

Issue 276

PS

November  
1975

# THE PREVENTIVE MAINTENANCE MONTHLY





YOUR CAREER . . .

# GETTING IT ON *with* MAINTENANCE

You're an E-2 with butterfly wings . . . but ya got solid dreams of wearing a coupla rockers or even more. Well, Army maintenance is the place for you.

Your interest may be in missiles or trucks, radar or commo equipment, supply or aircraft, but

HERE  
ARE  
SOME  
EXAMPLES...

## MAINTENANCE CAREER FIELDS

|                                              |        |
|----------------------------------------------|--------|
| Mechanical Maintenance                       | CMF 63 |
| Air Defense Missile Repair                   | CMF 23 |
| Aviation Maintenance                         | CMF 67 |
| Field and Area Communications Maintenance    | CMF 31 |
| Supply                                       | CMF 76 |
| Electrical/Electronic Instrument Maintenance | CMF 35 |
| Ballistic Missile Repair                     | CMF 21 |
| Non-Integrated Radar Maintenance             | CMF 26 |
| Combat Missile Maintenance                   | CMF 27 |
| Fixed Plant Communications Maintenance       | CMF 32 |
| Wire, Antenna and Central Office Maintenance | CMF 36 |
| Intercept Equipment Maintenance              | CMF 33 |

there's a job just for you. Over 170 military occupational specialties (MOS) are grouped into the maintenance career fields.

There are many career management fields (CMF), and each one has several maintenance MOS for you to choose from. Each offers you training and promotion opportunity.

Getting started on getting ahead is as easy as opening your mouth and spreading the word—to the right people, which includes your platoon sergeant and platoon leader. They can direct you to your unit's career counselor.

Whether you're in a maintenance job already or would like to be assigned to one, your career counselor can help you plan the best way to get ahead.

The basic reg that covers career planning is AR 611-201. AR 600-200 outlines the way to make it to the top.

Training required for promotion can include Army schools, civilian classes, correspondence work or on-the-job development. Once you know the requirements, it's up to you to get smoking. AR 140-158 with Ch 1 has detailed info on career field promotions.

If you're interested in "sampling" maintenance, look over FM 29-2, Organizational Maintenance, or Army pamphlets in the 350-series. Or, see your unit mechanic or armorer for a copy of the maintenance manual on a truck, tank or some other equipment that interests you.

Try it; you'll like it.

## PS THE PREVENTIVE MAINTENANCE MONTHLY

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ISSUE No. 276 NOVEMBER 1975

### GROUND MOBILITY 2-15

|              |       |                     |       |
|--------------|-------|---------------------|-------|
| Battery Tips | 2-5   | 5-Ton Truck         | 12    |
| Timing Light | 6     | Door Drainage Holes | 12    |
| M416 Trailer | 7     | 10-Ton Truck        | 13    |
| Brake Lines  | 7     | Marking Tires       | 13    |
| Air Cleaner  |       | Track Shoe Wear     | 14    |
| Element      | 8-9   | M113A1 Final Drive  | 15    |
| Gama Goat    | 10,11 | M115 Pan Telescope  | 15    |
| NSN Update   | 11    | Saving Fuel         | 29-36 |

### FIREPOWER 16-27, 37-41

|                    |       |                |       |
|--------------------|-------|----------------|-------|
| Fire Control       |       | LANCE Launcher | 37    |
| Purging            | 16-23 | Dragon Missile | 39-41 |
| BYOI M18 Binocular | 24-27 | System         |       |

### ELECTRONICS 42-47

|                       |       |                       |    |
|-----------------------|-------|-----------------------|----|
| MX-6707 Matching Unit | 42-43 | RL-172/G Cable Covers | 47 |
| TA-43/PT, -312/PT     | 44-46 | COMSEC Gear Tips      | 47 |

### AIR MOBILITY 48-53

|                   |    |             |       |
|-------------------|----|-------------|-------|
| Excessive Leakage | 48 | Huey, Cobra | 50    |
| Missing Hardware  | 49 | Kiowa       | 51,52 |
|                   |    | Ute         | 52,53 |

### COMBAT SUPPORT

|                     |       |                    |       |
|---------------------|-------|--------------------|-------|
| New Publications    | 28    | Foot Locker Safety | 59    |
| MW 24B Scoop Loader | 54-57 | Supply Follow-up   | 60-61 |
| Gas Can Parts       | 58    | Reconciliation     |       |
| Water Bag Faucets   | 59    | Listings           | 62-63 |
|                     |       | Outfit Moving?     | 64    |

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

M S G Half-Mast  
PS Magazine  
Lexington, KY  
40507

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GROUND MOBILITY

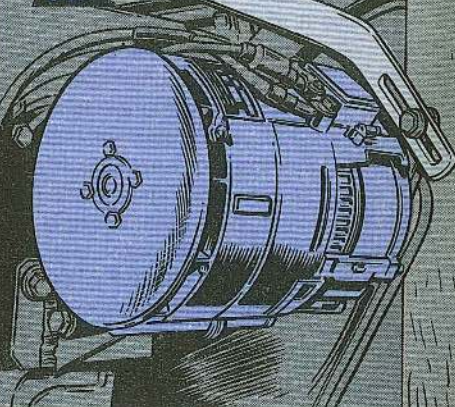
WITH ALTERNATORS  
YOU HAVE  
NO ALTERNATIVES,  
FELLAS--YOU  
GOTTA HAVE THE  
RIGHT POLARITY!

RIGHT ON,  
BATTERY GIRL!

They say that opposites attract—but that's not the case with your vehicle's battery. If you hook up the electrical system the opposite way, what happens to the alternator is not very attractive.

Electricity flows like traffic on a road. The alternator is strictly a one-

ONE WAY FLOW



way street. Electrical "traffic" going the wrong way will burn it out for sure.

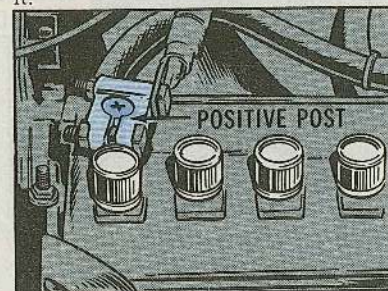
So, when you're replacing a battery or slave-starting a vehicle, you make sure you've got the right polarity. This means positive-to-positive and negative-to-negative.

2

# Watch for P's AND N's

## BACKWARDS BATTERY

One of the surest ways to ruin an alternator is to put in the battery backwards. The positive post of a battery usually has a P or + stamped on it.



Also, it's fatter than the negative terminal. This side is connected to the cable that goes to the starter.

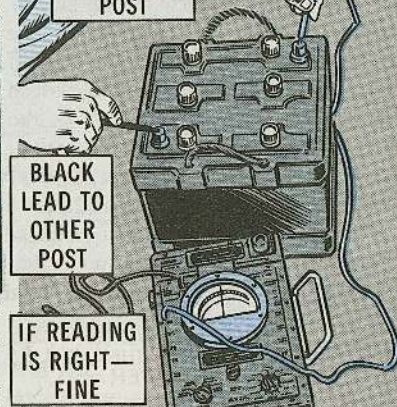
The negative connection, with an N or minus (-) mark on it, goes to the ground on the vehicle frame or engine.

If you're not sure which is the positive post of the battery, you can check it out with your multimeter.

Plug the black lead into the OHMS -DC  $\pm$  AC jack on the upper left of the TS 352 B/U meter. Plug the red lead into the 50V jack below that, and set the FUNCTION switch to DIRECT.

Touch the red lead to what you think is the positive post, and the

RED LEAD  
TO POSITIVE  
POST



black lead to the other post. If you get the right reading (the voltage of the battery) you're in business. If the needle tries to go the wrong way, reverse the leads. When the meter reads right, the red lead is on the positive post. (Since red goes to positive (+), remember red cross.)

If you get no reading either way, you've got a dead battery.

3



## SLAVING

Slave cables and receptacles make the jumping job easy. But if you're not careful, they can zap your alternator.

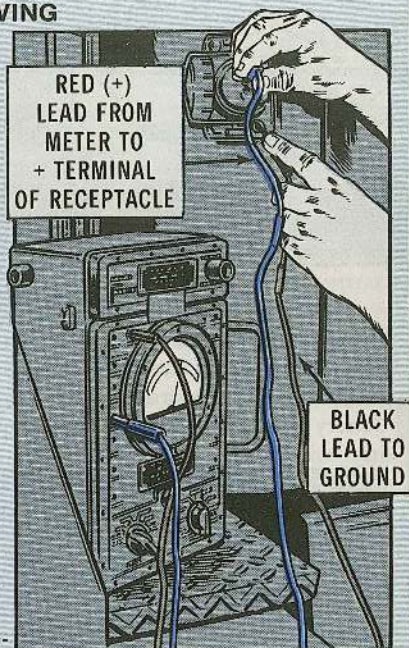
Some of those cables are cross-wired, and the receptacles might be hooked up wrong, too.

Take some time to check out the connections. TB ORD 537 (Sep 56) gives organizational mechanics the go-ahead for these tests.

First, check the receptacles on the vehicle with your multimeter set up the way it was to check the battery voltage.

Turn on the vehicle master switch. Put the positive (red) lead of the meter in the positive (+) terminal of the receptacle. Ground the black lead to the vehicle frame—not to the negative terminal of the receptacle.

If the voltmeter registers, the receptacle is installed right. If not, take the red lead out of the + terminal and put it in the - terminal. If you get a reading this time, the leads are crossed in the receptacle. Turn off the master switch and disconnect the battery. Remove the receptacle and change the power leads around.



NO READING NOW?... THEN YOU BETTER...

...CHECK THE WIRING FOR A LOOSE OR BROKEN WIRE, OR A SHORT CIRCUIT!

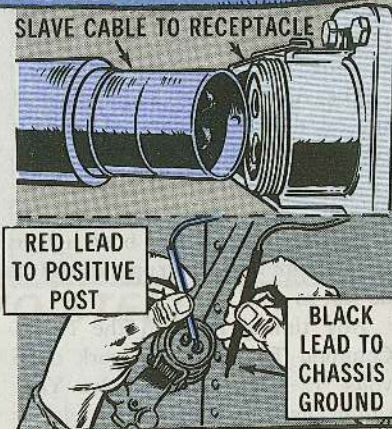


## CABLE CHECKOUT

Turn on the vehicle master switch. Connect one end of the slave cable to the receptacle. Make sure that it's plugged in right. If you have to force it, it's probably upside down.

Connect the red lead of the voltmeter to the positive post on the free end of the slave cable, and the black lead to a ground on the vehicle. It should read the vehicle's voltage.

If you get no reading, try the red lead on the negative post of the cable. If you get a reading there, reverse the leads on one end of the cable. If you still don't get a reading, the cable is defective.



## CHECK 'EM ALL

Make sure you check all vehicles and cables in your unit. If you leave just one unchecked, sure as shootin' that'll be the one that's wired wrong, and when you go to use it—phfff!

And don't take off the connectors to use the cable on vehicles without receptacles. You've got a 50-50 chance of blowing the alternator—

... AND A BIGGER CHANCE OF HAVING A "SHOCKING" EXPERIENCE!



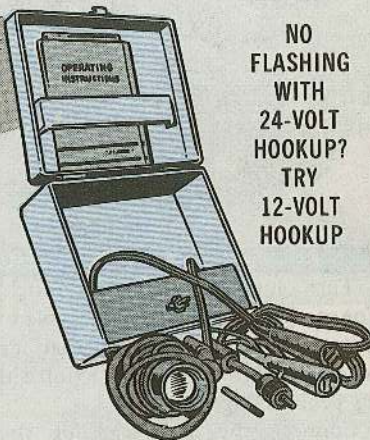


## TIMID TIMING LIGHT?

Generally, when you're working with a 24-volt system, you hook up your timing light for 24-volt operation—like you see on page 23 in

NO! NO!  
WE CAN'T  
STAND MORE  
THAN 24  
VOLTS!

?



NO  
FLASHING  
WITH  
24-VOLT  
HOOKUP?  
TRY  
12-VOLT  
HOOKUP

Your timing light may quit flashing if it gets more than 24 volts—and there's a good chance that a 24-volt battery setup will put out a little more than 24 volts when the engine's running.

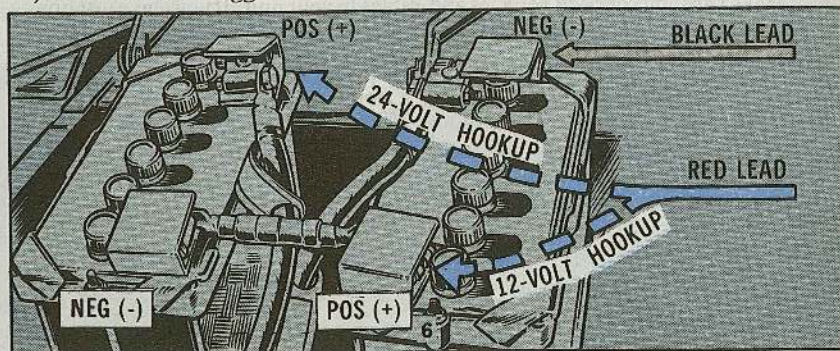
The Allen Model 30-91—one of several different makes of ignition timing lights issued under NSN 4910-00-937-5724—may pull this surprise on you.

No big problem. Just hook up the timing light for 12-volt operation. It'll do just as good.

Any timing light in the No. 1 Common Tool Set will work on 6 volts, 12 volts and 24 volts. Your timing light set may have a selector switch for the different voltages or just an ON-OFF toggle switch.

DA Pam 750-22 (Nov 73), Trouble-shooting Equipment in Combat Units. Two batteries are connected in "series" for 24-volt output.

To connect your timing light for 12-volt operation, just hook up to one of the batteries. Your red timing light lead goes to the positive (+) post of one of the batteries. Your black timing light lead goes to the negative (-) post of the same battery.



1/4-TON M416 TRAILERS

## THEY DON'T SPIN

HEY! LEGGO  
MY PINTLE!

SORRY, BUDDY,  
IT'S ROTATE  
OR GIG!

NOT  
SO!



Dear SP6 D.P.T.,

Hang on to those washers. There's no requirement for those lunettes to be rotated by hand. Fact is, when they're adjusted to the 0.010 in. clearance like it says on page 29 of TM 9-2330-251-14 (Oct 70), it'd take a hefty guy on the end of a long breaker bar to get them to move at all.

They're not supposed to rotate easily. They are supposed to give a little when they have to—like when the trailer goes over rough terrain, so the frame won't get bent out of shape.

*Half-Mast*

Dear Half-Mast,

We get gigs because the lunettes of our M416 1/4-ton trailers are not free to be rotated by hand. This is blamed on rust, lack of lube, etc. After shining and greasing the tapered stem, we adjust the spring to the specs in our manual. This makes the lunette tight like a cork in a bottle.

Must we continue to discard all the thrust washers to pass inspections?

SP6 D.P.T.

## STICK TO STEEL

Dear Half-Mast,

Is copper tubing safe for hydraulic brake lines? If not, why not?

CPT N.K.W.

Dear Captain N.K.W.,

Copper cannot be safely substituted for steel in a hydraulic brake system.

The reason is simply that copper is not as strong as steel. The steel tubing specified is designed to hold up under terrific hydraulic pressure. Copper tubing of the same size can't be expected to take the same pressure.

Substituting copper for steel in a brake system can be a fatal mistake.

*Half-Mast*





WASHABLE AIR CLEANER ELEMENT

# GUESS NOT,

# WASTE NOT!

Y'MEAN I'M NOT S'POSED TO THROW AWAY THIS DIRTY OL' ELEMENT?

