NARROW END

You can't keep your howitzer's engine from overheating unless you know the difference between a switch and a transmitter.

Your howitzers have both. The water manifold on the left side of the engine (looking from the radiator end) should have a temperature transmitter. This registers the temperature of the water and transmits it to the water temperature gage on the driver's instrument panel.

The water manifold on the right side of the engine (looking from the radiator end) should have a temperature switch. When the engine water temperature reaches 225°F this switch closes the circuit that makes the high temperature warning light come on.

Get your mechanic to help you check them out. Do it when the engine is cold before starting.

(Note: When you pull out a switch or transmitter, engine coolant will spurt out the opening. Put in a replacement right away before you lose it all).

Your mechanic first takes out the unit in the left water manifold. This should be the temperature transmitter. The end in the water will be no bigger around than a pencil.

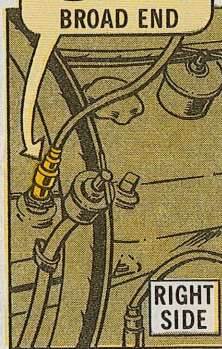
In the right water manifold is the switch which has an end about half an inch across.

ENGINE HIGH COOLANT TEMPERATURE SWITCH



ABOUT 1/2-IN ACROSS

BROAD END



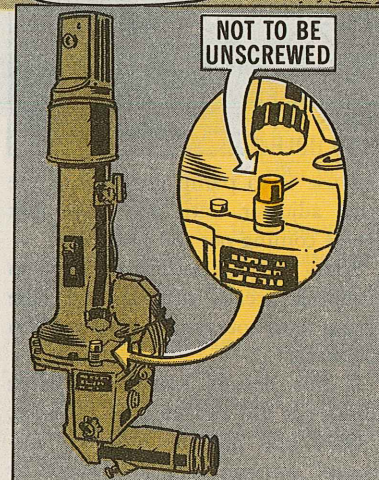
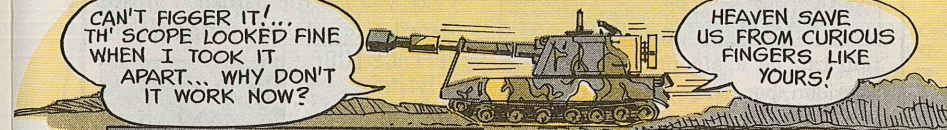
RIGHT SIDE

If the transmitter and the switch are in the wrong places, set 'em right. If you have 2 of the same kind, order the one you need.

The transmitter, (narrow end, left side of engine) comes as NSN 6685-00-814-5271 at \$2.74.

The switch, (broad end, right side of engine) is NSN 5930-00-902-0193 and costs \$3.92.

M117 PANORAMIC TELESCOPE



Could be a case of idle hands breeding mischief . . . or maybe just plain ol' curiosity. At any rate, some crewmen are screwing up the telescope by unscrewing it into 2 sections.

Once it has been unscrewed, it won't work right when you screw it back together again.

One of the screws is soldered to a wire that conducts electricity—and this wire breaks when the telescope is unscrewed. Soldering it to the screw is a support operation.

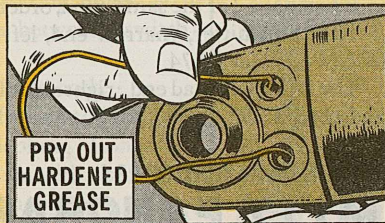
So kindly leave the M117 alone—and upright!

M551/M551A1 AD

MY PROBLEM?
FROZEN TRACK
ADJUSTERS...!!

CAN YOUR MECH
TYPES GIVE ME
SOME RELIEF?

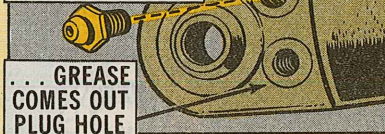
Now run a small diameter wire through both the plug and lube fitting holes and unstop it like you would a caulking gun.



PRY OUT
HARDENED
GREASE

Once you get the hardened grease loosened, screw the lube fitting back in

REPLACE LUBE
FITTING ...
PUMP IN
GREASE UNTIL ...



... GREASE
COMES OUT
PLUG HOLE

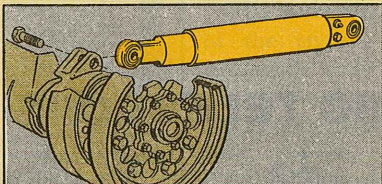
and use it to pump grease into the track adjuster until you have soft grease coming out the plug hole.

Screw the plug back in and keep on pumping grease through the lube fitting until you get the track tension you want.

If this doesn't work, your track adjuster is bad and must be replaced.

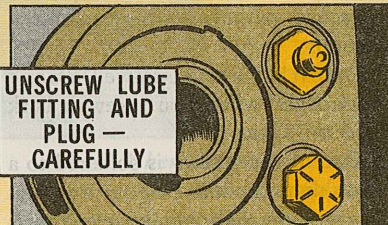
Once you get the adjuster "un-frozen" you can keep it in shape by

Track adjusters "freezing" in posi-



tion can be a big problem on your Sheridan, but here's what to do about it:

If the adjuster is already "frozen", screw out the plug, NSN 4730-00-788-5959 (P/N 11635482) and the lube fitting, NSN 4730-00-050-4208



UNSCREW LUBE
FITTING AND
PLUG —
CAREFULLY

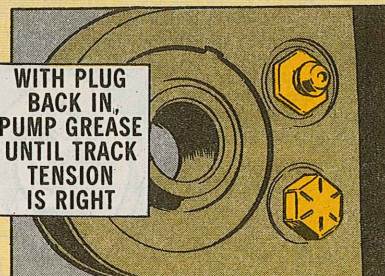
(MS15003-1). When you do this, make sure you keep all parts of your body out of the way because the grease could squirt out fast enough to hurt you.

JUSTER FIX

BET YOUR TRACK
SHOES, BUDDY!
HERE'RE
THE ANSWERS!

taking the plug out every time the track needs tensioning. Pump in fresh grease until the grease starts coming out the plug hole. Then you screw the plug back in and continue pumping grease through the lube fitting until you get the track tension you want.

WITH PLUG
BACK IN,
PUMP GREASE
UNTIL TRACK
TENSION
IS RIGHT



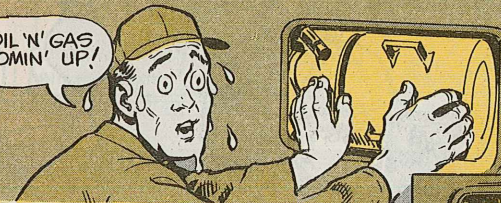
Some track adjusters will have the lube fitting in the upper hole and the plug in the lower hole, while others will be just the reverse.

Makes no difference which way it is. The track adjuster will work equally well either way.

Makes no difference which way it is. The track adjuster will work equally well either way.

FILTER INSTALLATION TIP

OIL 'N' GAS
COMIN' UP!

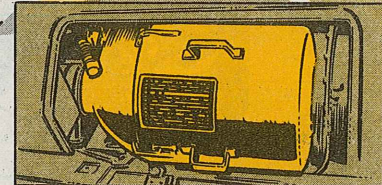


NO! NO!
NEVER USE OIL OR
GAS... RUINS THE
SEAL... A DAB OF
GAA IS MUCH
BETTER!

Having trouble installing the air filter in the housing on your M551 or M551A1 Sheridan?

A little GAA on the housing seal may help. Never use oil, gasoline or solvent because they'll just ruin the seal.

Like it says on page 2-128 of TM 9-2350-230-20-1 (Feb 75) Fig. 2-42, apply a light coat of GAA to the seal. Not too much because the excess will collect dirt and dust.



APPLY LUBE
HERE TO
SEAL

ELEMENT HOUSING

FRONT HOUSING

BE
YOUR
OWN
INSPECTOR . . .

M202A1 ROCK

Your M202A1 rocket launcher is a real futuristic firestick. But there's nothing spaced out about that 66-MM baby Superstar. No Sir-e-e.

The secret, tho, is to keep that launcher star bright . . . always ready to blaze away.

And the way to shine is with a lot of care, a good grip on TM 3-1055-456-12 (Mar 75) with Ch 1 and 2, a bit of preventive maintenance and—for safety—a quick daily before mission service.

BEFORE EACH MISSION--BEFORE YOU LIFT OFF FOR PLACES UNKNOWN--COMPLETE THIS INSPECTION!

FAULTS IN HEAVY TYPE ARE MOST SERIOUS!

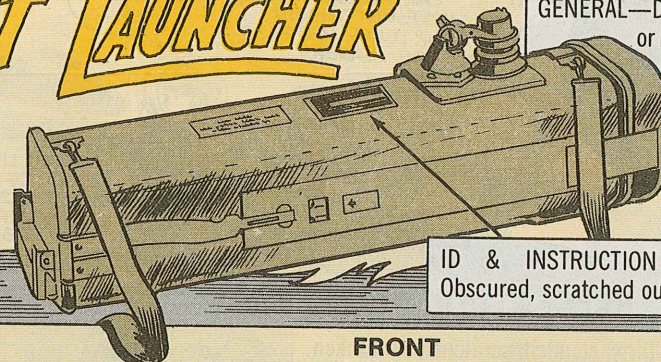


WARNING

Never fire an M202A1 launcher that does not have an MWO 3-1055-456-50 (19 Dec 75) label next to the launcher identification label.

ET LAUNCHER

GENERAL—Damaged, loose or missing parts; dirty, corroded, gunky, gritty or wet.



ID & INSTRUCTION LABELS—Obscured, scratched out or missing.

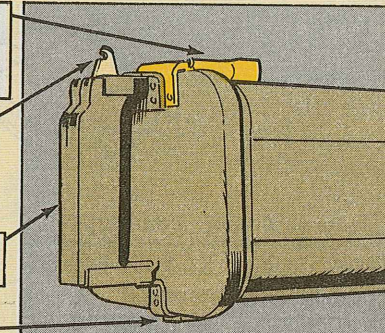
FRONT

COVER LATCH—Bent, broken or missing; gunked- or crudded-up; won't lock in down position.

FRONT COVER/TRIGGER HANDLE LATCH & TOGGLE—Won't lock trigger-handle assembly in retracted position when front cover is closed or fully opened.

HANDLE—Missing; latch broken.

HINGE PIN & COTTER PIN—Sprung, bent or broken; missing.



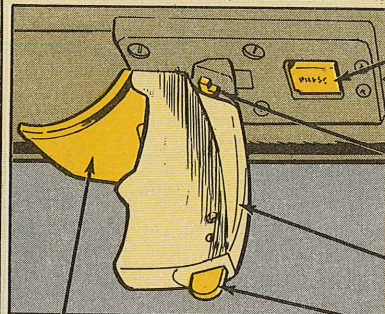
TRIGGER-HANDLE ASSEMBLY

TRIGGER-HANDLE RELEASE BUTTON—Won't release assembly from locked position.

TRIGGER SAFETY BUTTON—Gunked-up, rusted, bent or broken; won't slide into SAFE position; won't safety trigger.

HANDLE—Won't extend fully into locked position.

TRIGGER-HANDLE LATCH—Won't release to extend trigger handle.



TRIGGER—Gummy; sprung; won't pull all the way back.



REFLECTING SIGHT ASSEMBLY

LENS—Dirty, clouded, scratched or broken.

LENS COVER—Bent or missing; weak, hinge detent broken or missing.

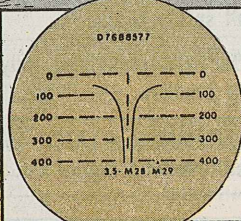
HINGE STUD & NUT—Rust-frozen, loose or missing; thread stripped.

STOP SCREW & NUT—Rusted; threads stripped; missing.

ELEVATION PLATE SCREWS—Loose or missing; threads stripped; head recess burred.

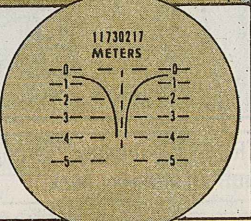
ELEVATION ADJUSTMENT PLATE—Cruddy, rust-frozen or broken.

SIGHT ALINEMENT MARKS—Blurred, obscured or missing; out of line.



YARD RETICLE

OPTICS—Reticle markings blurred (yard or meter); target definition unclear.



METER RETICLE

RUBBER EYEPIECE—Split, rotted or missing.

SIGHT LOCK—Broken; won't latch tight in stored or firing positions.

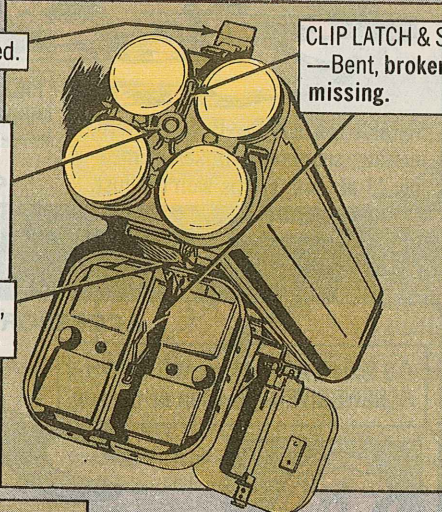
LATCH—Bent or damaged.

