

Issue 356

PS

July  
1982

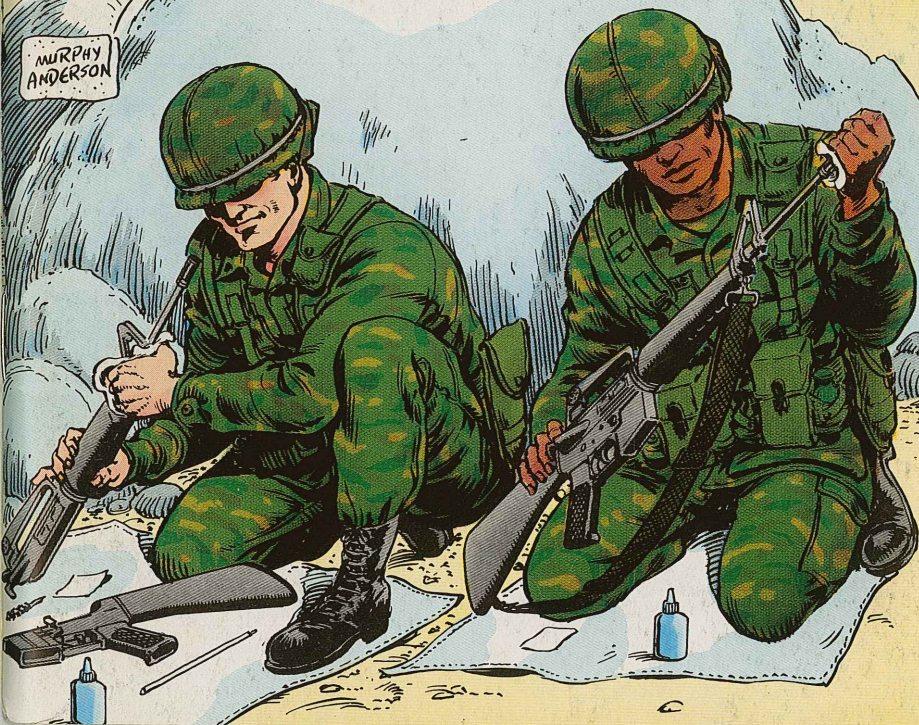
THE  
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MAGAZINE  
MONTHLY

Pass this  
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**YOUR**  
PM...

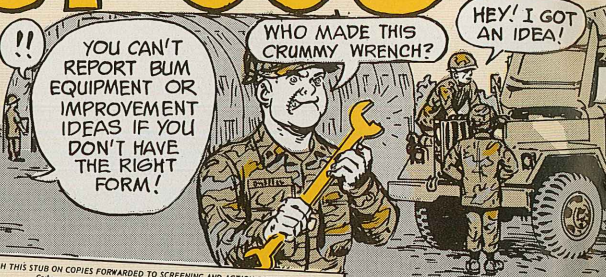
...you never  
know **WHO**  
might be  
watching!

MURPHY  
ANDERSON



# SF 368 is the KEY

**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 Materiel Readiness Support Activity, Lexington, KY 40511.

ISSUE NO. 356 JULY 1982  
**TROOP SUPPORT**

Clean Fuel	2	Insulated Canteen	56
Aircraft Refueling	5	Gen Drain Holes	57
Fuel Nozzles	5	Camouflage	57
Fuel Stick	5	Maintenance Codes	58
TEC Lessons	28	DA Form 2407	59
Usage Reports	29	DA Form 2408-1	60
Gas Lantern PM	54	PMCS	61
M59 Field Range	56	Supply Requests	62

DO NOT DETACH THIS STUB ON COPIES FORWARDED TO SCREENING AND ACTION POINTS  
When paper not required to complete this side.

**QUALITY DEFICIENCY REPORT**  
(Category II)

To: From (Originating unit)  
Co 4, 342d Trans Bn  
APO San Francisco 96271

SECTION I (Reporting point)  
US Army Tank-Automotive Materiel Readiness Command  
ATTN: DA Form 368  
Wazrta, WI 48990

1. Report Category No. 745-1234  
2. Report Code No. 302-3267  
3. Manufacturer, Make, Code, Model, Part No. 11200  
4. Title 2320-00-579-8942  
5. Quantity 1739230  
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UTILIZATION CODE: ON

**SF 368**

USAGMPC REQUEST  
PUBLICATION OR FORM CATEGORY

DA Form 4569

ACCOUNT NUMBER	BLANK	CHANGED	ORDERED	QUANTITY REQUIRED	UNIT OF ISSUE	SEE CODING SAMPLES ON REVERSE	REP CODE OR APO NUMBER	BLANK
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What you need is the Standard Form 368 Quality Deficiency Report. You use the SF 368 to report improvements on regular gear and quality problems on new equipment. Make sure you have plenty SF 368's on hand. Get them from your source of supply for forms, normally the installation publication stock room. If they're out, they can order up a bunch on DA Form 4569 from the AG Publications Center, Baltimore. DA Pamphlet 310-10-2 tells how to fill it out.

The DA Form 4569 can go to Baltimore by mail or by AUTODIN through your command's communications center. Either way is fine, but you'll get your forms faster if it's sent by AUTODIN. When you get your SF 368's, fill them out like TM 38-750 says. The Army won't find out about bum equipment unless you tell them.

**GROUND MOBILITY**

Tanker Grounding	6	Battery Splash Guard	9
Goat Jump-Starting	7	Wrecker Pins	10
M880 Ignition Switch	8	5-Ton Truck Fan	12
M880 Door Seal	8	Panel Light Lenses	13
2½-Ton Truck Lubr	9	Turbocharger	14
2½-Ton Truck Tractor	9	M578 Bulk Hose	17
M880 Junction Box	9	M110 Lug Nuts	17

**FIREPOWER**

M1 Tank	18, 19	M16A1 Tips	22
Exhaust Smoke	20	.45-Cal Pistol	23
Final Drive Tool	20	Vulcan	24, 26
Air Cleaner Doors	21	M240 MG	26
M102 Recoil Oil	21	.50-Cal BFA	26
		M60 MG	27

**AIR MOBILITY**

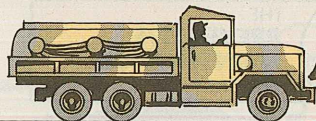
Tool Kits	37	AH-1 Transmission	43
Anti-Collision Light	37	Huey Washer	43
Safety Messages	37	UH-21A Landing Gear	44
OH-6A Tiedown	38	AN/ARC-102 Antenna	44
FOD Work Platform	39	Rotor Drive Shaft	45
Plexiglass Repair	40	Kiowa Batteries	45

**COMMUNICATIONS**

Commo Corrosion	46	Equipment Repair	51
MX-6707	50	PRC Pointers	52

MSG Half-Mast  
PS Magazine  
Lexington, KY  
40511

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TROOP SUPPORT

Clean Fuel...

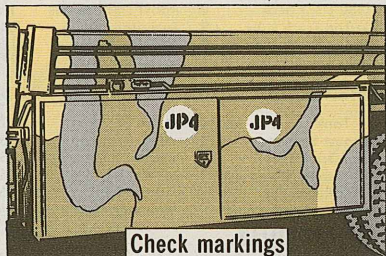
# It's Up to You



THIRSTY MACHINES NEED GOOD, CLEAN FUEL TO KEEP RUNNING!

IT'S UP TO YOU FUEL HANDLERS TO MAKE SURE THEY GET IT!

Never put any fuel into a container—whether it's a tanker or a 5-gal can—unless that container's in-



Check markings

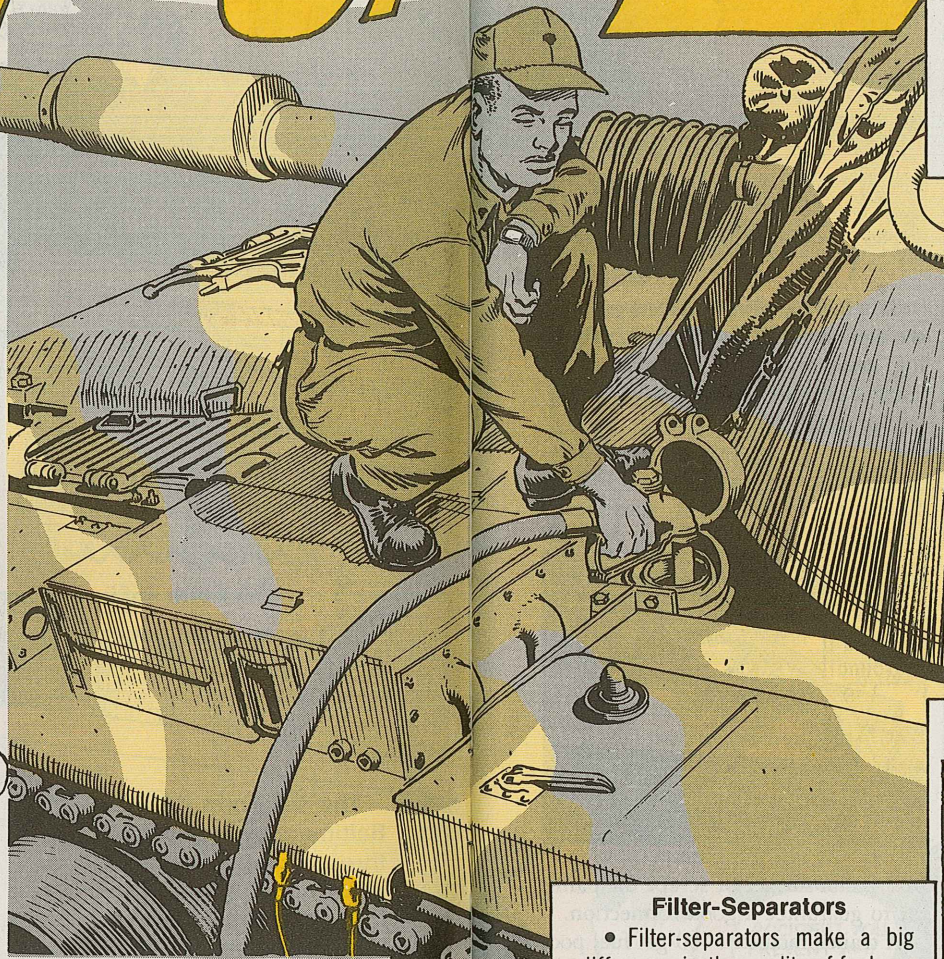
tended to hold the fuel you're pumping. Every can, pod and tank is marked with what it's meant to hold.

NO, NO, SOLDIER... DO NOT PUT JP4 IN THAT CONTAINER!

WHY NOT? FUEL IS FUEL!

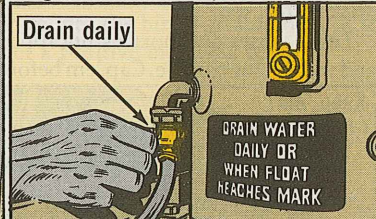


If you have to use the container for a different type or grade of fuel, check Appendix E of FM 10-69 to find out what kind of cleaning is needed. Hoses, nozzles, pumps and filter-separators need the same treatment. Never forget to change the markings, tho.



• Change elements regularly—every 24 months or at the interval recommended by the manufacturer. Don't hesitate to change 'em more often if they need it. An up-to-date daily log will warn you when pressure differential increases—or sharp decreases—signal that filters need changing. FM 10-71 has good info on the daily log.

• Drain water from filter-separators daily—at least. The water sight indicator lets you know if you

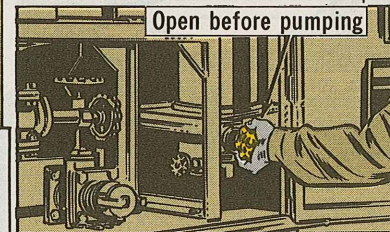


need to drain it more often. Keep the indicator clean so you can see the water level.

Draining water in cold weather's a must. Water freezes inside if it collects. Make sure you drain it when you finish for the day, too.

• Fuel-servicing tank vehicles have a built-in automatic dump

Open before pumping



valve. Open it before you start pumping so water build-up won't damage the filter elements.

## Filter-Separators

• Filter-separators make a big difference in the quality of fuel you dispense. They can't remove water and solid contaminants without filter elements in place.

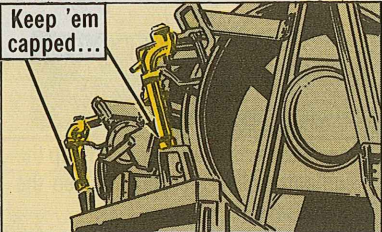
### Keep the Scene Clean

Keep dirt 'n' water off fuel handling equipment and you stand a better chance of keeping 'em out of the fuel. Latch covers and hatches shut when you're not using them. Make sure gaskets are in good shape to seal covers tight.

Put fuel gage sticks away when you're not using 'em. Otherwise, the gage sticks collect dirt and moisture...and dump the contaminants into the fuel next time you measure it. Sun and rain fade the numbers on the stick faster, too.

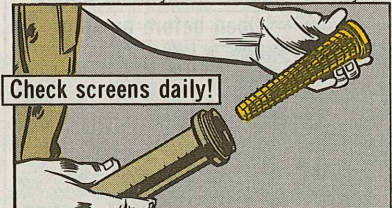
Leave hoses and nozzles uncapped and you ask for trouble. Cap 'em before

Keep 'em capped...



dirt and moisture get in. Keep 'em off the ground to protect 'em from feet, trucks and tanks.

Nozzle filter screens are the last line of defense against sediment. Check 'em daily to make sure they're



not clogged or damaged. Put the nozzle back together hand tight when you finish so it'll be easy to check next time.

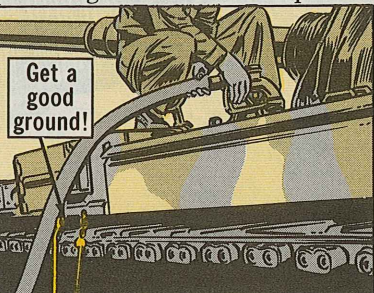
SPECIALIST, DID YOU CHECK THE FILTER SCREEN ON THAT NOZZLE TODAY?



### Safety First,

Safe fuel handling protects you and the equipment. Remember that flowing fuel creates static electricity. A good electrical ground helps make pumping safe.

Beware of painted surfaces when you ground fuel handling equipment. You can't get a good ground by connecting the cable to a painted

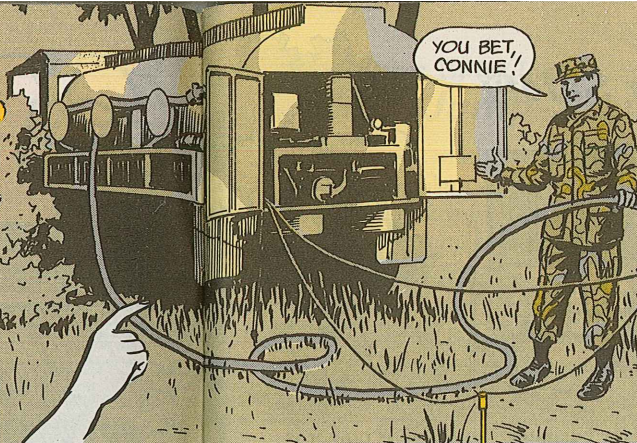


Get a good ground!

surface. Attach the ground cable to a bare metal surface or scrape the paint off to guarantee a good connection.

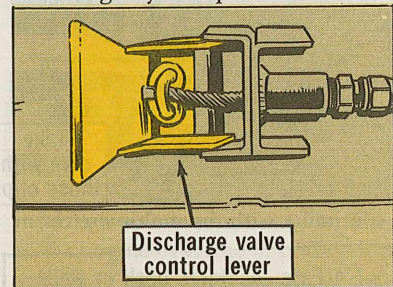
A trailer-mounted 600-gal fuel pod doesn't need its own ground as long as it's attached to a grounded truck. If you unhook the trailer, tho, make sure you hook it to a ground cable.

YOU BET, CONNIE!



### Last...Always

The discharge valve control levers on fuel tankers stop the flow of fuel in an emergency. Keep the levers and



Discharge valve control lever

cables clean, lubed and check 'em daily. You may need 'em some day.

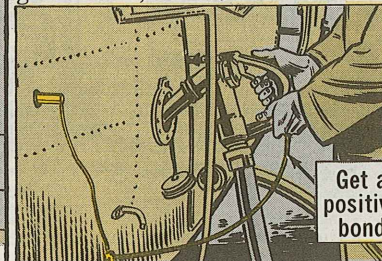
Take time for trailer or semi-trailer PM on fuel-handling vehicles...even if the trailer's not normally assigned to you.



THE ACCIDENT YOU PREVENT MAY SAVE YOUR LIFE!

## Aircraft Refueling Tip

Get an extra measure of safety when you refuel aircraft by using a nozzle ground wire, NSN 5920-00-897-4857.



Get a positive bond

Plug into the bird's grounding jack to get a positive electrical bond.

## Closed Circuit Nozzles

You aircraft fuel handlers and your C1 (Sep 80) to TM 5-4930-226-12&P on the closed circuit refueling nozzle can get up-to-date with these items:

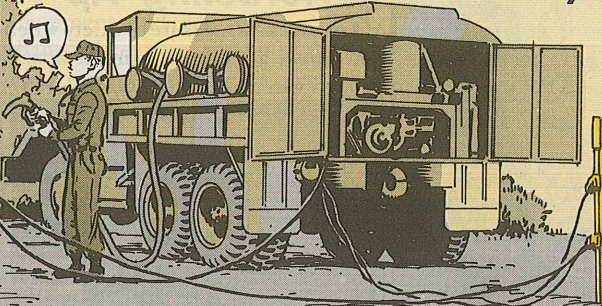
- Nozzle with strainer NSN 4930-00-117-4726
- Nozzle without strainer NSN 4930-00-204-9452
- Nozzle adapter (no receiver in acct) NSN 4930-00-516-0839

## Fuel Measuring Stick

Use fuel measuring stick, NSN 5210-01-083-2926, to keep up with the amount of fuel you dispense from tank and pump units. The stick is marked with both gallons and liters, and it's made specifically for the 600-gal fuel pods.

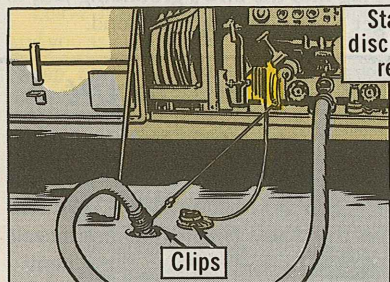
Fuel Tanker Operators...

## Ground for Safety



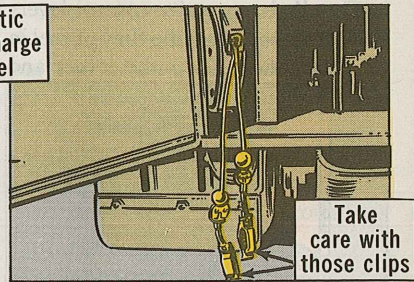
MAY BE SAFE FER HIM...  
... BUT IS IT SAFE FER ME?