NO, NO, A THOUSAND TIMES NO-- NOT UNLESS YOU FIND IT'S NO GOOD AFTER YOU'VE CLEANED IT! TOSSING OUT A USEABLE ELEMENT IS LIKE THROWING AWAY MONEY!

YEAH, ELEMENTS FOR SOME TRUCKS COST UP TO 35 BUCKS APIECE.

BESIDES, ELEMENTS ARE IN SHORT SUPPLY!

What d'ya wanna bet that there are perfectly good diesel engine air cleaner elements in your Property Disposal yard?

And you're having a tough time getting new ones?

Too many guys are tossing out air cleaner elements that only need blowing out with compressed air—or a good wash-rinse-dry treatment.

These are the dry-type air cleaner elements you find on all multifuel engine trucks and most other diesel engine equipment. You can use 'em over 'n' over again if you handle 'em carefully and clean 'em.

Your -20 TM tells how to clean the element. Or, if the TM for your equipment hasn't yet picked up the word, get TM 9-2320-209-20 (Apr 65) for the 2½-ton truck and check the poop in Ch 3, page 218, para 70b.

After it's washed and dried (about 3 days for drying), this element can be used again—

- if there're no holes or tears in it;
- if the ends are not bent so they make a bad fit; and
- if air can still get through.

FOLLOW THESE FEW SIMPLE STEPS AND SAVE A

LOT OF BUCKS FOR "UNCLE":

FIRST, TAP IT ON THE GROUND, GENTLY! IF YOU BANG IT TOO HARD, YOU'LL CHANGE THE SHAPE. THEN IT WON'T FIT SNUG IN THE CANNISTER—AND DIRT 'LL GO RIGHT PAST IT.

YOU'LL GET MORE DUST OUT BY SLAPPING THE ELEMENT AROUND THE SIDES. AGAIN—GENTLY!

BLOW COMPRESSED AIR AROUND THE INSIDE. THIS'LL PUSH DIRT BACK OUT TO THE OUTSIDE!

YOU'VE GOT A GO-NO-GO TESTER RIGHT ON YOUR EQUIPMENT. IT'S THE INDICATOR WITH THE LITTLE RED FLAG INSIDE.



GIVE IT ANOTHER GOOD GOING OVER AROUND THE INSIDE AND, FINALLY, ON THE OUTSIDE AGAIN. IF THE ELEMENT IS STILL PLUGGED WITH DIRT, WASH IT LIKE YOUR TM SAYS.



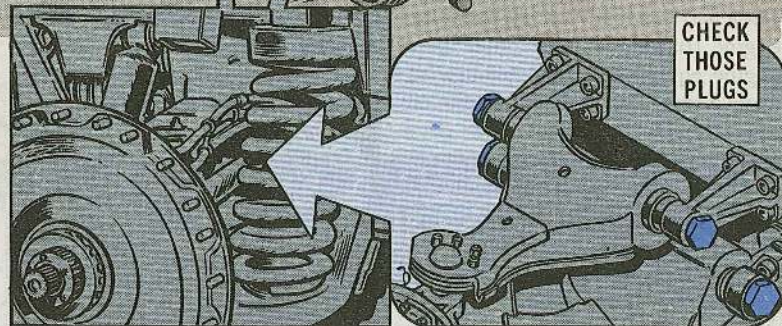
When you put a cleaned element back in your equipment, run the engine for a few minutes and watch that indicator. If the little red flag shows up in the window and then locks into full view, the air cleaner element is plugged up so bad it can't be used anymore.

That's when you put in a new one. Trouble is, some guys just take a look at a dirty element and say:

"I guess I need a new one."



## KEEP PLUGS TIGHT



Life's a lot sweeter for your Gama Goat when it's got all 16 of its front and rear suspension arm plugs—and they're all tight.

Trouble is, these plugs have a way of loosening up—and even falling out. So here's what you do:

If a plug's missing, get a new one—NSN 5365-00-079-2203. It's listed on both page 210 and 225 in your TM 9-2320-242-20P (Sep 70). The 5340 there has been changed to 5365.

But even if they're all "present" 'n' accounted for, "check 'em—every one of the 16—to see if they're loose. So

you know what you're looking for, eyeball Fig 2-295, page 2-292, and Fig 2-298, page 2-296, in TM 9-2320-242-20 (Aug 70) where it says "plug".

If you find a loose plug, unscrew it from the suspension arm shaft and dab some sealant on the threads. Any sealant you get under these stock numbers is OK—NSN 8030-00-081-2335, NSN 8030-00-081-2333, NSN 8030-00-081-2331.

Then give the plug 92-110 lbs-ft torque, like it says in the -20 TM—page 2-292, para 2-198d (2), and page 2-295, para 2-199d (2).

## DRAIN BY PANEL OR PLUG?



DEPENDS... IS YOUR DRAINAGE PROBLEM BIG OR LITTLE?

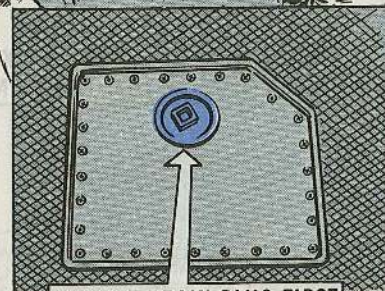
USE WHAT DOES THE JOB, 'CAUSE EITHER IS OK!

Some people are wondering if they have to take off the whole steering gear access cover to keep water from sitting in the Gama Goat carrier.

Why not just take out the plug that's in the cover?

Either one's OK—it just depends on how much drainage you need. If you're someplace where rainfall is real heavy, the plug hole may not be big enough. Or it may get plugged up easy with leaves and trash.

A lost plug is easier to replace. It's stocked in supply and is listed with the NSN on page 345, TM 9-2320-242-20P (Sep 70). But the access cover is a non-supply item.



TRY THE DRAIN PLUG FIRST

## NSN UPDATE

THERE ARE SOME *NSN* CORRECTIONS TO MAKE IN YOUR PARTS MANUALS ON TANK-AUTOMOTIVE EQUIPMENT:

TM 5-3810-288-20P (Oct 70), page 84 (2 places), Cylinder, Hydraulic, from -161-9881 to -00-436-3159.

TM 9-1450-500-24P (Dec 70), page 413, Shaft Assy, from -679-9300 to -00-798-3059.

TM 9-2320-209-20P (Oct 72), page 129, Radiator Cap, from -338-1005 to -00-720-2677.

TM 9-2320-209-20P (Nov 72), page 96, Belt Set, Alternator, from -788-1241 to -00-778-1241.

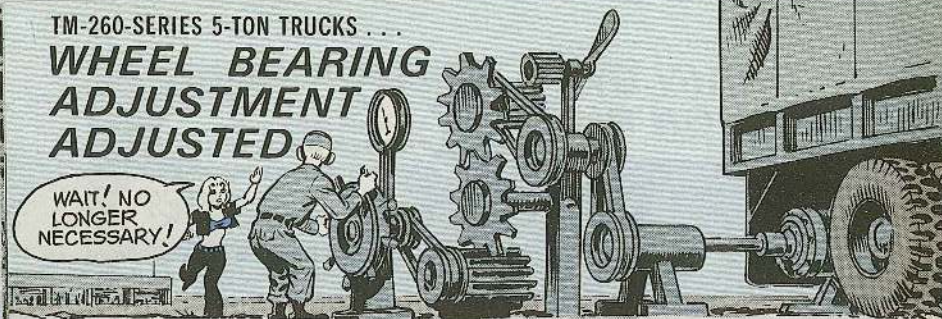
TM 9-2320-207-24P (Jul 73), page 55, Torque Rod Assy, from 2510-740-9607 to 2530-00-797-9189.

TM 9-2330-272-14 (Jun 72), page C-20, Packing, Preformed, from -900-2128 to -00-090-2128.



## TM-260-SERIES 5-TON TRUCKS ... WHEEL BEARING ADJUSTMENT ADJUSTED

WAIT! NO  
LONGER  
NECESSARY!

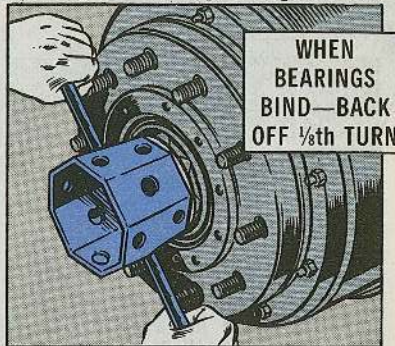


You can throw away those contraptions you invented to adapt the wheel bearing wrench to a torque wrench for adjusting the bearing. The procedure has been changed so there's no need to use a torque wrench.

The word in TB 43-0001-39-4 (Oct 74), page 8, is to use the same procedure as shown in TM 9-2320-211-20 (Jun 73), page 2-171.

Tighten the inner adjusting nut, while turning the wheel, until the bearings bind. Then back the nut off one-eighth turn.

After tightening the outer nut, check the play again.



## DRAINING THE DOORS

DRILL 1/2" HOLES  
HERE—AND SO  
MUCH FOR RUST!

NUTS! GUESS I  
GOTTA FIND  
ANOTHER  
HANG-OUT!

Sometimes, though, they get clogged up. Then water stays in the door, and you've got a rust problem.

If you've got a truck with holes that are too small, or no holes at all, TB 43-0001-39-1 (Jan 75) gives you the dope on drilling half-inch holes in the bottom. Don't get carried away, though. Four holes, equally spaced along the bottom edge, are enough.

Cab doors in tactical vehicles are supposed to have drainage holes in the bottom to keep 'em from rusting.

## TM-206-SERIES 10-TON TRUCKS ... ONE FOR ALL

RIGHT,  
BONNIE!  
ONE PIN  
NOW  
DOES  
FOR  
ALL!

GOOD DEAL!



you had. But now one does the job for all—NSN 5315-00-421-1676, as listed

ONE SHEAR  
PIN DOES  
THE JOB



Confused about what shear pin to use in the winches on your M125 and M123 series 10-tonners? You don't need to be confused any longer—there's only one pin for all of them.

There used to be 2 pins. The one you used depended on what model truck

on page 93 of TM 9-2320-206-20P. (Dec 71). It'll work for all winches on all models. This pin is stamped "25M" on its head.

Once the pin does its thing, it has to be replaced, so the -20P authorizes you to carry 2 spares on the vehicle.

## MARKING COMMERCIAL TIRES

WE'RE LOSING  
TOO MANY COMMERCIAL-  
DESIGN TIRES, JOE!

YEAH! MEBBE IF  
WE PAINTED A "US"  
ACROSS THE TREADS  
IT WOULD  
HELP!

HEH! WHILE THEY'RE  
YAKKING, THINK  
I'LL JUST  
DISAPPEAR!



Use Fed Spec TT-P-96 white latex-base paint. NSN 8010-00-754-2608 will get you a 1-gal can.

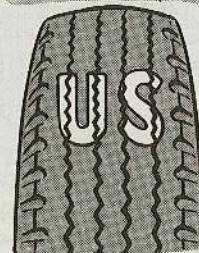
Clean 'n' dry the tires before you start.

Make the letters 4 to 6 inches high and go all the way across the face of the tires. Here are some stencil sets that will help:

| NSN               | HEIGHT (Inches) |
|-------------------|-----------------|
| *7520-00-269-9012 | 4               |
| 7520-00-272-9684  | 5               |
| 7520-00-577-4888  | 6               |

\*(In No 1 Common)

PAINT  
'EM  
LIKE  
SO ...



Make sure the paint gets into the grooves. That way the "US" will show as long as there's some tread.

This info will be in a new change to TM 9-2610-200-20.





Time to get a little more wear out of your shoes—your track shoes, that is. The new wear limits will be in the new TM 9-2530-200-24 on tracks; it supersedes TM 9-2630-200-14.

It'll also show in a change to your track vehicle TM. It's your authority for track replacement.

Meanwhile, word has gone out to your command by US Army Tank-Automotive Command Message AMSTA-M (NMP) 031910Z Mar 75.

What it amounts to is lower standards for longer wear. It lets you track shoe assemblies until they reach unserviceability code "H" wear limits.

This applies to all kinds of track except for T97E2 and T107 track in CONUS, which will be worn down to the "F" code limit. Report your worn T97E2 or T107 track to your supply support. They'll take it from there.



WHILE YOU'RE WAITING FOR THE TM'S AND ESC'S TO BE CHANGED, USE THIS ESC COLOR CODE:

| CONDITION | ESC COLOR | REMARKS                                                      |
|-----------|-----------|--------------------------------------------------------------|
| A, B or C | Green     | In CONUS, replace T97E2 or T107 when it reaches Code F—Amber |
| F         | Amber     |                                                              |
| H         | Red       |                                                              |



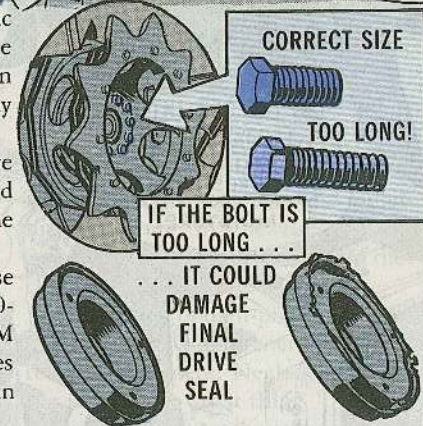
On detachable pad track, the condition of the track pad has nothing to do with the ESC rating of the track. Continue to replace the pads when the steel grouser begins to damage the roadway.



So what happens if a unit mechanic uses too long a bolt to mount the sprocket wheel to the final drive of an M113A1 personnel carrier ... or any member of the M113A1 family?

It's likely to damage the final drive seal, NSN 2520-00-679-9626, and that's going to give somebody the blues.

To prevent this grief, be sure to use the right bolts. They're NSN 5305-00-726-2543, Item 2 on page 2-503 of TM 9-2300-257-20P. They're 1 1/4 inches long. If you use 1 1/2-in bolts, you can ruin the final drive seal.



## FIRST THINGS FIRST



Before you take the M115 pan telescope off the M137 telescope mount, be sure to disconnect the illumination power supply connector. If you don't, you'll break the cord ... and a lot of cords are getting broken. Take an extra minute and do the job right.



