

Issue 289

PS

December
1976

THE PREVENTIVE MAINTENANCE MONTHLY

MURPHY
ANDERSON

Dear Kid:
Sorry, but we had
to cannibalize
your chopper to
complete others!
We'll remit your
missing parts
when and if
they arrive from
supply. Merry
Christmas!!
Santa &
Elves

See Page 29 -
"HANGAR
QUEENS"

NOTE:

WARNING!
DO NOT
LEAN ON FENCE!

Some soldiers skip over notes, cautions and warnings in technical manuals. Their reasons vary. So do their injuries.

Some read and heed. As a result, they stay healthy and their equipment does its job.

Those notations are in your TM's for important reasons. They protect you. They protect your equipment.

HERE'S
WHAT
THEY
MEAN...

"WARNING:" Used to describe an operation or maintenance procedure or condition which, if not strictly followed, could injure or kill you.

"CAUTION:" Used to describe an operation or maintenance procedure or condition which, if not strictly heeded, could damage or destroy your equipment.

READ THIS!

PS THE PREVENTIVE MAINTENANCE MONTHLY

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

Within limits of availability, older issues may be obtained direct from Editor, PS Magazine, c/o US Army Maintenance Management Center, Lexington, KY 40511.

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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 745-3593. **MSG Half Mast PS Magazine Lexington, KY 40511**

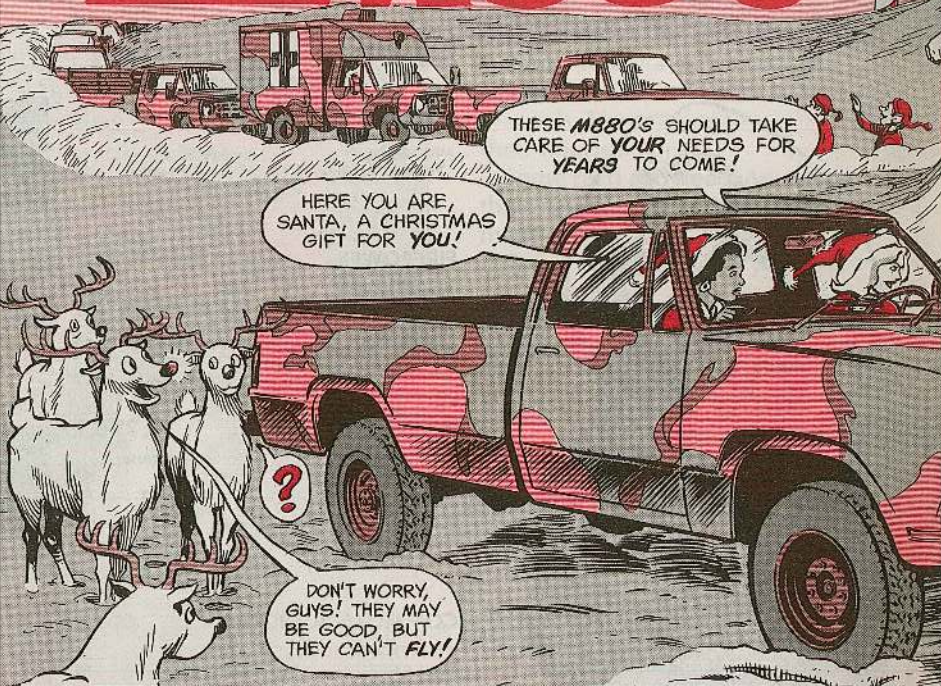
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TM-266-SERIES 1¼-TON TRUCK . . .

GROUND MOBILITY

M880



When you're talking about the whole fleet, you can call 'em M880-series—even though the M880 is only one of a dozen different models.

Or you can call 'em TM-266-series to remind you of their publications—TM 9-2320-266-10, LO 9-2320-266-12, etc.

Or, you might even call 'em easy 8's—for their easy automatic transmissions and V-8 engines.

Some are 2-wheel drive (4 x 2) and some 4-wheel drive (4 x 4).

All of 'em have a 12-volt electrical system,—just like your own buggy—for lights, starter and ignition. But some have an additional 24-volt system.

The 24-volt system includes a second alternator (either 60-amp or 100-amp) and 2 more 12-volt batteries. The 24-volt system is only for extra electrical needs, such as radios, shelters and wire reeling equipment.

UPDATE

They're movin' out into the field. Hundreds of 'em. Soon, thousands. They're replacing the old ¾-ton (M37B1, etc.) and 1¼-ton (M715, etc.) vehicles assigned to "behind the brigade rear." (The Gama Goat stays on for "forward of the brigade rear.")

They're the new M880-series 1¼-ton vehicles. They're an off-the-shelf commercial-design truck with only a few changes in 'em for their Army job as tactical trucks.



Your truck's model number tells you whether it's got just the 12-volt system or also has the 24-volt system. Only trucks with 60-amp or 100-amp alternators have the 24-volt system.

And the model number also tells you if your truck is a 4 x 2 or 4 x 4 . . . if it's a cargo truck or ambulance . . . if it's equipped to carry a commo shelter . . . if it's set up for electronics gear:

- M880 4x4 cargo truck.
- M881 4x4 cargo truck with 60 amp kit.
- M882 4x4 cargo truck with 60-amp and communications kit.
- M883 4x4 cargo truck with 60-amp and communications shelter tiedown kit.
- M884 4x4 cargo truck with 100-amp and communications shelter tiedown kit.
- M885 4x4 cargo truck with communications shelter tiedown kit.
- M890 4x2 cargo truck.
- M891 4x2 cargo truck with 60-amp kit.
- M892 4x2 cargo truck with 60-amp and communications kit.
- M886 4x4 ambulance.
- M893 4x2 ambulance.
- M887 4x4 chassis.

There's also a truck, using the M887 chassis, that carries Shop Equipment, Contact Maintenance, Truck Mounted, NSN 4940-01-016-2262.

TIN CANS
AND STRING?

Keep Command Kits

10-4,
EASY DRIVER!

YUP! WE FIGURED OUT HOW
TO KEEP COMMUNICATING TILL WE
GET RADIOS IN THESE M880's!

If it's not too late, keep the radio installation kits when you turn in those old M37B1 ¾-ton and M715 1¼-ton trucks.

You'll need the radio mount, cables, antenna, etc., for your new M882 or

Truck 'n'

RUDOLPH SEZ HE'S GOT
A 12-VOLT SYSTEM—AND
THAT NEW LAMP WE GOT
'IM IS 24-VOLT. IT'S
NOT BRIGHT ENUFF!



Towing a ¾-ton trailer (TM-202-series M101A1, etc.) with your M880-series truck calls for some special setups.

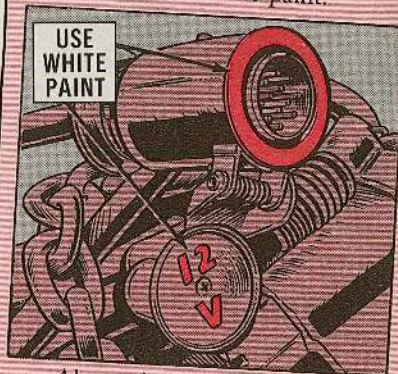
Like you've got to change the trailer's 24-volt light bulbs (lamps) to 12-volt—or you won't get enough light. Watch it, though. Once you change those lamps to 12-volt you can't hook up to a truck with a 24-volt system—you'll blow those 12-volt lamps!

HERE'S WHAT
SOME OUTFITS
DO TO MAKE
SURE EVERY-
BODY KNOWS
THE TRAILER
HAS 12-VOLT
LAMPS...



Paint "12V" inside the trailer's intervehicular cable cover, using a ½-in stencil and white paint.

USE
WHITE
PAINT



—Also, paint a white circle around the end of the rubber end of the cable connector. Careful so you don't get paint on the metal parts—you can wind up with a bum electrical connection.

4

Trailer

RUDY HEARD THAT SANTA
WAS THINKING O' USING AN
M880 TO PULL THE
SLEIGH THIS YEAR!

HAH! HE'LL MAKE
IT HARD FOR SANTA
TO PUT HIM OUT
TO PASTURE!

YEH--AN' THE
TRUCK'S SPARE
WON'T WORK ON
THE SLEIGH
EITHER!

HERE'RE THE SUBSTITUTES
FOR THOSE LAMPS, LISTED
IN YOUR TRAILER'S TM 9-
2330-202-14P (Aug 62)...



FROM (24-volt)

TO (12-volt)

NSN 6240-00-044-6914	NSN 6240-00-617-0991
NSN 6240-00-019-0877	NSN 6240-00-155-8717
NSN 6240-00-019-3093	NSN 6240-00-143-3159

And how 'bout a spare tire for your trailer? The truck's spare won't fit the trailer.