Static electricity makes pumping fuel a risky business...unless your tanker is grounded. Use the static ground reel to get the good, safe ground you need.



Static discharge reel

Clips



Take care with those clips

Your mechanic can check the reel for continuity with the multimeter from your No. 1 Common Shop Set.

HERE'RE SOME TIPS TO HELP YOU KEEP THE REEL IN TOP SHAPE...

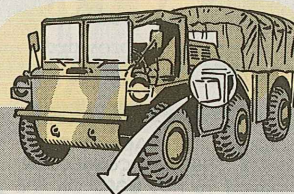


- Ease the wires back in when you're finished with 'em. If you let the reel's spring-loaded mechanism whip 'em back in, you'll cause unnecessary wear and tear on reels, wires and clips.
  - Fasten the clips to something on the truck before you move out. That'll keep 'em from bouncing around while you're driving.
- Need repair parts? Use No. 10 electrical wire, NSN 6145-00-519-2685, to replace the wires. NSN 5999-00-204-8350 gets new electrical clips.

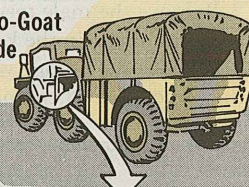
TM-242-Series 1/4-Ton Truck...

## Jump-Starting Your Goat

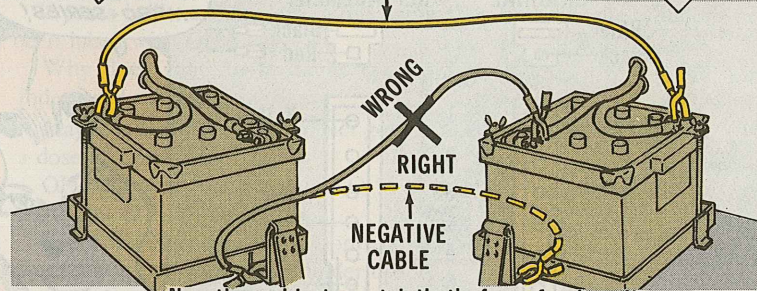
There's not much chance of getting a hard-starting Gama Goat started if you make the hookup as shown in TM 9-2320-242-10-1, Page 4-116. You'll be getting only 12 volts from the slaving vehicle. You've got to feed 24 volts to the starter for strong engine cranking.



Proper hook-up for Goat-to-Goat jump-starting (use left side batteries ONLY)



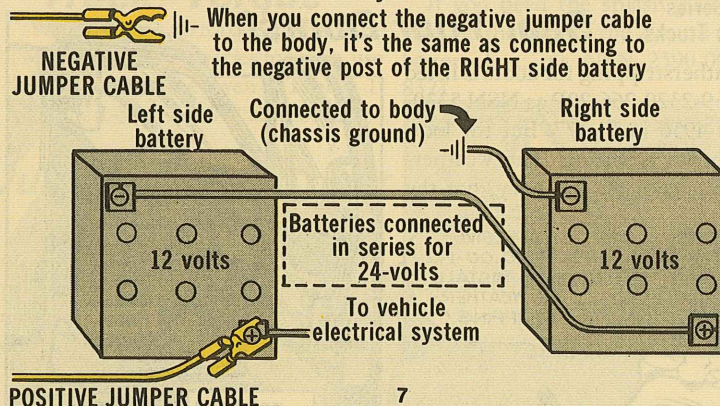
POSITIVE CABLE



Negative cable to metal that's free of paint, dirt, grease

Make a note in your Goat TM. The negative jumper cable must be connected to the engine or frame of both vehicles. This'll feed 24 volts from the slaving vehicle to the 24-volt system of the disabled vehicle.

### Here's the 24-volt system on a Gama Goat:



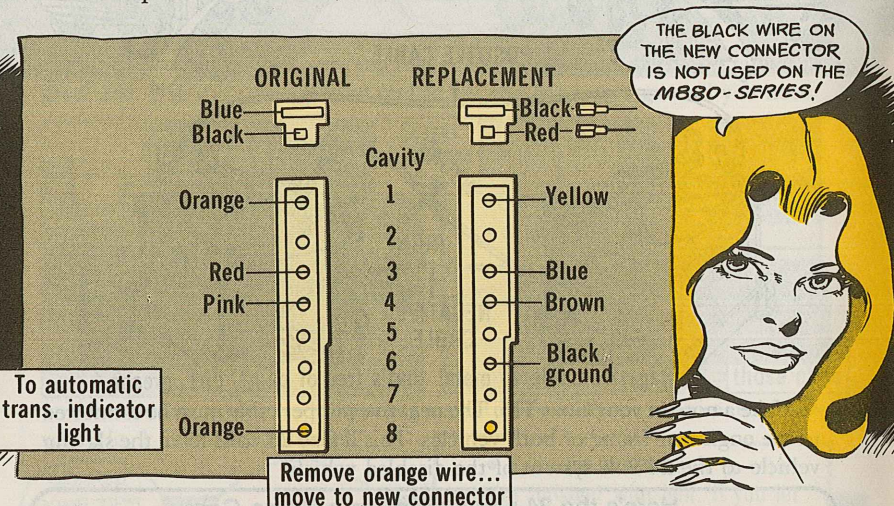
TM-266-Series  
1¼-Ton Trucks... **Ignition Switch Changed**

When you replace the ignition switch on your M880-series 1¼-ton truck, you may find the switch connector won't match the connector in the truck.

The yellow, blue and brown wires are in the right places and match up with the old orange, red and pink wires, respectively.

Remove the male terminals from the red and black wires and put on the 2 male terminals in the kit. Then put the terminals in the connector provided.

Remove the orange wire in position 8 from the old connector and put it in the same place in the new connector.



M880-Series  
1¼-Ton Trucks... **Seal Your Doors!**

Weatherstripping for doors is listed in TM 9-2320-266-20P as NSN 5330-01-004-4956 in Fig 77. But the location shown is wrong! The weatherstripping goes on the body, not the door.



TM-209-Series  
2½-Ton Truck... **OHA Lubes Brake Cylinder**



What does your DSU find when they tear down your air-hydraulic brake cylinder for rebuild?

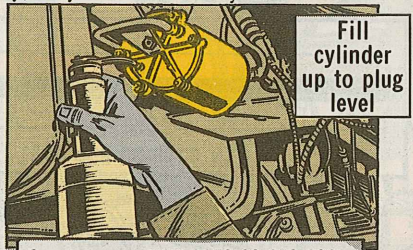
If yours is like a lot of 'em in the Army, they find that the cylinder's never been lubed with OHA.

Why does your air-hydraulic cylinder need rebuilding?

Maybe it failed because it never got a dose of OHA.

OHA is not mentioned in LO 9-2320-209-12/1, but it will be.

Every 6,000-miles (or 6 months) you fill your air-hydraulic cylinder up to plug-level with OHA. Plug-level means up to the hole where you put in the OHA.



Quart	NSN 9150-00-252-6383
Gallon	NSN 9150-00-223-4134
55-gal drum	NSN 9150-00-265-9408

**2½-Ton Truck Torque**

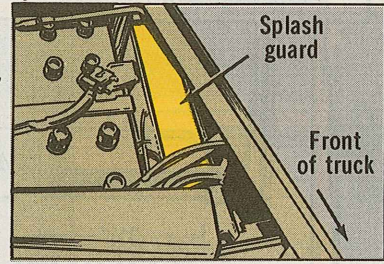
When there's no torque given in the TM 9-2320-209-20-series for a job, use the standard torque given in Table 1-1. It's Page 1-3 of TM 9-2320-209-20-3-1.

**Junction Box Cover**

A new cover for the circuit breaker on your M880-series truck's commo power junction box is NSN 5925-01-040-8963. DS puts it on. The TM's not out yet.

**Splash Guard**

If you need the splash guard that goes on the back of the 2½-ton truck's battery box, it's NSN 2590-00-411-8321.

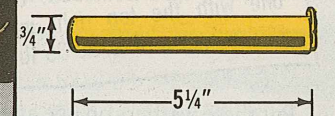
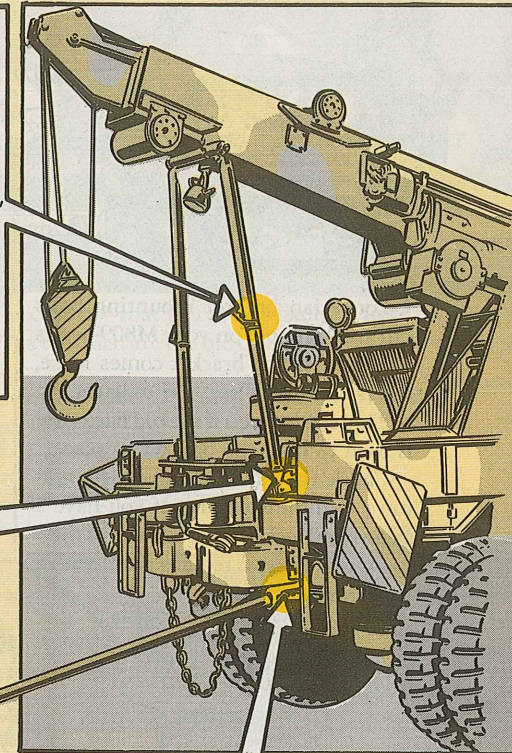
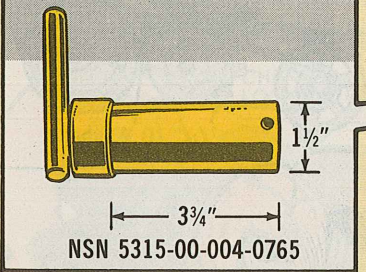
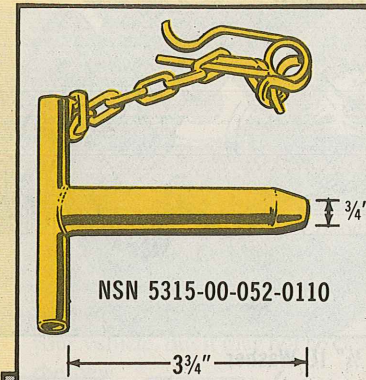
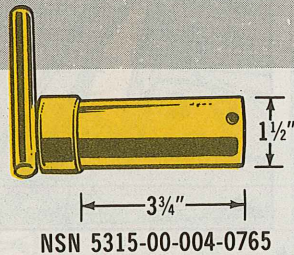
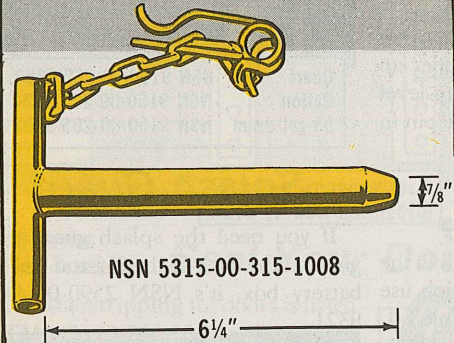
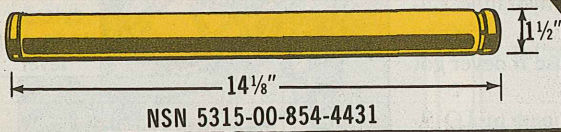
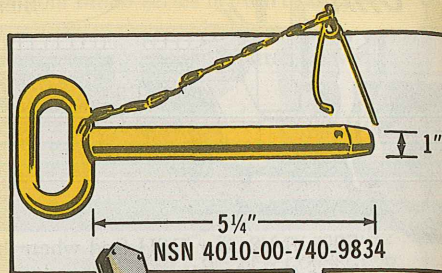


5-Ton  
Wreckers...

Which pins are used where on the boom jacks, shipper braces, and field chocks on the 5-ton wrecker?

All 4 wreckers—the M816, M819, M543-series and M246-series—use the same pins.

THE  
WRECKER USES  
11 PINS OF 4  
DIFFERENT  
SHAPES AS  
SHOWN HERE...



M809-series Trucks...

## Engine Fan Bracket Washers



SEZ HERE, WE OUGHTA REPLACE THE HARDWARE ON THAT LOOSE FAN BRACKET...

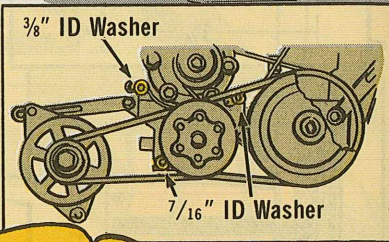
TOO LATE!!



Loose fan bracket mounting bolts can spell trouble on your M809-series 5-tonner. If the bracket comes loose, the fan can tear into the radiator.

This can happen if the old hardware is used to hold the bracket in place.

Check the fan bracket on your 5-ton's Cummins engine. If you have a spacer and lock washer at each of the 3 mounting points, replace them with a hardened washer.



HERE'S WHAT YOU'LL NEED...

• 1 washer,  $\frac{3}{8}$ -in inside diameter, NSN 5310-00-486-2505. Use this one with the top right mounting screw. Torque it to 30-35 lb-ft.

• 2 washers,  $\frac{7}{16}$ -in inside diameter, NSN 5310-01-112-4306. These go with the top left screw and the bottom screw. Torque them to 44-49 lb-ft.

Put these washers on one at a time. When you finish, check the fan drive belt tension. If the belts move more than  $\frac{1}{4}$  inch when pushed, adjust the tension like it says in Para 6-12c of TM 9-2320-260-20-3-1.

## Shedding Light on Lenses

HEY-- DOESN'T THIS HEAP HAVE ANY INSTRUMENTS ON IT?

IT DOES!



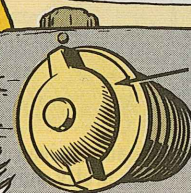
YOU COULD SEE 'EM-- DAY OR NIGHT-- IF YOU'D GET NEW PANEL LIGHT LENSES FOR THE PANEL!

Looking for instrument panel light lenses in your vehicle's -20P TM is seldom an enlightening experience.

The design of these lights has changed over the years. Some parts manuals still list lights and lenses—and lens covers—that you're not likely to have on your vehicle. But it may not be clear as to which are the old design and which are the new.

Check the pictures and listings in your -20P TM and, if needed, note the NSN's for the lenses used on your vehicle.

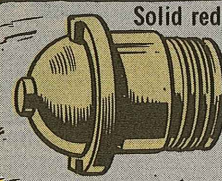
CHANCES ARE, THE LENS YOU'RE LOOKING FOR IS ONE OF THESE...



NSN 6210-00-337-7345—Its face is covered completely so it sheds only a dim light on nearby instruments.



NSN 6210-00-299-5564—It shows a small red light in the center. It's used for the high beam indicator light and is also used to show the ON conditions for master switches, bilge pumps, etc.



NSN 6210-00-548-0504—This all-red light signals a warning for high or low oil pressure, high oil or water temperature, etc.



Diesel Engines...

# Love That Turbocharger!

NO OPERATOR REALLY WANTS TO FOUL UP THE TURBOCHARGER ...

RIGHT?

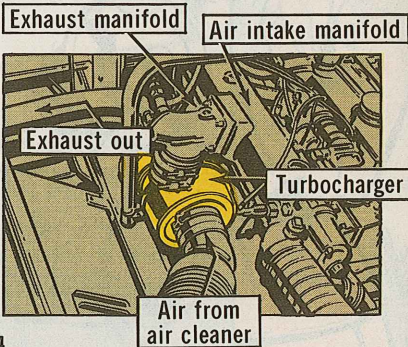


Drivers of turbocharged diesel-engine equipment know they need that turbocharger for full power. They know a turbocharged engine puts out more power than they'd get from that same engine without a turbocharger. The turbocharger rams more air into the cylinders, so more fuel can be injected into the cylinders—for a more powerful fuel/air mixture.

So a turbocharger is a mighty good thing. Drivers love their turbochargers!

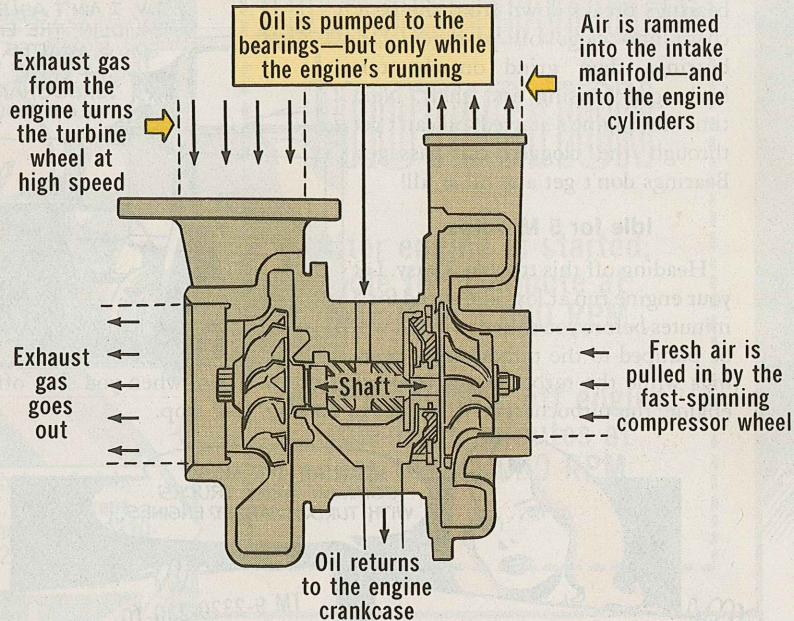
Then why do some drivers let turbocharger bearings burn up from lack of lube?

All exhaust-driven turbochargers look pretty much like this one on a multifuel engine



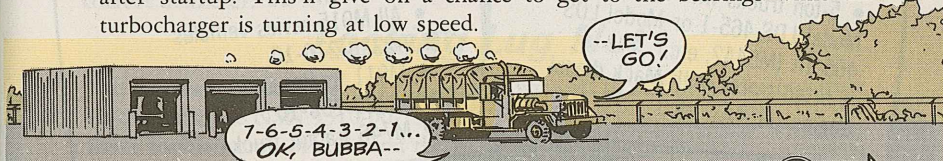
## Give Oil a Chance

Maybe they don't know that an exhaust-driven turbocharger spins at up to 70,000 RPM—more than 1,000 revolutions per second—and needs plenty of lube for the bearings. The turbocharger starts spinning as soon as the engine starts running and putting out exhaust. Higher engine speed...more exhaust...higher turbocharger speed.



Trouble is, engine oil takes a little while getting to the turbocharger bearings when the engine's first started up. If you rev up your engine too soon, the turbocharger spins at high speed before the bearings get full oil flow. That's rough on bearings!

Get the message? Keep engine speed down to low idle for about a minute after startup. This'll give oil a chance to get to the bearings while the turbocharger is turning at low speed.