FIRING PIN MECHANISM ASSEMBLY—Gunked-up; bent, frozen or broken. (Note; do not hand rotate mechanism—you might damage the launcher.)

HINGE PIN & COTTER PIN—Sprung, bent or broken; missing cotter pin.

BAIL HANDLE—Bent, damaged or missing. Spring weak, worn, broken or missing.

REAR



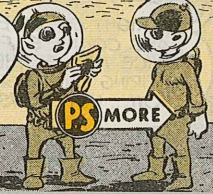
CLIP LATCH & SPARE—Bent, broken or missing.

M74 ROCKET CLIP—Punctured or damaged; shows evidence of leakage. (Note: damaged rocket clips should be disposed of according to local SOP. Keep ammunition clean, dry and cool—below 140°F.)

CLIP LOCK BUTTON—Frozen; won't depress to release detent; won't snap into locked position.

FIBERGLASS LAUNCHING TUBES—Dented or cracked; unraveled, frayed or loose fiberglass; burn spots on inside of any tube. (Note: a little chipped paint on the tubes won't hurt.)

ANALYSIS OF ROCKET FRAGMENTS INDICATE POOR PM ON LAUNCH TUBES, SIRE!



SLING ASSEMBLY

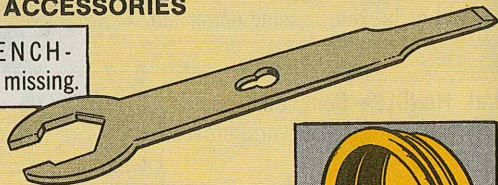


STRAPS & PAD—Rotted, torn, missing; snaphooks broken or missing. (3 of 'em); straps won't adjust.

PAD BUCKLES (2)—Springs worn, broken or missing.

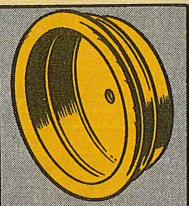
ACCESSORIES

COMBINATION WRENCH-SCREWDRIVER,—Broken or missing.

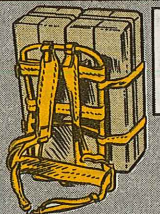


CROSSHAIR

CROSSHAIR BORESIGHT DISK AND PEEPHOLE BORESIGHT DISK, NSN 1055-00-312-7167—Gunked-up, damaged, broken or missing.

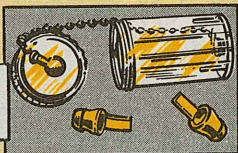


PEEPHOLE



BACKPACK—Bent frame; straps moldy or rotted; buckles and hooks damaged or missing.

EAR PLUGS—Make sure you have and use them.



SEE, Z-4! OUR LUNAR BASE IS SECURE!

... SO JUST KEEP ON TOP OF THESE PM INSPECTION POINTS AND WHEN YOU'RE BLOWN' IN THE WIND...

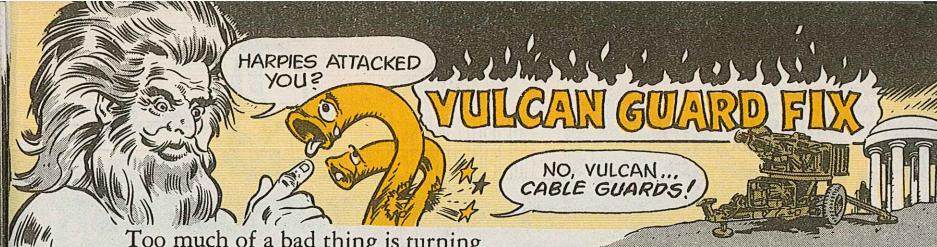
IT'LL BE MORE THAN JUST STARDUST!

GOTCHA, CONNIE!

RIGHT ON, SIRE-- AND CONNIE'S PM ADVICE MEANS THEY'LL BE FIRING ON TARGET NOW... NOT ON US!



PS END



HARPIES ATTACKED YOU?

YULCAN GUARD FIX

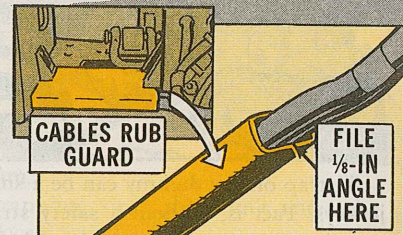
NO, YULCAN... CABLE GUARDS!

Too much of a bad thing is turning out to be two much for the radar cables on the M167 Vulcan.

Like so: the radar cables, during system use, rub against their cable guard (Part No. 8438662). The guard cuts into the wiring or rubs the insulation off. Scratch one cable (or two or more).

The damage is caused by the lower part of the cable feedthrough on the guard.

So, file an 1/8-in strip off the bottom of the feedthrough, where the feedthrough contacts the cable. File at



CABLES RUB GUARD

FILE 1/8-IN ANGLE HERE

an angle along the inner edge of the guard. Smooth off all rough edges.

Remove the cables and take off the guard before you do any filing. You can use a hand file or an electric drill with a grinder.

M16A1 SIGHT SEEING



YOU LIVE AROUND HERE, BUDDY?

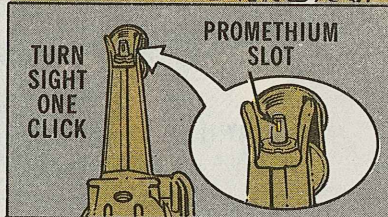
NOPE-- JUST SIGHT SEEING!

YEAH... SEZ HE'S PROMETHEUS! WE ASKED FER ADVICE ON A PROMETHIUM SLOT PROBLEM! AN' HE SHOWED UP...

"GAK!"

Bugged when you battle-sight zero your M16A1 rifle and the promethium slot disappears from view?

Stay cool. One click of the promethium front sight will put the luminous slot in view... and you'll still have good accuracy out to about 300 meters.



TURN SIGHT ONE CLICK

PROMETHIUM SLOT

LOOK! TH' DUMMY
AIN'T STRAPPED DOWN!

MAN--
IS HE IN
FOR A HEAD-
ACHE!

ME? I
NEVER HAD
A HEADACHE...

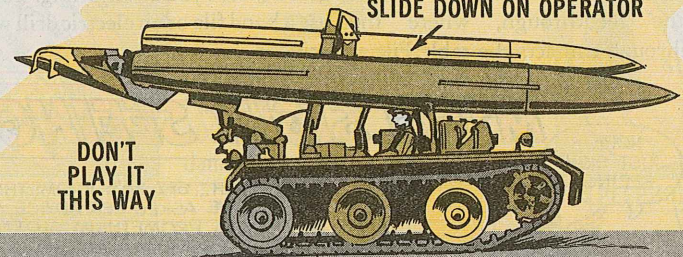
I JUST
GIVE 'EM!



A strap on the dummy can be a smart move for Hawk loader-transporter jockeys. Fact is, without a safety strap, a load of wingless dummy missiles can give a guy a monumental headache.

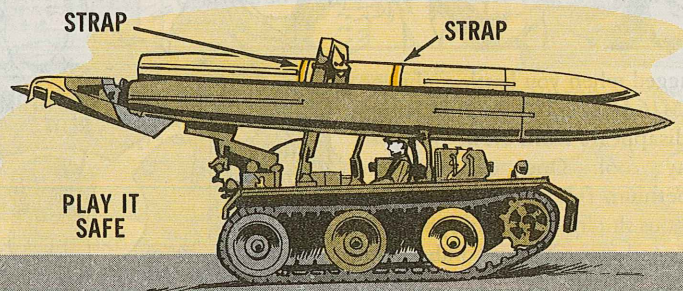
Without the wings, there's nothing to keep that top, center dummy missile from sliding right into the operator's compartment if it breaks loose from its latches.

**WITHOUT STRAP IT CAN
SLIDE DOWN ON OPERATOR**



**DON'T
PLAY IT
THIS WAY**

For your head's sake, strap the center dummy to the missile hoisting beam on the loader. Your battery supply man can get you 2 safety straps, NSN 5340-00-412-1997. They're listed under special tools in TM 9-1450-500-24P. Install the



**PLAY IT
SAFE**

... THAT LOADER
HAS ONE DUMMY
TOO MANY ON
BOARD!!

WELL... HIS
FIRST IS COMING
NOW!...



straps anywhere along the hoisting beam.

The outboard missiles need no strapping, since they can't enter the operator's compartment if they break loose.

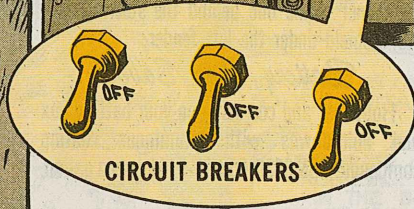
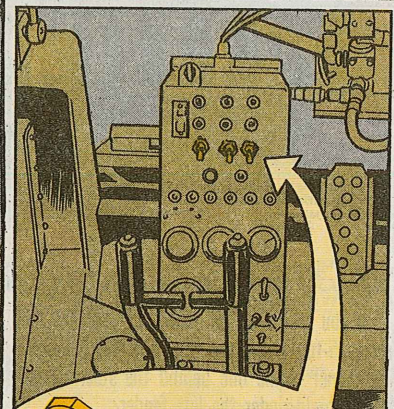
To keep any of the missiles from coming loose in the first place, make sure the latch well fittings on all 3 missiles are clean and tight. Check the latches on each missile hoisting beam for cracks, scoring and wear. And, make sure the hand levers move freely and are not damaged or worn. Damaged latches require action by direct support.

XM501 E3 BREAKER SWITCH

Missile latch circuit breakers (NSN 5925-00-842-7298) are big headaches on your Hawk XM501E3 loader-transporter.

Now, however, you can throw away the aspirin . . . thanks to improved breakers which are available to batteries in the field.

TH' WORD IS HERE IN
TB 43-0001-39-3 (Oct 76).



CIRCUIT BREAKERS





PUBS



VALENTINES FOR YOU AND YOUR GEAR

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 (Nov 74), and Ch 3 (Oct 75), TM's, TB's, etc.; DA Pam 310-6 (Jul 76), and Ch 1 (Current as of 15 Aug 76), SC's and SM's and DA Pam (O) 310-9 (Aug 74), COMSEC pubs.

TECHNICAL MANUALS

Ch 1, TM 3-1040-202-12 Sep M3A3 Smoke Generator
 TM 3-6665-214-13&P Oct M3A1 Radioactive Source Set
 TM 5-3810-295-12 Oct 20-Ton Crane—Harnischfeger Mod M320RT
 TM 5-6625-2691-13&P Sep Elec Test Set (Load Bank) O-30 KW, AC Essex Electro Engineers Inc Mod A427
 Ch 1, TM 9-1300-203/3 Aug Artillery Ammo
 TM 9-1425-382-10-2 Jul
 TM 9-1425-382-10-4 Jul
 TM 9-1425-382-10-5 Jul
 TM 9-1425-382-10-6 Jul
 TM 9-1425-382-10-7 Jul
 TM 9-1425-382-10-8 Jul
 TM 9-1425-382-10-9 Jul
 TM 9-1430-382-20P Sep
 TM 9-1425-485-L Aug Lance pubs
 TM 9-1425-585-L Aug Chaparral, FAAR,

Redeye, BATS, MQM 33A, B pubs
 TM 9-1430-486-24P Oct Lance
 TM 9-1440-585-20P Oct Chaparral
 TM 9-2320-242-20 Sep 1/2-Ton Truck M561 and Ambulance, M792 (Game Goat)
 TM 9-4935-485-20P Aug Lance
 TM 9-6920-485-14 Oct Missile, M25 Training (Lance) Field
 TM 11-3895-202-24P Aug RL-31(I) Reel Units
 TM 11-3895-209-24P Aug RL-207(I)/G Reeling Machine
 Ch 1, TM 11-5800-213-L Aug Commo Electronics Equip Pubs
 Ch 3, TM 11-5805-371-15 Oct AN/TCC-65 Telephone Terminal
 Ch 2, TM 11-5805-383-12 Sep TD-754/G Multiplexer
 TM 11-5805-689-14 Oct CV-1919/G Telephone Signal Converter
 TM 11-5921-311-12 Aug RT-1167/ARC-164(V) Receiver-Trans
 Ch 1, TM 11-5830-340-12 Oct AN/VIC-1(V) Intercom Set
 TM 11-6730-242-24P Sep PH-637E Still Picture Proj
 TM 55-1520-228-PMS Sep OH-58A
 TM 55-1520-234-23-1, Vol 1 Sep Avum and Avim Maint Manual AH-1S (MOD)
 TM 55-1520-234-MTF Sep AH-1S
 TM 55-2840-234-23P Sep Turboprop Engine, T-55 Series

TB 55-9150-200-24 Jul Engine, Transmission Oils, Fuels and Additives for Army Aircraft