If your own command wants you to carry a spare for the trailer, it'll authorize you to order an extra tire, tube 'n' wheel from Change 2, TM 9-2330-202-14P:

Tire, NSN 2610-00-540-4719
Inner Tube, NSN 2610-00-051-9266
Wheel, NSN 2530-00-738-8452

Or, if you haven't turned in your ¾-ton truck yet, your command can authorize you to keep the truck's spare. And you'll need the truck's tools

for changing wheels. Too late? Then you can get 'em from the truck's TM 9-2320-212-10 (Nov 73):

Jack, NSN 5120-00-233-6829
Handle, jack, NSN 5120-00-357-6106
Wrench, double-head socket, hex (lug wrench), NSN 5120-00-293-2452
Bar, socket wrench handle, NSN 5120-00-243-2419

The same jack and jack handle can be kept from the M715 1¼-ton truck, but that truck's lug wrench won't work on the ¾-ton trailer.

Fueling Squeeze

You can't get the common 1½-in. refueling hose nozzle into the gas tank on your M880-series trucks.

No sweat on the nozzle problem. Here's the hardware needed to put a 1-in nozzle on that 1½-in hose found on M49C-series 2½-ton tank trucks, some 5,000-gal fuel tanker semitrailers and those tank-and-pump units often carried on cargo trucks:

Nozzle, 1-in, NSN 4930-00-360-0611

Coupling, quick-disconnect, 1-in male to 1-in female, NSN 4940-00-360-0710

Coupling, quick-disconnect, 1-in male to 1½-in female, NSN 4730-00-889-2382

CTA 50-970 is your authority.

Or you can reduce most standard-issue 1½-in nozzles with an easy fix. Sweat a piece of 1-in copper tubing to a 1½-in-to-1-in copper reducer coupling. Then sweat this assembly to the nozzle—after cutting some off the nozzle to keep the original overall length. Careful—there's a screen-type strainer inside that nozzle you don't want to mess up. A little simple figuring before you start will tell you how long the copper tubing should be.

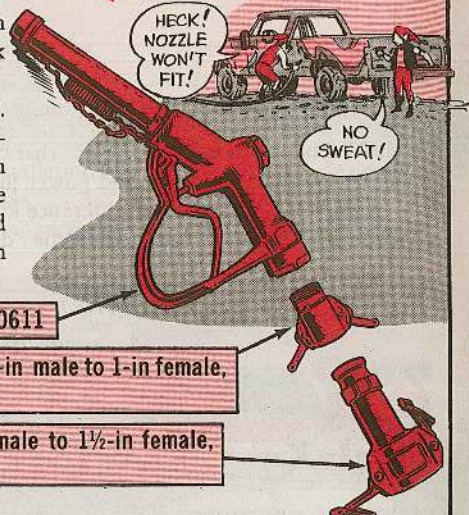
Even the 5-gal fuel can nozzle won't fit your truck's filler hole—unless you take the nozzle strainer off.

This means you've got to be extra careful. With no strainer on the nozzle, any dirt, rust or other junk in the gas can will be dumped right into the truck's fuel tank.

CAREFUL
WHEN
STRAINER'S
OFF...

SO MAKE SURE THOSE
FUEL CANS ARE REAL CLEAN
BEFORE YOU FILL 'EM UP TO
TAKE OUT ON A FIELD
EXERCISE.

... OR
YOU'LL
DUMP
CRUD
INTO THE
FUEL TANK



Pulley Wobble?

LOOKIT!
WHOLE TRUCK'S
WOBBLING -- ONLY
TH' PULLEY IS
RUNNING SMOOTH!

HMMM

MAYBE IT'S TH'
OTHER WAY
'ROUND, ELVIS!

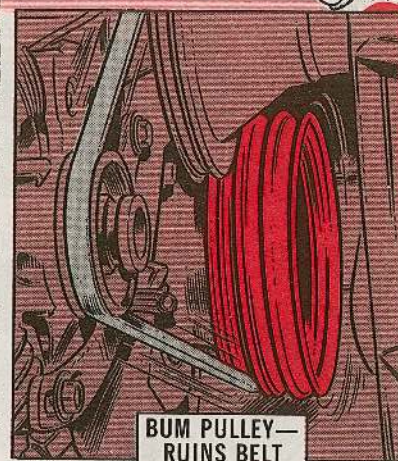
?

There've already been some warranty claims for defective crankshaft drive pulleys. They wobble... you can see it when the engine's running.

If it's bad enough, this wobble will ruin the drive belt.

A wobbly pulley should've been caught by your support during de-processing.

But check to make sure. If the belt's not running straight 'n' true, get that bum pulley replaced.



Warranty on Undercoating

Keep an eye on your truck's undercoating.

If you find it peeling off, get on that warranty wagon. First wash off the underside of the truck so you can see all bad places. Then, get the local Dodge dealer to make it right.

BLACK
SNOW?

NOPE!
UNDERCOATING
COMIN' OFF
THAT M880!



PS MORE

Watch Differ ential Plug

That rubber (neoprene) check-fill plug in the rear differential of some M880-series trucks might get lost.

**RUBBER
PLUG CAN
BE LOST**

Rest easy if your truck's got a screw-in metal plug like you see on most other trucks.

Before you take off down the road, take a look underneath and make sure that rubber plug's in the differential.

**PLUG'S
MISSING—
LUBE SPILLS
OUT, DIRT
GETS IN.
DOUBLE
TROUBLE!**

And make sure the axle breather vent is not plugged with dirt—so it can let off pressure.

**KEEP BREATHER
VENT CLEAN!**

**OH
NO!** DIFFERENTIAL
PLUG'S MISSING!
WE GOT **BIG**
PROBLEMS!

**FIX IT
QUICK,
SPEC!**
SANTA'S
IN A
HURRY
FOR THIS
SHIPMENT!

**HAH!
THAT'S
ONE
PROBLEM
WE REIN-
DEER
DON'T HAVE!**

THIS GOES FOR THE FRONT DIFFERENTIAL
BREATHER ON 4 X 4 TRUCKS, TOO.

**ALSO EYEBALL
FRONT BREATHER!**

If you lose the rear differential's rubber plug, order a new one under Part No. 4031945, using the exception data supply request. Or, if the truck's still covered by the warranty, it can be taken to the nearest Dodge dealer for plug replacement. (If you go the warranty route, let the US Army Tank-Automotive Materiel Readiness Command know about it on a DA Form 2407.)

Put in a warranty claim, too, if loss of the plug results in damage to the differential.

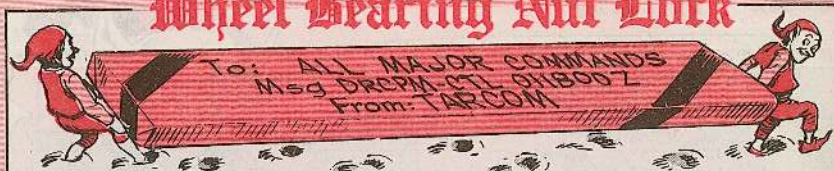
Remember, though, to make sure the axle breather vent is clean when you put in a new plug. It may save you from losing the plug.