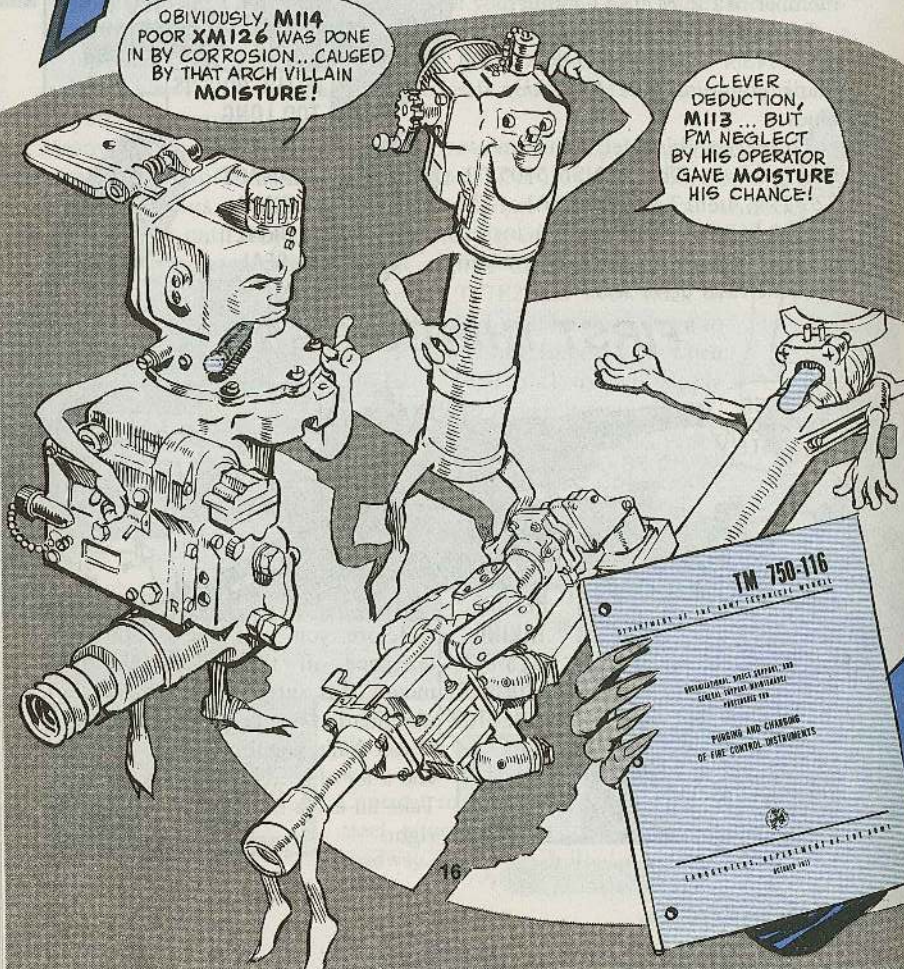
FIRE POWER

ARE YOUR SIGHTS IN A FOG?  
YOU NEED—

# PAINLESS PURGING

OBLIVIOUSLY, M114  
POOR XM126 WAS DONE  
IN BY CORROSION... CAUSED  
BY THAT ARCH VILLAIN  
MOISTURE!

CLEVER  
DEDUCTION,  
M113 ... BUT  
PM NEGLECT  
BY HIS OPERATOR  
GAVE MOISTURE  
HIS CHANCE!



TM 750-116

DEPARTMENT OF THE ARMY TECHNICAL MANUAL  
PURGING AND CHARGING  
OF FIRE CONTROL INSTRUMENTS

You'll like purging your fire control equipment with nitrogen. It's a real gas.

So, listen up, you organizational maintenance mechanics.

TM 750-116 (Oct 71) tells you to purge and charge your fire control items every 90 days or when condensation is evident in your instruments.

Supply Catalog 4931-95-CL-J54 (May 75) lists complete purging sets and parts, and it and the TM spell out who gets 'em.

HERE'RE  
THE PUBS  
THAT'LL KEEP  
YOU STRAIGHT.



GET THE FOG OUT OF  
YOUR TELESCOPE

It's necessary, too. If the fire control instruments are full of fog, dirt or



fungus, you can't use them in the fast, accurate way that gives first-round hits. Moisture in the fire control causes corrosion which screws up the close tolerances of the equipment.

Careless use of high-pressure water hoses is the worst enemy of fire control equipment. Neglect of purging is the next worst thing.

Even after you get the urge to purge, you'll need general know-how and specific knowledge.

The general know-how comes with experience, but this article may help you.

The specific word on purging all types of equipment is in TM 750-116. This TM shows location of entrance and exhaust ports and gives you the formula in pressure and time for both purging and charging every type of equipment. The -10 and -20 TM's for your weapon or vehicle have some purging dope, but TM 750-116 is sharper.

When you want to purge, line up your goodies and give them the hairy eyeball. Is everything there and in good working order?

PS MORE

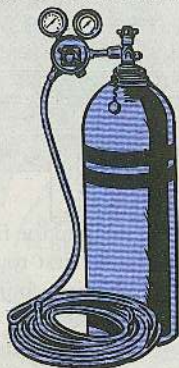


# WHAT YOU NEED

# FOR PURGING

## PART

TANK, technical nitrogen  
NSN 6830-00-782-2641



\* HOSE, rubber, 25 ft.  
NSN 4720-00-561-0713

So—you may need either—  
\* ADAPTER HOSE, left hand  
NSN 4730-00-951-8263



Or—  
\* ADAPTER HOSE, right hand  
NSN 4730-00-951-8264

## DESCRIPTION

Body painted gray, with 2 black bands on upper part of tank. If the tank has only one black band, send it back. It's not the oil-free nitrogen you need for purging, but the oily nitrogen used for charging tank recoil systems. Never use any nitrogen but the 2-black-band kind.

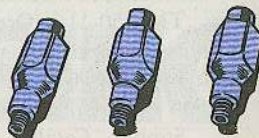
The regulator end of these hoses may have either left-hand or right-hand threads.

You'll need this adapter to hook any of the 3 regulators up to the hose, provided the hose comes with left-hand threads.

You'll need this adapter to hook up either of the left-hand thread regulators (NSN 4931-00-558-0922 or NSN 4820-00-724-9744) to a hose with right-hand threads. Since regulator NSN 4820-00-001-7749 comes with a right-hand thread fitting, this adapter is not required if the hose has right-hand threads.

## PART

\* KIT, ADAPTER ASSEMBLY  
NSN 4931-00-936-4283



\* VALVE EXTENSION  
NSN 4931-00-222-9056



SEALING COMPOUND  
NSN 8030-00-275-8110



\* NUT, cylinder valve  
NSN 4730-00-068-5756



## DESCRIPTION

Contains 3 adapters with threads 10-32UNF, 10-24UNC or 8-32UNC. All under one NSN. You can't get adapters separately.

Looks like an auto tire valve extension and is used in purging the transceiver on the M551 Sheridan and other places where the instrument attaching end of the hose needs an extension because the entrance port is countersunk under armor.

Black gunk for sealing entrance and exhaust port screws after charging. Comes in 2-oz tubes.

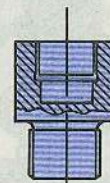
Needed with regulators NSN 4931-00-558-0922 and NSN 4810-00-724-9744.

## PART

\* NIPPLE, nitrogen  
NSN 4730-00-093-5736



ADAPTER, nitrogen filling  
NSN 4931-00-508-5453



PURGING KIT, fire control  
NSN 4931-00-065-1110

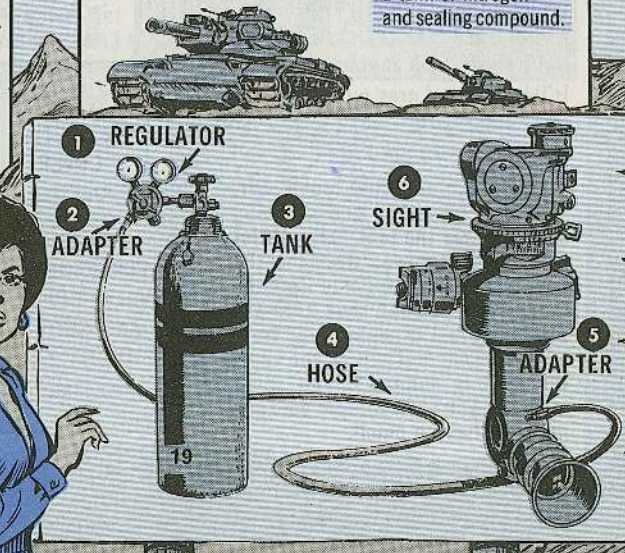
## DESCRIPTION

Needed with regulators NSN 4931-00-558-0922 and NSN 4810-00-724-9744.

This is not used with either nitrogen cylinder NSN 6830-00-782-2641 or with regulator NSN 4820-00-001-7749. It can be used only to make an old nitrogen cylinder with left-hand thread fit with regulator NSN 4931-00-558-0922 or NSN 4810-00-724-9744.

\*All the \*items are included in this kit. Note that the kit is not complete. You'll still need a tank of nitrogen and sealing compound.

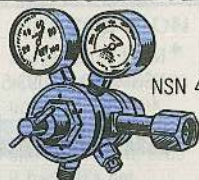
OK...  
GET IT ALL  
TOGETHER  
NOW...AND  
HERE'S WHAT  
A TYPICAL  
HOOK-UP  
SHOULD LOOK  
LIKE IF YOU  
WANT TO  
PURGE  
CORRECTLY!





# GUIDE TO REGULATORS

HERE ARE THE ONLY 3 REGULATORS YOU USE FOR PURGING AND CHARGING.



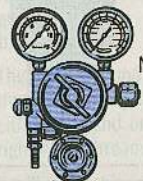
NSN 4820-00-001-7749

The newest regulator and the only one now being made for stock. Needs no extra fittings. Right-hand thread.



NSN 6685-00-724-9744

The most common one in the supply system now. Left-hand thread.



NSN 4931-00-558-0922

Has a circular pressure relief. Left-hand thread.

(NOTE: All these regulators have low-pressure gages calibrated at 50-PSI maximum or less and high-pressure gages at 4000-PSI, or less. A regulator with higher limits is for jobs like nitrogen charging on tank recoil systems and is DANGEROUS if used for fire control work.)

## GETTING IT ALL TOGETHER

First off, look at your nitrogen tank. It'll be painted gray with 2 black bands. (If it's not, stop right there. You've got the wrong tank.)

Take the protective cover off. This can be either a small plug screwed into the tank valve outlet or a dome screwed over the neck of the tank. Quickly flick the tank valve open and shut. This will blow any dust or water away from the valve seat or it will let you know the tank is empty. If you smell anything you're in trouble because nitrogen has no smell.

REMOVE PROTECTIVE COVER

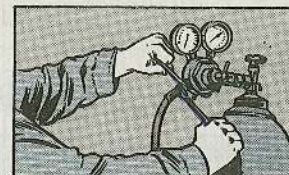


FLICK TANK VALVE OPEN AND SHUT QUICKLY



Use correct size open-end wrenches to put the parts of the set together. You'll need 11/16, 9/16 and 5/8 wrenches.

Mount the regulator on the tank using the fittings needed for the particular kind of regulator you have.



USE CORRECT SIZE OPEN-END WRENCHES

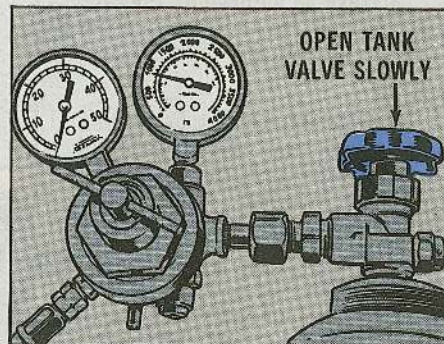
LOW PRESSURE GAGE

HIGH PRESSURE GAGE



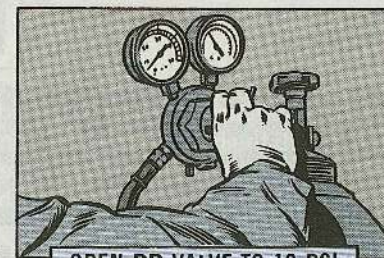
COUNTER-CLOCKWISE TO CLOSE PRESSURE REGULATOR VALVE

Slowly open the tank valve until the high-pressure gage needle stops moving forward. It is now registering (outer ring) the PSI of the gas within the cylinder. Pressure must be over 100 PSI or you can't do a good job of purging. (If the pressure is down, get a new cylinder from supply.) If gas is escaping at the end of the hose, it means the diaphragm is broken on your pressure-regulator valve. Get a new regulator because you can't control purging/charging pressures with a leaking diaphragm.



OPEN TANK VALVE SLOWLY

Slowly open your pressure-regulator valve until the low-pressure-regulator valve until the low-pressure gage registers 10 PSI and then close the valve right away. (This looks like a waste of nitrogen but it clears water, dust, spiders, etc., out of your hose instead of blowing them into your fire control instrument.)



OPEN PR VALVE TO 10 PSI AND FLUSH OUT YOUR HOSE



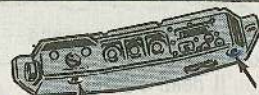
Entrance ports should be circled in gray paint and exhaust ports in yellow paint, but even if they're not, your TM 750-116 will show you which is which.

Take off the caps (or unscrew the screws) of your entrance and exhaust ports. It's important to have the exhaust ports open before you start. If not, the nitrogen would have no place to go and could build up a pressure that would blow things apart inside your fire control instrument.

Most of your entrance ports will have outside threads and a valve core like an automobile tire. You can screw the outlet end of the hose directly into the entrance port.

If your entrance port has a screw instead of a cap, you'll need one of the adapters from the 3-part adapter kit NSN 4931-00-936-4283. TM 750-116 shows you which adapter to use in most cases. If you're in doubt, compare the threads in the screw you've taken out of the entrance port with the threads at the small end of all 3 of the adapters. Use the adapter with a thread identical with the screw thread.

It may be easier to screw the adapter into the entrance port and then attach the hose to the other end or it may be easier to attach the hose to the adapter first. In any case, be careful of side-wise motion which could snap off the end of the adapter.

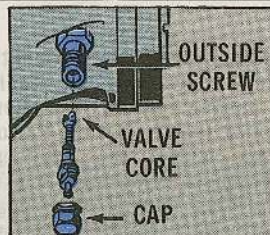


CIRCLE  
ENTRANCE  
PORTS WITH  
GRAY PAINT ...

... AND  
EXHAUST  
PORTS IN  
YELLOW  
PAINT



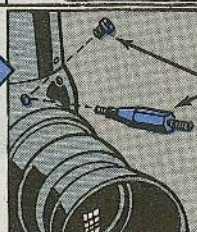
REMOVE ENTRANCE  
AND EXHAUST PORT CAPS



OUTSIDE  
SCREW

VALVE  
CORE

CAP

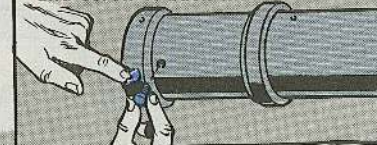


USE ADAPTER  
ON SCREW-TYPE  
ENTRANCE PORTS

## NOW-YOU PURGE...

After you have the hose hooked up, check your TM 750-116 again to make sure you know the purging formula (pressure and time) and then open the pressure regulator valve until the proper pressure—nearly always 5 PSI—shows on the low-pressure gage. When it has purged for the required time, shut off the pressure regulator valve.

Lightly coat the threads of the exhaust port screw with sealing compound NSN 8030-00-275-8110 and screw it back in.



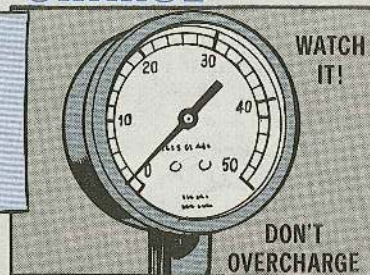
(NOTE: Many of the entrance and exhaust port screws have lost their gaskets or lockwashers. If the screws let nitrogen escape, order new screw and gasket sets from table 2-3 on pages 2-1 and 2-2 of your TM 750-116.)

## ... AND CHARGE

Set your pressure regulator valve to the charging pressure—nearly always 1 PSI—and charge for the required time which may be as little as 20 seconds. Do not overcharge or you could seriously damage the instruments.

When you're finished charging, unhook the hose from the entrance port, shut off the pressure regulator valve and quickly close the port.

If it is a screw-closed port, the same rules apply as for the exhaust ports. If it's an automobile tire

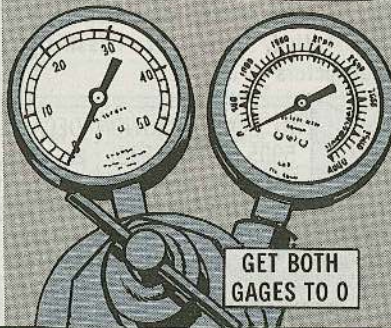


WATCH  
IT!