MISCELLANEOUS

DA Cir 750-48 Sep Military Vehicle Emissions
 DA Cir 750-49 Sep Phase Inspection for Army Aircraft
 FM 9-63G, 1/2 Jul 63G Fuel & Elec Systems Repairman, Skill Level 1 and 2
 LO 5-3810-295-12-1 Jul Crane, Whl Mtd, DED, M320RT
 LO 5-3810-295-12-2 Jul Crane, Whl Mtd, DED, M320RT
 LO 5-3810-295-12-3 Jul Crane, Wheel Mtd, 20-Ton, DED 4x4 M320RT
 LO 9-2320-206-12 Jul 10-Ton Truck M123, M123C, M123A1C, M123E, M125
 LO 10-3930-630-12 Sep 4000-lb Fork Lift Truck, GED, Army Mod MHE-231
 SC 4820-99-CL-490 Sep Aviation Unit Maint Set No. 1
 SC 5180-90-CL-N09 Sep Carpenter's Tool Kit, Engr Pll
 SC 5180-90-CL-N10 Sep Pioneer Tool Kit, Engr Cut Pll
 SC 5180-90-CL-N17 Sep Tool Kit, Rigging, Wire Rope, Cutting, Clamping and Splicing
 SC 5180-90-CL-N26 Aug Automotive General Mechanic's
 SC 5180-90-CL-N34 Sep Body and Fender Repair Tool Kit

AUDIO-VISUAL STUFF— Available at Your Local TASO

TEC LESSONS

010-071-6631-F Intro to 81-MM Mortars	041-061-6125-F Tube Artillery—Checking Fuze Setters	043-441-7842-F Load/Unload Chaparral and Missile—	944-441-0013-F Gama Goat, Checks & Services, Part 2 (In-between, Underneath)
020-171-1311-F Bridge Classif Signs	043-441-1023-F FAAR Emplacement, Part 1	043-441-7843-F Parts 1 & 2	944-441-0014-F Gama Goat, Checks & Services, Part 3 (Engine)
020-171-1640-F M551 Target Engage-Actions of Driver	043-441-1029-F thru Part 7	920-061-0500-F Introduction to TEC	944-441-0015-F Gama Goat, Checks & Services, Part 4 (Cab)
020-171-5345-E Operation of Xenon Searchlight	043-441-1025-F Intro to Leveling	920-777-0505-F TEC for Green Tabbers	947-071-0109-F Claymore Mine—Disarming, Recovery Emergency Destruction
020-171-5365-F M60/M60A1/M60A3 Tank—Target Engage at Night, Poor Visibility	043-441-1035-F and FAAR March Order-Airlifting	936-061-0147-F Visual Hand Signals	952-061-0055-F PSID Part 2, Emplacing, Mapping, Monitoring
041-061-6116-F Tube Artillery: Fire Control Alignment Tests—Leveling Trunnions	043-441-1036-F Vulcan Daily Checks, Parts 1, 2, 3	936-061-0120-F Radio Set Control Group-AN/GRA-39 (Prep for Testing)	
	043-441-5911-F Vulcan Daily thru Checks, Parts 1, 2, & 3	940-071-0086-F M203 Grenade Launcher Disassembly, Assembly and Maint	
	043-441-5913-F Vulcan Daily thru Checks, Parts 1, 2, & 3		
	043-441-7836-F Prep Chaparral		

DA 2408-10 Date Splash Panel for 5-Ton Trucks

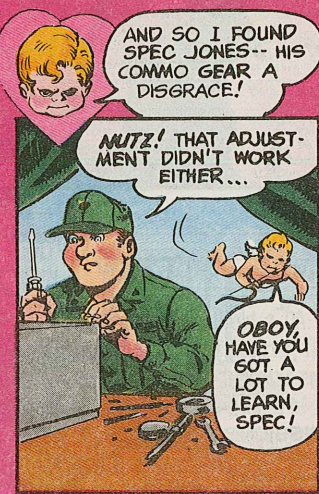
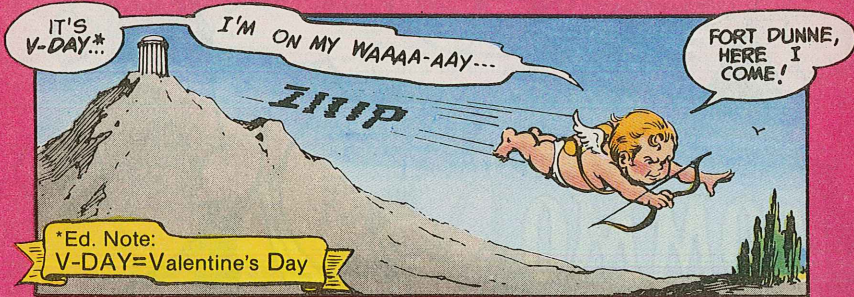
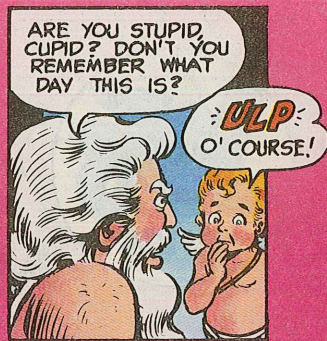
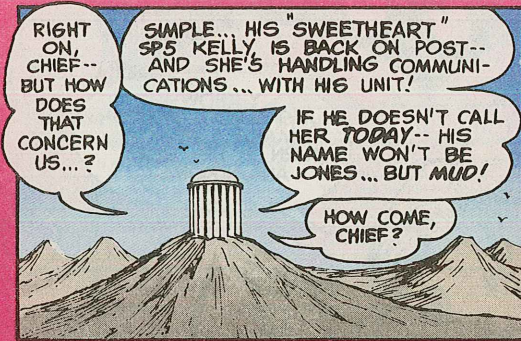
When you first fill out a DA Form 2408-10 Equipment Component Register, TM 38-750 tells you to put the date from the equipment data plate or the DA Form 2408-9 of new or rebuilt items in the first date column of the DA 2408-10. If no date shows up on the data plate, use the date in block 23 of the DA Form 2408-9. Acceptance or Gain Report for the 2408-10 entry.

If you need a splash panel for your TM-260-series 5-ton truck, use NSN 2510-00-880-4657. The panel is the one behind the steering gear stone shield under the left fender.

Battery Box Saver

Fight rust and corrosion on your battery box and hold-downs with bituminous coating compound. NSN 8030-00-290-5141 gets a gallon.

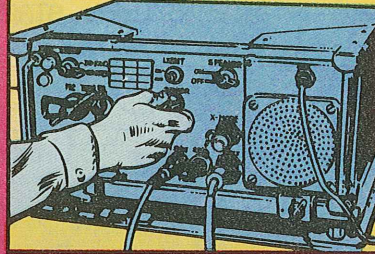




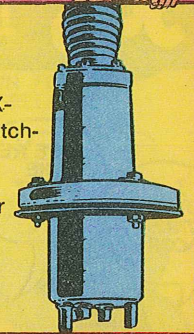
HERE ARE SOME POINTERS ON... ROUGH HANDLING



"When you're tightening knobs on the panel of your radio set, back off the heavy muscle handling."



"Or, when you're installing your MX-6707 antenna matching unit, use a torque wrench. Avoid broken or cracked plastic bowl."

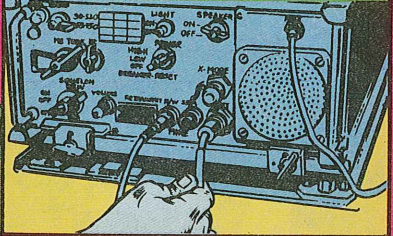


TRYING TO FORCE A CABLE CONNECTOR, ESPECIALLY A MISMATCHED ONE, ON YOUR RADIO'S RECEPTACLE, LEAVES CONNECTOR PINS BENT OR BROKEN!

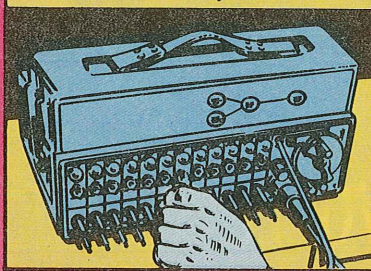
THIS WILL SHORT OUT YOUR SET.



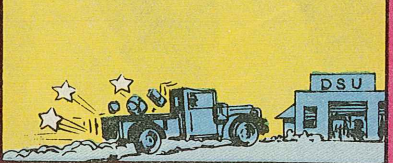
"Same goes when you disconnect a cable by yanking on the wiring instead of pulling by the connector. The wires are pulled loose inside."



"That heavy handedness can damage your switchboard, too. Nudge the plug with your fingers... not with the heel of your hand."



"If you're taking your commo gear to support for minor repairs, pack and cushion it."



CHECK P5281 FOR WORD ON PACKING MATERIALS!...

SAY THIS POSTER IS ON YOUR PROBLEM! WHY DON'T YOU POST IT?



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.



HEY! THIS POSTER IS GREAT!



HMM-- THAT GIRL, CONNIE, LOOKS FAMILIAR...



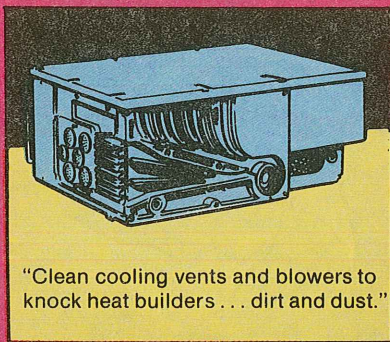
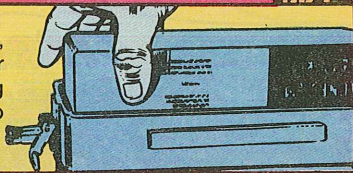
OK, LET'S TALK ABOUT

NEGLECT

NEXT...



"Leaving dry-cell batteries in radios, switchboards or telephones when your gear's not being used, or when it's being stored, will cause corrosion that'll eat into your equipment."

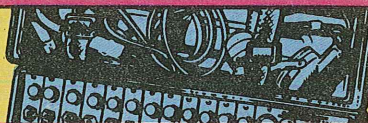


"Clean cooling vents and blowers to knock heat builders... dirt and dust."



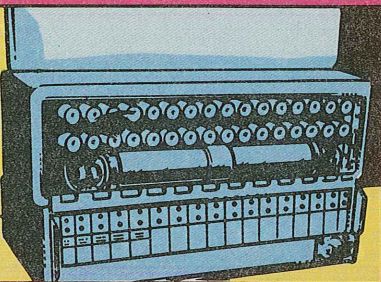
"Loose or missing screws will leave your gear open to water damage."

"You can also get water damage when your gear's gaskets are chipped or cracked."



"Get 'em put in, to protect your set."

"A twist or rub with an eraser will get rid of corrosion on radio, telephone or switchboard contacts."



SAY, KID... YOU DO KNOW YER STUFF! HOPE I CAN GET THIS GEAR WORKING... I GOT A SPECIAL CALL T' MAKE!

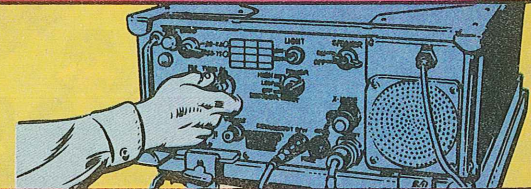
MAYBE I CAN HELP YOU, BUT...



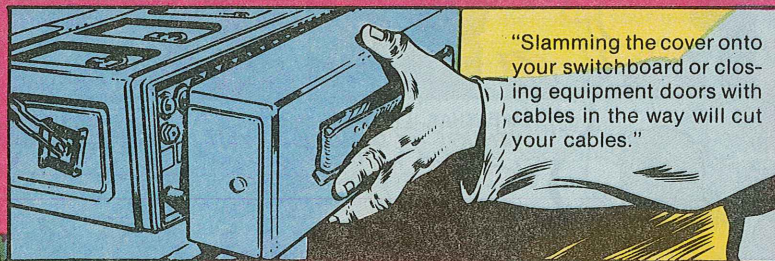
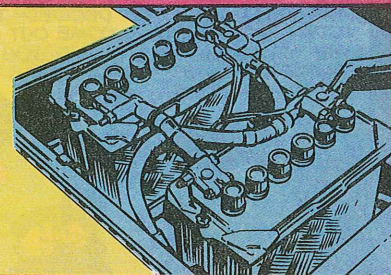
NOW, LET'S DISCUSS THE INEXCUSABLE KILLER... **CARELESSNESS**



"A radio switch left on when you start your vehicle engine will let surging voltage zap your set. Be sure to turn off your radio."



"Carelessness can result in reverse polarity when you hook up the CX-4720 power cable to the vehicle battery. Look for cable colors or markings... the larger post is positive and smaller post is negative. If you're still not sure, ask your support to give you a hand with the hookup."



"Slamming the cover onto your switchboard or closing equipment doors with cables in the way will cut your cables."

BIG FEET CAN DAMAGE CABLES AND CONNECTORS!