**RIGHT ON,
SGT. ELF-MAST!**
THE LOST PLUG
CAUSED DIFFER-
ENTIAL DAMAGE--
SO PUT IN A
WARRANTY
CLAIM!

**ER, CONNIE--
PRANCER
WANTS TO
KNOW IF HIS
HARNES IS
STILL UNDER
WARRANTY...**

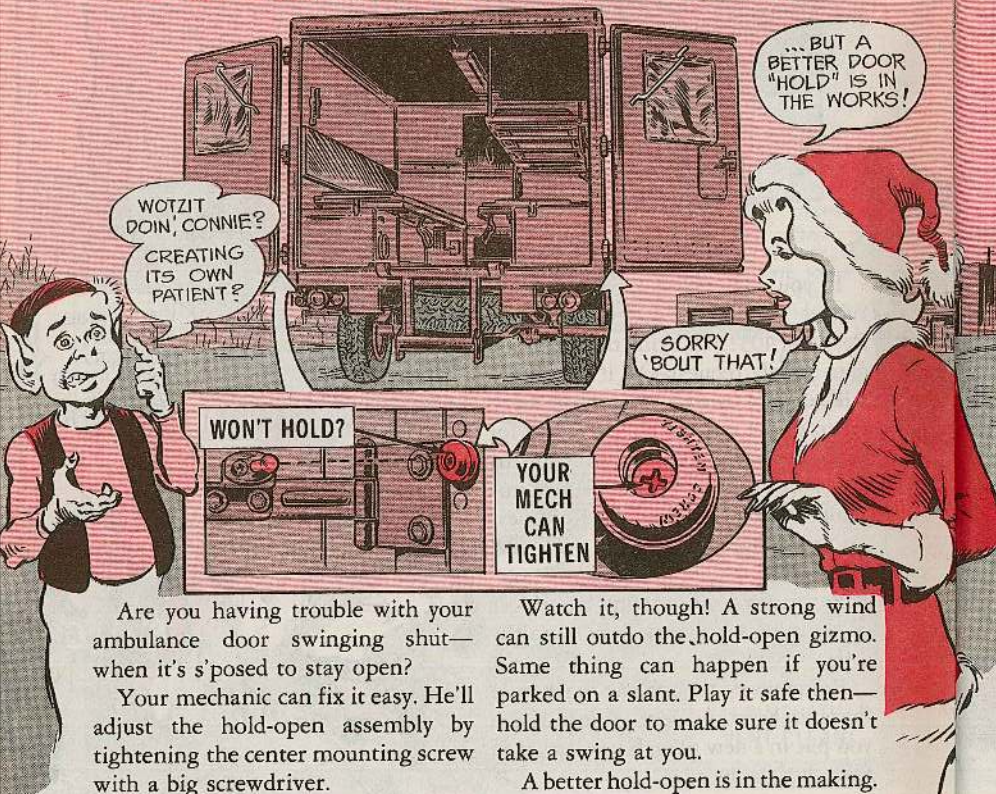
PS MORE

Wheel Bearing Nut Lock



All major commands got the word-TARCOM Msg DRCPM-CTL 011800Z Sep 76—on checking the rear wheel bearing jam nut lock ring. On some vehicles, the lock ring tabs were not bent over the jam nut. So, when you pull that "12 GAA Rear Wheel Bearings" service—per LO 9-2320-266-12 (Oct 75)—make sure you bend those lock tabs over the outer (jam) nut.

Fix Ambulance Door Gizmo



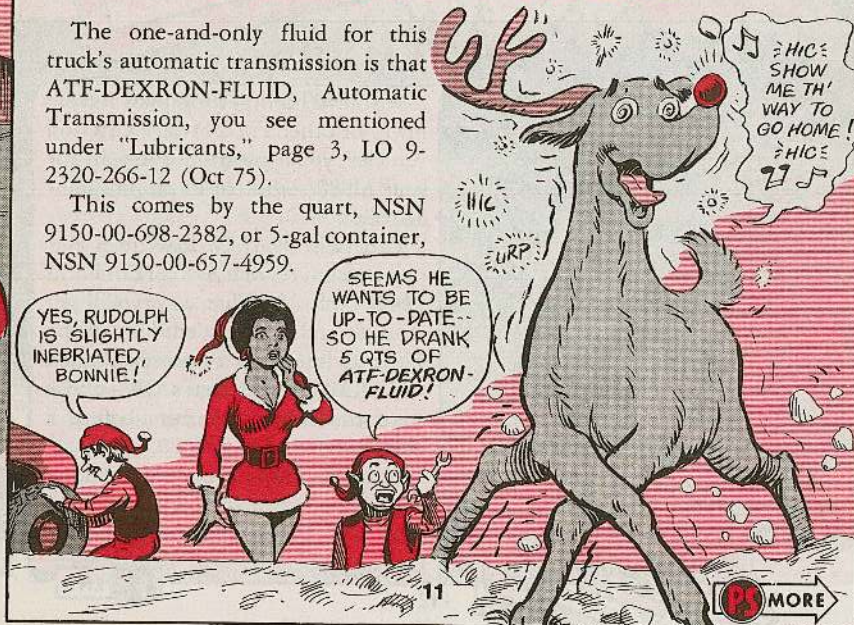
Special Tools



Transmission Fluid

The one-and-only fluid for this truck's automatic transmission is that ATF-DEXRON-FLUID, Automatic Transmission, you see mentioned under "Lubricants," page 3, LO 9-2320-266-12 (Oct 75).

This comes by the quart, NSN 9150-00-698-2382, or 5-gal container, NSN 9150-00-657-4959.



LIN's for TAMMS

You should've already got the word on TAMMS records-keeping for your M880-series trucks. The poop came out in DA Message DALO-SMM-F 161758Z Jan 76 and DA Message DALO-SMM-F 022009Z Jun 76

HERE'RE THE LINE ITEM NUMBERS (ALL WITH EQUIPMENT CATEGORY CODE HF) GIVEN IN THE JUNE 76 MESSAGE FOR THE DIFFERENT TRUCK MODELS...

X39432	M880
X39444	M881
X39447	M882
X39450	M883
X39453	M884
X39441	M885
X38592	M886
X39429	M890
X39438	M891
X39435	M892
X38562	M893



Publications

If you've been getting pubs for the M715 or other TM-244-series 1½-ton vehicles, you'll probably get pubs for your M880-series trucks on pin-point distribution.

Otherwise, you have to write in your requirement on line A-15 of DA Form 12-38 (Feb 74). That way, you'll get changes and any new editions of the TM's. If line A-15 is already printed with XM861, etc., that's OK—those were the model numbers before a switch was made to M880, etc.

If you need the current tech manuals and LO, order 'em on DA Form 17 from AG Publications Center, St. Louis.



TM-266-SERIES 1½-TON TRUCK...

REPAIR RADIAL TIRES?

OH, I THINK I'M GOING TO FAINT!

AW! YOU WON'T HARDLY FEEL IT.

Yes, Virginia—and Mike and Gloria and Sam—you can use your tubeless tire repair kit to plug holes in the M880-series truck's steel-belted radial tubeless tires.

But you've gotta have Ch 1 (May 74) to TM 9-2610-200-20 to get all of the dope.

See page 4-32 in that tire TM change, paras 4-18g and 4-19c.

The tubeless tire repair kit, NSN 2640-00-922-6921, is an "as required" item in the No. 1 Common Shop Equipment.



TM 9-2610-200-20
C 1

HEADQUARTERS
DEPARTMENT OF THE ARMY
Washington, DC, 1 May 1974

Organizational Care, Maintenance
and Repair

PNEUMATIC TIRES AND INNER TUBES

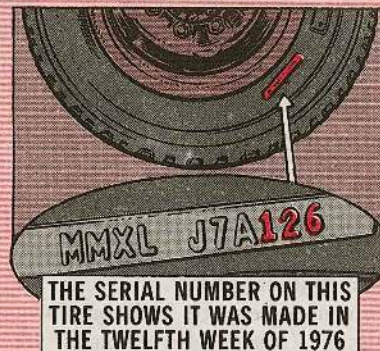
TATTLETALE TIRES

No other vehicle carries tires exactly like those on the M880-series 1½-ton trucks.

Not legally, anyway.

Tires identified as Goodyear Steel Belted Radial 9.50 R 16.5, Load Range D, with road/off-road tread, were furnished to the truck manufacturer, Chrysler Corp., only for the M880-series trucks.

Serial numbering of these tires started with MMXLJ7A355. The first 7 places in the serial numbers are the same on all tires. The next 3 places are for the date of manufacture—355 stands for the 35th week of 1975. All tires mounted on these trucks were made in that week or after.



Your command's SOP may require that serial numbers for each truck's tires—all 5 of 'em—be recorded in that truck's logbook, on DA Form 2408-10, as components of the vehicle. This is to insure accountability.

CRIME and MAINTENANCE

RIGHT ON, S.C.! BUT YOU DIDN'T PADLOCK TH' BODY TO TH' UNDERCARRIAGE ...

YOU'D BETTER READ UP ON VEHICLE SECURITY!

MOST OF THE DETAILS ON VEHICLE SECURITY WENT OUT TO ALL MAJOR COMMANDS IN THIS SERIES OF DA MESSAGES!

How can a chain-and-padlock save on vehicle repair costs? Injuries? Property damage?

By helping to keep that vehicle out of unauthorized hands!

A stolen vehicle hardly ever comes back without some damage. Or without some parts and equipment missing. And stolen vehicles are involved in a lot of accidents, causing injuries and property damage.

This is why locks are required on most tactical trucks and combat vehicles—especially vehicles that're not kept under close guard.

DA Msg DAPE-HRE 052132Z Feb 76
DA Msg DAPE-HRE-CP 182019Z Feb 76
DA Msg DAPE-HRE 201415Z Apr 76
DA Msg DAPE-HRE 032022Z Sep 76

There's also info in a worldwide letter, DAAG-PAP-A(M) (4 Feb 76) DAPE-HRE-CP (13 Feb 76), dealing with "Security of Airfields and Motor Pool/Parks."

A new Army Regulation is in the making and'll give more info. Watch for it.

All of this ties in with FM 19-30 (Nov 71) w/Ch 1 & 2, "Physical Security."

The chain-and-padlock treatment is mostly for military-design vehicles, because there's no other way to lock 'em up.