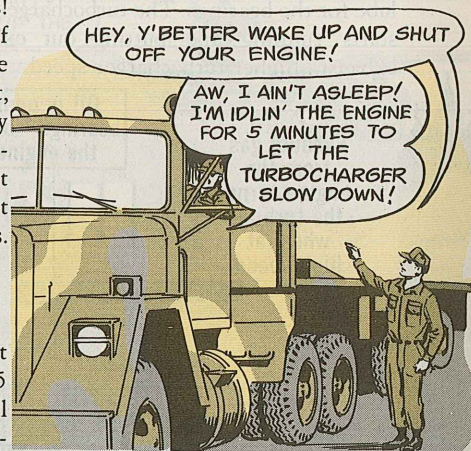


Even more important is letting the turbocharger slow down before you shut off your engine. Oil flow stops when the engine stops. But the turbocharger keeps on spinning for a while. If you shut down your engine while it's running at high speed, the turbocharger keeps spinning at high speed—without oil for the bearings.

That's when big trouble starts! Bearings get mighty hot from lack of lube. Oil that's still in and around the bearings breaks down from the heat, chars and clogs oil passages. Dry bearings then grind on the turbocharger housing and shaft. Next time the engine's started, oil can't get through the clogged oil passages. Bearings don't get any oil at all!

### Idle for 5 Minutes

Heading off this trouble is easy. Let your engine run at low idle speed for 5 minutes before you shut down. Oil will be pumped to the turbocharger bearings while the turbocharger is slowing down. Then, when you shut off the engine, the turbocharger will coast to an easy, cool stop.

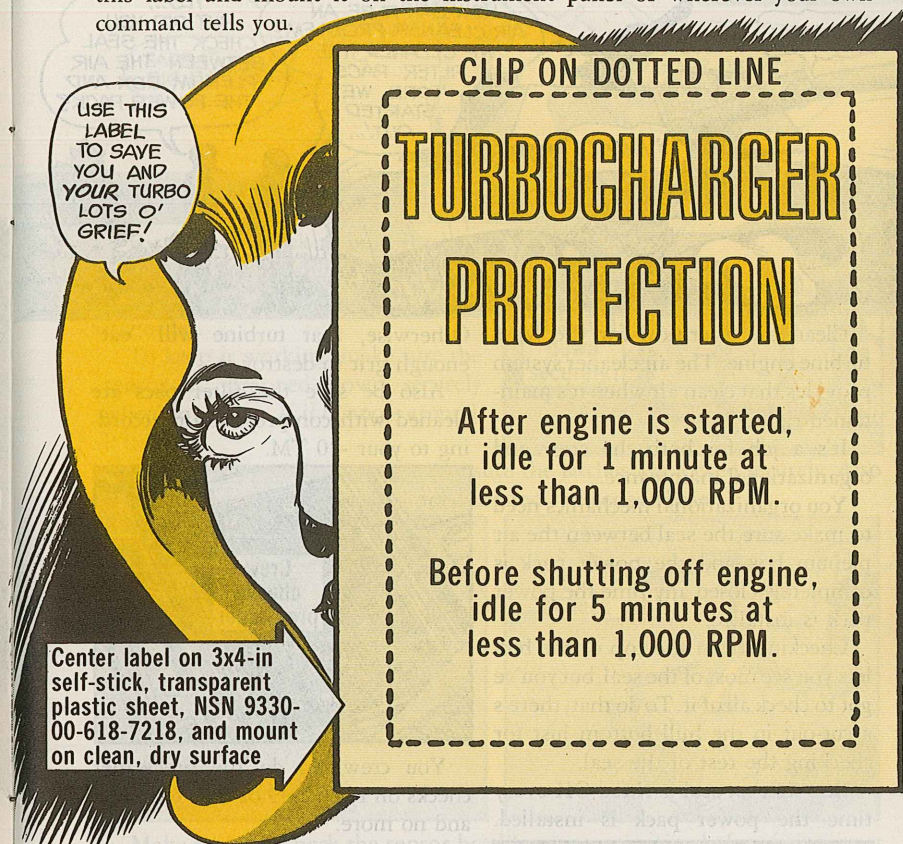


HERE'RE THE MOST COMMON ARMY TRUCKS WITH TURBOCHARGED ENGINES...

- TM 9-2320-209-10-1
- 2½-ton trucks with multifuel engine Model LDT-465-1C (M35A2, etc.) or Model LDS 427-2 (M35A1, etc.)
- TM 9-2320-211-10-1
- 5-ton trucks with multifuel engine Model LDS-465-1 or Model LDS 465-1A (M54A2, etc.)
  - 5-ton trucks with Mack diesel engine (M54A1, etc.)

- TM 9-2320-230-10
- 5-ton truck with multifuel engine Model LDS 465-2 (all vehicles in this fleet)
- TM 9-2320-233-10
- All Goer vehicles
- TM 9-2320-273-10
- All M915-series vehicles
- TM 9-2320-270-10
- M911 tractor truck
- TM 9-2320-258-10
- M746 tractor truck

If there's not already an idling instruction plate in your truck, you can clip out this label and mount it on the instrument panel or wherever your own command tells you.



CLIP ON DOTTED LINE

# TURBOCHARGER PROTECTION

After engine is started, idle for 1 minute at less than 1,000 RPM.

Before shutting off engine, idle for 5 minutes at less than 1,000 RPM.

Center label on 3x4-in self-stick, transparent plastic sheet, NSN 9330-00-618-7218, and mount on clean, dry surface

## M578 Bulk Hose

The NSN for bulk hose cited in Item 7, Pages 26-27, TM 9-2350-238-20P (Apr 72) is wrong. NSN 4720-00-404-7277 will get you the bulk hose with the correct diameter.

## Locking Lug Nut

If you have trouble keeping lug nuts on your M110 self-propelled howitzer roadwheels, use NSN 5310-00-139-4622. That'll get you a self-locking lug nut that's usable on all M110's and the M578 recovery vehicle.

M1 Tank...

# Clean Air Critical



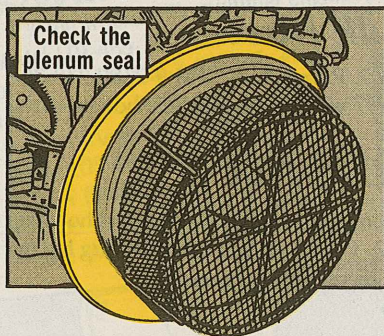
Clean air is critical for the M1's turbine engine. The air cleaner system provides that clean air when it's maintained right.

It's a job for both the crew and organizational maintenance.

You organizational mechanics need to make sure the seal between the air plenum box and the power pack is completely closed any time the power pack is installed.

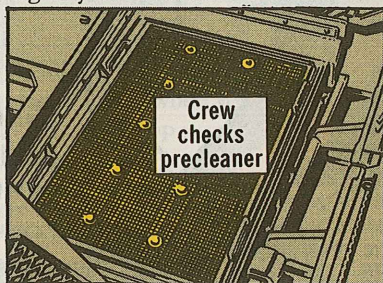
Checking from the top of the hull lets you see most of the seal, but you've got to check all of it. To do that, there's a cut-out in the hull bottom just for checking the rest of the seal.

Be sure that seal is fitted OK every time the power pack is installed.



Otherwise, that turbine will "eat" enough grit to destroy it.

Also be sure the filter packs are cleaned with compressed air, according to your -20 TM.



You crewmen do the pre-cleaner checks on Page 2-49 of the -10-1 TM, and no more.

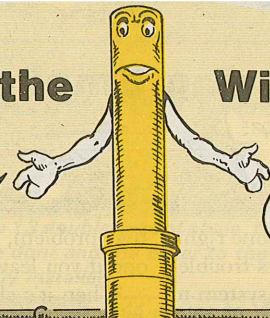
However, if the packs clog up in the field (there's an air cleaner clogged filter light on the driver's instrument panel) and you can't return to organizational maintenance, you can remove them and use the emergency procedures outlined on Pages 2-426 through 2-430 of the -10-2.

Never use water on the packs and never beat them against a hard object

# About the

# Wind Sensor

FACE IT, YOU M1 BIG BOOMERS...

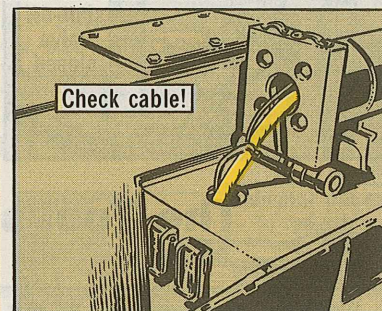
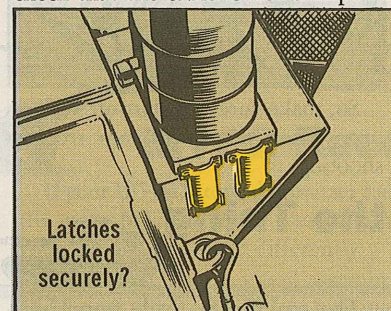
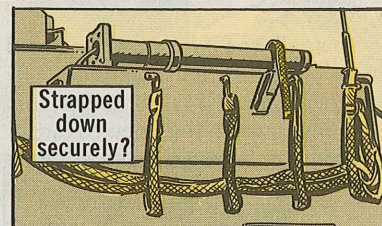


...NEGLECT ME AND YOUR CHANCES OF FIRST ROUND HITS ARE SLIM!

For your M1 tank to have the best first round hit capability it can offer, the crosswind sensor must be in working order.

To keep it working, make sure the sensor is strapped down securely when not in use. If it bounces around, it'll break.

When you erect the sensor, make sure the latches are locked securely. Also check that the cable is not crimped around the sensor base.



Make sure you check the sensor head for contamination before firing, or at least once a week.

To make the check, erect the sensor, fill a plastic squeeze bottle with clean water and squeeze water into the sensor cleaning hole 3 or 4 times.

Water should flow out the drain hole. If it doesn't, get your maintenance folks on the job.

If the temperature is below freezing, mix alcohol with the water to keep it from freezing. Never use antifreeze.

If you're gonna stow the sensor after cleaning the head, wait until all the water runs out first. Then strap the sensor down securely.

Tanks...

# Clearing Smoke *KOFF*

THOUGHT I TOLE YA T' TURN HIS SMOKE GEN-ERATOR OFF!

!GULP!  
I DID!

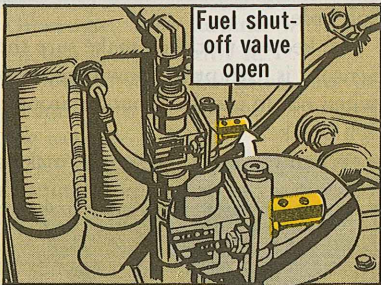
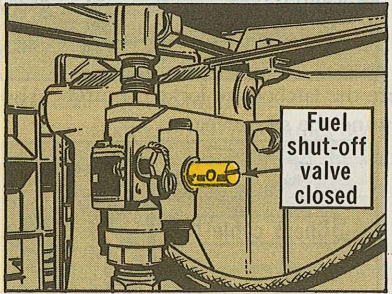
YES ... BUT HE CLOSED TH' MANUAL SHUT-OFF VALVE, TOO!

A job's not done till it's done right. When you tank mechanics troubleshoot the smoke generator system to isolate uncontrolled exhaust smoke, you close the manual fuel shut-off valve.

That tells you if the smoke is caused by an engine malfunction or a smoke generator solenoid valve malfunction. Thing is, when you've taken care of

that problem, you can cause another one if you leave the valve closed.

When it's closed, the expansion of the fuel in the lines (heated by the oil coolers) can rupture a solenoid valve seat or cause fuel to leak past the shut-off valve stem seal. That'll get you more uncontrolled smoke.



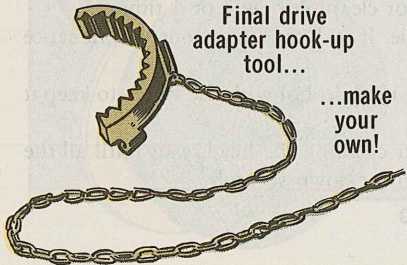
So, make sure the shut-off valve is open when you finish your troubleshooting.

## The Tool's the Thing

Would you like to have a tool that saves you time and sweat in hooking up the final drives when you install a powerpack? You bet you would!

Final drive adapter hook-up tool...

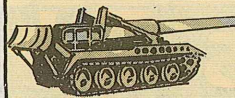
...make your own!



The tool can be made from a salvaged quick disconnect flange, which saves money.

Instructions on how to make and use the final drive adapter hook-up tool are available in TB 43-0001-39-6 (Jul 81).

You can also get the instructions from your local Tank-Automotive Command Field Maintenance Technician (FMT). Or, write to PS Magazine.



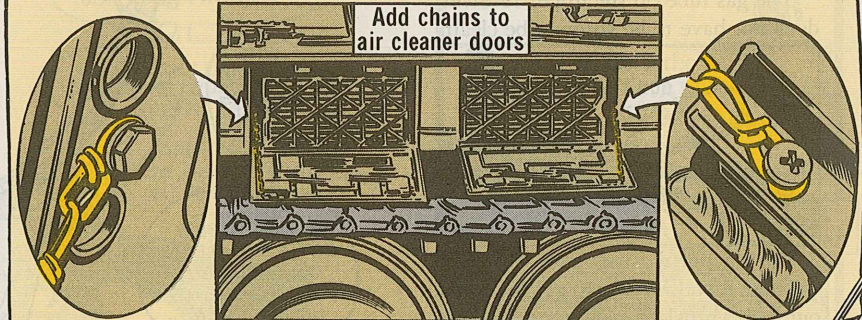
## Save the Doors



Dear Editor,

The air cleaner doors on the M110 and M578 fall to the track when open, and when the vehicles are moved, they are ripped off.

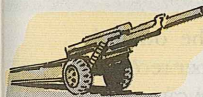
To prevent this, take 13 double links of chain, NSN 4010-00-129-3221, and attach one end to the door and the other to the air cleaner housing. Use the screws that are already installed.



The fix takes about 5 minutes and can save about \$48 per door.

SP4 Arthur F. Boyles  
B Btry, 2/92d FA  
APO New York 09169

(Ed Note:  
Looks like a winner!)



## M102 Recoil Oil Check

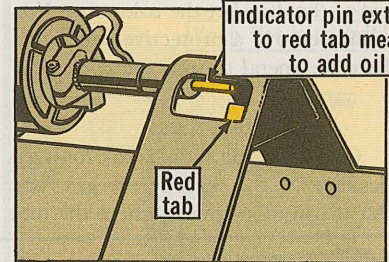


If your 105-MM towed howitzer has the new M37A1 recoil mechanism, you've gotta do things differently.

The M37A1 has a guard assembly and longer recoil oil indicator housing.

If you've got the M37A1, don't worry about the oil index indicator until it's in line with the red tab on the guard assembly. Then, add oil.

New M102's come with the M37A1. Older ones are being converted to the M37A1.



NSN'S FOR THE GUARD PARTS ARE...



Part	NSN
Guard Assembly	1015-01-003-9802
Screw (4)	5305-00-716-8187
Lock washer (4)	5310-00-584-5272

# M16A1 Gas Tube

# TIPS

Interested in an energy-saving tip while cleaning your M16/M16A1 rifle?

The gas tube on the upper receiver does not have to be shiny to be clean.



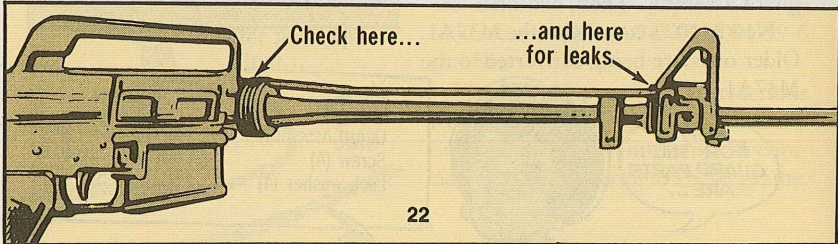
During normal use, gases discolor the tube metal. Trying to get the color out with a brush or steel wool won't do you or the tube any good. Best bet is to rub in CLP or RBC with a cleaning patch.

Wipe off the crud...and let the color stay.

Same goes for discolored metal on other parts (the bolt, for instance). Get rid of the dirt. Let the color stay. You could remove a protective finish and bare the metal to rust and corrosion.

## Gas Leak

One thing you should look for is gas leakage on the ends of the gas tube. Most common spot is where the tube

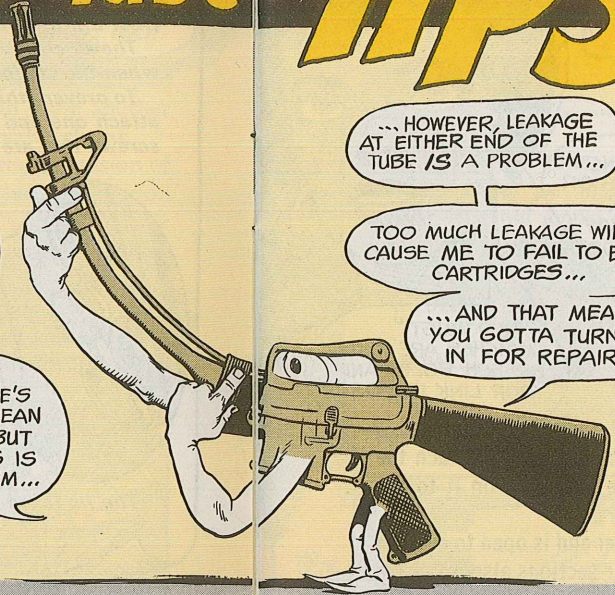


joins the front sight. The other is where it goes into the upper receiver.

If the tube's leaking, you can spot it from carbon buildup at the leak. Also, leakage will turn the tube blue at the point where it joins the sight. Remember, that's blue where it joins—not over the length of the tube.

Too much leakage will cause a rifle to fail to eject cartridges. So, if you spot leaks, turn the rifle in for repair.

WITH US '6'S CLEAN IS MEAN AND...  
SURE... MY GAS TUBE'S GOTTA BE CLEAN OF CRUD... BUT DISCOLORING IS NO PROBLEM...



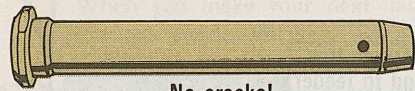
... HOWEVER, LEAKAGE AT EITHER END OF THE TUBE IS A PROBLEM...

TOO MUCH LEAKAGE WILL CAUSE ME TO FAIL TO EJECT CARTRIDGES...

... AND THAT MEANS YOU GOTTA TURN ME IN FOR REPAIRS!

## Buffer Cracks

A reminder: If you spot cracks around the pinhole of the buffer, replace the buffer.




No cracks!

THE CRACKS MEAN THE BUFFER'S HEADED FOR A MALFUNCTION!