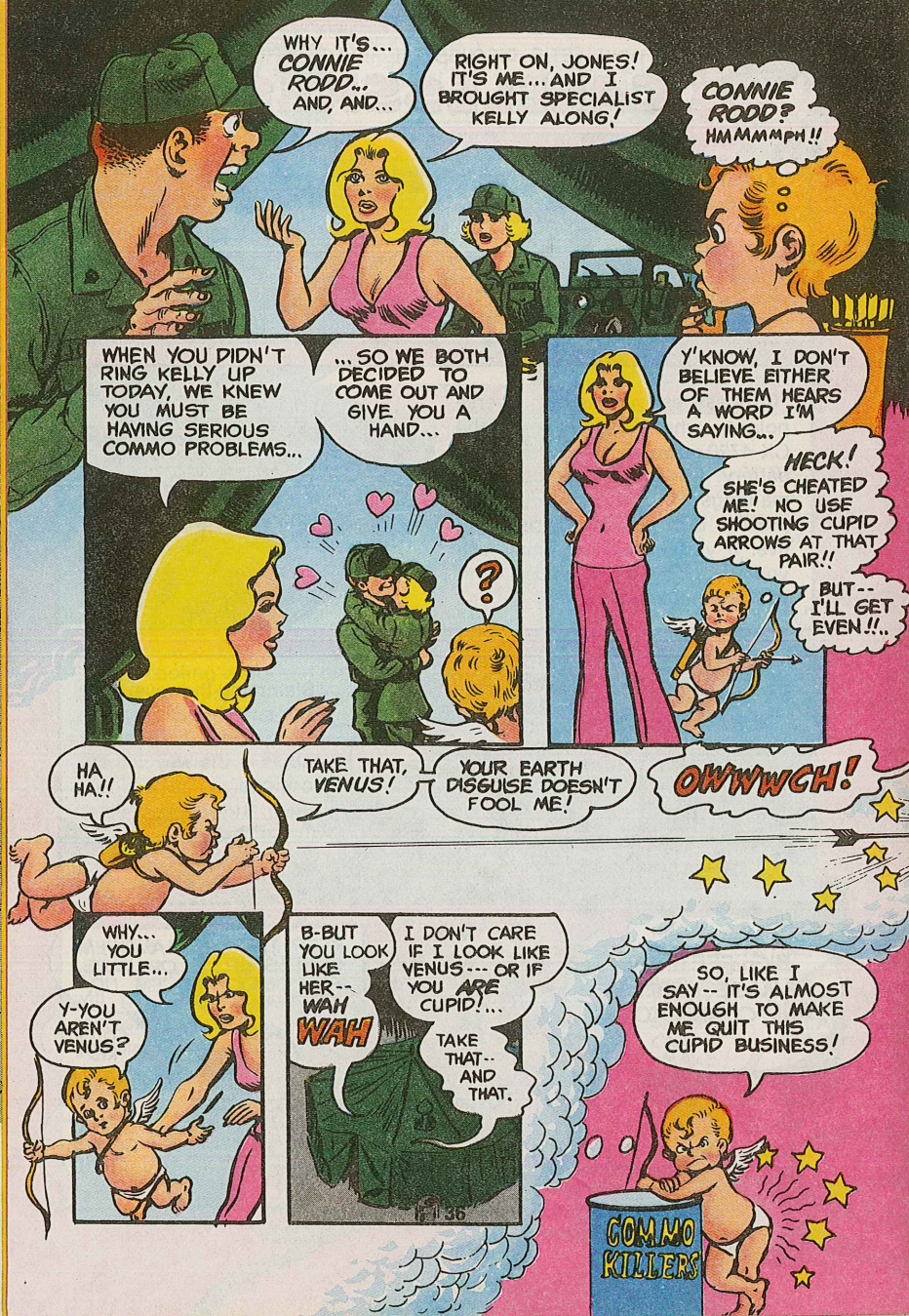
KEEP THE CABLES UP AND OUT OF THE WAY!

CLAMP 'EM OR TAPE 'EM UP!

GOTCHA, KID!

GREAT GOING, CUPID!





WHY IT'S...
**CONNIE
RODD...**
AND, AND...

RIGHT ON, JONES!
IT'S ME... AND I
BROUGHT SPECIALIST
KELLY ALONG!

**CONNIE
RODD?**
HMMMMPH!!

WHEN YOU DIDN'T
RING KELLY UP
TODAY, WE KNEW
YOU MUST BE
HAVING SERIOUS
COMMO PROBLEMS...

... SO WE BOTH
DECIDED TO
COME OUT AND
GIVE YOU A
HAND...

Y'KNOW, I DON'T
BELIEVE EITHER
OF THEM HEARS
A WORD I'M
SAYING...

HECK!
SHE'S CHEATED
ME! NO USE
SHOOTING CUPID
ARROWS AT THAT
PAIR!!

BUT --
I'LL GET
EVEN!!!

HA
HA!!

TAKE THAT,
VENUS!

YOUR EARTH
DISGUISE DOESN'T
FOOL ME!

OWWWCH!

WHY...
YOU
LITTLE...

Y-YOU
AREN'T
VENUS?

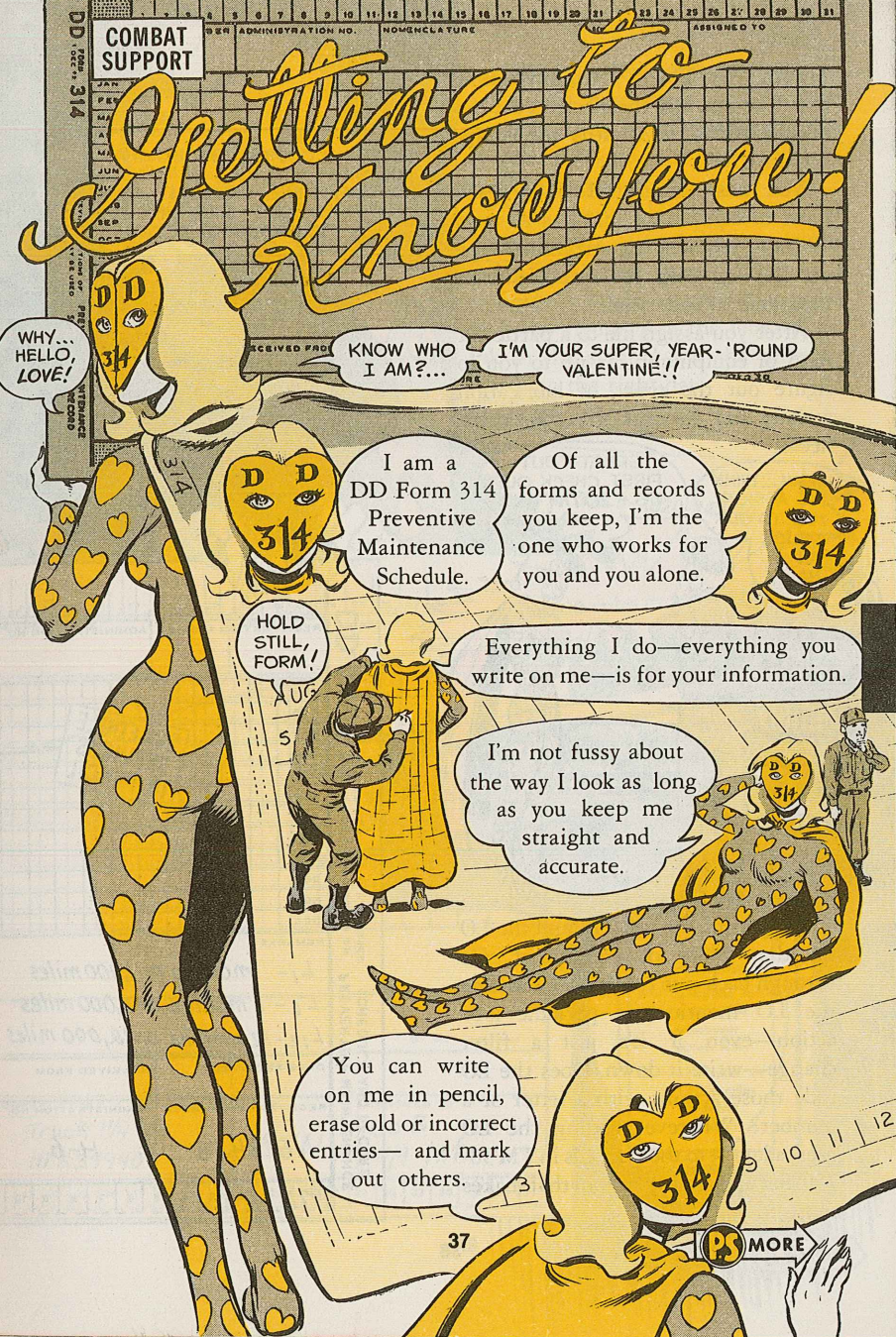
B-BUT YOU
LOOK
LIKE
HER --
WAH

I DON'T CARE
IF I LOOK LIKE
VENUS -- OR IF
YOU ARE
CUPID!...

TAKE
THAT --
AND
THAT.

SO, LIKE I
SAY -- IT'S ALMOST
ENOUGH TO MAKE
ME QUIT THIS
CUPID BUSINESS!

**COMMO
KILLERS**



COMBAT
SUPPORT

WHY...
HELLO,
LOVE!

RECEIVED FROM

KNOW WHO
I AM?...

I'M YOUR SUPER, YEAR-'ROUND
VALENTINE!!

I am a
DD Form 314
Preventive
Maintenance
Schedule.

Of all the
forms and records
you keep, I'm the
one who works for
you and you alone.

HOLD
STILL,
FORM!

Everything I do—everything you
write on me—is for your information.

I'm not fussy about
the way I look as long
as you keep me
straight and
accurate.

You can write
on me in pencil,
erase old or incorrect
entries— and mark
out others.

37

PS MORE

Para 3-3 of TM 38-750 tells you how to fill me out. Use the blocks at the top or the bottom to identify the equipment I cover.

You must assign a DD 314 to each piece of equipment that has its own TM and requires organizational-type services—or calls for a specialist or mechanic to supervise.

After you assign me to a particular item of equipment, it's up to you to figure out the types of lubrication actions and services the equipment needs.

USE A CODING SYSTEM THAT'S EASIEST FOR YOU. IF YOU CHOSE SOMETHING UNUSUAL — LIKE SUBSYMBOLS — EXPLAIN THEM IN THE REMARKS BLOCK.



So, get out the -20 TM and the LO on that piece of equipment. Go through each pub carefully. Each time the LO mentions a periodic lube action—even if it's just a filter change—write it down. Does the LO code those actions with a letter or a number? Whatever coding the LO uses, adapt it to the symbols in TM 38-750. Set up a coding system that makes sense to you.

DD FORM 314 1 DEC 83 PREVIOUS EDITIONS OF THIS FORM MAY BE USED PREVENTIVE MAINTENANCE SCHEDULE AND RECORD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27																																															
	REGISTRATION NUMBER											ADMINISTRATION NO.											NOMENCLATURE											MODEL											ASSIGNED TO																													
	JAN																																																																									
	FEB																																																																									
	MAR																																																																									
	APR																																																																									
	MAY																																																																									
	JUN																																																																									
	JUL																																																																									
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NOV																																																																										
DEC																																																																										
REMARKS																																																																										
L ₁ - monthly or 1,000 miles																																																																										
L ₆ - 6 months or 6,000 miles																																																																										
L ₁₂ - 12 months or 12,000 miles																																																																										
DATE RECEIVED															RECEIVED FROM																																																											
REGISTRATION NUMBER															ADMINISTRATION NO.															NOMENCLATURE															MODEL															ASSIGNED TO														
NG 3456															H-6															Truck 1/4 ton HF39940															M561															Co B 4/9 Inf														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31																																												

SCHEDULE SERVICES IN PENCIL

LO 9-2320-242-12

*TM 9-2320-242-20
Every 6,000 miles or semi-annually.

INTERVALS	
D	Daily
1	monthly or 1,000 miles whichever occurs first
6	6 months or 6,000 miles whichever occurs first
12	12 months or 12,000 miles whichever occurs first

If the LO calls for services by miles or hours, put those actions (the symbols for each and number of hours or miles needed) in the Remarks block. Explain any unusual ones.

Then, keep a close eye on the DA Form 2408-1 or other records for miles or hours usage. When the equipment finally reaches that miles or hours figure, pull the lube. Then, ink in the symbol and the miles or hours on the right day.

Services come out of your organizational TM. The preventive maintenance checks-and-services list covers almost all the scheduled services in detail. Read through the list carefully. Each time a different type of service is mentioned, write it down. Some special services—like tire rotations—may come under separate paragraphs in the pub. Do not overlook 'em.

Always use the symbol that identifies the service—not the time interval. If the TM only calls for monthlies, schedule 12 monthlies. The 3rd monthly is not a quarterly unless the TM identifies a completely separate Q service.

Those symbols marked on a day—or scheduled for a certain usage figure—represent appointments that you've set up. But, just like a friend who understands when you arrive an hour early or 15 minutes late, I know you're not always perfect.

AS LONG AS YOU PULL MY SERVICES WITHIN 10 PERCENT-- EITHER WAY-- OF WHEN YOU SAID YOU'D PULL THEM, YOU'RE STRAIGHT!

For a monthly, you can pull a service 3 days early or 3 days late and keep the original scheduling. Just ink in the day you said you'd pull that service.

That comes in handy when you see a lube coming up almost head-on with a service. Figure 10 percent of the time or miles requirement for that lube and—if you need it—10 percent of the service time and pull 'em together.

If you pull a lube or service outside the 10 percent leeway, erase the original schedule, ink the symbol in on the day you actually pulled it—and re-schedule any following services from the new date.