DON'T  
OVERCHARGE

type valve, just screw the cap on. You do not use sealing compound on the threads for this type of port. That's all there is to purging and charging.

One more big thing to remember: The nitrogen is not shut off until BOTH the high and the low pressure gages read 0. If you forget to shut off the high pressure gage, the rubber diaphragm in your pressure regulator will be under a constant strain and will wear out in a hurry. Then you'll have a permanent leak that can't be shut off at the pressure regulator valve, so you'll need a new regulator.



GET BOTH  
GAGES TO 0



BE YOUR OWN INSPECTOR

When the night is blackest black,  
And a chill lies in the air;  
When dark things lurk in shadows—  
Will you know for sure what's there?

You will if your M18 infrared binocular is in top shape. And if you're up on TM 9-6650-215-12 (Apr 64) and its 2 changes.

To make sure you're action-ready, scope out these inspection points and the things that can go wrong. Faults in bold type are most serious . . . if you find 'em on your M18, get 'em corrected!

**GENERAL**—Wet, gunky, gritty, dirty, rusted or corroded; scratched, chipped or blistered paint; loose, worn, bent, cracked, dented, **broken** or missing parts.

**CABLE ASSEMBLY**—Twisted, cracked, frayed or broken wires; corroded; pitted, loose or missing connectors or caps.

**ID PLATE, CAUTION DECAL** (NSN 5905-00-140-1533) & **SCALE**—Obscured, obliterated or missing.

STILL CAN'T  
SEE NOTHIN'!

24

**LOCK RINGS & COLLIMATING RINGS**—Never tamper with 'em . . . only depot is supposed to adjust 'em.

# M18 BINOCULAR SPECTOCULAR

W-WHAT WUZ  
THAT?...

DRAT!! IF  
ONLY I COULD  
FREE THIS  
SWITCH, WE  
COULD SEE...

HOOO

WHEN  
DIDJA  
LAST DO  
PM ON  
THAT  
BINOC  
?

**NECK STRAP**, NSN 1240-00-764-6236—Loose, torn, cut or rotted; missing.

**FORWARD & REAR HINGES**—Bind or stick; too loose.

**EYEPIECE FOCUSING DIALS**—Jerky or sticking.

**EYESHIELDS**—Warped, cut, torn or rotted; loose on eyepieces; missing.

HEH, HEH...  
MISSING  
NECK STRAP...

25

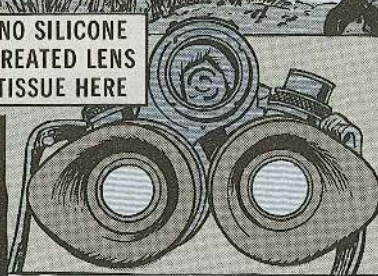




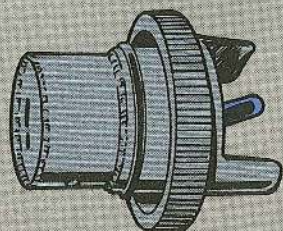
**FORWARD & REAR LENSES**—Wet, moldy, oily, smeared, chipped or cracked.

**NO SILICONE TREATED LENS TISSUE HERE**

(TIPS: To clean, use only alcohol, bleached white cheesecloth or clean lens tissue paper—such as NSN 6640-00-597-6745, and a small, clean camel's hair brush. Never use silicone-treated lens tissue.)



**ON-OFF SWITCH**—Won't snap securely into ON or OFF positions.



**BATTERY CAP & HOUSING**—Dirty, greasy, corroded or pitted contacts and housing; cap not replaced right 'n' tight.



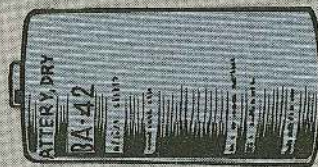
**KEEP CONTACTS AND HOUSING CLEAN**

(TIPS: Keep contacts clean with a burnishing tool or crocus cloth. When you replace cap, line up the slot, push cap down, then turn knurled knob snug. When you back the cap out, wiggle it slowly. Saves busted caps and slots.)

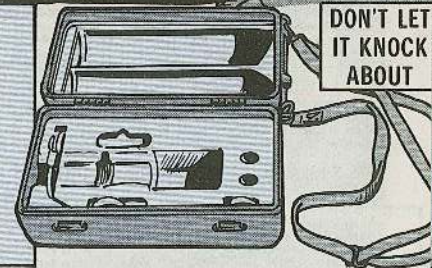
**BATTERY, 1½ VOLTS**—Weak, dead, corroded or leaking; cracked case.

(TIP: If available, alkaline battery BA-3042/U, NSN 6135-00-935-5301 is preferred. Otherwise, use the BA-42 battery listed in your TM.)

**TRY TO GET ALKALINE BATTERY**



**CARRYING CASE**—Torn, cut or rotted rubber seal; bent, damaged or broken locking clamps or hinges; loose, damaged or out-of-place interior packing; missing or unserviceable spare batteries (2 of 'em) or cable assembly; loose, torn, cut or rotted strap, NSN 6650-00-953-0120.



**DON'T LET IT KNOCK ABOUT**

## SOME CAUTIONS

The M18 binocular can't take rough handling or abuse. Never fool or tamper with it. Use it only as the TM says you can. Never try to force any knobs past their stops. If you can't get the binocular to adjust or operate right by following the TM, give it to your organizational maintenance types for repair or for turn-in to support.

Direct, strong sunlight will damage the lenses 'n' innards. Never operate under bright daylight conditions. And never point the binocular directly at the sun when the lens caps are off—not even with the switch in OFF position.

Save your M18 from corroded contacts and such by removing the battery when the binocs are not in use.

Keep these points in mind, and the dark will hold no terror.

**BA-42 BATTERY . . . TAKE OUT WHEN NOT IN SERVICE**



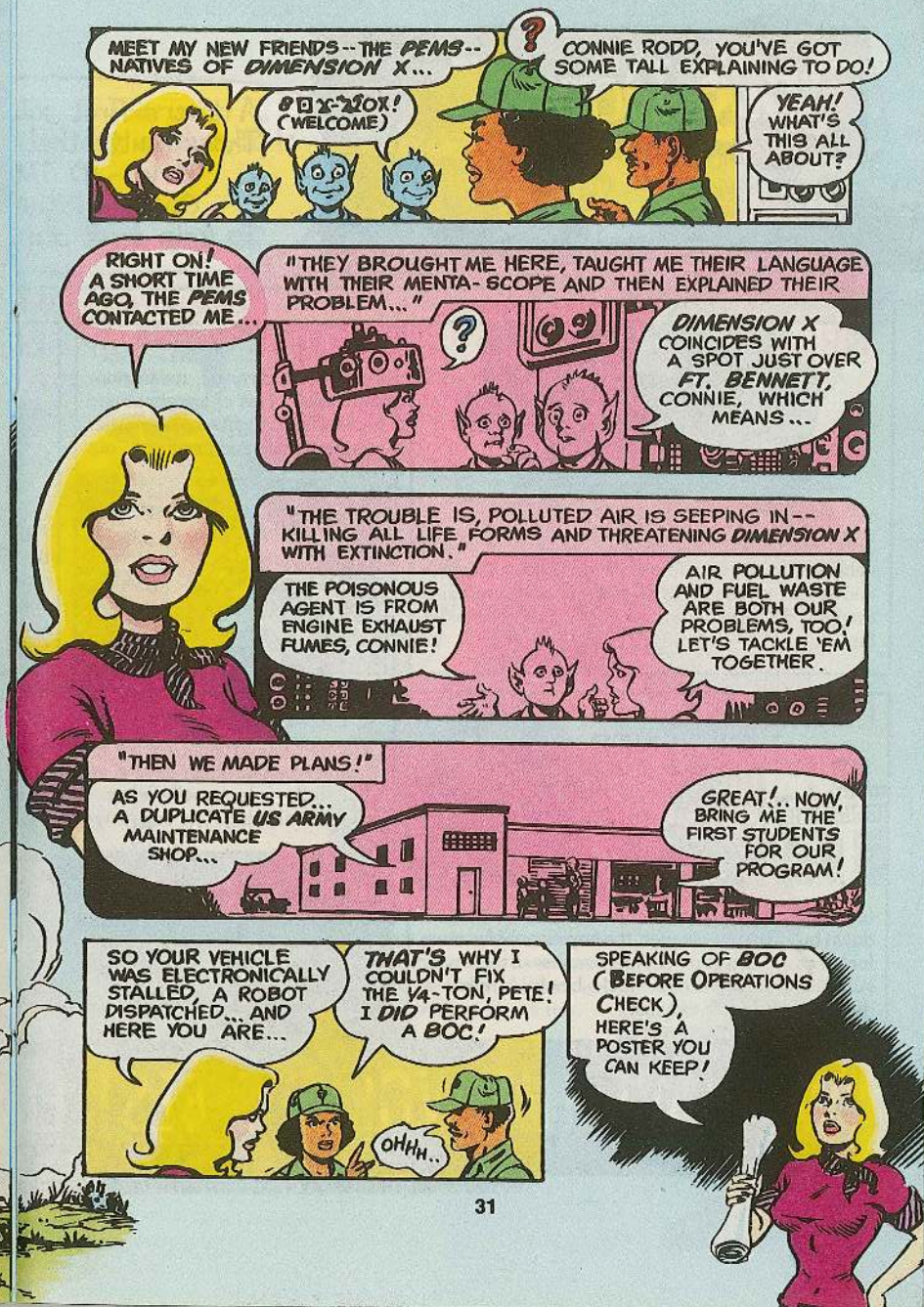
SEE THE LIGHT ?













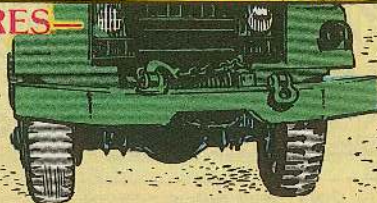
# Joe's Dope



A driver's first job is to foil  
Those faults that increase engine toil:  
Your - 10 TM  
Gives all the PM  
To help save our air, fuel and oil.

**ANYTHING THAT MAKES THE ENGINE WORK HARDER TO MOVE THE VEHICLE WASTES FUEL.**

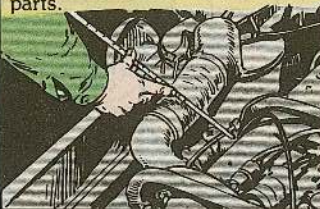
## TIRES—



Soft tires make the engine work harder to move the vehicle. Uneven wear on front tires shows the front end is out of line. This means the tires are being dragged. This shortens the life of the tire, and wastes fuel.

## ENGINE OIL—

Low oil, or dirty oil, mean poor lubrication. This causes heat and friction. The engine works harder wasting fuel and wearing out parts.



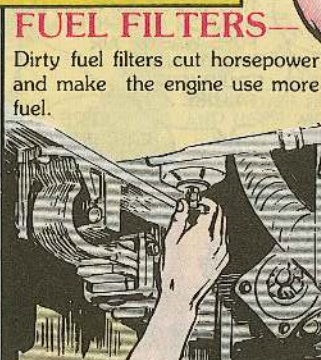
## ENGINE COOLANT—

Although oil carries away some of the heat, the cooling system does most of the job. When there's not enough coolant, the whole engine suffers . . . less power . . . more fuel.



## FUEL FILTERS—

Dirty fuel filters cut horsepower and make the engine use more fuel.



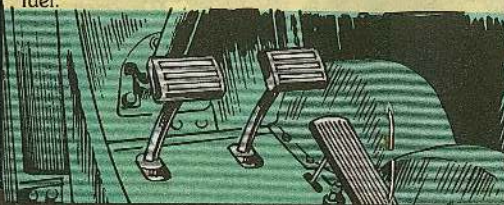
## ENGINE AIR CLEANER—



(especially the dry type)—When the air supply is cut down by a dirty air cleaner, the engine gobbles more fuel. It can't burn all of that fuel because of the low air supply. So unburned fuel—black smoke—is dumped out of the exhaust.

## CLUTCH—

The right clutch pedal free travel means there is solid contact between the engine and the power train. Too little free travel means weak contact—the clutch is slipping. The engine is wasting work—and fuel.



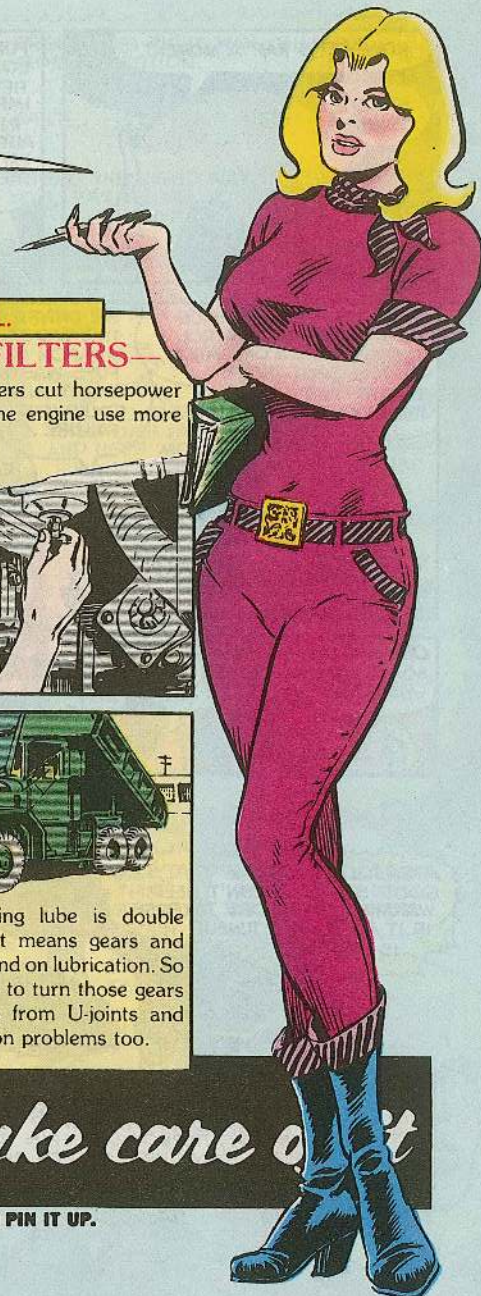
## LEAKS—



(anywhere, any kind)—Leaking lube is double trouble. Beside wasting oil, it means gears and bearings are getting the short end on lubrication. So the engine has to work harder to turn those gears and bearings. Grease thrown from U-joints and other lube points signals friction problems too.

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

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





NOW, LET'S RAP A MOMENT!

SHOOT, CONNIE!

FUEL WASTE, AIR POLLUTION AND EQUIPMENT FAILURE ARE ALL TIED TOGETHER--ANY IMPROVEMENT IN ONE AUTOMATICALLY IMPROVES THE OTHERS.

RIGHT ON, CONNIE! SINCE WE ARE IN TOTAL CONTROL DURING VEHICLE OPERATION, WE CAN SPOT THOSE FAULTS THAT LEAD TO BREAKDOWN.

WE DRIVERS ARE THE MOST IMPORTANT WEAPON IN FIGHTING FUEL WASTE, AIR POLLUTION AND EQUIPMENT FAILURE.

A GOOD DRIVER IS GOOD IN *FM*, TOO! EFFICIENT OPERATION MEANS LESS FUEL WASTE AND POLLUTION!

YOU'RE CATCHING ON...

OK, NOW FOR SOME AUDIO-VISUALS...