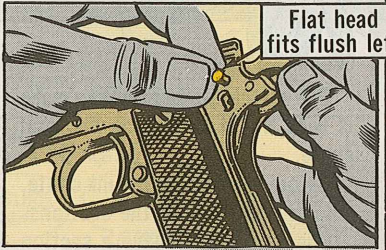


## M1911A1 How-To's for Armorer's

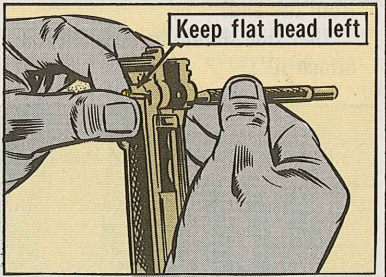


When you install the hammer and sear in your M1911A1 .45-cal pistol, be sure you get the headed side of their pins on the correct side.

The pins go in from the left, and the



head fits flush against the left side. The pins are held in position by the safety.



If you install the pins wrong, they'll fall out, and the pistol won't work.

# Vulcan

THE "MATCH" IS THE THING WHEN YOU INSTALL PARTS OR ASSEMBLIES ON YOUR M163A1 OR M167A1 VULCAN SYSTEMS!

TWO "MUST" MATCHES ARE YOUR BREECH BOLTS AND YOUR LINK DISPOSAL CHUTE!

## Chute Installation

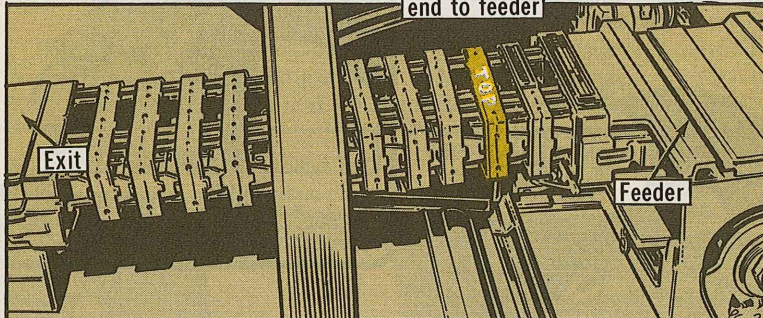
One match-up you want to make is with the M167A1 link disposal chute.

Before you attach the link chute, take a quick look at the sections.

One end should have a section banded in red. That section also should have TOP stenciled on it. It should be on the second section from the end.

That side should be up when you attach it.

Attach this end to feeder



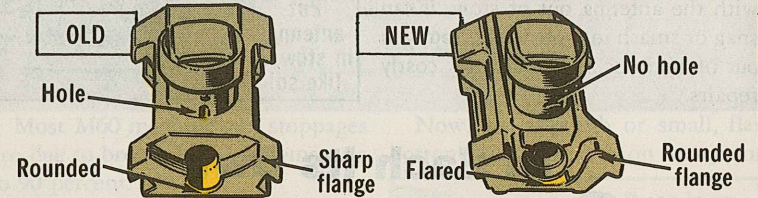
# Match-Ups

## Breech Bolts

With breech bolts, the same models must be installed together. The old model goes with other old models...and the new

with the new. You can't mix old and new.

Telling the new bolt from the old takes some looking.



## Radar Check



When you make your next daily operations checks on your Vulcan's AN/VPS-2 radar set, remember this when you get to the reflector and feed assembly:

Move the antenna with system power. That way, everything that's supposed to move gets going in sequence.

Finger pressure is all you use when you press the reflector for the elevation and azimuth check. If the reflector stays firm on the servodrive, you're OK.

If you apply muscle to the reflector, you can damage the antenna brakes.

Also, never move the antenna by hand. That's a one-way trip to damage.

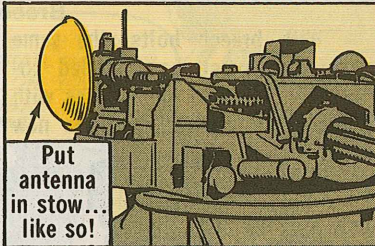


## Stow Before You Go!

Before you hit the road with your M167A1 towed Vulcan, think radar antenna!

Then, stow it!

If you hit the road (or the boonies) with the antenna out of stow, it can snag or smash into obstacles...put you out of business...and make for costly repairs.



## To Each Its Own

WHAT HAPPENED TO PVT. FLOYD?



HE SWITCHED BARRELS WITH PVT. BOYD...



Your M240 and M240C machine guns are issued with 2 barrels. One is on the receiver. The other is basic issue.

Each barrel and bolt is checked for fit and head-spaced to that receiver.

That prevents ruptured cartridges, damage to bolt, barrel and receiver...and injury to users.

So, never switch barrels or bolt assemblies from one gun to another gun.

## .50-Cal BFA's

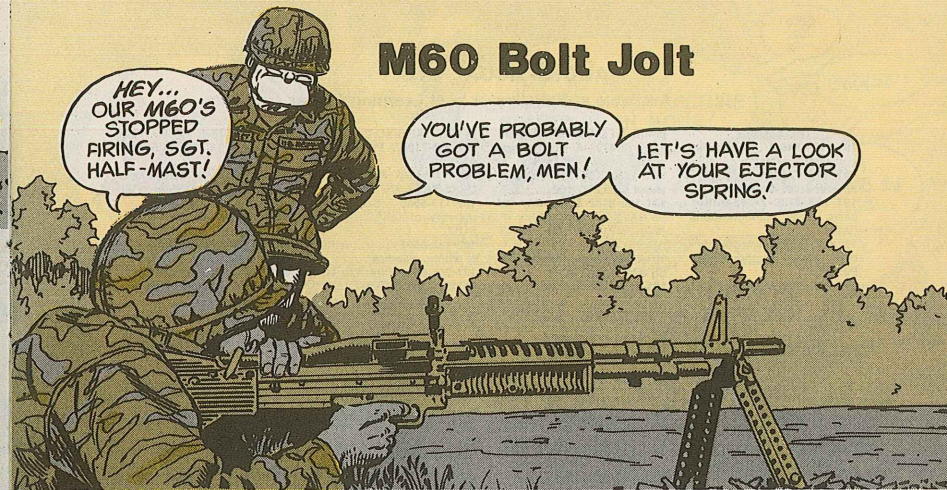
If you want an M19 or M20 blank firing attachment (BFA) for your M2 or M85 machine guns...and you're not a MILES unit, forget it! The only .50-cal BFA's to be issued for a long time will be to MILES (Multiple Integrated Laser Engagement System) units in FORSCOM, TRADOC, USAREUR and WESTCOM. They're nonexpendable items, and only MILES units have authorization for them at this time. They are issued only through the local TASC (Training and Audio-Visual Support Center).

## M60 Bolt Jolt

HEY... OUR M60'S STOPPED FIRING, SGT. HALF-MAST!

YOU'VE PROBABLY GOT A BOLT PROBLEM, MEN!

LET'S HAVE A LOOK AT YOUR EJECTOR SPRING!



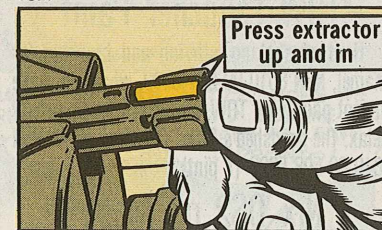
Most M60 machine gun stoppages are due to breech bolt problems—up to 90 percent.

Weak or broken extractor and ejector springs account for most of these bolt headaches.

Armorers can supply the aspirin before the headache happens.

Do this:

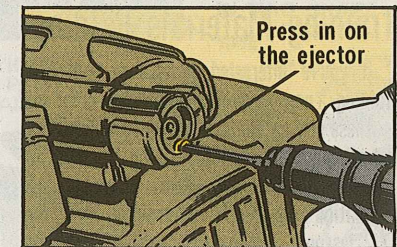
Use your thumb to press up and in on the extractor and plunger. It should take firm pressure to work the extractor.



When you ease off, the spring should push back the extractor firmly, without hesitation.

If the spring sticks or seems weak, replace it.

Now, get a punch or small, flat-bottomed tool. Press in on the ejector.



If the spring compresses with little pressure, or if it sticks, it's too weak. Replace it.

WHEN YOU RELEASE IT, THE EJECTOR SPRING SHOULD COME BACK FIRMLY...

ALL THE WAY!

## AUDIO-VISUAL STUFF

Available at Battalion or post Learning Center

### TEC Lessons

101-113-4786-A Identify circuit symbols Part 2  
101-113-4787-A Identify resistor color code values  
101-113-4788-A Identify basic circuit configurations Part 1  
101-113-4789-A Identify basic circuit configurations Part 2  
101-113-4790-A Locate test

points on schematic diagram  
101-113-4791-A Locate test points on block diagram  
101-113-7108-A Troubleshoot AN/GRC-108  
101-113-7112-A Monthly PM on RATT AN/GRC-142  
101-113-7180-A Op RATT AN/VSC-3  
101-113-7181-A Monthly PM on RATT AN/VSC-3  
101-113-7185-A Evaluate op

### of RATT AN/VSC-2

101-113-7186-A PM on RATT AN/VSC-2  
101-113-7187-A Troubleshoot RATT AN/VSC-2  
102-113-5509-A Faulty components of radio AN/ARC-51BX  
102-113-5561-A Identify fault wiring, avionics  
121-093-6601-F Intro to TOW field test set (TFTS)

621-113-6023-A Repair field cable line CX-1065/G or CX-1606/G

621-113-6024-A Recover field cable line CX-1065/G, CX-1606/G

621-113-6088-A Op PM on AN/TTC-29

948-071-0054-J M901 ITV combat load

953-071-0269-F NA/PVS-4 night vision sight with the M60 machinegun

## Bum Mask Canisters

Got charcoal dust on your face or M11 canister after using your M9 protective mask? You've got a bad canister! Turn it into your NBC specialist and get a replacement canister.

## Training Materials Catalogs

If you're interested in unit or individual training, a new series of DA Pamphlets is for you!

These new catalogs in the DA Pam 350-series list all current Extension Training Materials for individual, MOS and Army Training and Evaluation Program (ARTEP) training. You'll find TEC lessons, audio-visual material, graphic training aids (GTA) and more included.

The catalogs are automated now, so new items are added and outdated ones dropped immediately. Your unit should have the catalog that supports your ARTEP or the DA Pam 350-100 Consolidated MOS Catalog. If you need more copies, have your pubs clerk order them from the AG Pubs Center at Baltimore.

The pams give you plenty of info on what training materials are available, the skills and tasks each covers, and how to order any items or materials you need.

They replace all the old training and school catalogs except the Army Correspondence Course catalogs.

## Oil Gage NSN

The oil pressure gage NSN in TM 5-6115-332-24P (Item 21, Fig 9) may not get you the replacement part you need for your 5-KW generator. The gage you need depends on the type of connectors on your old gage. Replace a gage with pin-type connectors with NSN 6620-00-938-8212. Use NSN 6620-01-017-8765 for a gage with screw-on connectors.

## Capscrew Torque

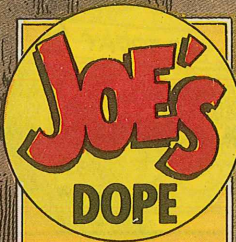
You now torque the capscrews holding the drive sprockets to the hubs of the final drives on M110 howitzers and M578 recovery vehicles to 120-130 lb-ft. Your M110-series -20 TM's say 350 lb-ft, which is wrong. Your M578 -20 TM doesn't specify a torque value.

## TOW Launcher Paint

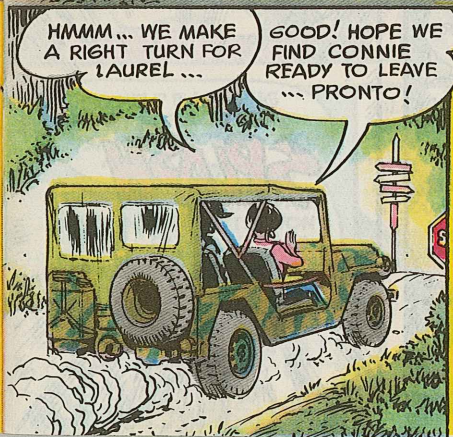
Tired of shaking, stirring and brushing OD enamel, NSN 8010-00-081-0809, when you have to spot paint your TOW missile system launcher? Relax. The headshed's OK'ed OD spray paint, NSN 8010-00-598-5936 (1 pint).

## Nix DS2 on Mask

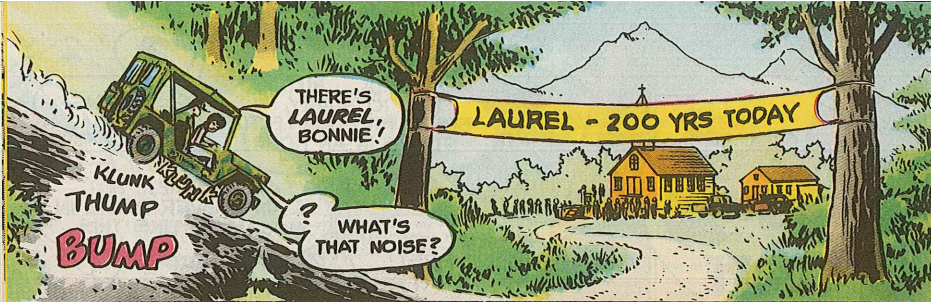
Take care when you're working with your M11 decon not to get any liquid DS2 decon agent on your M17/M17A1 protective mask. The liquid DS2 cracks or makes holes in the mask's voicemitter and ruins the seal.



Reporting for DOLLARS!





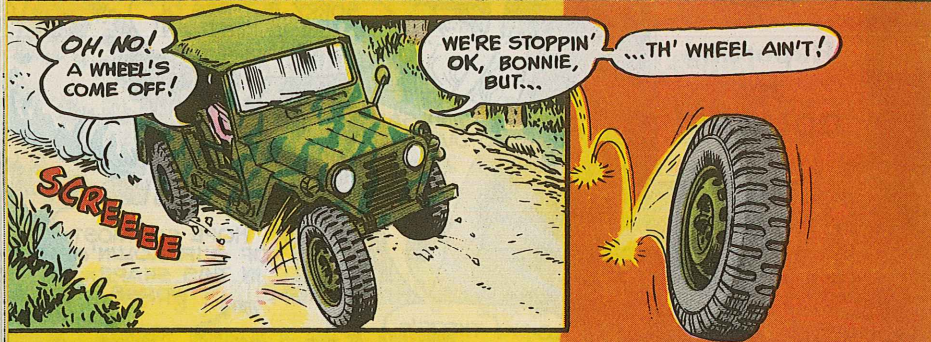


THERE'S LAUREL, BONNIE!

LAUREL - 200 YRS TODAY

KLUNK  
THUMP  
BUMP

? WHAT'S THAT NOISE?



OH, NO!  
A WHEEL'S COME OFF!

WE'RE STOPPIN' OK, BONNIE, BUT...

...TH' WHEEL AIN'T!

SCREEEE



WHILE AHEAD...

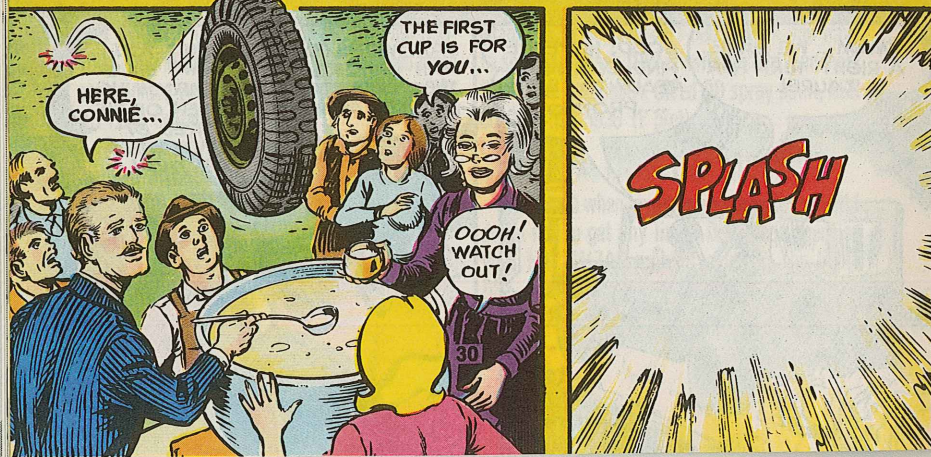
CONNIE, IN APPRECIATION FOR YOUR MAKING OUR BICENTENNIAL A HUGE SUCCESS...

... WE FOLKS OF LAUREL WISH TO PRESENT YOU WITH THIS PUNCH BOWL! IT'S YOURS SOON'S EVERY CITIZEN PRESENT TOASTS OUR GREAT COMMUNITY!

YAY, CONNIE!

H'RAY!

LAUREL'S PROUD O' YOU!

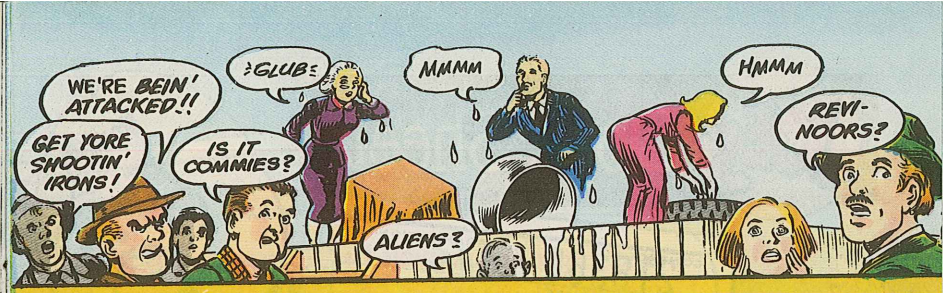


HERE, CONNIE...

THE FIRST CUP IS FOR YOU...

OOOH! WATCH OUT!

SPLASH



WE'RE BEIN' ATTACKED!!

GLUB!

MMMM

HMMM

GET YORE SHOOTIN' IRONS!

IS IT COMMIES?

ALIENS?

REVI-NOORS?



H'YAR THEY ARE-- TH' TWO SNEAK ATTACKERS!

YUP, MISS CONNIE, WE CAUGHT 'EM RED HANDED... STILL IN THEIR MISSILE LAUNCHER!

FESTIVAL CRASHERS!

SNEAK ATTACK? MISSILE LAUNCHER?

CAN I HELP IT IF TH' ARMY DON'T REPLACE TIRED, OLD, OVER USED VEHICLES?

NAH! NOW HE'S INSULTIN' THE US ARMY!



HOLD ONE, EVERYBODY!