INK IN COMPLETED SERVICES

DD FORM 314 PREVIOUS EDITIONS OF THIS FORM MAY BE USED

REGISTRATION NUMBER: NG 3456
ADMINISTRATION NO.: H-6

REMARKS:
L₁ - monthly or 1,000 miles
L₆ - 6 months or 6,000 miles
L₁₂ - 12 months or 12,000 miles

DATE RECEIVED: 1977
RECEIVED FROM: [blank]

REGISTRATION NUMBER: NG 3456
ADMINISTRATION NO.: H-6

DISPOSITION: [blank]

REGISTRATION NUMBER: NG 3456
ADMINISTRATION NO.: H-6
MODEL: M561
ASSIGNED TO: Co B 4/9 Inf

4. TYPE LOG
 DAILY MO

DA FORM 2408-1

DATE OF ENTRY: 15 Mar 77
READING HOURS: 4989
READING MILES: 5012

3. NEXT SERVICE OR LUBRICATION DUE
a. TYPE: L₁
b. HOURS/MILES: -15003
c. DATE: 16 Mar 77

REGISTRATION NUMBER: NG 3456
ADMINISTRATION NO.: H-6
MODEL: M561
ASSIGNED TO: Co B 4/9 Inf

DATE RECEIVED: 1977
RECEIVED FROM: [blank]

REGISTRATION NUMBER: NG 3456
ADMINISTRATION NO.: H-6
MODEL: M561
ASSIGNED TO: Co B 4/9 Inf

KEEP TABS ON SERVICE AND LUBE SCHEDULING WITH THE DA FORM 2408-1 DAILY AND MONTHLY AND THE DA 2404.



IF 2 SERVICES OR MAINTENANCE ACTIONS FALL TOGETHER—OR YOU CAN PULL THEM TOGETHER USING YOUR 10% VARIANCE—THE SYMBOL OF THE MAJOR SERVICE COVERS BOTH

When my equipment is DA Form 2406 reportable—either alone or as a subsystem—use my reverse side to keep up with downtime. Any time the equipment is down for over 12 hours, count the whole day as down.

AN' HOW!

YOU BET!

IS THAT REALLY A FORM?

When the gear is at support, the DA 2407 or DA 2418 you get back'll tell you how to charge that time.

I'm probably the easiest form you'll ever fill out. I depend on you. If you ignore me, I'm just another piece of paper gone wrong.

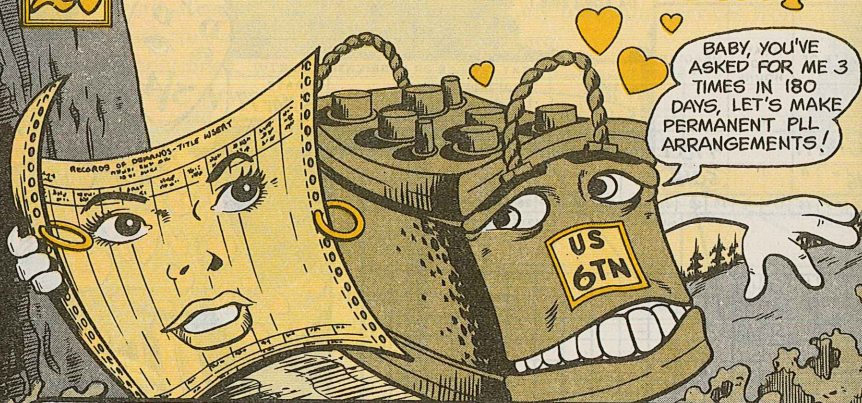
BUT WHEN YOU USE ME, I'M THE KEY TO A SUCCESSFUL LIVING-AND-BREATHING MAINTENANCE SHOP.

YOU WOULDN'T CONNIE US, WOULD YA, FORM?



PS END

Natural Partnership



Seems like some things just go together: ham 'n eggs, Laurel and Hardy, summer and baseball.

They're natural partners—they complement each other.

Well, you've got a pair like that in your PLL shop: DX items and the DA Form 3318 Record of Demands—Title Insert.

Even under supply systems that don't require the DA 3318, that form is the best and quickest way to keep track of on-hand stocks and demands.

Sure, you keep the DA 3318 on regular gear and parts and non-stocked items—but, what about your Direct Exchange (DX) items?

An item can be added to or deleted from the PLL whether you order it through regular supply channels or go the DX route.

Once you show 3 demands for a DX or regular item in 180 days (360 days for USAR), it qualifies for PLL stockage. Your PLL doesn't care how you get that item as long as it's demand supported.

Before you stock an item, make sure you'll need that item regularly. Could be those demands were a one-time deal and should have gone in as non-recurring demands. Or your DX activity may have information on the item that'll make stockage unnecessary.

The DA 3318 record also justifies changes to PLL stockage levels.

If you're under special supply controls limiting the stockage of DX gear, the DA 3318 OK's a change in PLL stockage if that item comes off DX or your unit is deployed.

So, watch those DX items and keep 'em paired with current DA 3318's.

SET YOUR PRIORITIES STRAIGHT

Each supply request you turn in must have a priority. Priority designators fall between 01 and 15—depending on your unit mission and how badly you need an item.

Priorities 01, 02, 03, 07 and 08 under urgency of need designator (UND) A are for must-have items to repair deadlined equipment that stops your unit mission dead.

Priorities 04, 05, 06, 09 and 10 under UND B cover parts needed on equipment that slows down your mission, and last-out-of-bin items.

Priorities 11-15 under UND C are for routine requests.

However, you can't use any priority you want. Each unit has a choice of 3—and only 3—priorities.

Your 3 priorities are governed by the Force/Activity Designator (FAD)—I, II, III, IV, or V—DA assigned your unit.

READ THE ROW ACROSS THE CARD BESIDE YOUR UNIT FAD TO SEE WHICH PRIORITIES YOU CAN USE.

CLIP THE CARD AND KEEP IT HANDY!



Check Appendix G of AR 710-2 for details on choosing urgency of need designators—A, B or C—and special situations for some high priorities.

Never use any other priority—lower or higher—than the 3 assigned to your FAD or special situation.

CANCEL THAT CANCELLATION

COMMON										CLASS IX REPAIR PARTS REQUESTS/REQUISITIONS DUE OUT TO UNITS				DATE
STOCK NUMBER	U/I	QUANT	REQNR	RON DATE	SERIAL	REQNR	DON DATE	SERIAL	PRI	STATUS	RIC	DATE STATUS	DATE STATUS	
2540 00 165 4029	EA	2	ACGA1	3193	4008			2455	13	BB X	3			
2990 00 825 1069	EA	2	ACGA1	3198	4005	3425M	3221	2104	13	BB REC	3	311		
5340 00 168 7111	EA	1	ACGA1	3200	4002	3425M	3214		13	BB X	3			
5965 00 926 2591	EA	24	ACGA1	3209	4003				13	BB CANCEL	3			
5820 00 190 4405	EA	5	ACGA1	3248	3016				13	BB X	3			
5305 00 001 1853	EA	2	ACGA1	3304	4006	3425M	3311	2000	06	BP X	3	087		
2540 00 176 9402	EA	1	ACGA1	3304	4010	3425M	3310	2021	06	RELEASED FOR ISSUE				
5999 00 937 1630	EA	2	ACGA1	3312	4030	3425M	3320	2303	13	RELEASED FOR ISSUE				
5995 00 933 8962	EA	8	ACGA1	3312	4051	3425M	3320	2299	13	RELEASED FOR ISSUE				
5315 00 023 4254	EA	2	ACGA1	3319	4021	3425M	3324	0763	13	BM REC	3			

IF YOUR LAST DUE-OUT PRINT OUT FROM SUPPORT SHOWS "RELEASED FOR ISSUE" NEXT TO THE ITEM YOU WANT TO CANCEL, FORGET IT. THE ITEM'S ALREADY ON ITS WAY. YOUR CANCELLATION PROBABLY WON'T CATCH THE ITEM IN TIME. WAIT UNTIL IT ARRIVES AND TURN IN THE ITEM.

Needs change. Times change. Equipment changes. So, now you want to cancel a request you've had out for a while. Hold it! Eye the document identifier code in card columns 1-3 of the latest status card. If an AS1 shows up, the item is already on its way.

If the status card shows only part of the request on its way, you can still cancel all or part of the items not yet shipped.

Glance over the latest due-out printout you got from support. Any item with released for issue next to it should arrive within a week. It's too late to cancel.

If you've got a shipment status card or a released for issue note on the printout, you cannot stop that item. Wait until the item arrives and then either turn it in or use it as needed.

For any other status card, tho, go ahead with the cancellation.



DA FORM 2062 NOTE

Lots of people are hung up on the Note that shows up at the bottom of the DA Form 2062 in Figure 2-5 of AR 710-2.

DA FORM 2062
1 JAN 84

DA FORM 2062

NOTE: (This Hand Receipt is used with DA Form 3122)
(Column T (a) will be a pencil entry)

THE NOTE IS FOR INFORMATION ONLY! YOU ARE NOT REQUIRED TO TYPE THAT NOTE ON YOUR DA 2062'S!

COMMUNICATIONS

TOOL KIT

BATTERY SERVICE TK-90/G

HERE 'TIS,
GENTS...

...YOUR NICKEL-CAD
SERVICE KIT AS
SHOWN IN THE
LATEST SC!

HEY--
WOW!

GREAT!

Your TK-90/G, NSN 5180-00-542-5812, is good news for your nickel-cadmium batteries, and you know how important battery health is to birds, commo and such.

This kit, from your SC 5180-91-CL-R03 (May 76), plus the necessary elbow grease, charging equipment and testers, will keep those power packs up to snuff. You get one each, unless otherwise indicated.

APRON, GENERAL
PURPOSE: bib type,
rubr ctd duck 48-in
lg



NSN 8415-00-082-6108

ATTACHMENT, SOCKET WRENCH:
internal soc head set and cap screw;
1/4-in sq dr



NSN 5120-00-596-0934 1/8-in



NSN 5120-00-596-0940 5/32-in

BAR, EXTENSION: soc wrench, 1/4-in
sq dr, 2-in nom lg



NSN 5120-00-227-8105

BATTERY FILLER, SYRINGE: bulb
type, 2-oz cap



NSN 6140-00-003-6096

BRUSH, ARTIST'S: round, dome tp,
hog brstl, 7/64-in dia



NSN 8020-00-224-8028

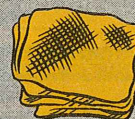


BRUSH, PAINT: sash-tool, syn filmnt,
oval, 2 7/8 in lg brstls, size no. 12



NSN 8020-00-297-6657

CLOTH, COTTON:
Cheesecloth, lintless,
bleached, 36-in wd



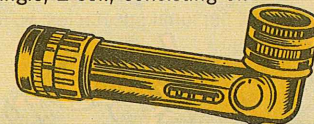
NSN 8305-00-267-3015 3 yds

COMPOUND, CORROSION
PREVENTIVE: 1-pt cn



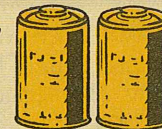
NSN 8030-00-903-0931

FLASHLIGHT MX-991/U: reg, std., rt.
angle, 2-cell, consisting of:



NSN 6230-00-264-8261

BATTERY, DRY: cyl,
1.5 nom v, D cell



NSN 6135-00-120-1020 2

FILTER: wht opaque,
plstc, .032-in thk,
1.74-in dia



NSN 6230-00-128-2464 2

LAMP, INCANDESCENT: electric; min
fling, S. C. base, 2.47 v, 0.30 amp



NSN 6240-00-155-8675 2

LENS: supplementary,
diffusion, clr trnsprt,
1.74-in dia



NSN 6230-00-356-4825

GLOVES, RUBBER: men's, nat or syn;
acid; alkali resistnt, size 11, bl, 14-in
lg



NSN 8415-00-266-8675

GOGGLES, INDUSTRIAL: rub frame, non-ventlte; hd band supported; worn over personal spectacles; w/o carrying case



NSN 4240-00-203-0317

HAMMER, HAND: inserted face plastic; screw-in hd 1-in dia inserts, 9-oz, 11-in lg hndl



NSN 5120-00-243-2953

KEY, SOCKET HEAD SCREW: hex, L-type, long series



NSN 5120-00-198-5413 $\frac{5}{32}$ -in



NSN 5120-00-198-5410 $\frac{3}{16}$ -in

KNIFE, POCKET: electrician's; 1 spear blde, 1 screwdriver blde; w/locking device, clevis



NSN 5110-00-240-5943

PLIERS, DIAGONAL CUT: regul nose, w/stripping notches, sleeve opngs and skinning hole; 6-in nom lg



NSN 5110-00-224-1532

PUNCH: drive pin, $\frac{5}{16}$ -in dia body; $\frac{1}{8}$ -in dia point 4-in lg o/a



NSN 5120-00-242-5966

SCREWDRIVER, FLAT TIP: plstc hndl, lt duty 3-in nom bld lg



NSN 5120-00-236-2127

SCREWDRIVER, FLAT TIP: plstc hndl, med hvy duty, 4-in nom bld lg



NSN 5120-00-222-8852

SCREWDRIVER, TORQUE INDICATING: w/flat scrdvr bit; Phillips cross bit No. 2-pt size; $\frac{1}{4}$ -in sq dr; $\frac{1}{4}$ -in lg soc; 0-25 lb-in torque cap