HIT THE STARTER AND YOU'RE IN...

**OPERATION**

AND YOU START LOOKING FOR INEFFICIENT, FUEL WASTING FAULTS...

A GASOLINE ENGINE THAT'S IN GOOD SHAPE DOESN'T NEED WARMING UP BEFORE TAKEOFF. IF IT ACTS UP, A TUNEUP IS NEEDED!

A DIESEL ENGINE USUALLY NEEDS WARMUP IDLING AND MAY RUN ROUGH BEFORE IT SMOOTHS OUT, BUT NO JABBING THE ACCELERATOR--YOU'LL OVERSPEED THE ENGINE BEFORE OIL GETS TO ALL OF THE BEARINGS!

A TURBOCHARGED DIESEL ENGINE FOR SURE GETS A WARMUP IDLING--TO GET OIL INTO THE TURBOCHARGER'S BEARINGS BEFORE IT STARTS TURNING AT HIGH SPEED! AND IDLING BEFORE SHUT-DOWN LETS THE TURBOCHARGER SLOW DOWN BEFORE ITS OIL SUPPLY IS SHUT OFF!

ENGINE PROPERLY WARMED UP? OK, NOW YOU'RE...

**ON THE ROAD**

DRIVING THE RIGHT WAY CALLS FOR CLOSE ATTENTION.

WATCH... LISTEN...

DRIVING THE RIGHT WAY IS EASIER ON YOU, EASIER ON YOUR VEHICLE... AND EASIER ON FUEL.

JACK RABBIT TAKEOFFS



GULP FUEL. WORK UP TO CRUISING SPEED... EASY.

KEEP SHIFTING AS YOU PICK UP SPEED...

YOUR ENGINE TURNS OVER FASTER AND USES MORE FUEL IN LOWER GEARS.



A STEADY SPEED SAVES FUEL. SUDDEN CHANGES IN SPEED USE MORE FUEL.

KEEP YOUR FOOT OFF THE CLUTCH PEDAL AFTER SHIFTING GEARS.



THE CLUTCH SLIPS. THE ENGINE WASTES POWER AND FUEL. AND YOU WEAR OUT THE CLUTCH.

LOOK AHEAD FOR:

STOP SIGNS



TRAFFIC LIGHTS



RAILROAD CROSSINGS.



START SLOWING DOWN EARLY BY TAKING YOUR FOOT OFF THE GAS PEDAL AND LETTING THE ENGINE SLOW YOU DOWN. THAT RED LIGHT MAY CHANGE TO GREEN BY THE TIME YOU GET THERE! MOVING OUT FROM A STANDSTILL TAKES A LOT OF FUEL.



SHUT OFF YOUR ENGINE--ESPECIALLY IF IT'S A GAS JOB--WHEN YOU'VE GOT TO WAIT FOR SEVERAL MINUTES!

KEEP A DIESEL ENGINE IDLING IF YOUR WAIT IS GOING TO BE ONLY A FEW MINUTES. LESS FUEL IS USED IN A SHORT IDLING PERIOD THAN FOR STARTING AGAIN.

HEY, CONNIE--THIS WAY OF LEARNIN' IS A REAL GAS!

FINE!... BUT LET'S MOVE ALONG AND LOOK AT SOME CHARTS...





YOU DRIVERS ARE NOT THE ONLY PEOPLE WHO CAN SAVE FUEL...

YOUR CO CARRIES PART OF THE LOAD. HE CAN MAKE SURE HIS VEHICLES ARE USED RIGHT!

TOUGH!

GREAT!

AND THAT'S IT--END OF COURSE!

## ONLY DRIVER'S LOAD? NO!

- VEHICLES MUST GET CAREFUL ATTENTION IN SHOP--LUBRICATION, TROUBLE-SHOOTING, REPAIRS, TUNE-UP.

HMMM...BRAKES NEED BLEEDING.

- ARE 2½-TON VEHICLES MAKING RUNS A ¼-TONNER CAN HANDLE? CAN ONE VEHICLE RUN SEVERAL ERRANDS INSTEAD OF SENDING OUT SEVERAL VEHICLES?

- IS IT EVEN NECESSARY TO KEEP ALL VEHICLES AT THE READY ALL THE TIME? KEEP 25% IN ADMINISTRATIVE STORAGE. AFTER 90 DAYS, THEY CAN BE PUT BACK INTO OPERATION AND ANOTHER 25% PUT INTO STORAGE. THIS GIVES ALL VEHICLES ENOUGH OPERATION TO KEEP 'EM LIMBER--AND CUTS DOWN ON TIME, WORK AND FUEL TO KEEP THE WHOLE FLEET IN OPERATION.

HA PO: Q: // = (GOODBYE!)

SEE YOU LATER!

'BYE!

OUR PROGRAM IS OFF TO A FINE START, PEMS!

WONDERFUL! AND THE ROBOT WILL RETURN SOON WITH NEW STUDENTS FOR YOU, CONNIE--SO IT WON'T TAKE LONG BEFORE THE DANGER IS PAST.

SHORTLY, BACK AT PORT BENNETT...

SOME TRIP, EH, SAM?

LOOK! THERE'S SARGE!

WHAT HAPPENED TO YOU GUYS? YOU FALL DOWN A HOLE?

NO, UP A HOLE!

FIRE-POWER

LANCE LAUNCHER...

## TIGHTEN BUS BAR CONNECTIONS

FINGER TIGHT'S NO GOOD... YOU GOTTA TORQUE THOSE BUS BAR CONNECTIONS!

GOTCHA, BONNIE!

QUICK DISCONNECT

TORQUE TO 200-220 IN-LB

INSULATION SLEEVES

CHECK FOR LOOSE CABLES

If you've got a LANCE launcher, your organizational mechs need to check out the battery bus bar connections. They were only finger-tightened during manufacture and need proper torquing before the storage battery can do its best.

Do this to check for proper tightness:

Disconnect the quick disconnect from the battery.

Check the cables leading into the bus bars for looseness. If loose, remove the insulation sleeving and discard it.

Slip new sleeving down the cable and out of your way. Torque the nuts attaching the cables to the bus bars to 200-220 in-lbs.

Install the new sleeving over both cable connections to the bus bars and heat shrink it.

To check the nuts inside the battery quick disconnect connector, remove the 2 nuts at each end to open the connector.

Loosen the nuts that mount the bus bars to the contacts. Torque the nuts to 200-220 in-lbs.

Reassemble the connector and reattach it to the battery.



# Dragon LAGGIN'?

SORRY, BOSS-- I BEEN SITTIN' AROUND DOIN' NOTHIN' FER SO LONG, I SEEM TO HAVE LOST MY 'GET-UP-AN'-GO'!!

AWW... C'MON, GEOFF!

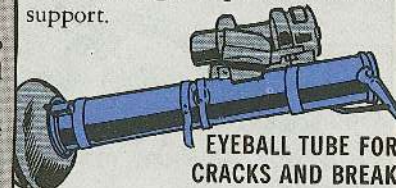
Your tank-busting Dragon missile system comes packed in a neat, simple, ready-to-use package, right?

About all you have to do to set it up for firing is adjust the bipod legs and mount the tracker. Right?

Well, right and wrong. Like, the Dragon is easy on the operator, with practically no maintenance required. But if it's been sitting around awhile, it can stand an eyeballing to be sure that it'll blast off when it has to.

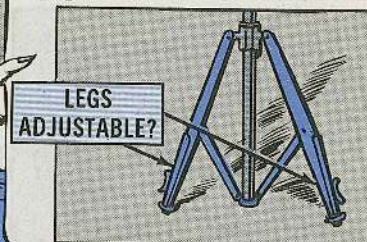
HERE'RE A FEW QUICK CHECKS YOU CAN PULL TO MAKE SURE IT'LL GO...

Check the fiberglass launch tube for cracks or breaks. If you find any, turn in everything except the tracker to support.



EYEBALL TUBE FOR CRACKS AND BREAKS

—Be sure the mount bipod legs are adjustable all the way up and down their length. (Since the front cover pops off when the bipod is lowered, you can't make this or the following check until the missile is ready for firing. You can replace the cover when it pops off).



LEGS ADJUSTABLE?

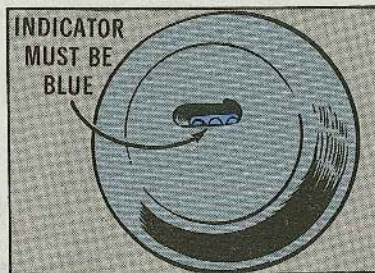




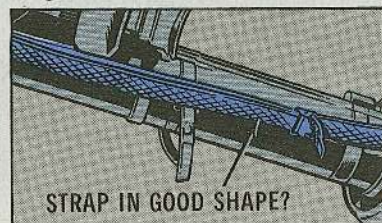
—The release device for the bipod legs must be able to hold the legs firmly in position, wherever you set 'em.



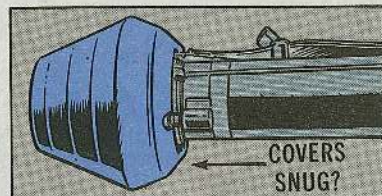
—Eyeball the dessicant package window on the front cover of the launch tube. The indicator should be blue. If it's pink, or turning pinkish, let your support know so that they can install a new dessicant package. That, naturally, prevents moisture damage.



—Check the canvas carrying strap (used for back-packing) on the launch tube for mildew or other damage. Also, make sure you can adjust the strap.



—The front and back covers on the launch tube must stay in place until the missile is ready for firing. If your covers are loose, or show any evidence at all that looks like someone may have taken them off... or tried to get 'em off... let your support know about it.

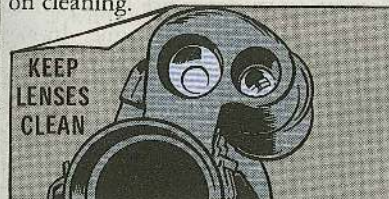


40

—Be sure the tracker can be slid into place on the bracket along the top of the tube. The tracker must hold firmly in place. (You make this test in an approved firing area, with SOP safeguards to prevent accidental firing. Otherwise, you never mate the tracker to a live round).



—Check the tracker optic and infrared receiving lenses for damage, scratches or dirt. Clean 'em with lens tissue and ethyl alcohol, if necessary. Read TM 9-1425-480-10 for the word on cleaning.



—Keep the protective covers over the lenses and the electrical connector on the tracker... and be sure the retaining cords on both covers are attached.



41

—Eyeball the tracker carrying bag assembly to be sure the lens tissue and dowel sticks are present and that the alcohol bottle (for lens cleaning, man) isn't leaking. Keep the interior of the bag clean.



—Never check the serviceability of the tracker trigger mechanism when the tracker's in place on a live or training missile (the missile'll go, man). That's done when the tracker's off the missile.



—And remember, support checks the serviceability of the tracker itself. Remember, too, that the missile requires no inspection. It comes in the tube... and stays there until it's fired.

The Dragon system is a one-shot deal. Once the missile goes, what's left is expendable.

THE ONLY THING THAT'S USED OVER AGAIN IS THE TRACKER ITSELF!

PS END



# MX-6707 **PM**

NO ANSWER FROM JONES, SIR.

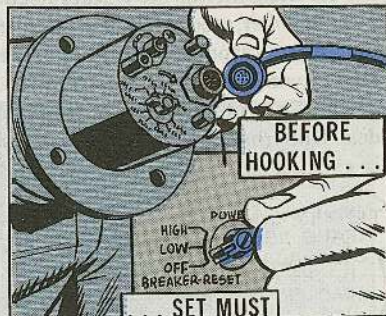
LATELY HE'S BEEN NEGLECTIN' HIS ANTENNA PM...

MAYBE TH' CHICKENS CAME HOME T' ROOST!

Pulling PM on your MX-6707 antenna matching unit can add up to a real plus for your radio set. But, a down matching unit will leave you with a big fat zero when it's communicating time.

SO HERE ARE A COUPLE OR SO **PM POINTERS** TO MAKE THAT UNIT ONE YOU CAN COUNT ON!

**CX-4722/U ANTENNA CONTROL CABLE**—Before hooking it to the MX-6707's J2 plug, be sure your radio set is turned off. If the matching unit's not alined with the frequency radio setting, and the radio is on, you can wind up with arcing and burnt pins in the cable connector.



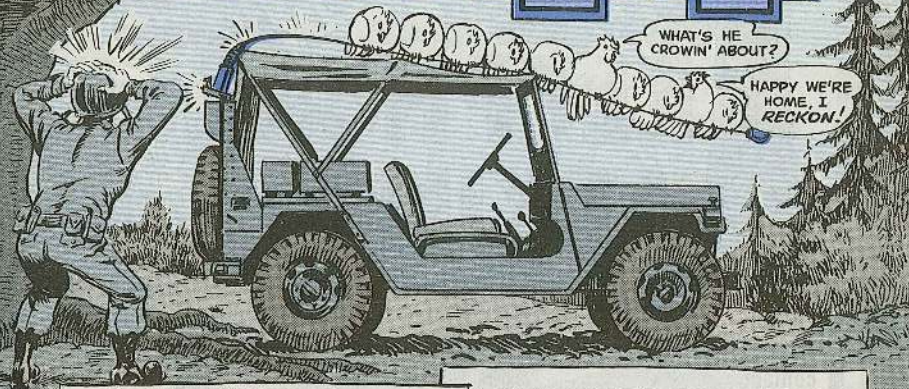
... SET MUST BE OFF!

**THAT DAMP STUFF**—One of the worst whammers of your matching unit is water. When it gets inside, water can knock out the unit. To keep water away, never use high-pressure hoses at bath-giving time. In fact,



you're way ahead by using a damp cloth, like it says in para 3.6 of TM 11-5985-262-15 (Mar 69).

# POINTS **ADD UP**



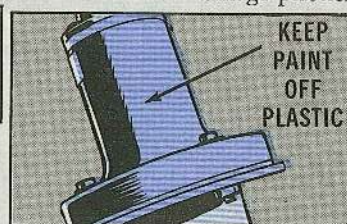
**HAIRLINE CRACKS**—To cut down on cracking, use care when bolting the unit to the mounting assembly and never use too much strain when tying down the antenna. When you're bolting the unit, always use a torque wrench and apply no more than 100 lb-in to the bolts and nuts.



**TORQUE TO NO MORE THAN 100 LB-IN ...**

When you're tying down the antenna, leave the tip of the AT-1095 antenna element about 9 feet above the ground. Be sure to use the triangular tiedown configuration that restricts sway. Also, be sure the antenna element goes into the upward facing slots of the antenna clip.

**PAINT POOPS PLASTIC**—Touchup painting of metal parts can help lengthen the life of your unit. Keep the metal free of rust and corrosion, and touch 'er up. Be careful, though, to keep the paint off the plastic or your MX-6707 will be hurting. Paint tends to break down and damage plastic.



If you get a dab or 2 of paint on the plastic and it dries before you notice, leave it alone.

AND CAREFUL WITH CLEANING SOLVENTS, TOO! THEY CAN BE AS BAD OR WORSE THAN SPECKS OF PAINT!



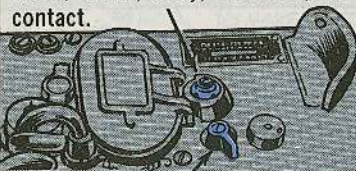
FOR

BE YOUR OWN INSPECTOR . . .