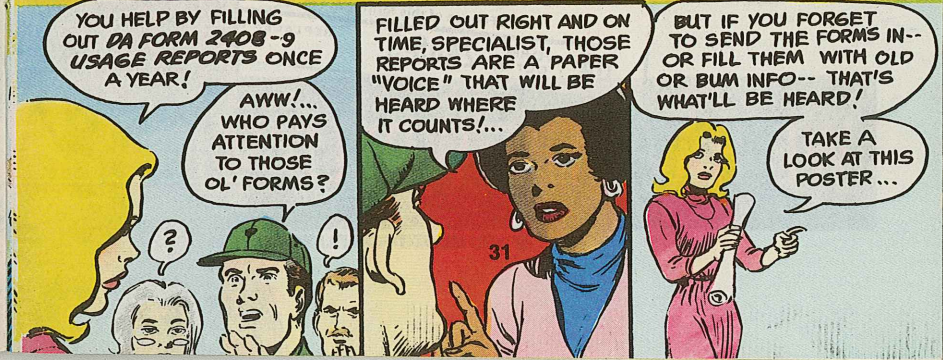
THEY'RE MY FRIENDS, BONNIE AND SPECIALIST LEN YUSHEK... HERE TO MEET ME!

I'LL VOUCH FOR THESE TWO!

HMMM!

SOME FRIENDS-- BOMBING YOUR PUNCH BOWL!

NOW TO ANSWER YOUR QUESTION, SPECIALIST-- YES! YOU CAN HELP IT IF THE ARMY ISN'T REPLACING YOUR UNITS WORN OUT VEHICLES!



YOU HELP BY FILLING OUT DA FORM 2408-9 USAGE REPORTS ONCE A YEAR!

FILLED OUT RIGHT AND ON TIME, SPECIALIST, THOSE REPORTS ARE A PAPER "VOICE" THAT WILL BE HEARD WHERE IT COUNTS!...

AWW!... WHO PAYS ATTENTION TO THOSE OL' FORMS?

BUT IF YOU FORGET TO SEND THE FORMS IN-- OR FILL THEM WITH OLD OR BUM INFO-- THAT'S WHAT'LL BE HEARD!

TAKE A LOOK AT THIS POSTER...

# Joe's Dope Sheet

CONTROL NO. <b>218360</b>	1. ORGANIZATION <b>HHC</b>	3. UNIT IDENT CODE <b>WH00TO</b>	4. UTILIZATION CODE <b>ON</b>	5. VEHICLE USE CODE
6. NOMENCLATURE <b>Truck</b>	7. MFG NO. <b>M74</b>	8. SERIAL NO. <b>09227</b>	9. STOCK NO. <b>-00-177-92</b>	10. REGISTRATION NO. <b>NB6482</b>
11. YEAR OF MFG <b>M74</b>	12. MANUFACTURER (MFG)	13. SHIPPED	14. a. ORG.	15. RECEIVED FROM b. ORGANIZATION
16. TYPE REPORT				
a. ACCEPTANCE AND REGISTRATION				
b. USAGE <input checked="" type="checkbox"/>				
c. TRANSFER				
d. LOSS				
e. GAIN				
f. OTHER				
21. REMARKS				
22. INSPECTOR'S SIGNATURE			23. JULIAN DATE <b>2305</b>	
EQUIPMENT			REPORTS CONTROL SYMBOL CSGLD - 1608	
For use of this form, see TM 38-750; REPLACES DA FORM 2408-9, OCT 72			of Staff for Logistics. IN 64, WHICH ARE OBSOLETE.	
			NMP COPY 1	

When you Fill out your usage report,  
Tell the Facts and you'll get the support!  
The info you send  
Helps tell what to spend,  
So no mission you'll need to abort!

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

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



AW, CONNIE-- COURSE I KNOW AS WELL AS ANYBODY WE NEED NEW VEHICLES TO REPLACE A HEAP OF OLD OVER USED ONES THE ARMY'S GOT...

...BUT EVERYBODY KNOWS MONEY'S SHORT!

WHAT CHANCE IS THERE THAT VEHICLE MANAGERS CAN CONVINCE THE BUDGET BARONS WE NEED MONEY FOR VEHICLES??

THAT IS A PROBLEM...



BUT THE BIGGEST PROBLEM IS THE BUM DATA THAT IS GETTING FED INTO THE COMPUTERS!

THE DA FORM 2408-9 USAGE REPORT INFO IN THE COMPUTERS SHOWS A LOT OF HOLES FROM REPORTS NOT TURNED IN AND GOOFS... LIKE REPORTS SHOWING LESS MILEAGE THIS YEAR THAN LAST...

HMM... THIS DATA ISN'T CONSISTENT!

RIGHT! WE CAN'T RECOMMEND FUNDS FOR REPLACEMENT TO THE BUDGET PEOPLE WITH THIS INFO!

THAT SERIES OF VEHICLES HAS LESS DEMAND THIS YEAR THAN LAST?

LOOKS LIKE WE'LL HAVE TO REFUSE THE REQUEST!

WELL... THAT'S WHAT THESE READ-OUTS SAY!



THE BUDGET BARONS JUST WON'T BUY THE NEED FOR VEHICLE MONEY BASED ON THAT KIND OF INFO!!

SEND IN YOUR USAGE INFO ON...

### COMBAT VEHICLES

as of 1 August

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### NON-TACTICAL VEHICLES

as of 1 October

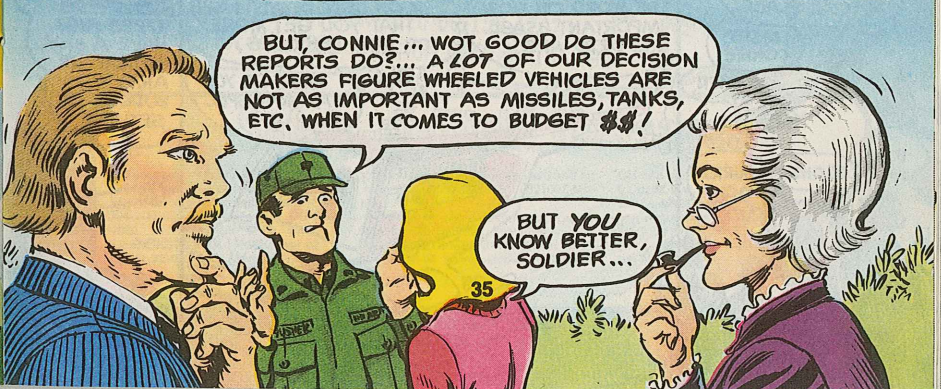
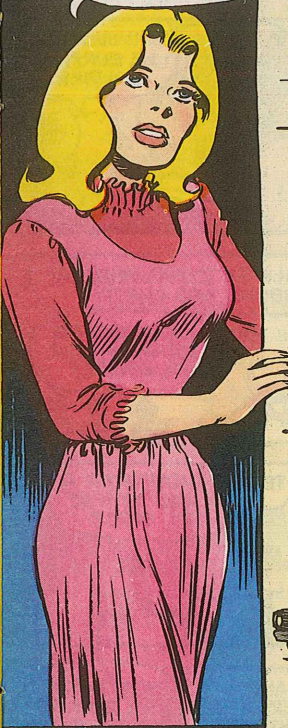
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### TACTICAL VEHICLES

(Including M880-series and M915-series)

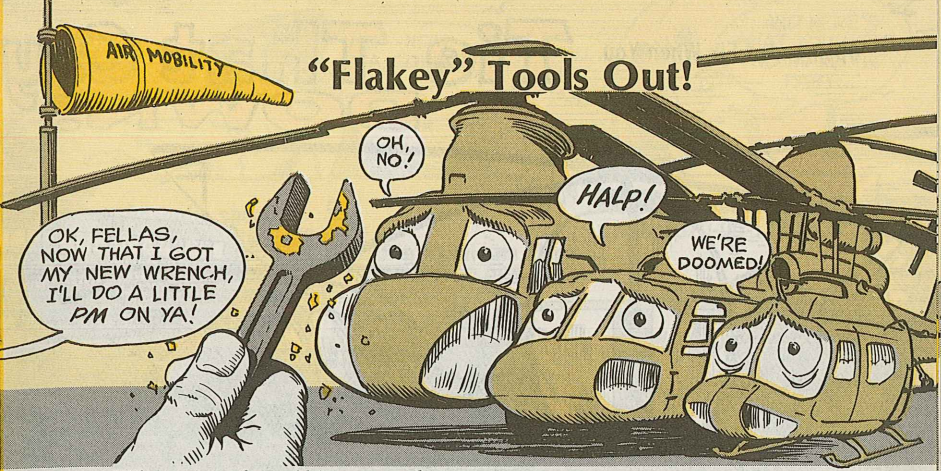
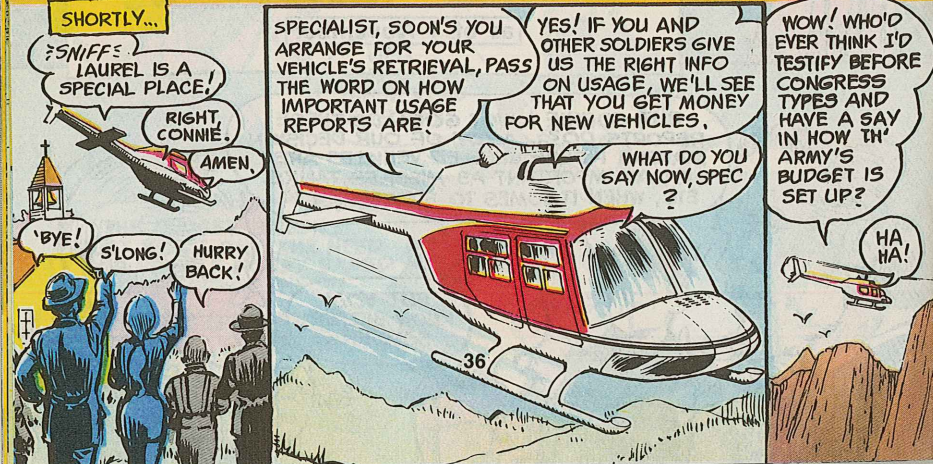
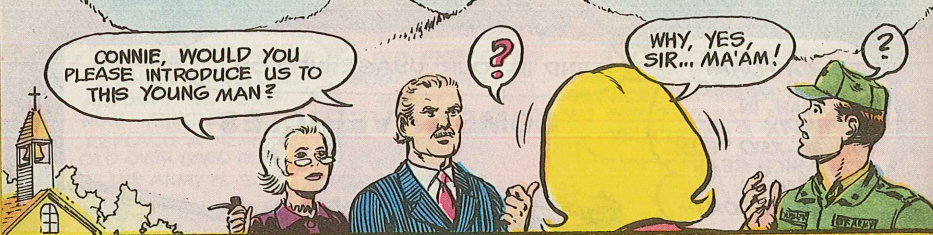
as of 1 November

THE DA FORM 2408-9 USAGE COLUMN IN APPENDIX E OF TM 38-750 TELLS YOU WHICH GEAR NEEDS A USAGE REPORT--



BUT CONNIE... WOT GOOD DO THESE REPORTS DO?... A LOT OF OUR DECISION MAKERS FIGURE WHEELED VEHICLES ARE NOT AS IMPORTANT AS MISSILES, TANKS, ETC. WHEN IT COMES TO BUDGET \$\$!

BUT YOU KNOW BETTER, SOLDIER...



When aircraft tool kits are made up, no cadmium-plated tools are included. (dull finish) and chromium-plated (bright finish) tools are in the supply system because there is no problem using either type on equipment other than aircraft.

If chips enter an engine, for example, they contaminate the lubrication system...cadmium feeds on magnesium and other metals!

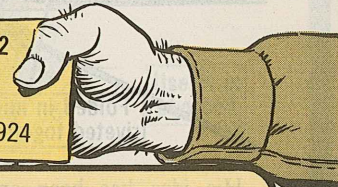
There are times when mechs need to replace a shot tool. Cadmium-plated

So be sure you put Advice Code 2B—do not substitute—on your supply request.

### Bulb Available

When the bulb in the anti-collision light on your AH-1S Cobra goes on the blink, you no longer have to ask for the costly assembly listed in Fig 110, Item 106, TM 55-1520-236-23P. The light is made by 2 manufacturers, so eyeball the part numbers and ask for one of these bulbs:

- Light Assy, PN 40-0210-5, NSN 6220-00-159-1762
- Lamp (bulb) PN 1939X, NSN 6240-00-361-1411
- Light Assy, PN D1485, NSN 6220-00-159-1762
- Lamp (bulb) PN MS25338-311, NSN 6240-00-155-7924

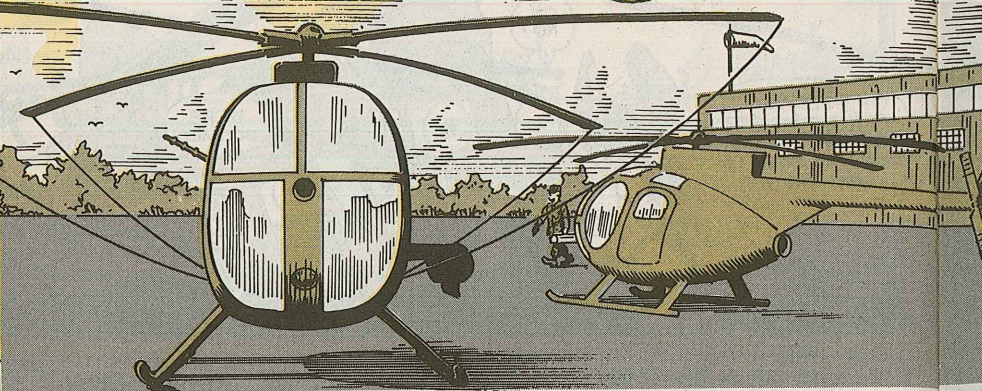


### Safety-of-Flight Messages

- If your unit has not received a message in which you have an interest, check with your next higher headquarters.
- change on CH-47A/B/C forward and aft transmission DRSTS-MEC 082100Z Mar 82
- CH-54B main landing gear DRSTS-MEC 012020Z Mar 82
- CH-54-82-03 Inspect forward main gear box support fitting CH-54A/B DRSTS-MEC 241903Z Mar 82
- Cat 1 EIR Phone: AUTOVON 695-2066 (24-hr)
- CH-47-82-01 Maint Mandatory, Inspect
- 1860, AH-1 Inspect servo extension tubes DRSTS-MEA 132200Z Mar 82
- CH-47-82-01 Maint Mandatory, Inspect
- CH-54-82-02 Maint Mandatory, Inspect
- CH-54-82-01 Maint Mandatory, Clarify use of MIL-H-83282 hyd fluid in CH-54A/B DRSTS-MEC 011930Z Mar 82

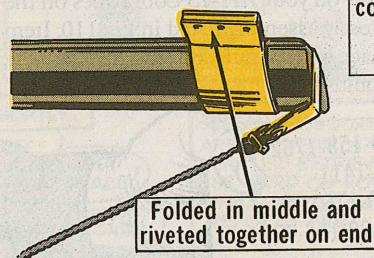
Open-ended Fix When You...

# Tie That Cayuse DOWN!



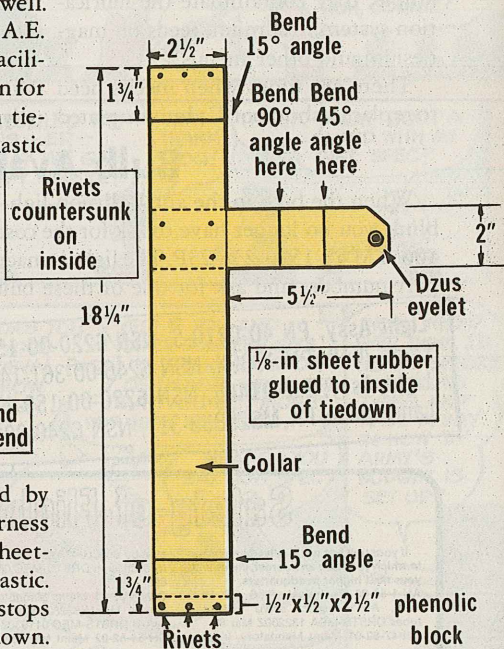
High winds, rain, snow and ice can tear up your OH-6A's main rotor tiedown. The water collects in the plastic cup, freezes and damages not only the tiedown, but the rotor blades as well.

No sweat, tho. Mr. Louis A.E. Rohde, Army Aviation Support Facility in Rapid City, SD, has a solution for the problem. He made his own tiedown to replace the original plastic flyaway item.



Folded in middle and riveted together on end

His idea has been approved by TSARCOM and calls for a harness made from aluminum, rubber sheeting and phenolic (laminated) plastic. The item's open-ended, which stops water from collecting in the tiedown.



HEY--NEAT IDEA, CONNIE!

YOU BET...

...AND HERE'S WHAT YOU NEED TO MAKE THE PART...

Phenolic sheet  
NSN 9330-00-788-9738

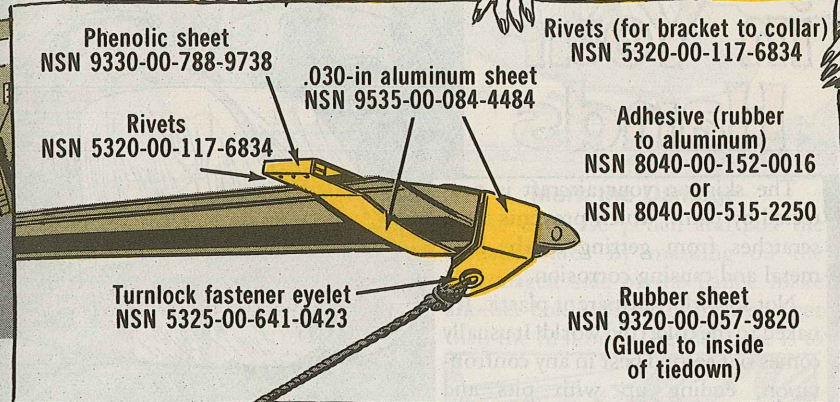
.030-in aluminum sheet  
NSN 9535-00-084-4484

Rivets  
NSN 5320-00-117-6834

Adhesive (rubber to aluminum)  
NSN 8040-00-152-0016  
or  
NSN 8040-00-515-2250

Turnlock fastener eyelet  
NSN 5325-00-641-0423

Rubber sheet  
NSN 9320-00-057-9820  
(Glued to inside of tiedown)



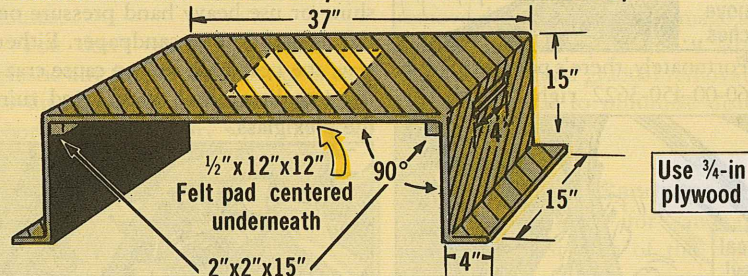
## FOD Fighter

Dear Editor,

We used to stand on the bird's cowl assembly to work on the Huey's main rotor.

The possibility of the cowl being damaged or chipped and debris falling into the engine intake was real.