NSN 5120-00-568-4742

SOCKET, SOCKET WRENCH: hex, reg lgth; 6-pt, $\frac{1}{4}$ -in sq dr



NSN 5120-00-236-2264 $\frac{1}{4}$ -in



NSN 5120-00-232-5703 $\frac{5}{16}$ -in



NSN 5120-00-241-3186 $\frac{3}{8}$ -in



(12 pt)

NSN 5120-00-189-8610 $\frac{1}{2}$ -in

TOOL BOX, PORTABLE: w/2-comp cantlvr tray; s; 7-in h, 7-in w, 19-in lg o/a



NSN 5140-00-331-5496

TOOTHBRUSH: plstc brstl; 6-in lg

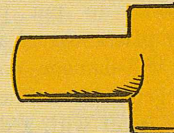


NSN 8530-00-161-6208

WRENCH, BATTERY FILLER CAP. rigid tee hndl; 2-25-in lg



NSN 5120-00-618-5320 1.25 wd.in



NSN 5120-00-618-5305 2.00 wd.in

WRENCH, SOCKET (HANDLED): hex, spin type, scrdvr grip, 6-pt opngs



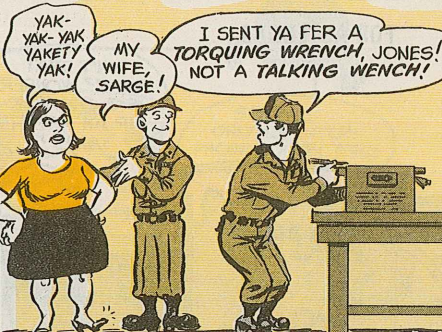
NSN 5120-00-241-3188 $\frac{1}{4}$ -in 6



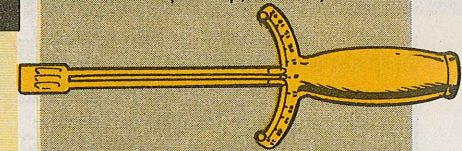
NSN 5120-00-224-2596 $\frac{5}{16}$ -in 6



NSN 5120-00-293-0375 $\frac{1}{2}$ -in 7



WRENCH, TORQUE: deflecting beam; indicating plate; direct reading, 0-60-lb-in torque cap; $\frac{1}{4}$ -in sq dr

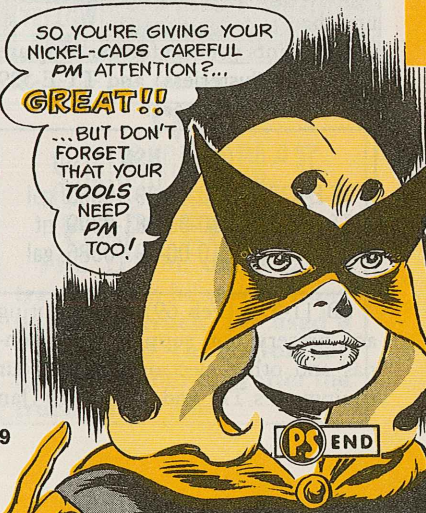


NSN 5120-00-529-2552

WRENCH, VENT PLUG: rigid T-handle, 2-in w, $2\frac{1}{2}$ -in lg

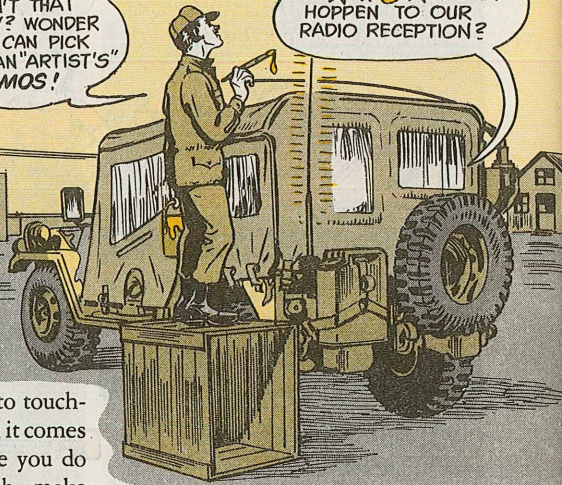


NSN 5120-00-087-2969





AIN'T THAT PURTY? WONDER IF I CAN PICK UP AN 'ARTIST'S' MOS!



To touch-up paint or not to touch-up paint is the question when it comes to radio antennas. So, before you do any dabbing with that brush, make sure your antenna is one that gets paint.

It's OK to put PM paint on metal antenna parts. A touch-up job will protect your gear from rust and corrosion.

Never use just any ol' paint. The wrong kind can mess up your commo. Use the right paint for the right touch-up job.

OD paints you use for touch-up are TT-E-527 (lusterless) and TT-E-529 (semi-gloss) types are:

NSN	
TT-E-527	8010-00-297-0560 gal
TT-E-529	8010-00-081-0809 qt
	8010-00-297-0586 gal

SB 11-573 (Feb 69) lists painting and preservation supplies for antennas and other electronic gear. Your equipment's TM and TB 746-10 (Jan

69), Field Instructions for Painting and Preserving Electronics Command Equipment, give you the info for doing the painting.

It's a no-no to put paint on fiberglass or plastic-coated antennas. Most paint will damage 'em. If you accidentally get paint on these parts, though, wipe it off with a dry cloth. Never use paint remover on fiberglass or plastic. It can cause more damage.

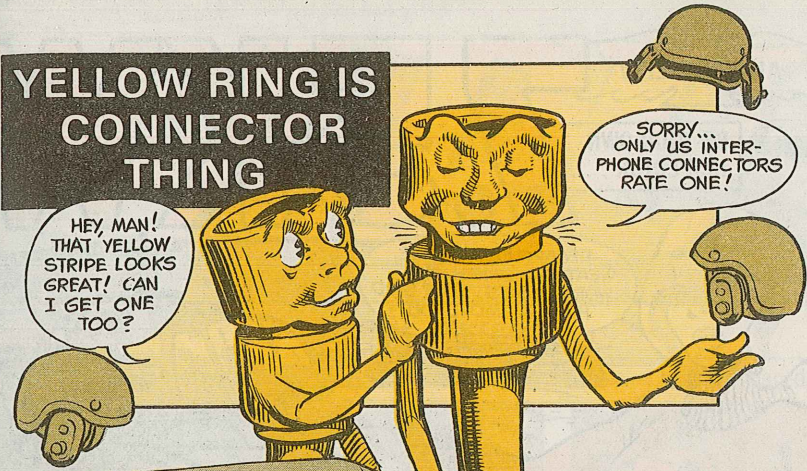
Even on metal antennas you need to keep paint off element sections, contact threads and rubber gaskets.



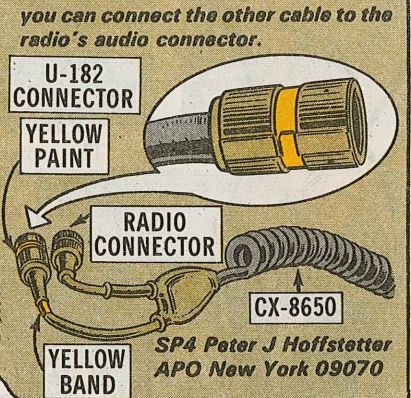
If your antenna has warning or marking labels or decals, protect 'em with masking tape before you paint.

YELLOW RING IS CONNECTOR THING

HEY, MAN! THAT YELLOW STRIPE LOOKS GREAT! CAN I GET ONE TOO?



Dear Editor,
Operators crossing their Y's on the H-161(I)/U headsat-microphone's CX-8650 retractile cable are real headache makers.
I realize the longer interphone cable is marked with a yellow band, but this gets overlooked and causes commo problems.
I remedied this mixup by putting yellow paint around the recessed ring on the interphone cable's U-182 connector. This way you have the marked cable connector in your hand when you're making the hookup. Then



SP4 Peter J Hoffstetter
APO New York 09070

(Ed Note: Sounds like a winner. It'll save wear and tear on your radio.)

Next Month In PS

BY01 . . . M85 MG
★
FOR POL TANKERS
★
MK-693/A
★
THE COMMUNICATIONS GAP

IT SHOULDN'T HAPPEN . . .

PFC D.U.M. didn't use a trestle when he was working under his truck. He used a jack instead. The doctors say he didn't suffer long after the truck fell on him.

AIR MOBILITY

BE-YOUR-OWN-INSPECTOR . . .

7.5-KW, GEDALPU

REGARDLESS OF THE WEATHER... WHEN THE WORD COMES, YOUR BIRD HAS TO MOVE OUT!

This auxiliary power unit helps get your bird off the ground during frigid operations.

It'll serve you faithfully, if your PM is tops.

The most important PM points are shown in bold face type. The Hollingsworth model is shown here, but the same PM applies to your Bendix or Atlas Polar models.

FROM THE TOP

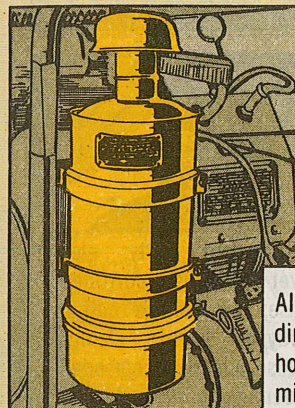
TAKE A GANDER AT THE "WHOLE THING"—CHECK FOR MISSING OR DAMAGED PARTS, OIL AND GAS LEAKS, OVER-ALL APPEARANCE!

RIGHT ON!

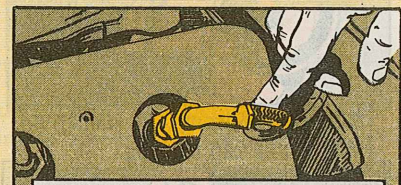
52

INDIVIDUAL SYSTEMS

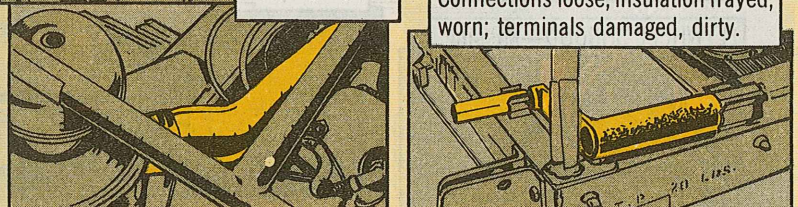
OIL—Level low, leaking; filter clogged, damaged, filler cap gasket worn, damaged.



AIR—Cleaner dirty, clogged; hose loose, missing, split.

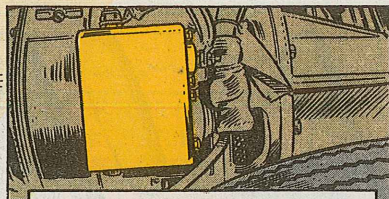


ELECTRICAL—Spark plugs burnt, cracked, broken, carbon fouled; wires frayed; points pitted, adjusted wrong, burnt; magneto burnt from overheating; evidence of arcing; manual starting crank missing. Connections loose; insulation frayed, worn; terminals damaged, dirty.

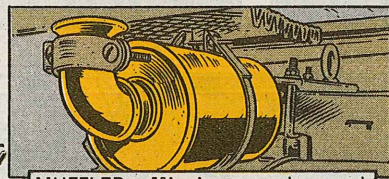


53

PS MORE



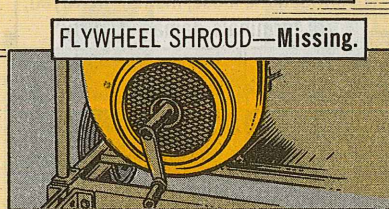
STARTER GENERATOR—Loose, not lubed, dirty; mounting bolts **loose or missing**; drive belts **split, worn, dry, adjusted wrong** (all 4 belts should deflect ½-in with thumb pressure).



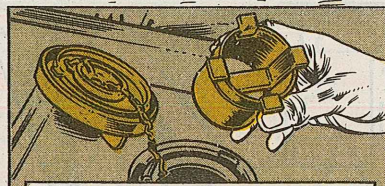
MUFFLER—Missing, damaged. Muffler rain cap missing.



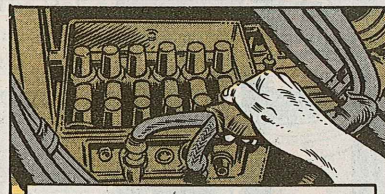
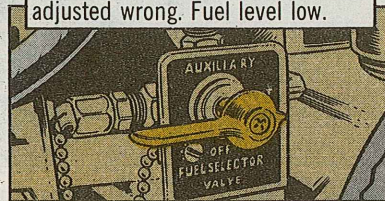
EXHAUST MANIFOLD—Dirty.



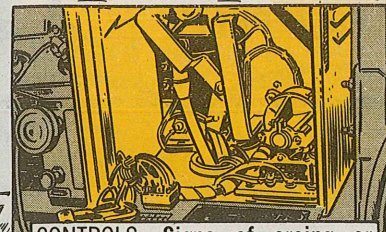
FLYWHEEL SHROUD—Missing.