But one family of commercial-design tactical trucks also comes under this requirement. That's the M880-series (TM-266-series) 1½-ton trucks, since the ignition and door key fits 'em all. DA Msg 201415Z Apr 76 hits this point.

M880-SERIES 1½-TON TRUCK . . .

HOOD & SPARE TIRE LOCKS

Besides the steering wheel lock on your M880-series 1½-ton truck, your command may require you to lock the hood and spare tire.

Instructions for installing these 2 lockups are in TB 43-0001-39-3 (Oct 76).

IF YOU'VE GOTTEN THE WORD FROM YOUR COMMAND TO INSTALL CHAINS AND PADLOCKS, HERE'S SOME EXTRA POOP THAT MAY HELP SMOOTH OUT THE WRINKLES...

Chain with ¼-in thick links can be ordered under NSN 4010-00-129-6049 (about 141 feet). You may be able to get it by the foot from your QSS (Quick Supply Store) or your SSSC (Self-Service Supply Center).

Or your support may already have bulk tailgate chain on hand—the kind used on 5-ton trucks. NSN 4010-00-149-5583, listed in TM 9-2320-211-34P (Apr 72), brings 550 feet of chain with ⅜-in thick links.

You don't have to use the padlocks specified—NSN 5340-00-158-3807 (with retaining chain) or NSN 5340-00-158-3805 (without chain). The latest word from DA is "... or other Government issue tumbler-type padlock with steel shackle which offers a similar degree of protection . . ."

Dear Santa:
Please bring me a spare tire & wheel for my M880 1½ ton... we have an inspection soon. I promise to lock up the spare in the future.
SP4 Brown

Except for the drilling of a hole for a ⅝-in bolt, both jobs can be done with tools authorized for organizational maintenance.

NO BATTERY DUMPING!

Keep the electrolyte in your lead-acid batteries when you turn 'em in to your support.

Then they can check to see if the battery's still good. Maybe all it needs is charging. Or maybe the electrolyte's been weakened by someone flooding out the acid when they poured in too much water. Your DS can put it back into shape.

But you hit 'em below the belt when you dump out the electrolyte.

Forget what it says in TM 9-6140-200-12 (Sep 73), page 3-52, para 3-13, about "Electrolyte Disposal." That's for support-level maintenance—not organizational maintenance.

The TM will straighten this out when it's revised as a -14 instead of -12.

**THIS IS THE
RIGHT
WAY! NOT FOR
ORGANIZATIONAL
MAINTENANCE!**



Next Month In PS

1977 PM CALENDAR

DLOGS READOUT

NEW LOOK—PHASED INSPECTIONS

MACON SPARKS IN COLD WEATHER

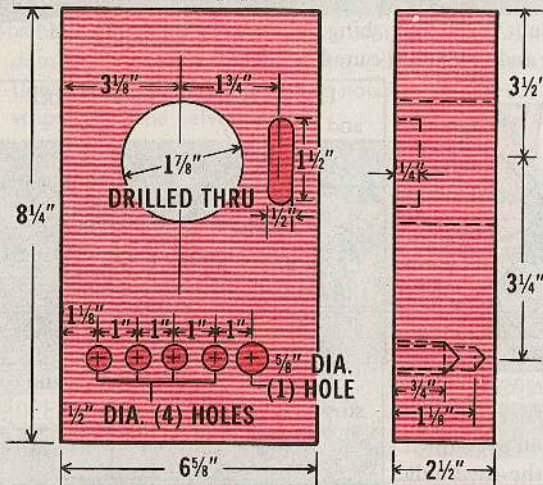
FIREPOWER

SIGHTING AND FIRE CONTROL

PURGING KIT CARRYALL

HERE'S A FIELD FIX THAT WILL STOP THE BANGS, BUMPS AND BOUNCES AND A TRIP TO THE REPAIR SHOP--ON YOUR PURGING/CHARGING KIT NSN 4931-00-065-1110!

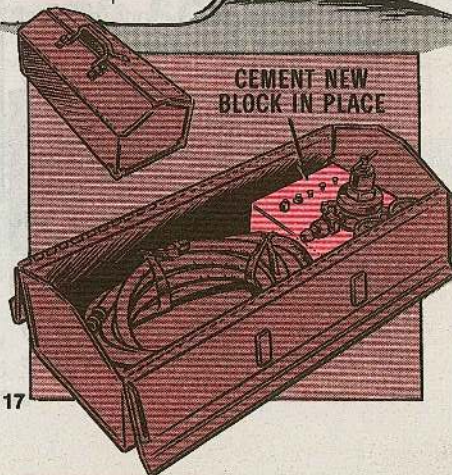
Cut a block of wood $8\frac{1}{4}$ -in long x $6\frac{5}{8}$ -in wide x $2\frac{1}{2}$ -in thick. Drill 7 holes as shown on the sketch. Finish the surface with fine grain sandpaper.



Order a portable metal tool box, NSN 5140-00-498-8772. It's part of your General Mechanics-Automotive tool kit as well as several other sets/kits. Remove the tray.

Use any kind of glue or cement to hold the new block in place.

Now place your purging kit components in the cutouts. You have a safe, secure way to carry your kit around to your panoramic telescopes, mounts, collimators and the like.

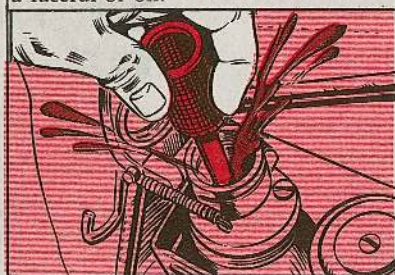


THIS GUSHER YOU DON'T NEED!

CONNIE
WILL BE
PROUD OF
MY PM!
THE HYDRAULIC
SYSTEM WAS
LOW--AN' I
FILLED IT
UP!

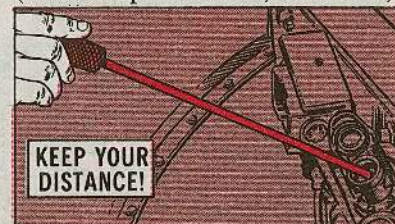


Who needs a hydraulic reservoir that blows like a gusher and gives you a faceful of oil?



This can happen when you open the accumulator dump valve if the hydraulic system has been over-filled.

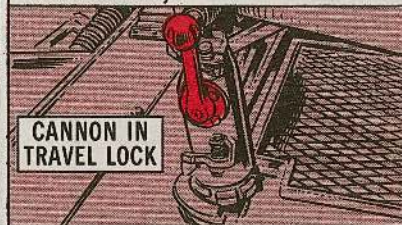
You can over-fill the hydraulic system if you check your oil-level dipstick under the wrong conditions. (With the spade lowered, f'rinstance.)



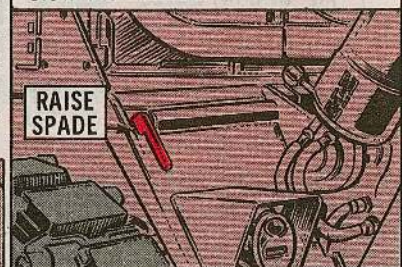
So keep your head out of the way of the dipstick at all times and do these

things before you open the accumulator dump valve:

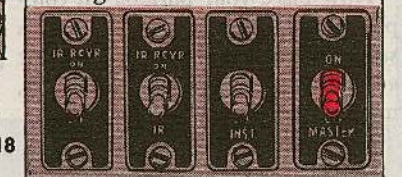
1. Put the cannon in travel lock and in battery.



2. Raise and lock the spade and stow the rammer.



3. Flip all switches OFF, including the master switch.



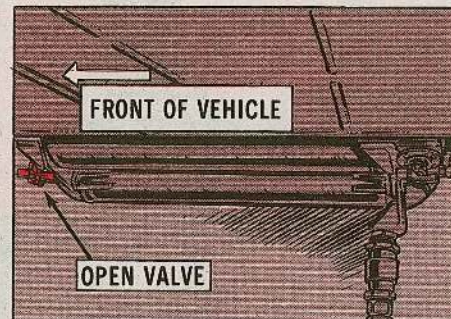
WAIT'LL I GET MY HANDS
ON THAT GUY! HE JUST
OVER-FILLED THE HYDRAULIC
SYSTEM!



Now you can open the accumulator dump valve. (You'll hear the oil flowing in the pipes. When the noise stops, close the valve.)

You can now check the hydraulic oil level without worrying about a gusher.