# ROUBLE-FREE ELEPHONE ALKING

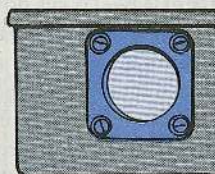
HAVING  
YOUR TA-43/PT  
OR -312/PT  
TELEPHONE  
UP-TO-PAR WHEN  
IT'S NEEDED IS  
EASY WHEN YOU CAN  
**BE YOUR OWN  
INSPECTOR!!**

CIRCUIT SELECTOR SWITCH—  
Loose, binds, dirty, corroded, no  
contact.

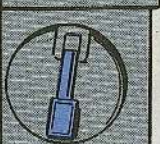


EXT-INT SWITCH—Loose, binds, no  
contact.

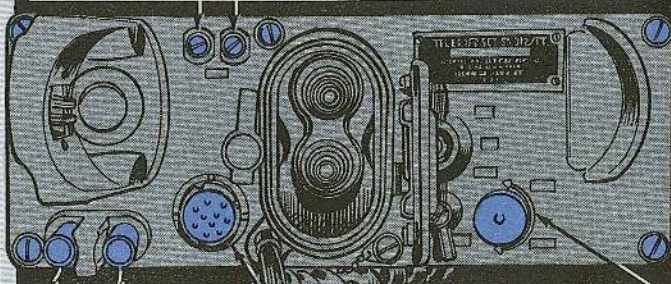
BUZZER DIAPHRAGM—  
Dented, screws loose or  
missing, broken.



GENERATOR  
HANDLE—  
Bent, binding,  
broken.



EXTERNAL BATTERY TERMINALS— Dirty, broken, **not usable.**



PANEL  
SCREWS—  
Loose,  
missing.

BINDING POSTS—  
Damp, dirty, broken,  
**not usable.**

U-79/U RECEPTACLE  
CONNECTOR— Loose, bent or  
loose prongs, dirty, **not making  
contact.** (TA-312 only)

BUZZER VOLUME  
CONTROL KNOB—  
Loose, binds.

44

YOU'LL BE TIPPED  
OFF TO PENDING TROUBLE  
BY EYEBALLING THESE  
TIPS.

KEEP A SPECIAL  
WATCH ON THE ITEMS IN  
BLUE **BOLD TYPE**—

SOME CAN  
STOP YOUR  
TALK NOW  
WHILE OTHERS  
CAN CAUSE  
FUTURE  
PROBLEMS!



RECEIVER AND TRANSMITTER  
CAPS—Loose.

MOISTURE SCREEN—  
Missing, dirty, clogged.

CORD—Frayed, cut, torn,  
insulation damaged.

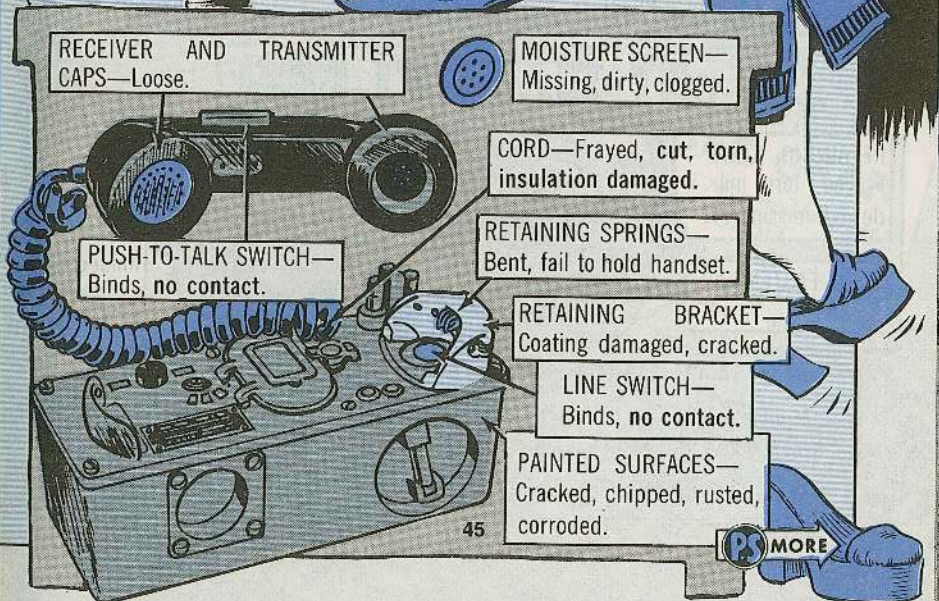
PUSH-TO-TALK SWITCH—  
Binds, **no contact.**

RETAINING SPRINGS—  
Bent, fail to hold handset.

RETAINING BRACKET—  
Coating damaged, cracked.

LINE SWITCH—  
Binds, **no contact.**

PAINTED SURFACES—  
Cracked, chipped, rusted,  
corroded.



45

PS MORE



REGULAR  
PM'S THE  
ANSWER...  
ALWAYS  
RINGS THE  
BELL!

CHECK  
MY SET,  
CONNIE?

...AND  
MINE!

MINE  
TOO!

DON'T  
F'GET  
MINE!

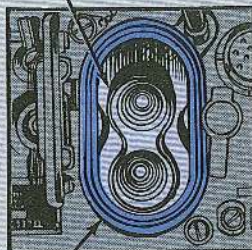
QUIT  
SHOVIN'!

## BATTERY COMPARTMENT

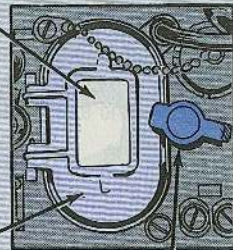
INSIDE— Dirty  
corroded, fungus  
present.

DESIGNATION STRIP—  
Scratched, unreadable,  
loose, missing.

TIP: To keep from losing the  
designation strip (NSN 9905-00-  
226-1742) glue it with an  
adhesive (NSN 8040-00-691-  
1322).



GASKET—Worn,  
cracked, missing.



COVER—Broken,  
corroded.

LATCH—  
Broken, bent.

## CY-1277(I)/PT CASE

RETAINING STRAP—  
Frayed, torn, mil-  
dewed, missing.

SLIDE FASTENER—  
Broken.



CASE—  
Frayed,  
torn,  
mildewed.

Pubs for TA-43, -312 Telephones

TM 11-5805-201-12 (Jun 67)

TM 11-5805-256-24P (Jul 73)

TM 11-337 (Jul 54) w/changes

Pub for H-60 Handset

TM 11-5965-224-15P (Aug 63)

## COUPLE OF CLIP COVERS

Dear Half-Mast,  
I need the insulator sleeves or covers  
for the alligator clips on my RL-  
172(I)/G cable reeling machine.  
They're shown in Fig 1.1 of Ch 3 to TM  
11-3895-207-10 (Apr 62).  
Without these covers there's a  
tendency for the clips to short out the  
equipment, or somebody gets shock-  
ed. Can you give me a hand?

SP5 M.L.K.

Dear Specialist M.L.K.,  
Sure can.

Get your support to get 'em and put  
'em on. These cable nipples are color  
coded for polarity. The black one goes  
by NSN 5975-00-727-6099 and the  
red one goes by NSN 5975-00-727-  
6098. They're in TM 11-3895-207-35P  
(May 71) as insulator, clip.

GET CLIP INSULATORS  
FOR ALLIGATOR CLIPS



## OFF FOR POWER SHIFT

Whoa! Turn your TSEC/KW-7  
COMSEC gear's ON-OFF switch to  
OFF before switching from vehicle to  
that component on during the power  
shift can leave you with blown fuses  
when it's teamed up with a RATT Rig.

## SB FOR COMSEC GEAR

SB 11-700 (Jul 74) sound familiar to  
you? If you're a COMSEC-type who  
has gear installed in vehicles, get  
familiar with it. It lists installation kits  
for COMSEC equipment when used  
with vehicle-communication con-  
figurations.



AIR  
MOBILITY

## THE 'EXCESSIVE' DRIP

Dear Windy,  
We've been looking high and low for  
a definition of "excessive" leakage  
when eyeballing aircraft oil and  
hydraulic systems.  
Are there limits given in a general  
manual which would apply to aircraft  
across-the-board?  
SP6 E.C.H.

Dear Specialist E.C.H.,

Nosir-e-e-e! Bird manufacturers use  
different engines, transmissions, and  
gear boxes, so it's impossible to set  
down uniform leakage limits.

Which is why you'll find leakage  
limits in the individual bird pubs.  
Limits are published in the  
organizational maintenance manuals  
for the Kiowa, Cobra, Chinook and  
Huey.

Take the Kiowa, for example. The  
hydraulic system, freewheeling unit,  
transmission input quill, tail rotor  
gear box and main rotor hub grips are  
covered in Chaps 6, 7 and 8 of TM 55-  
1520-228-20 (Oct 72). When leakage  
is beyond the maximum limits listed,  
it's "excessive", and the bird should be  
grounded.

Remember that idle birds with dry  
seals have been known to leak like a  
sieve when cranked up. Even the  
contraction of a cold gear box can give  
you leakage. Expansion of a heated  
gear box will seal a leak.

So, mechs and tech inspectors  
should use good judgment in deter-  
mining excessive leakage—especially  
where there are no published limits.

Windy

ER... WINDY, I THINK  
WE MAY HAVE FOUND  
A CASE OF  
EXCESSIVE  
LEAKAGE!

?

TM 55-1520-228

48

## "ALL PRESENT AND..."

Dear Windy,  
We have a question on aircraft  
hardware.  
How many screws can be missing  
from structural and non-structural  
panels for a chopper to be serviceable,  
Windy?  
SP6 W.J.T. III

BUT, SIR... ONLY A  
COUPLA NUTS WERE  
MISSING DURING  
DAILY INSPECTION!

\*G\*!!... I AIN'T  
THE ONLY ONE AROUND  
HERE WITH SOMETHIN'  
MISSING!

Dear Specialist W.J.T. III,  
None!

But read on...

The airworthiness of any bird is  
based on the fact that it's complete.  
So—all missing screws, rivets, bolts,  
nuts, cotter pins, safety wire, seals and  
gaskets should be replaced when you  
find them missing or damaged.

Aircraft manuals are written in this  
"positive" manner. If there is an  
allowance for leaving out hardware, or  
installing it in a special way, the pub  
will spell it out.

Your bird will lose hardware  
because of vibration and wear, though,  
and you mechs should use good  
judgment in getting hardware replac-  
ed.

Hardware missing from a structural  
panel would have to be replaced right  
now. In other cases you might defer  
the chore until you pull scheduled  
maintenance.

SOMETIMES  
IT'S EASIER TO  
REPLACE HARD-  
WARE ON THE  
SPOT RATHER  
THAN CARRY  
THE FAULT  
FORWARD ON  
THE DA FORM  
2408-13.

49



## "YOU BE THE

## JUDGE!"

When inspecting the numerous rotating, spinning, turning parts on aircraft, your guide is the wear limits given in the bird maintenance pubs.

A manual may even mention a more detailed inspection—which may, or may not, be needed.

Take the Huey tail rotor drive shaft clamps. Steel clamps may be checked by magnetic particle inspection—aluminum clamps by the fluorescent penetrant method.

Does this mean such a detailed check is routinely needed, say, every 500 hours when you repack the couplings? Nosir-e-e-e!

Check the drive shaft clamps for nicks, gouges and scratches. A scratch

can sometimes clue you that the clamp is cracked.

So, a thorough look might be in order. You make the decision.



Fact is, any time you suspect hidden damage on a bird part, make the scientific check.



## A NEW ELEMENT



### TRASH

There's a new hydraulic filter element in the works for your Huey and Cobra, airman.

### CLEAN AND REUSE NEW METAL ELEMENT



The element, NSN 4330-00-106-6764, P/N 205-076-034-7, is metal and it's non-expendable. The old paper element, NSN 4330-00-442-2484, gets tossed out every 100 hours.

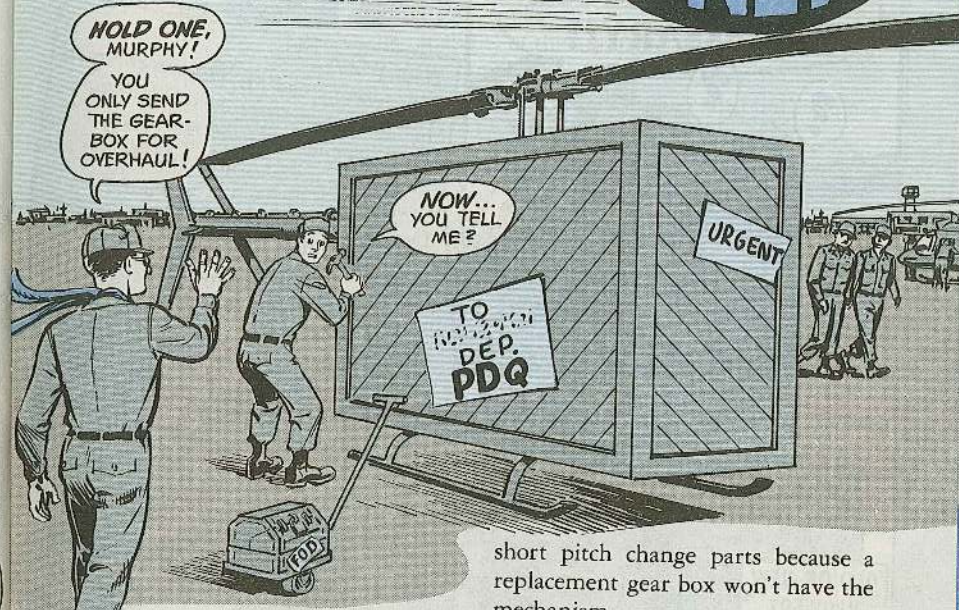
Some of the paper elements have a wire mesh and have been mistaken for the new metal ones. So, eyeball the stock number or part number stamped on the element.

Never discard those tough metal jobs. Just clean 'em with detergent, or by chemical or ultrasonic means, every 1000 hours . . . sooner if the filter indicator button pops.

Keep using those paper elements until the supply is exhausted, tho. After awhile, the new metal elements will take over.

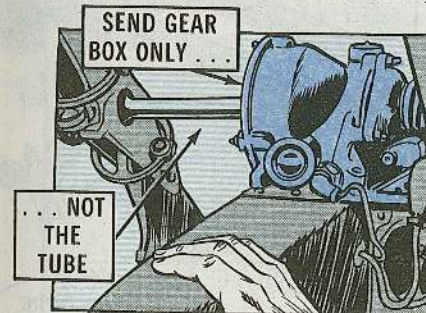
## SEND THE "COMPLETE" PART

## ONLY!



Some Kiowa tail rotor gear boxes arrive at overhaul with extra parts—some with not enough parts.

The pitch change mechanism, for one, has been shipped with the gear box. This means a unit will end up



short pitch change parts because a replacement gear box won't have the mechanism.

For another, gear boxes have arrived without the chip detector bayonet. Now, any on-the-stick mech knows that the female and male just naturally go together!

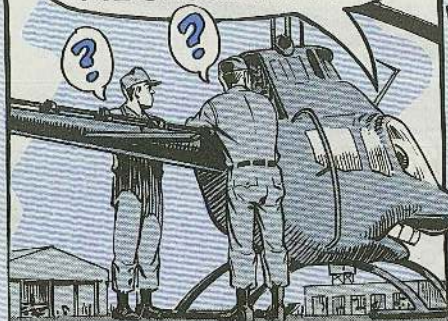
Without the male bayonet, extra ones have to be bought by support so that a complete gear box can be sent back to the field.

Sure, it may take a little more time to disconnect the chip detector at the outboard end of the bayonet. But you'll hold down the tab for replacement parts.