But no more! We built a work platform that eliminates this problem.



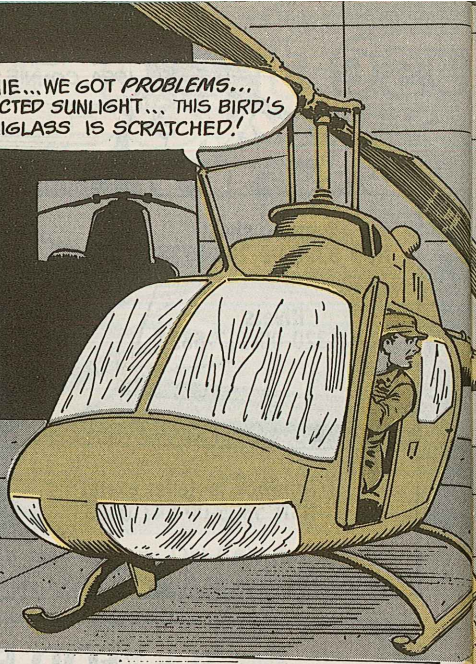
Paint the finished platform yellow with black stripes with red lettering and you got yourself a handy platform.

SFC Lawrence J. Simone  
Corpus Christi Army Depot

(Ed Note: A good way to prevent foreign object damage. The platform also gives you the needed height to inspect the rotor head properly.)

# It's All in Your Hands

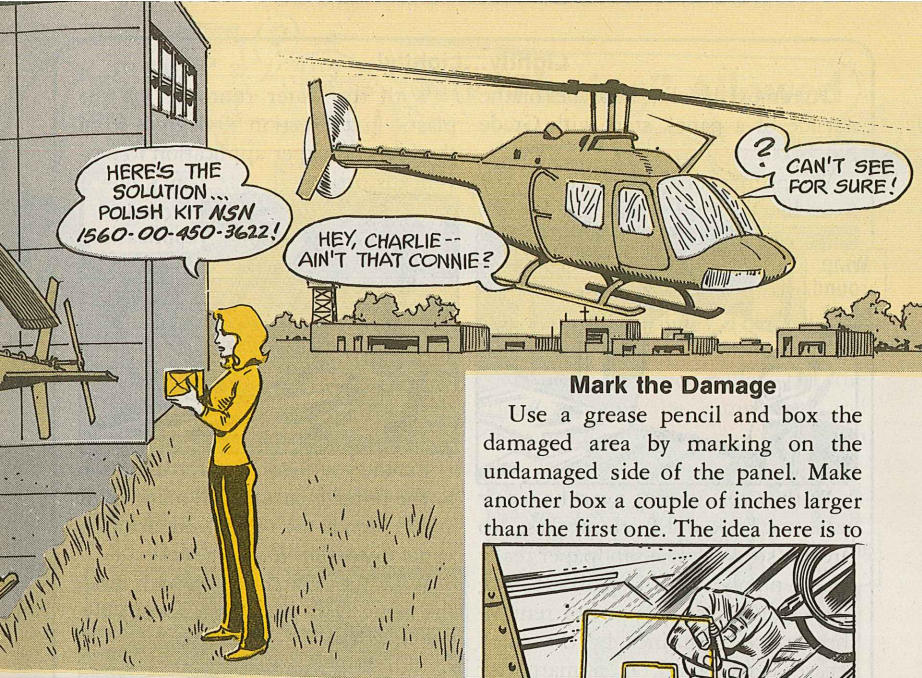
CONNIE... WE GOT PROBLEMS... REFLECTED SUNLIGHT... THIS BIRD'S PLEXIGLASS IS SCRATCHED!



HERE'S THE SOLUTION... POLISH KIT NSN 1560-00-450-3622!

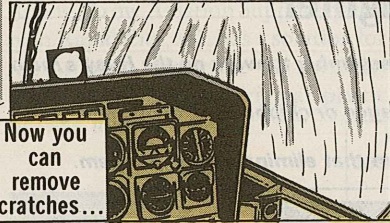
HEY, CHARLIE -- AIN'T THAT CONNIE?

? CAN'T SEE FOR SURE!



The skin on your aircraft is protected by paint, which prevents most scratches from getting to the bare metal and causing corrosion.

Not so with transparent plastic. It's naked to the cold, cold world! It usually comes out second best in any confrontation, ending up with pits and scratches. Crew members are distracted by sunlight reflected in scratches.



Now you can remove scratches...

Fortunately, there's polish kit, NSN 1560-00-450-3622, right in tech sup-



...real easy!

ply. Everything you need to make spot repairs is in the kit. Just make sure you follow the directions carefully.

## Some Basic Pointers

You can see scratches in acrylic plastic and confirm them with a fingernail.

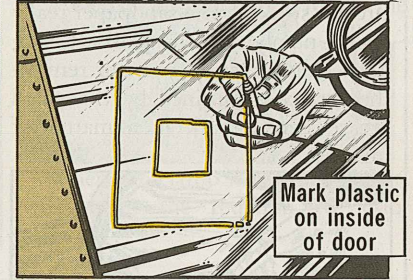
Never restore the plastic in sunshine or use heavy hand pressure on the reconditioning sandpaper. Either way, the heat built up can cause crazing (small internal cracks) and ruin the plexiglass.



Remove door for repair

## Mark the Damage

Use a grease pencil and box the damaged area by marking on the undamaged side of the panel. Make another box a couple of inches larger than the first one. The idea here is to



Mark plastic on inside of door

Use the wet (cool water) method of polishing out the scratches. Remove OH-58 doors, for example, from the bird. You can then haul 'em to a water source.

You don't want to scratch the plastic any further by rubbing in dust or dirt, so wash and rinse the panel thoroughly. Wipe dry with industrial wipes.



Wash...

...and dry!

## Select Right Sandpaper

When you reach for sandpaper during the first step of the repair, never pick a grade that is coarser than you need. The sandpaper has its own "scratch" pattern and you don't want to create deeper scratches than you already have. The lower the grade number, the coarser the sandpaper.



### Lightly...Lightly!

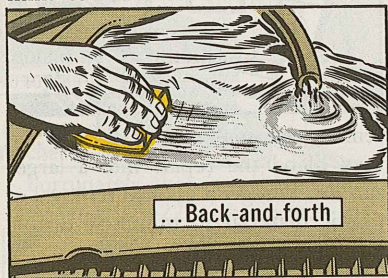
To remove hairline scratches on the outside of a panel, start with Grade No. 3200.

Wrap the sandpaper around the foam block supplied with the kit.



Wrap around block

With water running over the repair area, use back-and-forth strokes. No circular strokes! The sandpaper really does a number on the plastic. Using light hand pressure, you can remove the scratches outlined by the small grease pencil mark in a matter of minutes.



...Back-and-forth

Next, change to Grade No. 3600 sandpaper.

With the water running, rub the plastic in a direction 90 degrees from the last sandpaper application to prevent distortion.



Rub 90° from last application

Extend your back-and-forth motion to the outer grease pencil mark. This action blends the repair and also prevents distortion in the panel.

With the scratches removed, wash the panel again and dry it thoroughly.



Wash... and dry

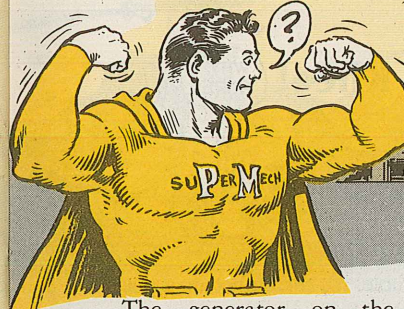
Finish up the repair by polishing the area with dry Grade No. 8000 sandpaper. Be sure you again use straight strokes, 90 degrees from the last sandpaper application.

Now, hold that panel up to the light and you'll see that it's as good as new.

ONCE YOU GET THE HANG OF IT, YOU'RE READY TO TACKLE A WINDSHIELD!

JUST FOLLOW THE DETAILS IN THE INSTRUCTION SHEET!

GOTCHA, CONNIE!



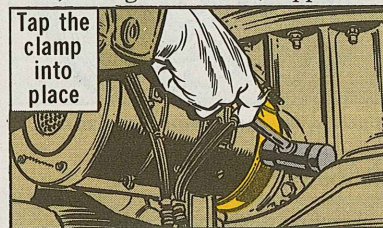
### No "Flexing" Allowed



The generator on the AH-1 transmission is taking a beating, Cobra mechs.

That heavyweight will flex if the retaining V-band clamp is not tight. Any movement leads to an early replacement due to a shot bearing or drive shaft.

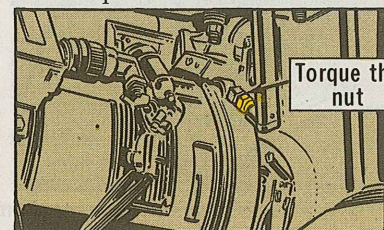
So, during installation, support the



Tap the clamp into place

generator and carefully position it into the drive quill splines. Then, add the clamp.

Using a plastic mallet, tap the clamp around the component and then make with the torque wrench on the clamp nut.

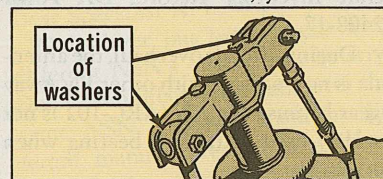


Torque the nut

When the clamp is seated, the nut will retain the required 70 lb-in torque.

### Make This Washer!

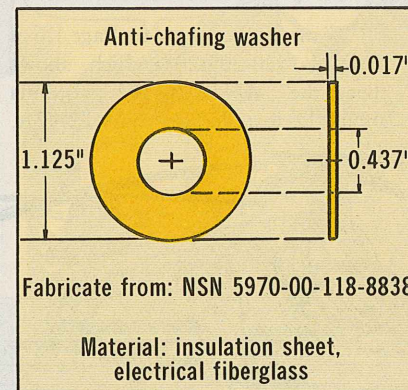
When installing the Huey tail rotor hub and blade, according to Para 5-97 of TM 55-1520-210-23, you have to



Location of washers

use a synthane washer between each pitch change link and the crosshead.

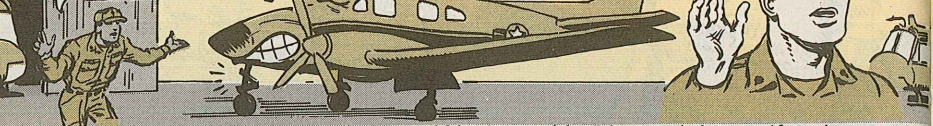
You make the washer from bulk material.



HEY, MURPH... DIDJA INSTALL TH' CORRECT KNEE ON THIS BIRD?

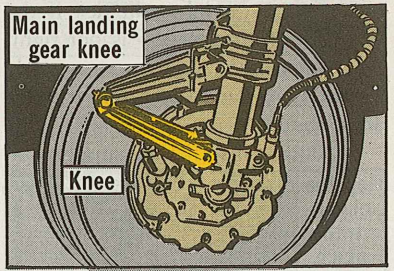
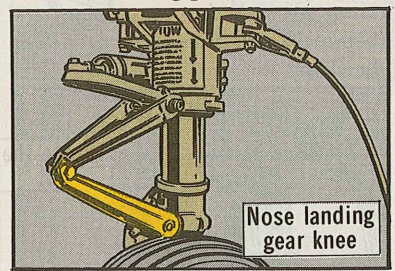
# Ooops, Wrong Knee!

WHY, SURE!



Grab the wrong knee and you could be in trouble. It's certainly true if you're working on the U-21A landing gear.

The Ute's nose gear knee, NSN 1620-00-179-5323, is a look-a-like cousin to the main landing gear knee, NSN 1620-00-179-6008. They can be Murphied.\*



The 2 knees have different strut limit stops, tho, and using the wrong one can damage your bird's landing gear.

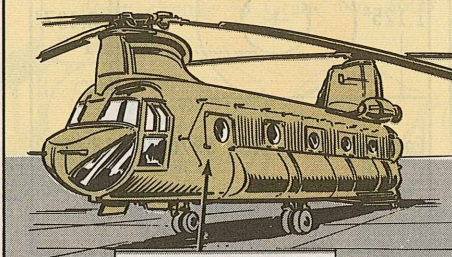
Check your parts manual to make sure you grab the right knee.

\* **Murphy's Law:** "If a part can be installed wrong, it will be."

## The Antenna Option

"X" marks the spot—on Page 1-6 of TM 11-1520-209-20—which shows that the AN/ARC-102 antenna should be installed on your CH-47A.

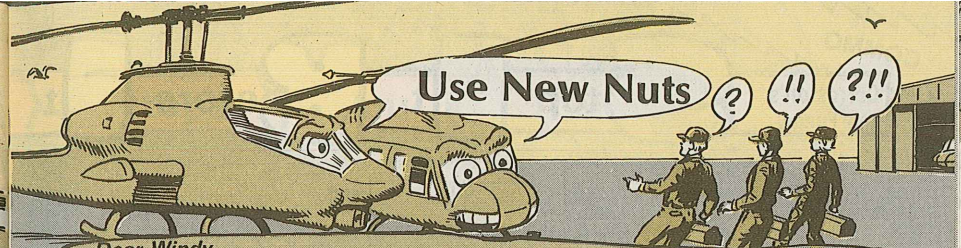
That baby may not be on your bird, tho. No sweat! It's listed on the Aircraft Inventory Record, DA Form 2408-17.



You may not need it!

During aircraft overhaul, the antenna is now stowed with other Fly Away gear because the AN/ARC-102 is not widely used. It takes a beating when it's in use.

So the "X" code in the pub is being changed to "Y". This means the antenna may not be installed, but the bird can accommodate it—if needed.



Dear Windy,

We're a little mixed up on the reuse of self-locking nuts, NSN 5310-00-688-2069, used on both the Huey and Cobra tail rotor drive shaft clamps.

Can we use them again, provided they pass the drag or breakaway torque check?

SP4 R.G.H.

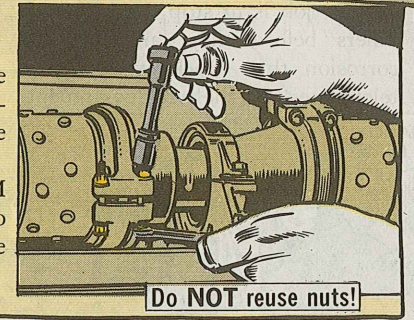
Dear Specialist R. G. H.,

Not any longer!

It was OK to reuse the nuts on the Huey, but Para 6-165 in TM 55-1520-210-23-1 is being updated to agree with the Cobra pub.

The caution in Para 6-81A of TM 55-1520-236-23, on the Cobra, says to use new nuts each time the clamps are installed.

Windy



## Kiowa Battery Switch

Dear Windy,

We just got the new BB-476/A nickel-cadmium batteries for our OH-58's. Can the cells from the old BB-676/A batteries be used in the new batteries?

SP5 K. L. W.

Dear Specialist K. L. W.,

No! Never put battery cells with different NSN's in the same battery. Don't even mix battery cells with the same NSN if they're made by different manufacturers. The word on this is in Para 5-10e of TM 11-6140-203-14-2.

The BB-476/A battery takes BB-475/A cells, NSN 6140-01-073-3206.

MAKE SURE THE CELLS ARE MANUFACTURED BY THE SAME COMPANY!





Corrosion's  
the Enemy...

# Stop It Before It Stops You

In the summertime, when all the leaves and trees are green... heat, humidity and moisture will join forces to try to stop you from communicating.

Your job is to stop these commo killers before they can start the corrosion that attacks your radios, telephones and sheltered equipment.

MACON'S  
HERE!

YOUR "WEAPONS"  
FOR KEEPING YOUR  
GEAR DRY AND COOL  
ARE GOOD PM AND  
COMMON SENSE!

FR'INSTANCE...

NOW WE  
CAN GET ON  
WITH GOOD  
COMMUNICATIONS!

## Shelters

Keep shelter doors closed, louver covers open, and ventilating fans going. That stream of fresh air across your gear will hold off corrosion.

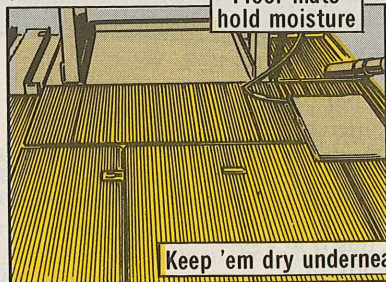
If your support has had trouble finding the amp cooling blower motor for your AN/GRC-122 and -142's A and B models, tell 'em to ask for NSN 6105-00-512-9225.

Since your shelters are almost airtight with the doors closed, be sure you keep them clean and dry inside.

If they have rubber floor mats, watch out for moisture buildup under-

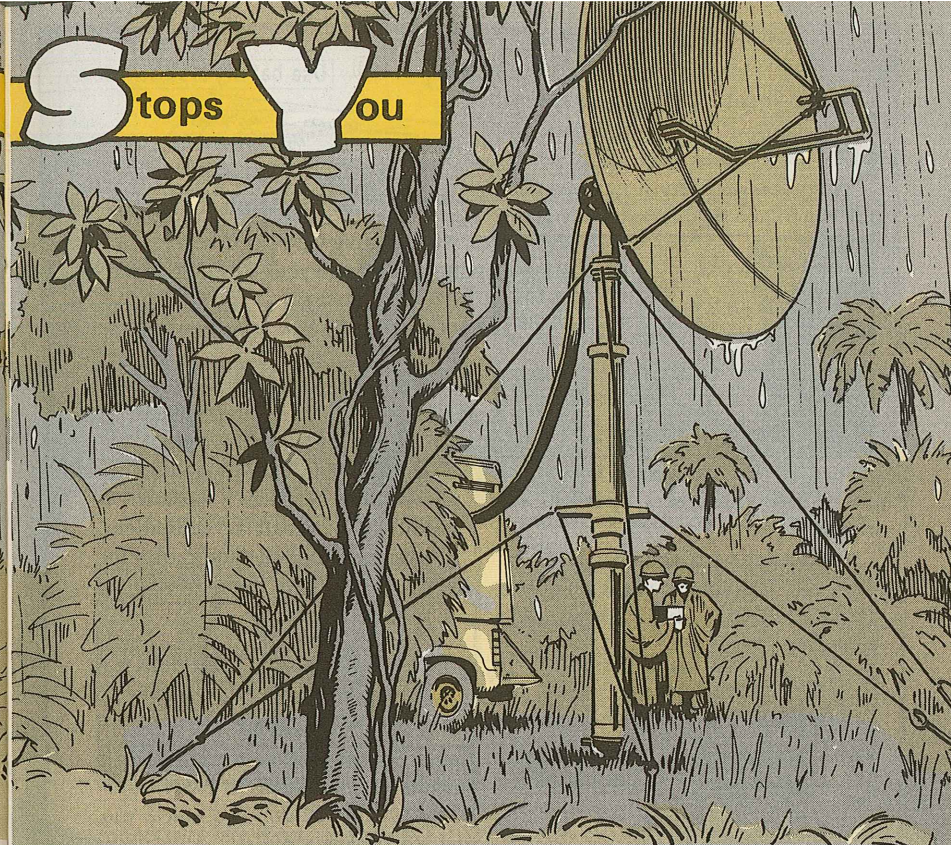
neath. That's a starting place for mold, mildew and rot.