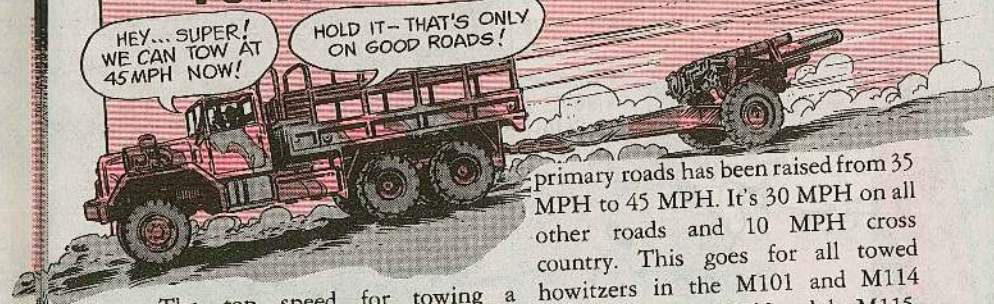
Oil level should be between the ADD and FULL marks on the dipstick.



TOWED HOWITZER SPEED

HEY... SUPER!
WE CAN TOW AT
45 MPH NOW!

HOLD IT--THAT'S ONLY
ON GOOD ROADS!



The top speed for towing a howitzer on freeway/interstate and

primary roads has been raised from 35 MPH to 45 MPH. It's 30 MPH on all other roads and 10 MPH cross country. This goes for all towed howitzers in the M101 and M114 families, plus the M102 and the M115.

M102 HOWITZER DRAIN

You gotta know where the fill and drain holes are on your howitzer or you won't do much of a job lubing the 2 ball screw and equilibrator assemblies.

SO HERE'S
WHAT TO
DO...

1. Elevate the cannon to 1200 mils.

2. Find the drain hole at the bottom of each equilibrator. (There's no plug in this hole which is in the center and just above the nut.) Take a small wire and clean out the holes.

CLEAN OUT
DRAIN HOLE

3. Use a $\frac{3}{16}$ -in key, socket head screw to take out the $\frac{1}{8}$ -in -27 NMP pipe plug at the top of both equilibrators. (Do this gentle-like so you don't strip the plugs). New and recently-rebuilt M102's have square-headed fill plugs.

REMOVE
PIPE PLUG

20

HOLE GUIDE

4. Now using a pump-type oiler, pump at least a pint of general purpose lubricating oil into each fill hole. NSN 9150-00-231-6689 gets

OIL
HERE...

you a quart. Keep on pumping until the oil starts to seep out through the drain hole at the bottom of each equilibrator.

... TILL
IT
SEEPS
HERE

5. Carefully replace and tighten the fill hole plug at the top of each equilibrator. (If you tighten it too hard you'll strip the threads. Ten inch pounds of torque is about right.)

NOT TOO
TIGHT

6. Depress and elevate the cannon several times to make sure the ballscrew assembly is completely lubricated for each equilibrator.

M551 SHERIDAN ...

PINNING IT DOWN

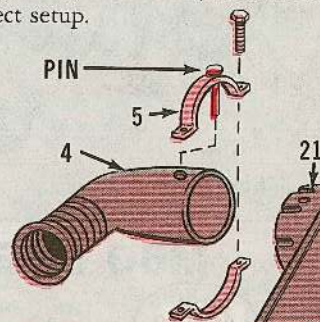
HEY,
GOOD
SHERIDAN
BUDDY...

PLEASE
NOTE
THIS...



Figure 2-48 of TM 9-2350-230-20-1 (Feb 75) gives you a bum steer on the exhaust muffler and components. It fails to show a pin that helps secure items 4, 5 and 21.

Figure 25, of the -24P/1 shows the correct setup.



The pin comes with the upper clamps NSN 2990-00-944-3596. Torque both screws to 80 lb-in.

PS Copies—For Free

You can get copies of older issues of PS Magazine by jotting a note to Bonnie, PS Magazine, Lexington, KY 40511.

21

HOW TO HANDLE A TOW HANDLE

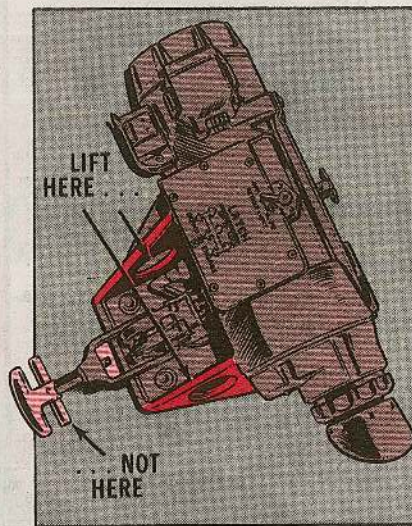
DRAT! SOME ELF
CARRIED IT BY
ITS LOCKING HANDLE!!

The locking handle on the optical sight of your TOW missile system needs some special handling to prevent damage or breakage.

For instance, when you set the sight in place on the traversing unit, be sure the sight is fully seated (sight aligned with index plate on traversing unit) before you lock the handle. If the sight's not seated right, the handle will break.

Never lift the sight on or off the traversing unit by the handle . . . or carry it by the handle. Lift the sight on or off by grabbing the holes in the braces on either side of the handle.

When you store the sight (in the carrying bag), keep the handle up . . . and try not to stack anything on it.

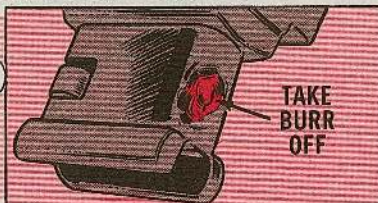


M60 OPERATING ROD



Unit armorers: You can make the operating rods in your M60 machine guns last longer by sticking close to the dope in Fig 4-5 of TM 9-1005-224-24.

If the operating rod yoke is burred, take off the burrs with the fine sharpening stone, NSN 5345-00-224-6595 in your Armorer's Tool Kit.



M16A1 STORAGE

LEVER OK-- TRIGGER UNCOCKED
COVER CLOSED! NOW YOU
CAN BE STORED!

MY
PRINCE!

A couple of quick checks before storing your M16A1 rifle in its rack can prevent needless damage.

First, be sure the selector lever is in the semi-automatic position . . . and be sure the trigger is depressed (uncocked).

That way, you prevent a safety hazard as well as take the tension off the hammer spring. The spring lasts longer.

Also, eyeball the ejection port cover before you put the rifle in the rack. The cover should be closed.

If the cover's open, it can snag on the rack. You can also damage the tension lock on the cover spring . . . in which case the cover can't stay closed.

LEVER IN SEMI POSITION
AND TRIGGER UNCOCKED



GUNNER'S GUIDE

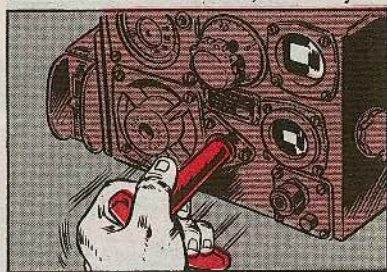
Your M60 machine gun's quite a weapon. You can help keep it that way by getting, reading and using TM 9-1005-224-10 (Oct 70). You can even keep it in your pocket.

COMPUTER ARE AND CONSERVATION

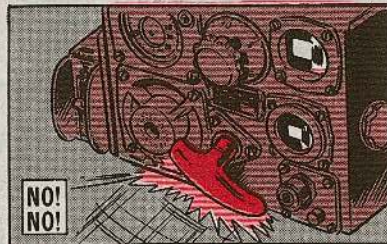
It just doesn't compute. Why break up the M13-series computer in your M60A1 tank by trying shortcuts that don't work?

THESE COMPUTERS WHICH COST ABOUT \$3,600 EACH...

1 WRONG WAY—Grab the ammo selector handle, make your



selection and then let go of the handle which will snap right back to the start



RIGHT WAY—After you make your ammo selection, let your hand ride back with the ammo selector handle, slow it down as it moves into the start position.



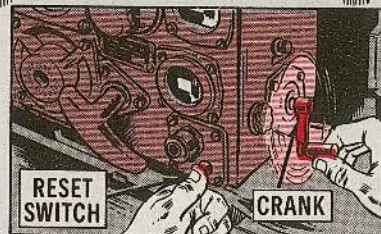
position. Do this and you derail the cam follower roller and cut up the servo wheel deep inside the computer.

...ARE GETTING BUSTED BECAUSE GUNNERS TRY TO SAVE TIME.

SO, HOW 'BOUT IT? TAKE A SEC' LONGER AND SKIP THE SHORTCUTS ...YOU'LL KEEP YOUR COMPUTER HEALTHY!

THANKS, CONNIE! YOU'RE A PAL!

2 WRONG WAY—Crank the super-elevation into the computer and then push in on the reset switch so the main gun will try to move. Do this without bothering to notice that the gun is still in travel lock. This won't work. It'll likely break a capscrew in the main gun super-elevation adapter.