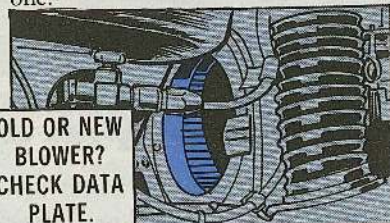
The Kiowa parts pub clues you on what parts are included in a complete tail rotor gear box assembly.



## IS THIS CHANGE NECESSARY??



If you're about to replace the oil cooler blower on your OH-58A, hold one!



**OLD OR NEW BLOWER? CHECK DATA PLATE.**

You may have the old blower, P/N A23259 or P/N A23259-1, listed for retirement at 600 hours . . . no sweat! However, there are only a few of the oldies around these days.

If you're using the new blower, NSN 1615-00-169-0360, you've got a condition item which is good as long as it passes inspection.

To see which type you have, check the blower data plate. It's usually on the side or back of the blower housing on the left side of the bird. You'll need to remove the aft fairing to see the plate.

## UTE ENGINE TEST

Dear Windy.

Maybe I need my glasses changed because I can't locate a turbine engine analysis check for our Ute engines?? Is there a TEAC in print. Windy?

SP6 J.J.L.

Dear Specialist J.J.L.,

No—not by that name. But a rose by any other name is still a rose. Engine performance check number 4 is your TEAC.

You'll find the poop, which came along before the TEAC program, in para 5-85 of TM 55-1510-209-34/1 (Jan 72).

*Windy*

YA MEAN THERE'S NO TEAC FER HIS ENGINE, JONATHAN?

'COURSE THERE IS... ONLY IT'S NOT CALLED TEAC!!

## FOR YOUR HIGH FLYER

To service your high-flying birds, air types, latch onto a new regulator, NSN 4820-00-627-9816. It goes on oxygen servicing unit, NSN 1730-00-435-7817, mounted on a standard maintenance trailer.

The regulator upgrades the capability of the unit from 1000 PSI to 3000 PSI. You need the high pressure, for example, to service the U-21.

You can now get filled oxygen cylinders, also. For your upstairs trips ask for—cylinder, NSN 6830-00-782-2639.



## LOW-POWER LOOK

You can skip the 5-power glass as you look for cracks on the Ute (U-21) landing gear knees. A change to the preventive maintenance intermediate



check sheets will call for just a normal vision once-over. Continue to use the glass on the Periodic check, tho.



COMBAT SUPPORT

MW 24B BYOI ...

\*☆☆!!

# SCOOP LOADER

HEY--  
YOU SEEN  
THAT CIVILIAN?

?

YOU BIG  
MOVERS OUT  
THERE...

...THERE'S ONLY  
ONE WAY TO KEEP  
YOUR SUPER SCOOPER  
SCOOTING...

...REGULAR  
PM!

Scoop up a load of PM for this 2½-cu yd, rubber-tired, 4-wheel loader. Be your own inspector and keep those 6 cylinders putting out 157 horsepower day after day.

After a good walkaround inspection to see if there're any loose ends, connections, lines, damage or deterioration, take a close look at these items. Take care of the items in bold face type quick-like.

**FUEL TANK**—Leaks, seeps; damaged. While you're looking for fuel leaks, check for lube leaks, too. Fuel level low. Filler neck dirty, damaged, damaged. Dipstick missing. Fuel contaminated with water, trash.

*TIP: Fill tank at end of each day; that keeps moisture from collecting in the fuel system.*

**FUEL FILTERS**—Contaminated with water, trash. Change filters any time conditions call for it.

DON'T MISS  
THIS!

THAT  
TECH  
REP WUZ  
GONNA  
INSTRUCT--

QUIT  
COMPLAININ'!

**RADIATOR**—Cap damaged, missing; filler neck damaged, cap gasket missing, damaged. Coolant level low. Keep coolant within 1 inch of top of the radiator.

**HYDRAULIC RESERVOIR**—Corroded, dirty. Oil level low. (It should be between the FULL and ADD mark on dipstick.) **Leaking**; connecting lines loose, leaking; mounting bolts loose, missing; Dipstick-filler cap damaged; gasket damaged, worn, missing. Drain plug loose, missing, damaged. Keep fuel contaminants—grass, dirt, mud—off reservoir.

**AIR CLEANER**—Indicator inoperative; clamp mounting loose, Red signal showing? When you clean or replace the filter make sure all the parts are accounted for.



EARTH-  
QUAKE?

GRR-RR!!

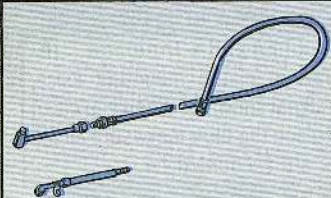
WAIT'LL  
I GET MY  
HANDS  
ON HIM!

WOT  
ARE YOU  
DOIN' IN  
THERE?

HUH?

**ENGINE**—Attaching bolts, nuts, screws, clamps loose, missing. Lube and cooling line connections **leaking**; hoses and belts rotten, cut; housing chipped, cracked. Engine components dented, bent, damaged. Dipstick gasket missing, damaged; filler neck damaged. Drain plug missing, **loose**. Crankcase oil level **low**. Keep oil up to **FULL** mark 'cause the turbocharger depends on engine oil to keep it cool and lubed.

**TIRE INFLATION KIT**—Missing, parts damaged, **missing**.

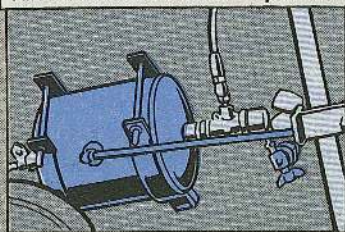


**TIRES**—Cut (to or thru the fabric), damaged, smooth in spots; excessively **worn**; pressure too high/low. Keep 45 PSI in 'em (cold).

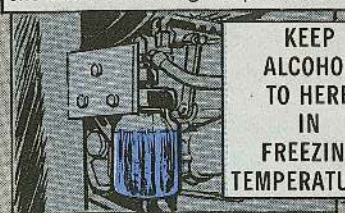


INFLATE  
TO 45 PSI  
WHEN TIRE  
IS COOL

**AIR RESERVOIRS**—Mountings, connections **loose**; leaking; drain plugs loose; lines, hoses **damaged**; drain valve stuck. Condensation **present**.



**ALCOHOL EVAPORATOR** — Keep alcohol level up to evaporator's shoulder in freezing temperatures.

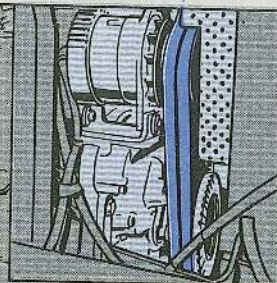


KEEP  
ALCOHOL  
TO HERE  
IN  
FREEZING  
TEMPERATURES

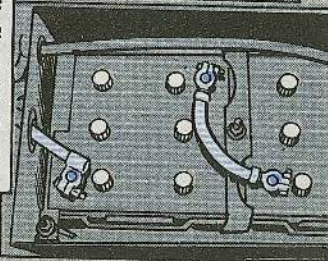
56

JOHNSON  
SAID HE'D  
RATHER HAVE  
CONNIE SHOW  
US HOW TO  
BYOI!!

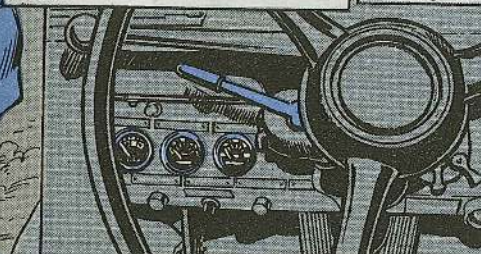
**FAN/ALTERNATOR/COMPRESSOR DRIVE BELTS**—Worn, cracked, frayed, stretched; need adjustment. You should get 1/2-in deflection half way between pulleys.



**BATTERIES**—Dead. Electrolyte levels **low**. Keep it 3/4 inch above separators. Connections **loose**, dirty, **corroded**, missing. Box **corroded**, damaged; cover **missing**. Cables **broken**; terminals **corroded**, damaged, **loose**.



**CONTROL/INSTRUMENTS**—Dials, unreadable, broken; switches **missing**, broken, won't operate like they're supposed to. Connections **loose**.



**HORN**—Won't work. Button **missing**.

**PROPELLER SHAFT**—Bent, cracked; mounting loose; bearing/flanges cracked, worn, damaged.

**FLOW DIVIDER VALVE**—Leaking, damaged. Hoses, loose deteriorated; mounting **loose**.

**FIRE EXTINGUISHER**—Seal broken. Discharged. Inspection tag **missing**. (You weigh it every 6 months. Get a new one if yours weighs less than 4 1/2 lbs, or pressure is less than 125 lbs).

**LIGHTS / TURN SIGNALS** —Lens broken; housing damaged; bulbs **missing**. Connections **loose**.

**STEERING WHEEL**—Broken; housing cracked, damaged. Mounting brackets **loose**, **missing**.



KEEP  
TM 5-3805-  
251-12 (Oct 73)  
AND  
LO 5-3805-251-  
12-2 (Aug 73)  
CLOSE AT HAND.

57

PS END



## GAS CAN PARTS LIST

Dear Half-Mast,

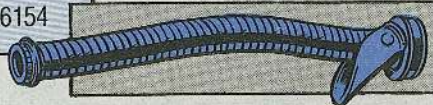
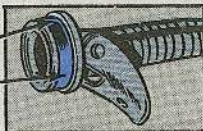
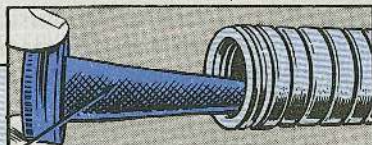
We got gigged for unserviceable 5-gal gas cans. Seems the cap screens were missing from the spouts. Could you give us the NSN we need to get out of the doghouse?

1LT R.G.C.

Dear Lieutenant R.G.C.,

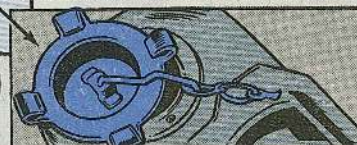
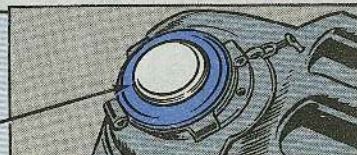
Glad to help. Here's the number for screens, and some others that'll be useful:

| SPOUT<br>ITEMS           | NSN              |
|--------------------------|------------------|
| Cap Screen               | 7240-00-132-6433 |
| Bottom<br>(bushing)      | 7240-00-132-6431 |
| Bottom washer            | 5310-00-228-6638 |
| Spout assy<br>(complete) | 7240-00-177-6154 |



## CLOSURE ITEMS

| CLOSURE<br>ITEMS | NSN              |
|------------------|------------------|
| Gasket           | 5330-00-298-7165 |
| Closure Assy     | 7240-00-025-3377 |



SEE TM 10-7200-200-13 (Feb 74) FOR THE PM WORD ON WATER CANS.

## FAUCET FACTS

Dear Half-Mast,

I have water sterilizing bags, NSN 4610-00-268-9890, with defective faucets. It seems a waste to replace the complete bag because of leaking faucets. Any way to get the faucets?

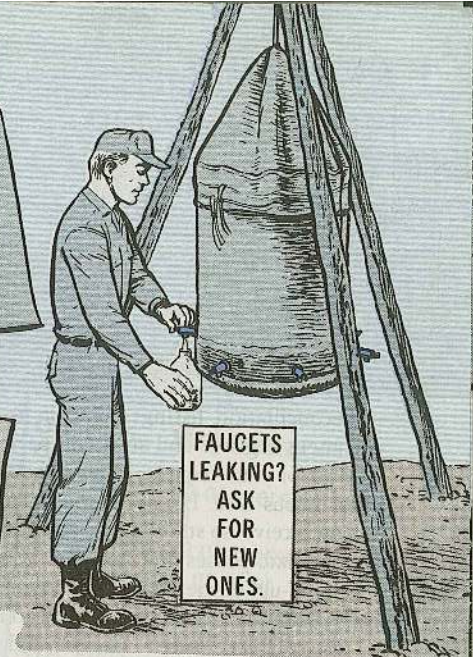
SFC B.E.W.

Dear SFC B.E.W.,

They're available under NSN 4510-00-277-9569, Part No. C13200E6482. They're listed as exhaust items so you may or may not get one. Your request will help build demand data for a new buy, tho.

Half-Mast

FAUCETS  
LEAKING?  
ASK  
FOR  
NEW  
ONES.

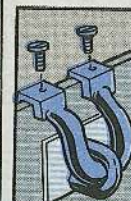


## SPRING FOR SAFETY

If your foot locker, NSN 8460-00-243-3234, doesn't have a safety spring clip on the staple, spring into action. Get modification kit, hasp, NSN 8460-00-021-5395, and apply it soonest.

This spring clip keeps the hasp from accidentally locking the lid on some child who might crawl into a foot locker. Without the clip, the hasp will lock onto the staple and keep the lid from being opened from the inside. Some child could suffocate.

Make sure all foot lockers going to salvage have the clip installed or the hasp or staple removed.



INSERT  
SPRING CLIP  
THROUGH  
STAPLE



ATTACH  
CLIP TO  
LOCKER



WON'T  
LOCK  
ACCIDENTALLY



NEW SUPPLY ANGLE

# FOLLOW-UP STRATEGY

NO HOLE UNDER HERE FOR IT TO FALL INTO!

IT'S ONLY SPECIALIST STEWARD LOOKING FOR HIS REQUEST!

RIGHT ON! HE'S HAD IT IN FOR WEEKS!

... AND HE'S REALLY GETTING DESPERATE!

TO DATE HE'S RECEIVED NO STATUS CARDS...

... NOR ANY SHOWING ON THE RECONCILIATION LIST!

FOLLOW-UP!

SUPPLY HOTLINE CALL AUTOVON 977-7431

Reconciliation listings come in from your support. So you get out your document register and start comparing.

Most of your requests show up on the listing and match the info on your latest status card. But sometimes a request seems to fall in a hole.

You receive no status cards, you get a no-show on the reconciliation list, and the due date passes and no item. What do you do?

Follow-up. Some people think you send out follow-up cards only on high-priority items. Not so! If you need an item and haven't heard from support on it, the delivery date's passed and the item does not appear on your reconciliation listing follow-up even low-priority requests. Course, DLOGS people wait through 2 reconciliation listings, then cancel and resubmit.

AR 710-2 tells you to use document identifier code (DIC) AF-series. But could be you're missing a good bet. AR 725-50 (DSU's supply bible) recognizes DIC AT-series. NCR, DLOGS and SAILS systems also cover the AT-series.