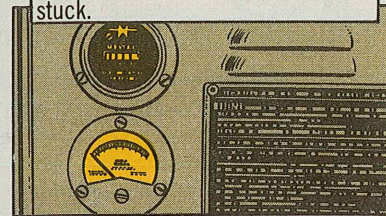
FUEL—Tank not secure; bolts **missing or loose**; cap **missing**, tank cap chain broken; lines **cracked, corroded, leaking, clogged**; connections **loose**; strainer **clogged, dirty**; holder parts damaged or missing; gaskets **leaking or worn**; choke not operating; selector valve clogged, adjusted wrong. Fuel level low.



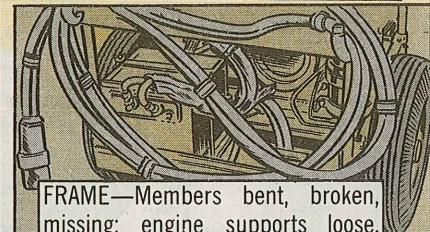
BATTERY—Cracked, dirty; electrolyte level low; posts corroded, cables loose; low voltage output; cables frayed, burnt; clamps, tiedowns loose, **missing or corroded**. Filler cap vent holes clogged.



CONTROLS—Signs of **arcing or over-heating**; meters **missing, broken, missing glass faces**; needles stuck.



VOLTAGE REGULATOR—Loose, dirty, oily, or corroded. (Note: When operating, voltmeter should read 28 volts.)



FRAME—Members bent, broken, missing; engine supports loose, mounting nuts or bolts missing; cables **chafed, burnt**; load connector damaged, missing; connector cable damaged; towbar worn, damaged; tires flat, worn, wearing unevenly, pressure low; rims bent, wobbly, lugs missing, **broken**; axles dry.

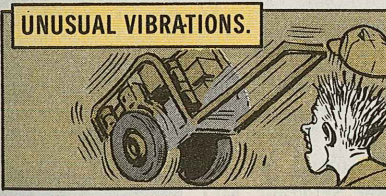


CANVAS COVER—Missing, torn, mildewed.

Finished!

Nope . . . you're close, but not quite done. Before you can put your personal seal of approval on this job, you're going to have to see if the "whole thing" works right.

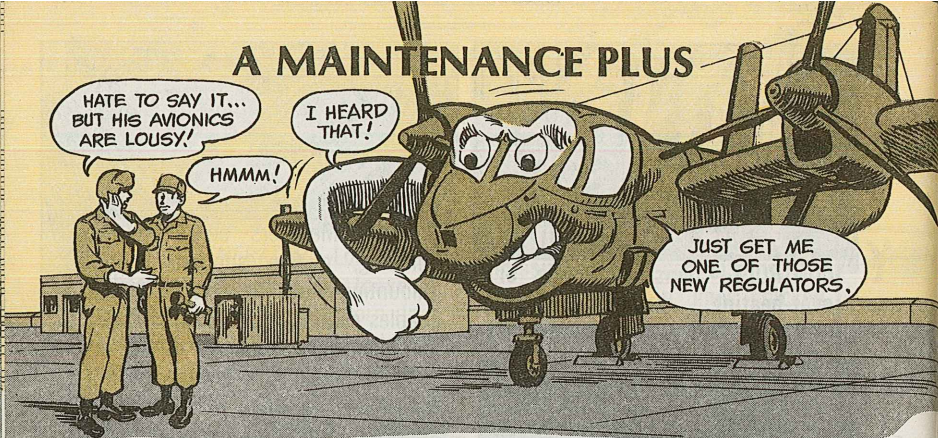
So-o-o-o, crank 'er up—and watch for:



INCORRECT OR FLUCTUATING VOLTAGE OUTPUT.

ANYTHING ELSE THAT SETS YOUR MECHANICS' SENSES AJAR.

A MAINTENANCE PLUS



A solid state DC voltage regulator, P/N MS18071-1A, NSN 6110-00-598-2574, has made the scene for your Mohawk. It replaces the carbon-pile regulator, which is no longer in supply.

When the new regulators hit tech supply, you can use them without waiting because the bird doesn't have to be modified. 'Course, both regulators in your bird have to be of the same type.

By the way, in the MS18071-series of DC voltage regulators, only the -1A

will fit or operate in the OV-1.

You'll get increased performance and reliability with the new baby—fewer squawks on avionics equipment.

Your regulator adjustment as spelled out in Chap 12 of TM 55-1510-204-20-2 (Oct 68) and TM 55-1510-204-20/1-2 (Aug 75) does not change.

A big break in maintenance comes from the fact that you inspect and adjust the solid state regulator every 100 flight hours. It's 25 hours on the old carbon-pile job.

Try it—you'll like it!

TM 43-0103

TECHNICAL MANUAL

DA FORM
2028
ADDRESS

NONDESTRUCTIVE INSPECTION METHODS

TM 43-0103 (Jun 76), Nondestructive Inspection Methods, has no Army proponent listed. It's US Army Aviation Systems Command, ATTN: DRSAV-FR, Box 209, St. Louis, MO 63166.

56

CART PM ADVICE



Dear Editor,
You might want to pass this along on fire extinguisher carts. Most aviation units use them, but it seems they're only noticed when the wheels fall off due to lack of lubrication. I suggest that every 3 months or so, depending on conditions—remove the wheels, clean or sand the axle shafts and hubs, then lube them with GAA.

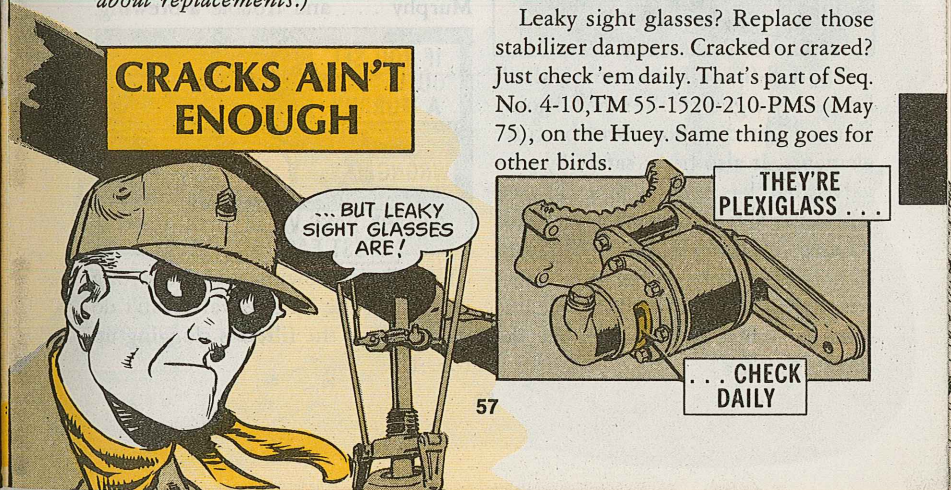
SGT Bernie Brady
Army Aviation
Support Facility
Chicago

CLEAN
SHAFTS
AND HUBS ...

... AND
THEN
LUBE

(Ed Note: Sounds like a real good idea. Those carts are usually installation property, so if you can't repair them, get with your installation fire department about replacements.)

CRACKS AIN'T ENOUGH



Leaky sight glasses? Replace those stabilizer dampers. Cracked or crazed? Just check 'em daily. That's part of Seq. No. 4-10, TM 55-1520-210-PMS (May 75), on the Huey. Same thing goes for other birds.

57

COMBAT
SUPPORT

HOUGH H90CM LOADER ... OIL FILTER FLAK



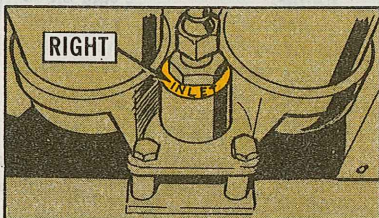
So your Hough loader's lubricating oil filter assembly is leaking . . . blowing seals . . . not pumping oil . . . or you're replacing too many filter elements.

Could be the oil filter base—housing—was put on bassackward the last time you serviced the oil filter during the scheduled oil change. A real Murphy!



The full-flow filter assembly that's hooked up right has the lube oil going in the right direction thru the filter elements. It also has a safety by-pass valve that lets engine lube oil pass when the filter's clogged with gunk. 'Course, the engine gets lubed with dirty oil—a very unhealthy diet—when this happens. Still, the engine does get lubed until you service the filter.

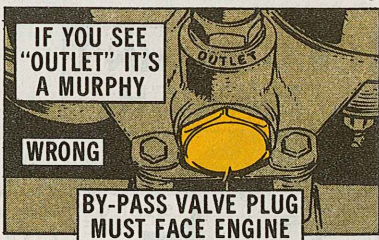
An eyeball check will tell you if you've got a Murphy. The filter housing should be stamped OUTLET and INLET. The INLET side should



be facing you when you open the access door. The OUTLET side—with the by-pass valve just below it—should be next to the engine.

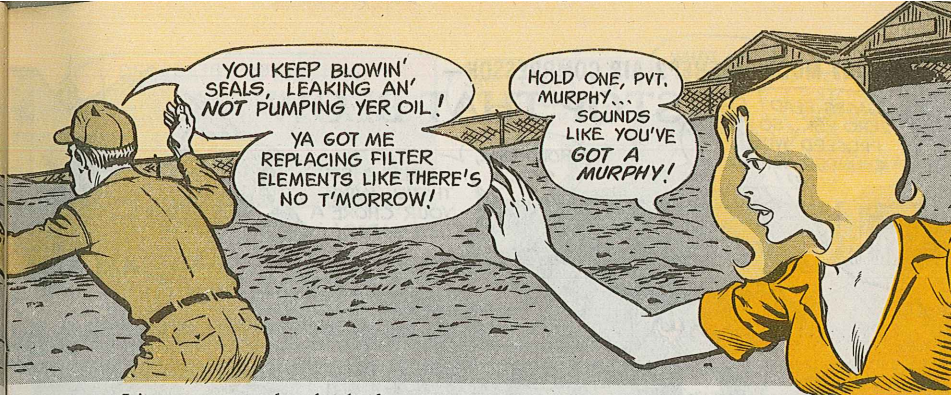
If you see INLET, no sweat.

If you see the plug—and OUTLET stamped on the housing—you've got a Murphy . . . and trouble a-brewing.



The oil is flowing in the wrong direction—the by-pass valve can't do its job—and the filter is clogging up f-a-s-t!

WHAT-S'AMATTER WITH YOU?



It's easy to make the bad scene go away.

1. Just follow the poop in para 155b, TM 5-3805-201-15 (Feb 64) to unhook the housing from the mounting bracket.

2. Turn the housing around 180 degrees.

3. Put the assembly back together. Take care, tho, to hook up the upper inlet and outlet tubes—lines—at the right filter-to-tube adapters.

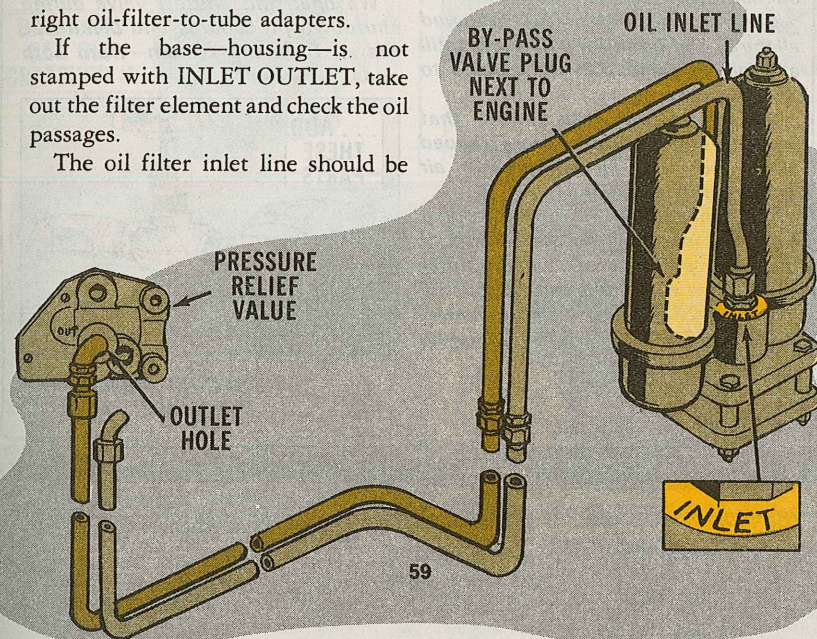
If the base—housing—is not stamped with INLET OUTLET, take out the filter element and check the oil passages.

The oil filter inlet line should be

connected to the fitting that passes oil to the outside of the filter element.

The by-pass valve plug should be next to the engine. Figure 2, TM 5-3805-201-20P (Nov 67) shows the by-pass valve setup.

The upper oil filter inlet line should be connected to the housing opposite the plug . . . and to the outlet hole on the pressure relief valve.