THIS GUNNER O'MINE IS KILLIN' ME! HE CRANKED THE SUPER-ELEVATION INTO THE COMPUTER--AND MY GUN IS STILL IN TRAVEL LOCK!

RIGHT WAY—Make sure the gun is out of travel lock before you crank in the super-elevation.



HI-HO,
RUDOLPH--
AWAAAAAY!

PULL THIS
CHECK FIRST
WITH YOUR
AN/URM 105
MULTIMETER!

OPEN
THE MPU
COMPART-
MENT, THEN...

CHARGING CHECK

Here's a quick check to see if your Chaparral's Main Power Unit has gone into charging to give it the proper system voltage.

After you hit the starter, the first minute is engine warm up time. After the first minute, the RCR—Reverse Current Relay—should energize to allow the starter generator to charge.

The engine appears to "load down" . . . like maybe it's under a load. Listen for this change in pitch.

If the engine pitch frequency doesn't change, the RCR is probably not working.

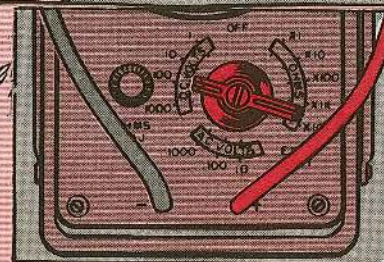
HOLD IT! DON'T
GET EXCITED AND
TOSS OUT THE
GENERATOR SET
CONTROL BOX!
THIS COULD BE
EXPENSIVE!



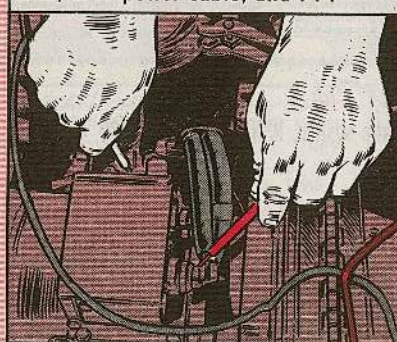
GREAT! SANTA
LEFT US AN
RCR AND A
STARTER
GENERATOR!

YEAH--BUT HE
ALSO LEFT US AN
AN/URM 105
MULTIMETER...
SEZ THAT'S WHAT
WE REALLY NEED!

SET YOUR MULTIMETER
ON 100 VDC AND...

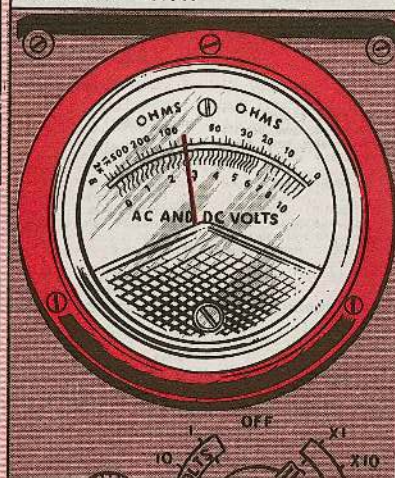


1. Hold the positive lead to the big
W43, W44 power cable, and . . .



2. The negative lead to the small
upper terminal.

3. You should get a voltage reading
of 27.5v to 28.5v.



This reading means your starter
generator is good—but your RCR is
on the fritz.

If the multimeter reads less than
26V your starter generator is bad, but
your RCR is OK.



This is a selected list of recent pubs of interest to organizational maintenance personnel. This list is compiled from recent AC Distribution Centers bulletins. For complete details see DA Pam 310-4 (Nov 74), and Ch 3 (Oct 75), TM's, TB's, etc.; DA Pam 310-6 (Jul 76), SC's and SM's; and DA Pam (O) 310-9 (Aug 74), COMSEC Pubs.

TECHNICAL MANUALS

TM 3-2420-204-128P Jul Mask, CBSB, M9/M9A1
Ch 4, TM 5-4330-211-12 Aug Filter-Separator, 350 GPM
Ch 1, TM 5-4810-221-20P Aug Water Purification Unit, 1500 GPH
Ch 23, TM 9-1300-203 Aug Artillery Ammo
Ch 1, TM 9-1300-251-20 Jun Artillery Ammo
TM 9-1425-383-10-2 May Pershing 1A
TM 9-1425-383-10-3 May Pershing 1A
TM 9-1425-383-10-4 May Pershing 1A
TM 9-1425-383-10-6 May Pershing 1A
TM 9-1425-383-10-7 May Pershing 1A
TM 9-1425-383-10-8 May Pershing 1A
Ch 2, TM 9-1425-473-23P Aug XM65 Airborne TOW GM system
TM 9-1440-380-20P Jul Pershing 1A

Ch 13, TM 9-2350-224-10 Aug M48A3 tank
TM 11-1510-204-20-2-1 Jul Electronic Equip on OV-10
Ch 5, TM 11-5805-357-15 Sep AN/TCC-61 telephone terminal
TM 11-5805-357-24P Jul AN/TCC-61 telephone terminal
Ch 3, TM 11-5805-359-15 Sep AN/TCC-62 telephone terminal
TM 11-5805-359-24P Jul AN/TCC-62 telephone terminal
TM 11-5820-571-10 Aug Comm Centers AN/MSQ-76(V), AN/GSQ-108(V)
TM 11-5820-757-20P Aug Radio AN/URC-58
TM 11-5820-807-148P Sep MK-1517/UR accessories kit
Ch 4, TM 11-5895-367-15 Aug AN/TRC-108(V) radio terminal
TM 11-5895-453-24P Jun Radio Terminal AN/TRC-145
TM 11-6625-203-24P-2 Sep AN/URM-105C multimeter
TM 11-6730-242-12 Jul Still Plot Projector PH-637E/PPP
Ch 14, TM 55-1520-209-20-1 Sep CH-47A
Ch 9, TM 55-1520-209-20-2 Sep CH-47A
Ch 3, TM 55-1520-214-20 Jul OH-6A
Ch 13, TM 55-1520-219-20 Sep UH-1B

Ch 5, TM 55-1520-220-PMS Jul UH-1C/M
Ch 23, TM 55-1520-227-20-1 Aug CH-47B, CH-47C
Ch 12, TM 55-1520-227-20-2 Aug CH-47B/C
Ch 3, TM 55-2840-230-24 Jul T73-P-1, T73-P-700 Turbo Engines
Ch 9, TM 55-2840-231-24 Jun T63-A-SA, T63-A-700 Engines
MISCELLANEOUS
DA Form 2765-1 Apr Request for Issue or Turn-In
SC 4933-95-CL-A07 Jul Tool Kit, Small Arms Repairman
SC 5180-90-CL-NO1 Jul TE 50-B Teletypewriter Repairman
SC 5180-95-CL-A54 Jul FAAR Tool Kit, Radar Maint
TB 55-1500-210-20-33 Sep Inspec Fwd, Aft Main Rotor Hubs, Strap Assys
TB 55-1520-228-20-21 Aug Inspec Improved Beat Belts, Attach Points Kits
Ch 7, TB 746-93-2 Aug Painting, Marking Aircraft

AUDIO-VISUAL STUFF—

Available at Your Local TASO

TEC LESSONS	944-441-0005-F 2½-Ton Truck, Operator Checks, Services	944-441-0018-F Game Goat, Part VII (Lubrication and Troubleshooting)	948-071-0006-F LAW-Engaging the Target
943-441-7839-F and 943-441-7839-F Chaparral, Parts I, II	944-441-0007-E thru	944-441-0021-F Game Goat, Water Operations, Part I—Fording	NEW FILMS
940-071-0088-F M203 Grenade Launchers	944-441-0008-F and 944-441-0009-F 2½-Ton Truck Tire Changing, Repair, Operations Under Unusual Conditions	944-441-0022-F Game Goat, Water Operations, Part II—Swimming	MF21-5912 You Can Beat It (M80-Series and T-82 Tanks Compared)
941-071-0078-F M80 Machinegun, Parts I, II, III	944-441-0012-F Game Goat, Part I (Exterior)	947-071-0108-F Claymore Mine Non-Electrical Arming, Firing	TF 6-4777 PM Indicators for M109-M109A1 SP Howitzer
941-071-0084-F M80 Machinegun	944-441-0018-F Game Goat, Part V (Starting)	947-071-0109-F Claymore Mine Erection-AN/TRA-37	TF 10-4841 The Parachute Rigger
942-071-0001-F Hand Grenades	944-441-0017-F Game Goat, Part VI (During & After Operations)	948-071-0005-F Operating the LAW	TF 11-4833 Radio Terminal Set AN/TRC-121, Part III—Antenna
942-071-0002-F Hand Grenade Maint, Identif			TG 10-4-15 Care of Clothing, Equipment
942-071-0003-F The Hand Grenade			

New Tester Pub

If you airmen are authorized tester, pitot and static system, NSN 4920-00-718-6480, the pub you're looking for is TM 55-4920-378-14&P (Jun 76).