Floor mats  
hold moisture



Keep 'em dry underneath

Keep your shelter's outside in good shape, too. Skin punctures or bad seals



can open the door for corrosion. See TB 43-0124 to find out who fixes what. The pub also has the tools and material you need to do the work.

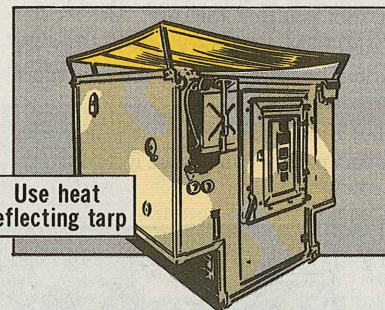
You can also keep your sheltered

sets cool by using a heat reflecting tarp, NSN 5820-00-937-5530. Mount it 1 or 2 feet above the shelter.

Air filters need constant attention in hot weather. Scope out the filter in your AN/GRC-103 radio set at least once a day.

Keep connectors like those on your Pair-26 cables covered when not in use. Likewise, watch out for poor grounds. At fixed installations, rot can do in your ground rod. Pull it up once a year or so to be sure it's still doing the job.

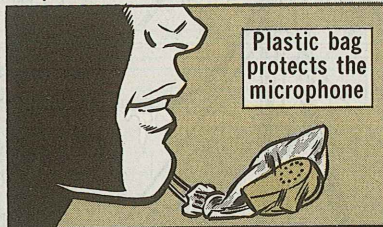
Use heat  
reflecting tarp



## Think Small, Too Use battery's plastic cover...

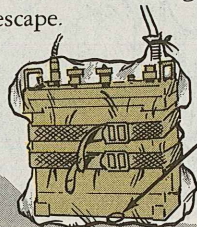
Those small pieces of gear that go everywhere you do, like backpack and squad radios, need protection.

After you do everything your pubs tell you to, add field expedients to keep



things dry. Plastic makes a good cover for handsets, headsets, speakers and radios.

Be careful with your backpack radios, tho. Battery gas needs an outlet. Leave a hole in the bag's bottom for it to escape.



If you carry CEOI's or keylists, use the plastic from your BA-4386 batteries to protect 'em.

'Course, you'll want to wipe the outside of your gear whenever you see it's wet. But, once the water gets inside, your best bet is to get the set to support so they can bake it dry.

Gear, like your TA-312 telephones, covered with canvas? Remove it periodically to eyeball the equipment.

Check commo cords and cables for dry rot, too. Bend them over your



finger. If you see dry rot, use a little silicone grease. A dab of NSN 6850-00-880-7616 will do. Too much, tho, and you'll have a mess.

## Battery Reminders

Remove dry cells when you won't be using your gear for a while. Batteries corrode quickly in hot and wet areas. That corrosion KO's the gear it's in, too. Batteries have a short shelf life in hot areas. In garrison, keep dry cells refrigerated if possible. Find the coolest spot you can, for sure.

In the field, test those dudes with your AN/PSM-13 battery tester before you have to depend on 'em to do the job for you. The tester will tell you how much life the power pack has left.

The PSM-13 won't test all dry cells, but it does test the most widely-used ones. That includes the BA-4386 in your backpack set and those in your squad radios.

NO SUCH THING AS A "DRY" CELL IN THIS CLIMATE!

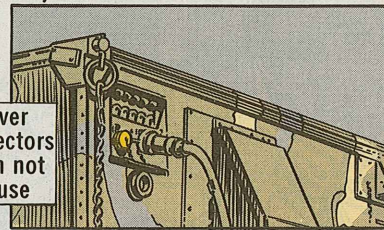
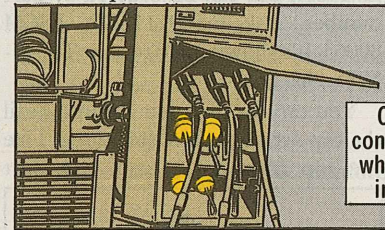


48

## Covering Up



You protect connectors on your commo gear by using the covers. Even when covered up, tho, connectors can corrode. Eyeball 'em often.



Use a plain rubber eraser to rub off corrosion on connectors. Sealed connectors like those on your MT-1029 mounts can corrode. Give the outside edge a light coat of silicone grease for good measure.

'Course, draining your MX-6707 matching unit is a must in rainy, humid weather. Drain it as often as necessary.



You might not be able to stop moisture damage completely. But, using good common sense and liberal doses of these PM tips, you should slow a flood of damage to a trickle.

*(ED Note—We want to thank CPT Edwin M. Ortiz, CO of the 396th Signal Company, for much of the good info in this article. Stationed in the Canal Zone, his unit has learned its moisture-proofing lessons well.)*

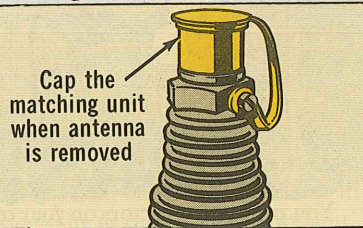
For MX-6707 ...

# Drain the Rain Pain

The rain in Spain falls mainly on the plain. Everywhere else, tho, it seems to fall mainly on the MX-6707 matching unit.

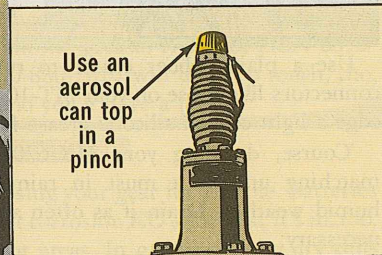
AND, IT SEEMS TO HAVE A WAY OF SHORTING OUT YOUR COMMO!

Protect yourself. When you remove the AS-1729 antenna, always cap the matching unit. The cap for the job has



no NSN, but can be ordered by part number. Ask for 911110-2, FSCM 80063. It's shown in C6 to your TM 11-5985-262-15.

You can protect your commo until the cap arrives with a substitute. Like the top from an aerosol can. Just

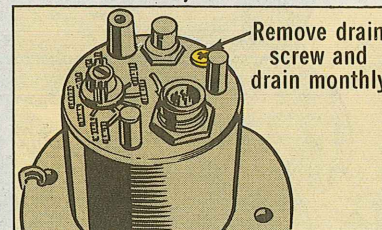


punch a hole in it and wire it to the -6707 to keep it handy.

Other homemade lids can be made from plastic dust covers, like NSN's 5340-00-342-5577 or 5340-00-811-5959.

A piece of tape will do in a pinch. Be sure to rub off any tape residue from the contact when you pull the tape off.

That makes sure you get a good connection with your antenna.

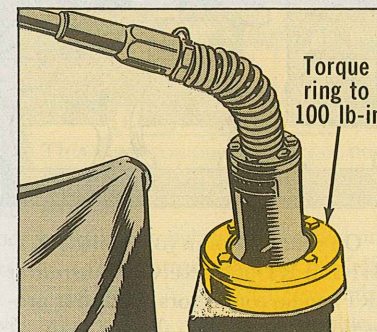


Another way to keep moisture from building up inside the matching unit is to drain it. Do it once a month, at least. More often is necessary in wet or humid weather. If a drop or two comes out each time, you probably have a bad unit. Turn it in.

Cracks in the plastic base can let in water, too. Use the new steel reinforc-

ing ring, NSN 5985-01-012-5425, to head off these cracks.

Tighten the ring down to only 100 lb-in. A torque wrench for the job is in the org shop's TK-101 tool kit.



Finally, when you wash your vehicle, never point high pressure water hoses toward commo gear. That's a sure way to get moisture damage.

## Equipment Repair...

### Holdouts Mean Holdups

When you're sending an end item for repair, be sure you pack it all.

Not just because that's the word in

panel, part of a **AN/TCC-7** telephone terminal.

Some troops hold back liners, trays and oscillators. These are critical items and even depots can't get 'em. That means they can't repair your gear.

The **AN/USM-118** test set also often arrives incomplete. The depot needs both the tester and card kit for overhaul.

**AR 750-1 tells you:**  
If an end item cannot be repaired and is to be discarded, all such end items will be complete with serviceable or unserviceable non-expendable basic issue items, parts, and components, or be accompanied by appropriate evidence that satisfactory action has been initiated to secure relief from responsibility or

Para 3-22 of AR 750-1. It's also the only way some gear can be fixed.

Depot types complain that many items arrive incomplete. For instance, the TA-228 carrier frequency supply

So, when it's time to send in an end item, be sure all the basic issue items (BII) go with it.

SECTION III BASIC ISSUE ITEMS		(4) LOCATION	(5) USA C C
(3) DESCRIPTION	Check BII when turning in gear		
PART NUMBER			
NOTE			

PRC Pointers...

## Easy On and Off

I SEE IT...

I DON'T BELIEVE IT...

...A CLEAR CASE OF RADIO ABUSE!

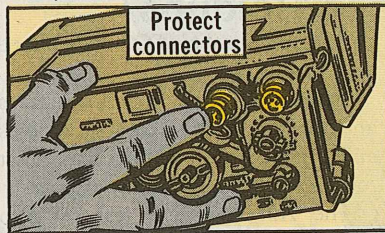
?

HALP!

On your back or in your vehicle, RT-841 and RT-505 receiver-transmitter (RT) audio connectors need your protection.

Too many RT's end up at support 'cause too much muscle or careless operation broke a front panel.

Easy does it when hooking up an audio accessory. Muscling it on or heavy-handed wiggling and jiggling



can damage a connector. A loose RT connector lets you twist and turn inside wiring. A cracked connector lets in moisture.

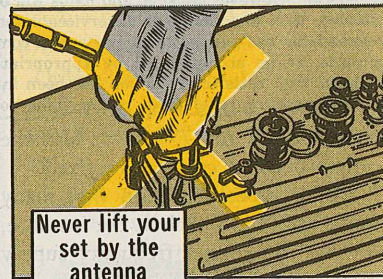
Take care when you've already got a handset or headset hooked up. Dropping 'em when you're through talking can do in your RT's connectors, too.



Audio accessories attached to your backpack radio have panel guards for protection.

But connectors stick up over the guards. If the set is slung carelessly to ground, a knock on the connector can break the radio's face.

Finally, when you're ready to go again, never hoist the radio by an antenna or cable.



## PM's in the Cards

All done? Replace the set's card cell cover or retaining bar if it has one. Without them, cards can jiggle loose.

I FOLD!

ME TOO, YA LUCKY STIFF!

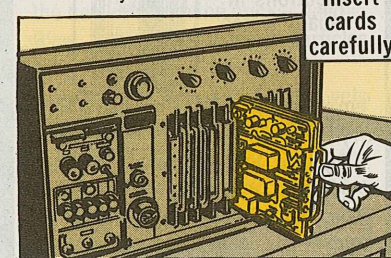
NO LUCK! JUST GOOD PM SAVVY!



Handling printed circuit cards, like those in your TD-660 multiplexer and CV-1548 telephone signal converter, takes a pat hand.

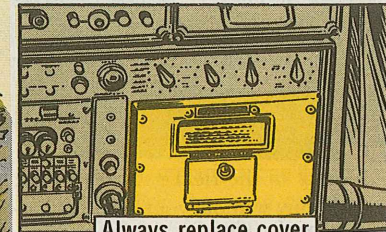
Wait one, tho. Before you lay a glove on 'em, turn your gear off. Plugging into an operating set can blow your card's circuits right now.

Now insert those cards gently. Pins are sitting ducks when slammed home. Push until you feel the pins meet the receptacles. Then seat the card firmly.



Never slam or hit them with the heel of your hand to "be sure".

If you should bend a pin, try straightening it with a needlenose pliers before getting a new card.



This gives you poor contact or none at all. It also lets in dirt and dust to short you out.

A light touch is also needed on the test ring button of your CV-1548.

Holding it for 10-15 seconds can start a chain reaction of trouble.



Holding it too long can burn out the 18A3's R5 resistor. That can lead to a burned-out transistor in your 18A2 panel, which can lead to a blown fuse in your 18A1 power supply.

Resist the temptation to overfuse, say with a penny, paper clip, or tin foil. That could lead to damage of cards, -1548 or worse.

The simple way to head off this action and reaction chain is to hold the test button for 2 seconds, release for 5, hold for 2, and so on until you get an answer.

TROOP SUPPORT

Gasoline Lantern PM...

# Keep 'Em

# Shining

?

LISTEN UP, YOU GUYS... YER LANTERN PM STINKS...

CONNIE?

... SO CONNIE STOPPED BY T' SHOW YOU TH' LIGHT!

LET'S GO!

GANGWAY!

Nights in the field get pretty dark and gloomy without your gasoline lantern to keep you company.

**NO GAS LIKE MOGAS.** No need to drag special lantern fuel with you. It works fine on plain ol' MOGAS—either leaded or unleaded.

HERE'RE A FEW PM TIPS TO HELP MAKE SURE YOUR LANTERN WON'T LEAVE YOU IN THE DARK...

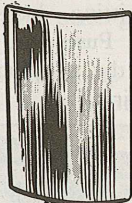
SEZ HERE MOGAS IS LESS APT T' EXPLODE.

NOW HE TELLS ME?

**MOGAS** may burn a little "dirtier" than special lantern fuels. But then, MOGAS is less apt to explode!

**GLOBES AND VENT HOODS.** Dirty quadrant globes rob you of light. Remove quadrant sections and clean

Clean globe sections in soapy water



'em in soapy water. Then use a soft, dry cloth on 'em.

Replace broken globe sections, NSN 6260-00-174-3874, and bent globe channels, NSN 6260-00-174-3873.

A clogged or dirty vent hood chokes the light out of your lantern. Take the hood off and use light air pressure to blow carbon particles out of the screen.

OOF!

HEY--WATCHIT!

OUCH!

OUTTA THE WAY!

WONDER IF SHE BROUGHT ANY BACK COPIES OF PS?

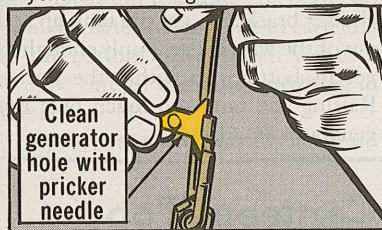
?

**BURNER AND GENERATOR CARE.** Your lantern's generator should last a long time if you keep it clean. Look it over for signs of carbon build-up after about 50 hours of operation, or when the flame turns yellow and the light dims.

gummed up, replace it. You'll find a replacement in the repair parts kit, NSN 6260-00-553-1090. Or order a new generator and burner assembly, NSN 6260-00-284-0554.

If the locknut that holds the generator in place is worn, replace it, too. It'll save you troubles later.

Burner assemblies build up carbon deposits. Take the whole burner-generator assembly out of the lantern. Remove the generator.

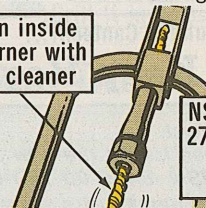


Clean generator hole with pricker needle

No sweat if the tip is clogged. Use the special wrench, NSN 5120-00-288-9687, to remove the tip. Clean the hole in it with the pricker needle. Blow away loose carbon particles with low-pressure air.

When the whole generator gets

Clean inside of burner with pipe cleaner

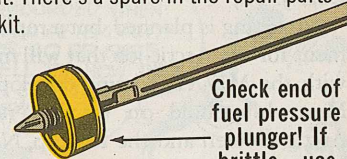


NSN 6260-00-270-4060 gets a box of 6 mantles

Then use a soft wire—like a pipe cleaner, NSN 9920-00-292-9946—to clean the inside of the burner.

**PUMP LEATHER PM.** Check the pump leather—the leather washer at the end of the fuel pressure pump plunger. Look for cracks and feel for brittleness. Soften it with a few drops of light oil—such as Neat's foot—NSN 8030-00-597-6105. Knead the leather till the oil soaks in.

it. There's a spare in the repair parts kit.



Check end of fuel pressure plunger! If brittle—use light oil!

If the leather stays brittle, replace

The kit also gets you replacements for the generator and pricker.

## Burner Unit Check



Your M2 burner unit's fuel tank could be in a heap of trouble if it sticks out below the unit's frame. That's all that protects the tank from dents.

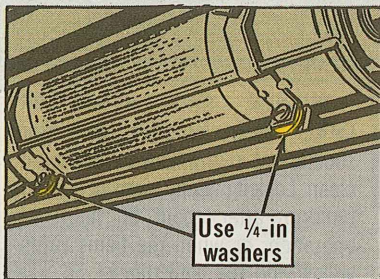
Here's a quick and easy way to make sure the tank is where it should be. Slide a pencil—or any straightedge—



under the corner of the frame. If it clears the tank, you're OK. If not, read on.

### Shim It

Use 1/4-in diameter washers, NSN 5310-00-639-7554, on the 4 fuel tank mounting brackets and under the



shutter bracket to get the tank up and out of the way. Raise it only enough to get its bottom up within the frame. Raising the tank too much puts the generator in a bind.

Got an Insulated Canteen?...

## Keep Regular Canteen, Too

Dear Half-Mast,

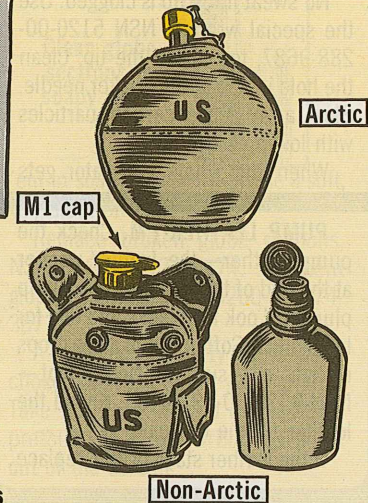
We've been issued the new Arctic canteen, NSN 8465-00-753-6489. The canteen comes with a stopper but no fitting for the M17A1 protective mask. Is a fitting on the way?

J. M.

Dear J. M.,

No fitting is planned, but a replacement for the Arctic job that will mate with the M17A1 is being developed. Meanwhile, hold on to your non-Arctic canteen and the M1 cap, NSN 4240-00-930-2077, for use with your M17A1's.

*Half-Mast*



## Drain Control Box Miseries

GLURGE WATER'S FOULIN' ME UP!

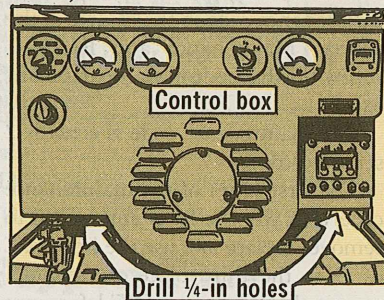
DON'T FRET! HELP IS HERE!