But, under any system you should use the AT-series only to follow up requests for which you have no word at all.

| DOCUMENT IDENTIFIER | ROUTING IDENTIFIER | W | FSC | FIN          | ADD'L | UNIT OF ISSUE | QUANTITY | BLANK | EXTD | DISTR | PROJECT | PR | REQD | ADVICE | ROUTING | TRANSACTION | DELTA | LENTH |  |
|---------------------|--------------------|---|-----|--------------|-------|---------------|----------|-------|------|-------|---------|----|------|--------|---------|-------------|-------|-------|--|
| STOCK NUMBER        |                    |   |     |              |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| ORG DOC NUMBER      |                    |   |     | ROUTING DATA |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C1                  |                    |   |     | C1           |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| CONTROL NUMBER      |                    |   |     | ATA          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C2                  |                    |   |     | C2           |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| FUND                |                    |   |     | DISTRIBUTION |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| PROJECT             |                    |   |     | PR           |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| ADVISE              |                    |   |     | C3           |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C4                  |                    |   |     | C4           |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C5                  |                    |   |     | C5           |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C6                  |                    |   |     | C6           |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C7                  |                    |   |     | C7           |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C8                  |                    |   |     | C8           |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C9                  |                    |   |     | C9           |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C10                 |                    |   |     | C10          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C11                 |                    |   |     | C11          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C12                 |                    |   |     | C12          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C13                 |                    |   |     | C13          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C14                 |                    |   |     | C14          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C15                 |                    |   |     | C15          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C16                 |                    |   |     | C16          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C17                 |                    |   |     | C17          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C18                 |                    |   |     | C18          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C19                 |                    |   |     | C19          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C20                 |                    |   |     | C20          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C21                 |                    |   |     | C21          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C22                 |                    |   |     | C22          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C23                 |                    |   |     | C23          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C24                 |                    |   |     | C24          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C25                 |                    |   |     | C25          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C26                 |                    |   |     | C26          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C27                 |                    |   |     | C27          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C28                 |                    |   |     | C28          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C29                 |                    |   |     | C29          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C30                 |                    |   |     | C30          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C31                 |                    |   |     | C31          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C32                 |                    |   |     | C32          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C33                 |                    |   |     | C33          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C34                 |                    |   |     | C34          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C35                 |                    |   |     | C35          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C36                 |                    |   |     | C36          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C37                 |                    |   |     | C37          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C38                 |                    |   |     | C38          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C39                 |                    |   |     | C39          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C40                 |                    |   |     | C40          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C41                 |                    |   |     | C41          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C42                 |                    |   |     | C42          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C43                 |                    |   |     | C43          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C44                 |                    |   |     | C44          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C45                 |                    |   |     | C45          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C46                 |                    |   |     | C46          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C47                 |                    |   |     | C47          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C48                 |                    |   |     | C48          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C49                 |                    |   |     | C49          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C50                 |                    |   |     | C50          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C51                 |                    |   |     | C51          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C52                 |                    |   |     | C52          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C53                 |                    |   |     | C53          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C54                 |                    |   |     | C54          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C55                 |                    |   |     | C55          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C56                 |                    |   |     | C56          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C57                 |                    |   |     | C57          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C58                 |                    |   |     | C58          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C59                 |                    |   |     | C59          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C60                 |                    |   |     | C60          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C61                 |                    |   |     | C61          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C62                 |                    |   |     | C62          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C63                 |                    |   |     | C63          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C64                 |                    |   |     | C64          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C65                 |                    |   |     | C65          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C66                 |                    |   |     | C66          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C67                 |                    |   |     | C67          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C68                 |                    |   |     | C68          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C69                 |                    |   |     | C69          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C70                 |                    |   |     | C70          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C71                 |                    |   |     | C71          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C72                 |                    |   |     | C72          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C73                 |                    |   |     | C73          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C74                 |                    |   |     | C74          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C75                 |                    |   |     | C75          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C76                 |                    |   |     | C76          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C77                 |                    |   |     | C77          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C78                 |                    |   |     | C78          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C79                 |                    |   |     | C79          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C80                 |                    |   |     | C80          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C81                 |                    |   |     | C81          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C82                 |                    |   |     | C82          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C83                 |                    |   |     | C83          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C84                 |                    |   |     | C84          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C85                 |                    |   |     | C85          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C86                 |                    |   |     | C86          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C87                 |                    |   |     | C87          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C88                 |                    |   |     | C88          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C89                 |                    |   |     | C89          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C90                 |                    |   |     | C90          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C91                 |                    |   |     | C91          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C92                 |                    |   |     | C92          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C93                 |                    |   |     | C93          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C94                 |                    |   |     | C94          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C95                 |                    |   |     | C95          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C96                 |                    |   |     | C96          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C97                 |                    |   |     | C97          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C98                 |                    |   |     | C98          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C99                 |                    |   |     | C99          |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |
| C100                |                    |   |     | C100         |       |               |          |       |      |       |         |    |      |        |         |             |       |       |  |

ENTER THE APPROPRIATE AT-SERIES DOCUMENT IDENTIFIER CODE IN BLOCK D

The follow-up card goes through the system just as your original request did. When it reaches an action point with no record of your original request, the AT card becomes a request. AF-series DIC's only tell the computer to start looking. If there's no record of your original request, an AF-DIC earns a status card telling you to resubmit. But the AT-series card becomes a request with no more paperwork from you.

Course, support checks for any trace of your original request before using the AT-series card as a request so you don't get duplicate shipments.

The headshed says that even though AR 710-2 does not cover the AT document series, there's no rule against it.

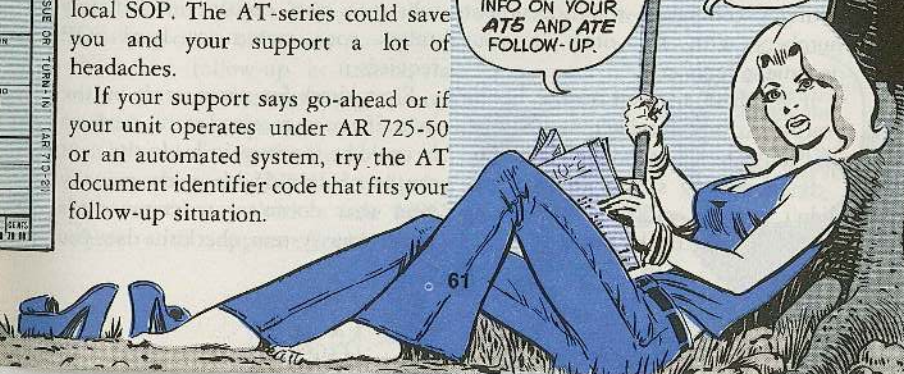
Your DSU can put the AT-series in local SOP. The AT-series could save you and your support a lot of headaches.

If your support says go-ahead or if your unit operates under AR 725-50 or an automated system, try the AT document identifier code that fits your follow-up situation.

| DIC | MEANING                                           |
|-----|---------------------------------------------------|
| AT1 | Follow-up of overseas request with NSN            |
| AT2 | Follow-up of overseas request with part number    |
| AT5 | Follow-up of overseas request with exception data |
| ATA | Follow-up of CONUS request with NSN               |
| ATB | Follow-up of CONUS request with part number       |
| ATE | Follow-up of CONUS request with exception data    |

IF THE ORIGINAL REQUEST WAS EXCEPTION DATA, MAKE SURE YOU PUT THE SAME INFO ON YOUR AT5 AND ATE FOLLOW-UP.

CHECK APPENDIX B, AR725-50 FOR OTHER AT-SERIES CODES.





# RAISE YOUR ODDS

Keeping straight on supply requests is like trying to get candy from a machine. You put in your money and take your chances. Mostly you get what you want. But you can lose your money, get the wrong kind . . . or get more than you ordered.

However, there're ways to raise the odds on getting the candy bar, er . . . item you requested.

Status cards keep you up-to-date on where your high-priority requests stand. But a smart PLL type also keeps an eye out for his periodic reconciliation listing. This listing is usually a computer printout showing the supply and shipment status of each request your support unit has on the books for you. Depending on your supply system, the reconciliation listing may come out every 2 weeks, monthly or even quarterly.

Whenever you get a reconciliation listing, compare the document numbers with the ones in your document register.

If you find an item on the listing you've already received, write REC and the date it arrived beside it.

If the listing shows an item you didn't request, cancel it by writing CANCEL next to the entry.

SIX  
GROSS  
OF  
GASKETS  
?

PREPARED 75 OCT 01  
STORAGE SITE AXB

DODAAC  
W22PLO

JULIAN DATE/  
SERIAL NO. PD EAD

|          |    |     |
|----------|----|-----|
| 50140133 | 09 | 303 |
| 50142703 | 05 | 319 |
| 50143364 | 09 | 303 |
| 50143365 | 09 | 303 |
| 50143383 | 13 | 303 |
| 50143426 | 05 | 287 |
| 50143606 | 09 | 303 |
| 50143666 | 05 | 287 |
| 50149617 |    |     |
| 50156447 |    |     |
| 50152317 |    |     |
| 50152336 |    |     |
| 50152208 |    |     |

COMPARE  
THESE WITH  
YOUR DOCUMENT  
REGISTER

However, if you find an item in your dues-in file that's not on the reconciliation listing, never cancel the item out on your document register or submit a new request immediately unless your system or local SOP requires it.

First, check for status cards on the item. If you've received status cards on it, could be the item is due in the next couple of days. If it's a low-priority item that doesn't rate status cards under your system, check the date you

THAT  
WASN'T  
OUR  
REQUEST!

WAIT'LL  
HALF-MAST  
HEARS ABOUT  
THAT!

## DUE-OUT RECONCILIATION LISTING

PCN B-ALB-094

CUTOFF DATE  
75274

RESPONSE DUE DATE  
75304

| STATUS | NSN              | U/I | QTY<br>D/O | FUND<br>CODE | COST<br>CODE | ASSET/<br>OBJECT | SOURCE<br>SUPPLY |
|--------|------------------|-----|------------|--------------|--------------|------------------|------------------|
| BB     | 6630 00 171 5126 | EA  | 3          |              | MF40         | 0 OK             |                  |
| BG     | 2590 00 256 5535 | EA  | 3          |              | MD68         | 0 OK             |                  |
| BA     | 1005 00 937 8255 | EA  | 1          |              | MD96         | 0 OK             |                  |
|        | 1005 00 937 8255 | EA  | 1          |              | MD96         | 0 OK             |                  |
|        | 1240 00 970 8656 | EA  | 1          |              | MD68         | 0 OK             |                  |
| BB     | 5360 00 582 4075 | EA  | 4          |              | MD68         | 0 REC 5026       |                  |
|        | 5910 00 649 3188 | EA  | 2          |              | MD80         | 0 OK             |                  |
|        | 5365 00 816 4239 | EA  | 49         |              | MD64         | 0 REC 5025       |                  |
|        | 1025 00 478 3765 |     |            |              | MD60         | 0 REC 5053       |                  |
| BB     | 1025 00 470 1664 |     |            | MK           | MD68         | 0 REC 5078       |                  |
|        | 6685 00 763 2168 |     |            |              | MD68         | 0 OK             |                  |
|        | 2510 00 808 7767 |     |            |              | MD60         | 0 OK             |                  |

CHECK  
NSN'S  
FOR ANY  
CHANGES

GOT  
'EM?  
MARK  
THEM  
RECEIVED

sent the request in. Then see how long that priority is supposed to take. If the item is overdue, visit or call your support unit and see what their status is on the item. Then, if they don't have anything on it, either put through an AT-series follow-up or cancel the entry on your document register and submit a new request.

Give the listing the once-over, too, for any changes in NSN. If the listing has an old item with a new NSN, check with support. Could be the

number's been changed on the AMDF. So, update your records accordingly.

In any case, your reconciliation listings give the latest inside information on your requests.

USE 'EM!  
THE LISTING  
RAISES THE  
ODDS ON  
GETTING THE  
ITEMS YOU'VE  
REQUESTED.



A black and white portrait of a man in a military uniform, wearing a cap and looking slightly to the right.

Or, if your unit's name or number changes . . .

You're in for extra grief unless you put 3 real important letters in the mail with the right dope inside.

**FOR YOUR ADMIN PUBS . . .  
AR'S, PAMPHLETS, TOE,  
CIRCULARS, POSTERS, FM'S**

# SEND THE WORD

Your letters must give:

1. Your old address.
2. Your new address.
3. Your pinpoint account number (you have a different one for each center below).
4. When to start using the new address.

DEPART

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U.S. Army AG Publications Center  
2800 Eastern Blvd.  
Baltimore, MD 21220

FOR YOUR TECH PUBS...  
TM'S, TB'S, SUPPLY  
CATALOGS, SB'S, LO'S

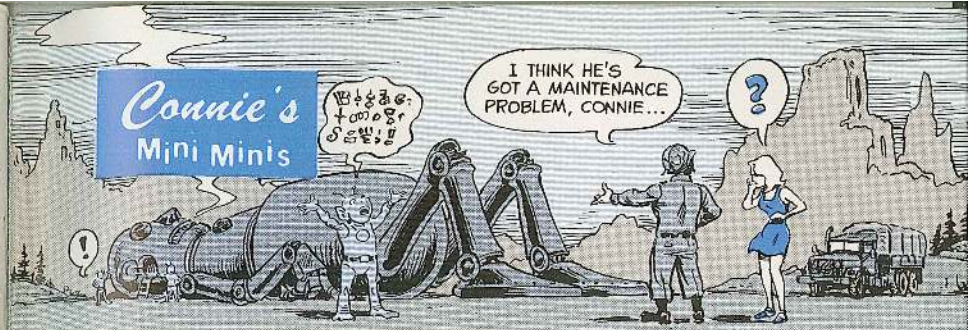
U.S. Army AG Publications Center  
1655 Woodson Rd.  
St. Louis, MO 63114

**FOR YOUR MICROFICHE . . .  
MONTHLY AMDF, REFERENCE  
AND HISTORY**

U.S. Army Catalog Data Agency  
ATTN: AMXCA-CP  
New Cumberland Army Depot  
New Cumberland, PA 17070

If you get moved on short notice, you can get the word up to the microfiche head shed by calling Autovon 977-6741 or 977-6608. But send a follow-up letter.

Send the word, and these outfits will mail back to the pubs centers.



## CB Mask/Hood Care

Nobody—but nobody—should repair rips, tears or pinholes in your CB mask or hood. Replace the hood or mask according to your TM and SB 740-94-120, Storage Serviceability Standards for Protective Mask (All Items) and Ancillary Items (Aug 74). Repairing damage with glue, tape or patches could cost you your life.

M720 Dolly Doozy

It's a bash, man, unless you replace the no-good straight, headless towbar hinge pin P/N 116121123-1 on your M720 dolly lifter. Replace it with the stronger, safer pin, NSN 5315-00-144-9963, P/N 12250099-1. Take the exception data supply route, 'cause the NSN's not on the AMDF.

## Splint Set For M718

The splint set in the BIIL for your M718 frontline ambulance comes under NSN 6545-00-952-6975. You'll find the components listed on page 75 of Fed Cat 06545-IL Vol. 2, (Jul 74). They're not in the TM.

### Hinge Pin Drill

A little drilling is needed to make the tailgate hinge pin work in your M105 or M104 cargo trailer. Pins ordered under NSN 5230-00-011-9285 are the right ones, but they lack a cotter pin hole. Drill a hole 1 17/32 inches from the base of the head. Either a No. 6 or a 13/64 drill bit is OK for the job.

## 2½-Ton Lube Plug, Fitting

Need a 7/8-in plug for the lube hole in the rear spring seat assembly on your TM-209-series 2½-ton truck? NSN 4730-00-221-2136 gets it. This plug goes with the drilling and tapping instructions in para 191.2, page 294.4, Ch 4, TM 9-2320-209-20 (Apr 65). The grease fitting you need comes under NSN 4730-00-172-0028.

## Off Before Hookup

Before hooking up the intervehicular cable between your truck and the trailer you're gonna tow, make sure your vehicle's lights are off. This will prevent sparks and shorts, which could damage the connectors.

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

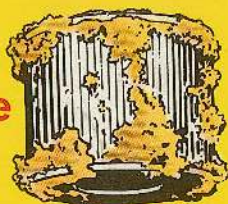


**FILTER  
CHANGED**

**(OR  
CLEANED)**

**COMPARE**

the



**BEFORE**

and



**AFTER**

**NOW**

**YOU SEE**

**WHY**



**YOUR  
ENGINE  
LOVES  
A  
CLEAN  
FILTER**