M720 Dolly Tires

You'll need NSN 2610-00-204-4231 to get tires for your M720 transportable shelter lift dolly set. This will be a 700 x 16, 8-ply rating tube type, truck and bus highway tread tire. NSN 2610-00-051-1610 listed on page C-14 of TM 9-2330-285-14 (May 74) is no longer available.

Keeping Ahead

The only way to stop corrosion on your thin-skinned aircraft is to catch it in the early stages, before it gets out of hand. The treatment outlined in the new TM 43-0105 (Apr 76) on corrosion control, will head off expensive repairs to your birds.





WOT? MY HUEY?
HOW DID THAT HAPPEN...?
I'LL WANT A FULL REPORT... BUT FIRST...



GET ONE OF TH' CARGO HUEYS AIRBORNE... ON TH' DOUBLE!

!GULP!



OH, NO...
SORRY, S.C. TH' REST OF TH' BAD NEWS IS... ALL OF OUR BIRDS ARE GROUNDED!

OH, NO...



QUICKLY...

C'MON, SARGE! HEADS ARE GONNA ROLL OVER AT TH' HANGAR!!

B-BUT-- SANTA--



ALL RIGHT! WHERE IS MY HUEY?

NO, NO, CHIEF! IT MAY BE TOO MUCH FER YER 1900 YEAR OLD TICKER!



A 'QUEEN'-- OH-NO!! !SOB: YOU'VE MADE MY BIRD A-- "HANGAR QUEEN"! !SOB:

!GULP!

!CHOKE!



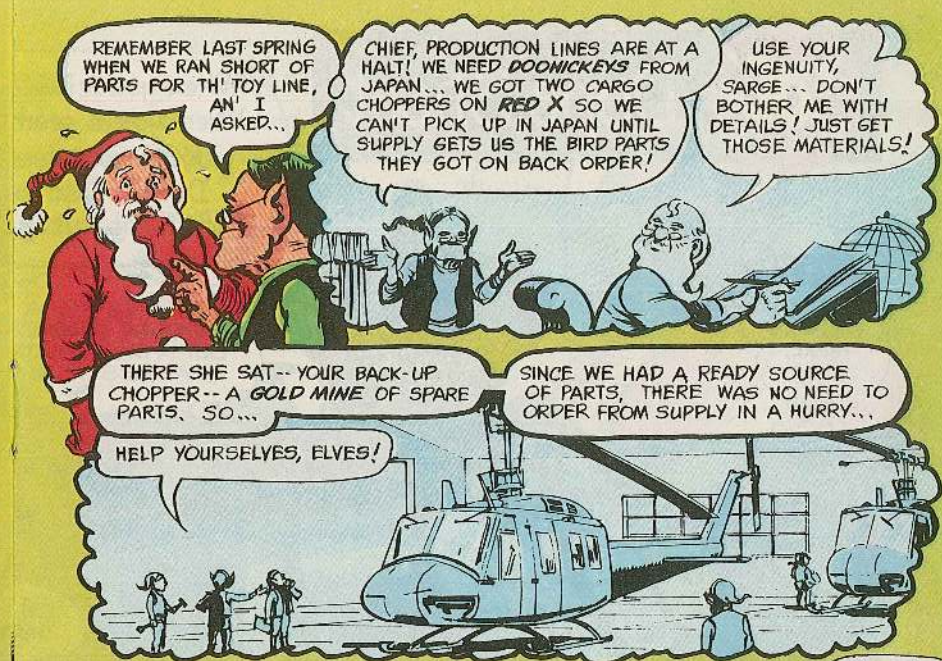
YOU GUYS HAVE STRIPPED HER!

WHO AUTHORIZED THIS MAYHEM?



ERRR-- YOU DID, S.C....

I...?



REMEMBER LAST SPRING WHEN WE RAN SHORT OF PARTS FOR TH' TOY LINE, AN' I ASKED...

CHIEF, PRODUCTION LINES ARE AT A HALT! WE NEED DOONICKEYS FROM JAPAN... WE GOT TWO CARGO CHOPPERS ON RED X SO WE CAN'T PICK UP IN JAPAN UNTIL SUPPLY GETS US THE BIRD PARTS THEY GOT ON BACK ORDER!

USE YOUR INGENUITY, SARGE... DON'T BOTHER ME WITH DETAILS! JUST GET THOSE MATERIALS!

THERE SHE SAT-- YOUR BACK-UP CHOPPER-- A GOLD MINE OF SPARE PARTS, SO...

SINCE WE HAD A READY SOURCE OF PARTS, THERE WAS NO NEED TO ORDER FROM SUPPLY IN A HURRY...

HELP YOURSELVES, ELVES!



ONE BY ONE WE STRIPPED BIRDS THAT BECAME UNFLYABLE UNTIL LAST WEEK...

HOW 'BOUT OUR PARTS FROM SUPPLY?

OH, YEAH-- YOU SHOULD'VE SEEN TH' LIST WE SENT THAT VERY DAY LAST WEEK, S.C.!

HEY! YOU CAN'T RED X THAT CHOPPER-- IT'S TH' ONLY ONE WE GOT FLYING!

Y'MEAN-- IT WAS TH' ONLY ONE.

HUH! SO THAT'S THE ANSWER!

CONNIE RODD!

I WONDERED ABOUT YOUR SUDDEN, HUGE, URGENT ORDER WHEN IT CAME IN! SO I HITCHED A RIDE ON THE CH-47!

HOLD ONE! BEFORE UNLOADING, HANG UP THIS POSTER!



H'RAY!

OUR SUPPLIES!

Joe's Dope Sheet

When you're LACKING and you're ON THE LOOK,
When you're searching each corner and nook,
Keep your temperature COOL--
Do not fracture ONE rule...
You'll win out if you play BY THE BOOK!

HEY!

WOT ARE
YOU DOIN'
THERE,
SPEC?

HE'S MAKING A
HANGAR QUEEN
OUTTA ME... THAT'S
WHAT HE'S DOIN'!

OH, H'LO,
SARGE!...

(HEH MEH)... ER... I'M
JUST "BORROWING"
SOME PARTS SO'S I CAN
GET MY BIRD BACK IN
THE BLUE!



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

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

OK, YOU GENTLEMEN HAVE HAD A REPAIR PARTS PROBLEM AND YOU HAVE RESORTED TO CANNIBALIZATION...

CANNIBALIZATION?

I NEVER THOUGHT OF IT THAT WAY...

DON'T BE SHOCKED! CANNIBALIZATION IS OK-- THAT IS, AS LONG AS IT'S CONTROLLED! USED PROPERLY ... IT DOES HELP GET THE JOB DONE!

BUT WHAT YOU DID CERTAINLY WASN'T CONTROLLED!

OK-- CONNIE! HOW IS IT DONE?

YES-- AND WHEN IS IT DONE?

HERE'S A LITTLE CHART THAT SPELS OUT THE DEAL ON **CONTROLLED CANNIBALIZATION**...

1 You cannibalize when your unit is capable of repairing both items involved in the cannibalization exchange.



2 You cannibalize only when the modules, parts, or items you need can't be latched onto in a reasonable time through DS channels or other supply sources.

3 You cannibalize when the aircraft or other end item giving up the needed part is not ready for action.



4 You must do everything to obtain and install serviceable replacements for the cannibalized bird. That's important!



FINE!... BUT ARE THERE ANY TOUCHY POINTS WE OUGHTA WATCH OUT FOR?

FOR SURE! SOME TRICKY POINTS ARE...

YOU SHOULD ONLY USE A WRECKED AIRCRAFT OR ONE SLATED FOR TIME-CONSUMING MAINTENANCE OR MODIFICATION. 'COURSE, IT'S D-U-M-B TO SNAKE A PART OFF ONE FLYABLE BIRD JUST TO MAKE ANOTHER FLYABLE!

YOU CANNIBALIZE BY THE MAC* SO YOU'LL BE SURE OF YOUR AUTHORIZED LEVEL OF MAINTENANCE!

*Maintenance Allocation Chart

NEVER CANNIBALIZE AN UNWRECKED BIRD TO THE POINT THAT IT BECOMES PRIMARILY A SOURCE OF PARTS, LOSES ITS IDENTITY, AND GETS TO BE ECONOMICALLY UNREPAIRABLE...

THAT'S HOW YOU GET A "HANGAR QUEEN"!

NEVER START CANNIBALIZING A WRECKED BIRD TILL AN ACCIDENT INVESTIGATION REPORT HAS BEEN FILED AND THE PARTS CLEARED FOR USE!

GOTCHA, CONNIE! BUT JUST WOT DO WE GET FROM CONTROLLED CANNIBALIZATION?