Water can make a mess of the electrical insides of a generator's control box. The box needs drain holes in the bottom so the water can drain before it causes trouble.

No drain holes in your set's control box? Drill 'em yourself. You need two 1/4-in diameter holes—one in each end of the bottom plate. When you drill 'em, be careful not to hit anything in the box.

If your control box already has drain

holes, keep 'em clear so they can do their job.



## Camouflage Action Line

Need quick answers about equipment camouflage problems? The US Army Mobility Equipment Research and Development Command—MERADCOM—Fort Belvoir, VA, has a 24-hour Camouflage Action Line just for you. They answer questions like, "Do we paint canvas?" (No); "Do we paint 5-gal fuel cans?" (Yes, but they're not pattern-painted); "How do we change patterns for seasonal operations?" (See TC 5-200). It's AUTOVON 354-2654 or commercial (703) 664-2654.

YOUR QUESTIONS ARE RECORDED WHEN YOU CALL AFTER DUTY HOURS, SO BE SURE TO TELL 'EM HOW THEY CAN GET THE ANSWERS TO YOU!



# Coming Up Short

MOST CODES ARE INFORMATION SHORTCUTS!

BUT LIKE ANY SHORTCUT...

... YOU CAN GET LOST WITH 'EM IF YOU'RE NOT CAREFUL!

That's really true with the 2-letter maintenance code in the middle of the Source, Maintenance and Recoverability (SMR) Code in your parts manuals.

The maintenance code is actually 2 separate codes.

The first letter of the maintenance code tells you the level authorized to remove, replace and use the item. A C or O in the third place of the SMR means the items are OK'd for your use.



ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	FSCM	DESCRIPTION	USABLE ON CODE	U/M	QTY INC IN UNIT
30	7 PAOFF	2910-00	19207	0306 - TANKS, LINES, FITTINGS, AND HEADERS (cont'd)		EA	1
	8 PAOZZ		96906	TANK, FUEL, ENGINE (M47, M48, M59, M275, M342)		EA	1
			96906	CAP, FUEL TANK (M47, M48, M59, M275, M342)		EA	1
			96906	GASKET (M47, M48, M59, M275, M342)		EA	1

The second letter of the code—fourth position in the SMR—tells you if the item's repairable and who does complete repair on it. It does not mean lower maintenance levels do nothing with it. It tells you which level does everything possible to the item.

When just half of the 2-letter maintenance code shows up—like on the Army Master Data File (AMDF) in the MR column—beware! Make sure you know which half you have.

The MR code on the AMDF is the second part of the code. It tells you who does complete repair on the item. It does not tell you who can order, use, replace or do limited work on that item.

EFFECTIVE DATE 02001										
LISTING	CR	SC	CC	EA	ER	UM	MEASMT	P	NOMENCLATURE	LIN
C	C	C	C	C	C	C	QTY	C	PHRASE STATEMENT/RELATED	NSN/MCN
		96							GASKET, RUBBER	
		96							SWITCH, JOGGING ASSE	
		96							ANTENNA, UPPER	
		96							TRANSFORMER	
		96							ADAPTER ASSEMBLY	
		96							ADAPTER	
		96							ADAPTER	
		96							ANTENNA DE	
		96							DIPOLE	
		96							JACK, MODIF	
		96							LEVER, MIXE	
		96							CONNECTOR	
		96							FAIR, AS	
		96							NOZZLE, INPUT	
		96							ACT, L	

On the AMDF, this is the highest repair level—not the only one!!

Your TM and the first half of the maintenance code tell you who can have, remove, replace and use it. Check your TM—not the MR code on the AMDF—to see what repair work you pull on that part, component or item.

## A Site for Support Time

MAINTENANCE REQUEST		PAGE NO.	NO. OF PAGES	REQUIREMENT CONTROL SYMBOL
For use of this form, see TM 38-750, the proponent agency is DCSLOG.				CSGLD-10410(1)
SECTION 1 - EQUIPMENT DATA				
CONTROL NUMBER	WORK ORDER NUMBER	WESDC	ORG PD	PD AUTHENTICATION
166. REMARKS Support notified of on-site repair needed on NMC equipment				2078 of 1310 hours.
<b>DA Form 2407</b>		PREPARATION INSTRUCTIONS (Prior to using this form, read TM 38-750 for details)		

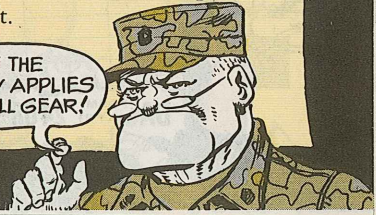
Count your NMC time from when support is contacted

Dear MSG Half-Mast,  
There's some info missing from TM 38-750 on handling the DA Form 2407 for on-site repairs on Not Mission Capable (NMC) equipment. Paras 3-7c (29) (b) 2 and 3-8c (2) (y) 1 say nothing about when to count support NMC time. Do we start counting support NMC time when the support unit is told about the need for on-site repair or when the on-site repair team arrives?

SP4 E.C.C.

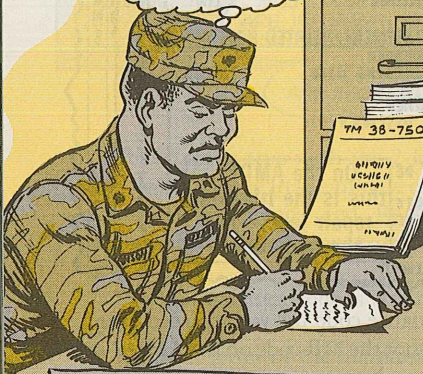
Dear Specialist E.C.C.,  
The support unit controls when on-site maintenance is scheduled. So NMC time starts the time and day support is told about the problem. Para 10-15a (2) (m) 1 explains that for aircraft.

BUT THE POLICY APPLIES TO ALL GEAR!



# Checks and Services Catchall

DRAT!!  
CAN'T FIGURE IT OUT--  
GUESS I'LL HAFTA WRITE  
HALF-MAST!



Dear Half-Mast,  
TM 38-750, Para 5-4d (13), says the 6 blank subcolumns in Column i, DA Form 2408-1 can be used for making services or actions peculiar to the type of equipment.  
It also says that we do not use them to record wheel bearings, filters, oil samples, etc. since they're accomplished during the scheduled lubrication/services.  
Can you give us some examples of what can be recorded in those sub-columns?  
  
J.Q.A.

Dear J.Q.A.,

Column i is a handy catch-all for several types of checks and services. You can use it to show:

- All services on DD Form 314—including those that are "covered up" by the major service when they're pulled together.
- One-time only operations like boosting rust protection of antifreeze.
- Tire rotation.

ANY SERVICE, SPECIFICATION OR MAINTENANCE YOU PULL -- AND WANT A SEPARATE RECORD OF -- WILL FIND A HOME IN COLUMN i!

DA Form 2408-1 (MAY 81)

60 EDITION OF MAY 87 IS OBSOLETE

EQUIPMENT DAILY LOG

1. NOMENCLATURE: TRK M151A2

2. REGISTRATION OR SERIAL NUMBER: 2E 1979

3. IN DUE DATE: 10 Jul 81

4. LAST OIL CHANGE: 18 JUL 81 1475/1835

DATE OF ENTRY	READING HOURS	READING MILES	TOTAL FUEL ADDED (GAL)	ENGINE HOURS	MISSION	EQUIPMENT FAULTS	STATUS	SIGNATURE OF OPERATOR OR CREW CHIEF	OTHER ACTIONS	SIGNATURE OF INDIVIDUAL MAKING ENTRIES
19 Oct	500	1947	120	4	1			Brought Forward	previous DA Form	Buck Regan
21 Oct	502	1950	75					see log		Buck Regan
23 Oct	503	1954						see log		Buck Regan

DA Message, DALO-PLO 161407Z Apr 82, said this form is no longer required. Use this info only if you keep the DA 2408-1 for local use.

# The Unbreakable Rule

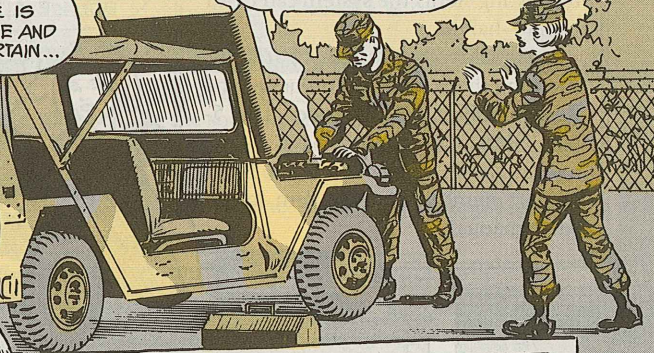


SOME RULES ARE BENDABLE ... SOME EVEN BREAKABLE!

BUT ONE RULE IS SURE AND CERTAIN...

HMMM... THIS LEAK'S NOT TOO BAD... LET'S GIVE IT A CIRCLED X AND NOT MAKE IT NMC!

NO WAY! THE PMCS SAYS A LEAK IS NMC! PERIOD!



ITEM NO.	INTERVAL					ITEMS TO BE INSPECTED	PROCEDURES: CHECK FOR AND HAVE REPAIRED OR ADJUSTED AS NECESSARY	FOR READINESS REPORTING, EQUIPMENT IS NOT READY/AVAILABLE IF:
	B	D	A	W	M			
6	●					RADIATOR	Check radiator coolant level, fill just below bottom of filler neck.	Radiator leaking

Faults in this column are NMC no matter what status symbol you use!

Gear with a fault in the Not Ready/Available column of the operator's Preventive Maintenance Checks and Services (PMCS) is Not Mission Capable (NMC).

Some people think they can bend that rule by giving the fault a status symbol other than X. Others figure the gear's no longer NMC if it's downgraded to a circled X for limited operations.

Sorry, but no banana. Any fault listed in the Not Ready/Available column of the operator's PMCS makes

the gear NMC. The fault can carry any status symbol you please—X, circled X, dash or diagonal—but it's still NMC.

Unless you clear the fault before the end of the day, you count that NMC time for your DD Form 314 and DA Form 2406.



NO BREAKS HERE!



# Take the BOUNCE Out!

Most PLL clerks have too much work to want bounced requests. But some people still waste time by requesting items the system can't—or won't—handle.

You can spot those parts by checking the Source, Maintenance and Recoverability (SMR) code. The 5-part SMR—older pubs have 3-part codes—shows up just before the NSN or part number of each item in the parts manual.

GEE, CONNIE... YOU'D THINK I ORDERED NOTHING BUT RUBBER BALLS TH' WAY MY REQUESTS BOUNCE ALL THE TIME!

HMMM... HAVE YOU BEEN CHECKING THE SMR CODES, SPECIALIST?

SMR?? WHAT'S THAT?



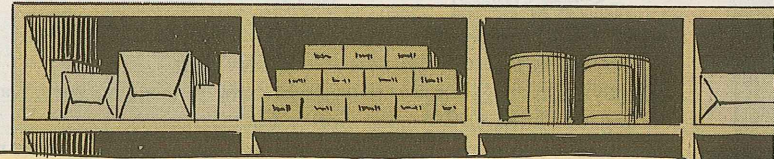
(1) ILLUS.		(2)	(3)	(4)	(5)	(6)	(7)	(8)
(a) FIG NO.	(b) ITEM NO.	SMR CODE	NATIONAL STOCK NUMBER	PART NUMBER	FSCM	DESCRIPTION USABLE ON CODE	U/M	QTY INC IN UNIT
49	1	PAOZZ	5310-00-959-1488	MS51922-21	96906	GROUP 05 - COOLING SYSTEM 0501 - RADIATOR NUT, SELF-LOCKING	AA	EA 8

PAOZZ

PA(Source Code)

OZ(Maintenance Code)

Z(Recoverability Code)



## SOURCE CODES

The first 2 places of the SMR are the source code. The source code tells you how or if the item is stocked in the supply system—and sometimes why a part does not have an NSN.

Items with source codes starting with P come from regular supply system sources with normal handling.

This item is supplied by and through regular sources.

PAOZZ | 5305-00-269-2805 | MS90726-62 | 96906 | SCREW, CAP, HEXAGON HEAD

Source codes starting with K apply to items in kits. Forget about ordering those parts separately. They're not stocked—except in the kit. They probably won't have NSN's, either. If you need one, you'll have to order the whole kit.

This item is part of a kit. It is not stocked separately, so it has no NSN.

KFOZZ | 8720762 | 19207 | ROD, STAY (part of kit, P/N 868688B)

Items with M source codes must be fabricated or manufactured. The second letter tells you what level makes it. You make MO-coded items. M-coded items won't be stocked or have NSN's. Look at the description of the item in the parts manual for a list of parts or materials you need to make it.

You must make this item. Look here for info on what to use.

MOOZZ | 10889991 | 19207 | HOSE, NONMETALLIC: water tube to water pump (mfd from hose, NSN 4720 00-882-1738)

Source codes starting with A go on items that must be assembled. You put together the ones coded AO.

You put this item together.

AO000 | 7370381 | 19207 | RACK AND SEAT ASSEMBLY

Parts with source codes starting with X are not stocked in the supply system. The second letter gives you special info on how to get those items.

Ask support to try the Can Point or Salvage for this part.

XBozz | 8720763 | 19207 | ROD

XA tells you to order the next higher assembly.

XB says to ask your support to try the cannibalization point or salvage before ordering. No luck? Order using Advice Code 2A.

XD means the item isn't stocked. But once your request reaches them, the item's managers will try to get you one.

Items coded XB or XD take a long time to fill—if at all! And since they weren't figured for stockage, they probably won't have NSN's. If you need those items, you'll have to order by NSN or Federal Supply Code for Manufacturers (FSCM) and part number on a DD Form 1348-6.

### MAINTENANCE CODES

The maintenance code covers the third and fourth places of the SMR.

The first letter of the maintenance code tells you who can remove, replace and use the item. A code of C or O in the third place of the SMR means you have the action.

The second letter of the maintenance code—fourth place of the SMR—tells you if the item's repairable and who does complete repair on it. That means the level authorized to do everything possible to that item. It does not mean lower maintenance levels do nothing to it. Your TM—the Maintenance Allocation Chart (MAC)—and the first part of the maintenance code tell you what you do with it.

The second letter—telling you who does total repair—shows up in the MR column of the Army Master Data File (AMDF).

### RECOVERABILITY CODES

The last code in the SMR is the recoverability code. It tells you if the item is repairable and who gets rid of it when it cannot be fixed. Z means the item's not repairable and the level that replaces it also disposes of it. O tells you it can be repaired and—when it's beyond repair—you dispose of it.

Recoverability codes of F, H, D, L and A apply to repairable items disposed of at other levels or by special instructions.

Check the front of your parts manual or AR 700-82, Use and Application of Uniform Source, Maintenance and Recoverability Codes, for a complete list of codes and their meanings.

Learn to break the SMR Code.

IT'LL SAVE YOU WORK AND TAKE THE BOUNCE OUT OF YOUR REQUESTS!



### A 'Clear' Solution

If your dustoff outfit has a high performance rescue hoist in your birds, you need a piece of plastic to protect the cable from chafing against the striker plate. Use insulation sleeving, NSN 5970-00-740-2972, P/N M23053/2-207. Cut off 4 or 5 inches of the sleeving, remove the hook and work it over the ball on the cable. Heat shrink it in place with a standard heat gun. Replace the sleeving, if necessary, as determined by a daily visual inspection.

### Track Driver's Pub

Before you move out on picking, training and licensing new track combat vehicle drivers, make sure you have the latest book. FM 21-17, Driver Selection, Training and Supervision-Track Combat Vehicles (Dec 81), replaced TM 21-301.

### TOW ITV Bolt Torque

Page 13 of PS 354 has the wrong torque value for armor plate bolts on your M901 TOW ITV. Torque 'em to 18-19 lb-ft. Over-torquing will shear the bolts or strip the threads.

### Jumper Cables

You can now get a complete battery booster cable for your No. 1 and No. 2 Common shop sets with NSN 2920-01-027-0125. You no longer have to make 'em yourself.

\* U.S. GOVERNMENT PRINTING OFFICE: 1982—559-009/8

### Safety Equipment Pub

The right clothing and equipment are a must to protect you from on-the-job hazards. DA Pam 385-3, Protective Clothing and Equipment, lists individual items, describes 'em and gives their NSN's.

### Tool Silhouette Mat

NSN 7690-01-110-7671 gets a tool silhouette layout mat for your General Mechanic's Tool Kit, NSN 5180-00-177-7033. SC 5180-90-CL-N26 will include this item in its next revision. Meanwhile, use Appendix A, CTA 50-970 as your authority to get the mat so you can inventory your tools better.

### SPH-4 Fix

Got a problem locking your SPH-4 helmet visor? Don't chuck the whole visor locking assembly. Get a new left-hand threaded screw for the assembly with PN 74A2860-1, FSCM 97427. You can get the screw for about 1/3 of the cost of the locking assembly.

### 2½-Ton Brake Hazard!

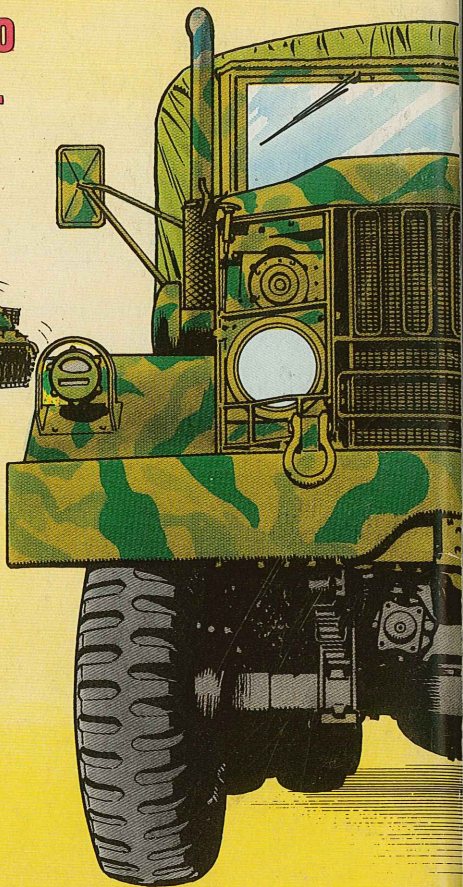
Warning! Your 2 ½-ton truck's brakes may fail because of bad seals and cups in the brake air-hydraulic cylinder. A daily check for brake fluid loss is required. DA Msg DAPE-HRS 291600Z Apr 82 spells out detailed special instructions.

Would You Stake Your Life <sup>right now</sup> on the Condition of Your Equipment?

# Spare Your Turbo Lots of Grief-- Let It Idle for Relief!



- \* Operate at low idle for about a minute after start-up!
- \* Idle for 3-5 minutes before shutdown!



**On ANY Equipment that's  
TURBOCHARGED, BEGIN  
and END with IDLE!**