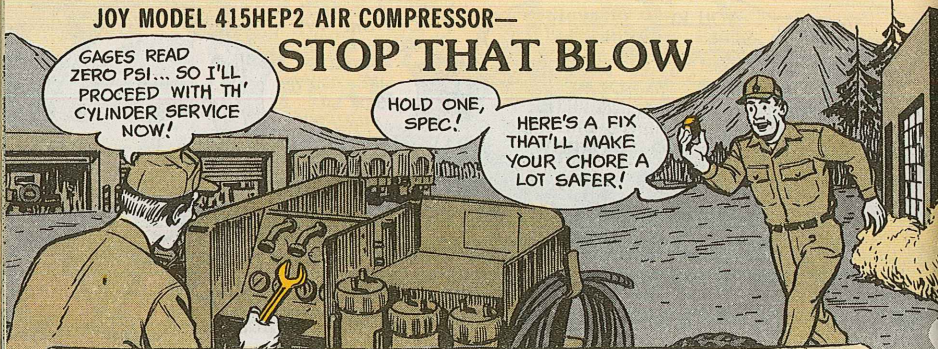
JOY MODEL 415HEP2 AIR COMPRESSOR—

STOP THAT BLOW

GAGES READ ZERO PSI... SO I'LL PROCEED WITH TH' CYLINDER SERVICE NOW!

HOLD ONE, SPEC!

HERE'S A FIX THAT'LL MAKE YOUR CHORE A LOT SAFER!



Dear Editor,

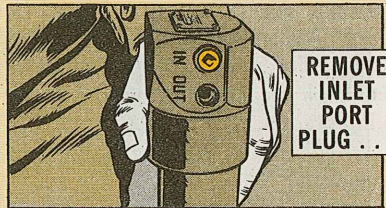
During servicing of the No. 2 oxygen purifier cylinders the cap blew off. Fortunately, the operator escaped serious injury, and the compressor was not damaged.

This blow-off happened after all gages read 0 PSI. The receiver drain, service relief, service line shutoff and service hose shutoff valves had been opened for several minutes.

Even tho the operator had followed all the by-the-book poop there was still enough air trapped in the system to blow the cap.

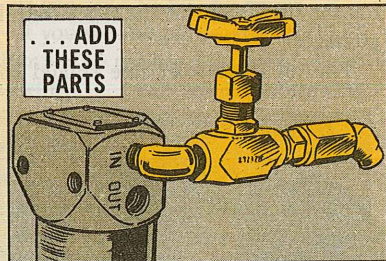
We came up with a fix that guarantees there'll be no more trapped air in our Joy air compressor air system after shutdown.

We removed the air filter pipe plug from the inlet port on the outside of the high pressure air cleaner filter head. Then we added an elbow, NSN 4730-00-278-3845, globe valve, NSN 4820-00-809-5094, nipple,



NSN 4730-00-196-1502 and check valve, NSN 4820-00-684-7104.

We open this shutoff valve during shutdown procedures and bleed ALL the air from the system—from both ends.



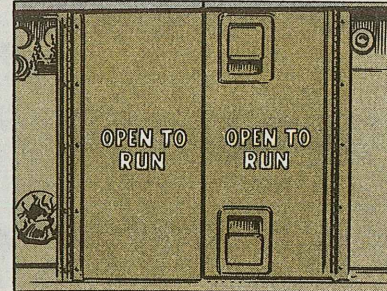
SFC R.L. Kilgore
Ft. Belvoir, VA.

(Ed Note: Safety and PM are hand 'n' glove operations. Add this valve OPEN poop to your unit SOP.)

GENERATOR OPERATORS ...

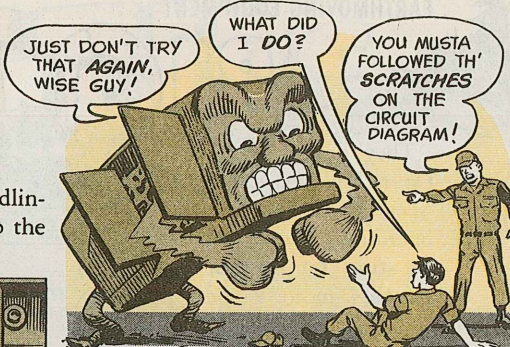
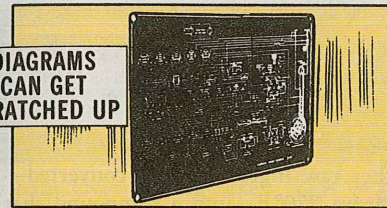
OPEN AND SHUT CASE

Ever hear of electric power deadlined because somebody banged up the generator doors?



It's no weird yarn. Lots of sets have circuit diagrams, instruction plates

DIAGRAMS CAN GET SCRATCHED UP



JUST DON'T TRY THAT AGAIN, WISE GUY!

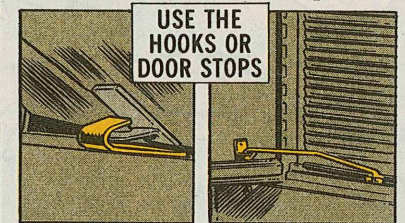
WHAT DID I DO?

YOU MUST FOLLOWED TH' SCRATCHES ON THE CIRCUIT DIAGRAM!

and other poop printed inside panel doors.

These plates can get scratched up by unlocked doors—open or closed—banging against the controls.

Use the hooks or door stops when



you have to get at your generator panel. If you let the door flop around, it'll bang up the panel plates for sure.

NEW SCOOP LOADER? ...
READ THE SAFETY MANUAL

If you're operating one of the new Clark Michigan 175B scoop loaders, be sure you read and heed the safety manual that comes with it.

That 4½ to 5-yard loader is a lion and any other loader you ever had was a house cat by comparison. So make sure you're up to snuff on all the safety angles before you move out.



CIMA CONSTRUCTION INDUSTRY MANUFACTURERS ASSOCIATION
111 E. Washington Ave. • Milwaukee, Wisconsin 53201 U.S.A.

BIG TIRE PM TIPS

They're big!
Do a big job, too,
'specially in off-the-road
operations. This is why
the tires on loaders,
scrapers, motor graders
and tractors need a big
dose of PM from
operators.

HEAT
IS YOUR
TIRES
WORST
ENEMY!



NO MATTER HOW SLOW OR FAST
YOUR EQUIPMENT MOVES, A LOT
OF HEAT HEAT BUILDS IF IN TIRES
AS THEY ROLL AND FLEX!

During manufacture, rubber and other raw ingredients are converted—vulcanized—at temperatures ranging from 270°F—into a compound that gives these biggies more strength, stability, and flexibility for all-weather, year 'round operations.

But overflexed tires can get hot enough to reverse this process. The rubber reverts . . . plies separate and tires fail.

When air inside a tire heats faster than it can be cooled thru the casing, you have a gradual temperature buildup . . . and fast tire breakdown. Heat weakens the tire fabric, and cornering, braking or impact forces cause ply separation.

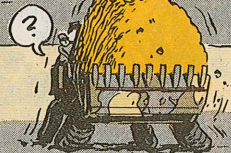
Tires will also fail quicker from cut-throughs because of this heat buildup. A tire that's hot cuts a lot easier than a cool one.



YOU GET
INTERNAL
HEAT BUILD-
UP BY...



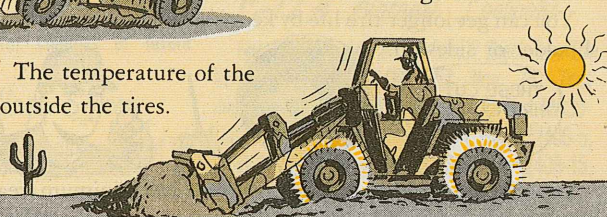
1 The weight
of the load on
the tires.



2 The speed of the tires
over the ground.



3 The temperature of the
air outside the tires.



YOU CAN'T CONTROL THE
TEMPERATURE WHERE YOU'RE
OPERATING...

...BUT YOU CAN CONTROL
HEAT BUILDUP IN THE TIRES
IF YOU...

1 Pay close attention
to loads. Over-loading flexes
the tires more, and they
heat up faster.



2 Reduce speed before driving
off the haul road
and when working
in extra hard terrain...



4 Never ride the brakes.



5 Reduce speeds as the
temperature rises.



6 Never run your equipment
with a leaking tire.
A low tire gets hotter
quicker . . . weakens
the tire cords. Even
hitting a small chuck hole
damages a tire when it's hot.



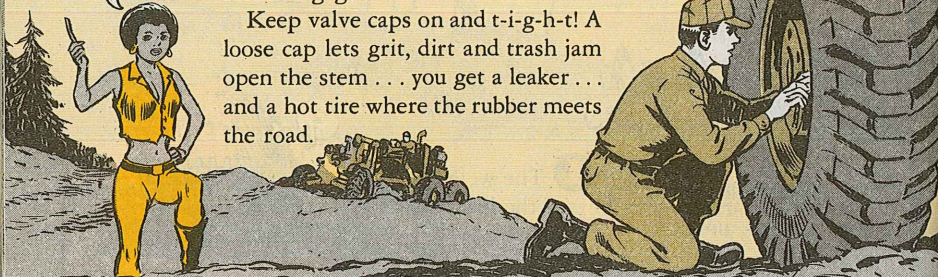
3 Use long, slow turns.



USE AN ACCURATE GAGE AND...

Check your tire pressure daily—while it's cold. Be sure you use an accurate gage.

Keep valve caps on and t-i-g-h-t! A loose cap lets grit, dirt and trash jam open the stem . . . you get a leaker . . . and a hot tire where the rubber meets the road.



OTHER OPERATOR PM TIPS

You can get longer tire life by keeping rocks, nails and roots out of tire tread, shoulder or sidewall.

THESE CUT THRU QUICK IF THE TIRES HOT!



Look for cuts, bruises, uneven tire wear and minimum tread depth. If the tire tread depth is less than $\frac{13}{32}$ inch deep, be extra careful with your load and speed during operation . . . 'specially if it's sizzlin'.

CALL YOUR SUPERVISOR 'CAUSE YOUR TIRE IS BORDERLINE SAFE!



Keep the right amount of air in 'em. A low tire—even if it's part of a dual set—causes the tread edge to scuff the road. This puts uneven wear on the tread . . . shortens tire life . . . and causes uneven and rapid wear on both tires. Keep a matched set on duals at all times.

Use a retarder on down hill hauls. Speed and brake use increases tire temperatures.



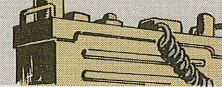
Always use hydraulic power, not wheel power. Spinning those big wheels is a tire-burning deal for real!

Doublecheck your tire PM picture by doing homework in TM 9-2610-201-14 (Aug 75) and TM 9-2610-200-20 (Nov 72).

Connie's POST SCRIPTS

AND SO, CONNIE, I WANT YOU TO BE MY VALENTINE... ?SCRAWF!

HA! SOUNDS LIKE MACON HAS A COMMO MAINTENANCE PROBLEM, EH, CONNIE?



Supply Code Book

Looking for a good supply dictionary so you can decode status cards and printouts? Here it is! FM 38-725-10, Logistic Codes for the Unit/Organization (Nov 76). Order it on DA Form 17. Use DA Form 12-11B, block 337 to get on pinpoint distribution for changes or future editions.

Cool Camouflage Screen

Staring you right in the eye on page 2-1 of TM 5-1080-200-10&P is:

CAUTION

Keep screens away from hot exhaust system at all times.

And if you don't?

Why, you can burn up the whole works, equipment and all . . . maybe even yourself.

So, keep the camouflage screen cool—away from hot exhaust.

Ditto for antennas. Some radio antennas also will put the scorch to your camou screen. Keep 'em apart.

Water Bag Bloop

One glass ampule of calcium hypochlorite is what we should have said on page 59 of PS 288. That's $\frac{1}{2}$ gram to a gallon of water for those who get chlorine in bulk.

☆U.S. GOVERNMENT PRINTING OFFICE: 1976 - 757-002/4

Flasher Power

Need to power up your portable flasher light NSN 6220-00-796-2657? Order 2 batteries, NSN 6135-00-050-3280, to get the power goin'.

C-12A Aircraft Logbooks

Got a C-12A aircraft on hand? Check into DA Msg DALO-SMM-F 092055Z Nov 76. That message adds the C-12A to Appendix E of TM 38-750. Keep a logbook binder, DA Forms 2408-5, 2408-9, 2408-12, 2408-13, 2408-14, 2408-15, 2408-17 and 2408-18 on your C-12A's.

DA 2406's for TRADOC Units

National-level DA Form 2406 Materiel Readiness Reports now apply to TRADOC units. The word is in DA Msg DALO-SMM-F 151525Z Oct 76. Put an asterisk (*) next to utilization codes K and Q in Table A-7 of Appendix A, TM 38-750, to show the new requirement for national-level DA Form 2406's.

Saves Elbow Grease

Now that the health indicator test for Huey and Cobra aircraft engines has been adopted there is no longer any need to pull scheduled hot-end checks. T53 L-11 and T53 L-13 internal inspections are being removed from Chap 3 of the organizational maintenance pubs.

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



YOUR **NSN!**

IS IT ...

NSN 5935 - **00** - 022-4344 ?

OR IS IT ...

NSN 5935 - **01** - 022-4344 ?



IT **DOES** MAKE
A **DIFFERENCE!!**