MAINLY... RESTORATION OF A BIRD... WITHOUT CORONATION OF A "QUEEN"!

AND THAT'S BIG, CONNIE!

BE SURE THAT THE CHORE FALLS WITHIN THE CAPABILITY AND AUTHORITY OF YOUR UNIT!

GET YOUR COMMANDER'S OK FIRST, OF COURSE...

...THEN TRANSFER THE COMPONENT RECORDS -- DA FORMS 2408-5, 2408-16 AND 2410 TO THE GAINING BIRD!

HEED THESE POINTS AND YOU'LL HAVE ONE BIRD FLYING, AND ANOTHER (THE CANNIBALIZED ONE) BIRD FLYING BEFORE LONG!

RIGHT ON, CONNIE! I'M GOING TO MAKE IT HAPPEN AROUND HERE!

WHERE CAN WE FIND THE GOOD WORD, CONNIE?

JUST TAKE A LOOK AT AR 150-1, CHAPTER 4, SECTION III, FOR THE WHOLE WORD ON CONTROLLED CANNIBALIZATION!

AH-- THEY'VE FINISHED UNLOADING YOUR REPAIR PARTS-- ANY FINAL QUESTIONS BEFORE WE LEAVE?

YES, CONNIE-- EVEN THOUGH WE'VE REPAIR PARTS NOW...

...THERE ISN'T TIME TO REPAIR MY BACK-UP BIRD-- AND WITHOUT VACCINATIONS, MY REINDEER CAN'T FLY ME ON MY ROUNDS...

WHAT ARE THE KIDS OF THE WORLD GOING TO DO WITHOUT A VISIT FROM OL' SANTA CLAUS?

SOB!
SOB!
SOB!

GLAD YOU REMINDED ME... HERE-- A PRESENT FROM A MEDIC FRIEND WHO HEARD ABOUT YOUR MISPLACED ORDER!

GLORY BE!...

THE VACCINE!

CONNIE-- WHEN I RETIRE-- I'M GOING TO RECOMMEND YOU FOR MY JOB!

YIPPEE!

36

AIR MOBILITY

LET THE GOOD TIMES ROLL



Seem' those birds flyin' around can be a real turn-on, especially if you're responsible for moving 'em safely on the ground. The towbar you use to tug a



bird needs some operator maintenance, but there's no pub on it.

There're only 2 replaceable parts--the solid rubber wheels. NSN 2530-00-288-0406 will get a new wheel.

Any other parts you need have to be cannibalized. When the towbar can't be repaired, ask for a new one with NSN 1730-00-967-9556.

To get more mileage out of those towbars:

1. Keep POL, 'specially avgas off the wheels.

2. PSP and other rough surfaces will tear those wheels up-- steer clear when possible.

3. Store them with the crossbar secured.

4. Move the towbar with the crossbar in place, and both wheels firmly on the ground.

5. Keep towbar painted and free of corrosion.

CROSSBAR SECURED



BOTH WHEELS FIRMLY ON GROUND

37

IT'S A SKID— NOT A STAND!

NOW
YOU TELL
ME?...

Dear Windy,

I have noticed soldiers standing on the UH-1 tail skid and using it as a maintenance stand. They say it's OK since the skid is supposed to withstand a downward force of 400 pounds.

I say this is a no-no which can damage the skid and cause accidents. It's a dangerous place to work from. Can you help emphasize this, Sarge?

SP6 D. McK.

Dear Specialist D. McK.,

You cut the bullseye dead-center! This is a no-no! Standing on the tail skid may not damage the bird, but a trooper can slip and fall from it.

Use a stand to pull your maintenance... beats gettin' strung by the stinger!

Windy

A NEW SEALANT

HOW'S
THAT!

WONDERFUL!

USE
SEALANT
HERE

Hueys coming off the production line now have Sealing Compound, MIL-S-8802, applied around the edge of the 90° gear box. It does a good job of keeping moisture from getting in between the gear box and mount.

The pubs are being updated to require use of the sealant, after mounting the gear box. NSN 8030-00-753-5006 will get you a 2½-oz tube of sealant, item 207, Table 1-2 of TM 55-1520-210-20 (Sep 71).

NO-SPILL FUEL SAMPLING

Dear Editor,

Taking fuel samples on UH-1, AH-1, and OH-58A helicopters can be messy. Fuel can spill down the sleeve when you use a wide mouth jar (also a safety hazard).

Here's a method we use that makes fuel sampling easy and clean.

Leftover 1 liter IV bottles from the medics work well. Those bottles with a ½- to ¾-in neck opening fit perfectly in the drain valve. All you do is push up with the bottle, and the fuel comes out—no spilling.

This gives you the sample, quick 'n' easy.

SP6 William H. Littlejohn, Jr.
Ft. Campbell, KY

(Ed note: Looks like the best method going!)

THIS GREASE,



OK, GUYS...
WINDY
SAYS
OK!

NOW-- WHAT WE
NEED IS MORE
ELBOW
GREASE...
AROUND
HERE!

THAT GREASE

Dear Windy,

The lube chart on the U-21, TM 55-1510-209-20/1, says to use MIL-G-81322 general purpose aircraft grease to repack the wheel bearings. The lube chart on the U-8, TM 55-1510-201-20, says to use MIL-G-3545 aircraft high temperature grease on the bearings.

Can we use the same grease for both aircraft?

SP6 G.S.

Dear Specialist G.S.,

You can use either MIL-G-3545 or MIL-G-81322 on the U-8 and U-21 wheel bearings. The 2 greases are compatible and interchangeable. MIL-G-81322 is the newer grease and costs a little more. It replaces MIL-G-3545 and several other older types.

Windy

KEEP 'EM FLYING!

RED
DASH

NO--THE HEAD
SHED TYPES SAY
ONLY A RED DASH
IS NECESSARY!

I THINK
TH' CHECK
RATES A
RED X!

Dear Windy,
We have a debate going about whether a red dash, or a red X, is required when a special calendar inspection is past-due on bird components.

I have in mind the compass, outside air temperature gage, altimeter, air speed indicator, first aid kit and fire extinguisher.

What's the good word, Windy?

SP6 W.J.T.

Dear Specialist W.J.T.,
Put the component on a red dash. You do not have to ground the bird. 'Course, AR 95-1 requires that components be up-to-snuff. However, the head shed (AVSCOM) interprets that reg in TM 55-1500-328-25 on maintenance policies and procedures. Para 2-3b(2) of the policy pub says that a special inspection of components on a calendar basis is done during the nearest Intermediate or Periodic Inspection. So, even if the

component check is past-due it still gets the red dash.

Remember, tho, an Intermediate or Periodic Inspection is not complete until the calendar checks are done.

You'll also find the component policy poop in the special inspection section of your bird pubs. You would only red X your bird for an immediate special inspection caused by a hard landing, sudden stoppage, overspeed, or some other critical incident that would affect safety-of-flight.

Windy

ONE FOR ALL!

Dear Windy,
We have an aircraft engine cylinder compression tester, NSN 4920-00-141-7013, and can't find a publication for it.

How can we replace worn out valves, washers and the filter to keep it in service, Windy?

SGT R.Z.

TM 55-4920-222-12

DEPARTMENT OF THE ARMY TECHNICAL MANUAL

COMPRESSION
TESTER EQUIPMENT MODEL A-313
NSN 4920-00-141-7013

HEADQUARTERS, DEPARTMENT OF THE ARMY
WASHINGTON, D.C. 20315

Dear Sergeant R.Z.,
Eyeball a copy of TM 55-4920-222-12, with Ch 2 (Sep 69) and Ch 3 (Feb 72). Although this pub covers a tester made by a different manufacturer, all the testers are made to specification MIL-T-58070A(AV)3 Apr 70.

SO, THE PARTS
LISTED IN THAT MANUAL
ARE USABLE ON ALL
TESTERS!

I CAN'T
BELIEVE I
ATE...

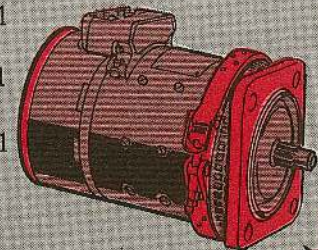
THE WHOLE THING

When you're turnin' in General Electric starter-generators for UTE's, make sure you turn in these parts:

Adapter	2925-00-104-6703	36C716661ABG1
Coupling	5340-00-119-4034	36B506256ACP1
Clamp		
Baffle	2925-00-102-6835	36B506294ABG1
Assy		

Support is not getting enough of these items back to rebuild the generators and that runs up the tab! Send the complete part.

OK?



EYEBALL THIS LITTLE GEM!

Your 175-PSI air compressor does a first-rate job of supplying air for pumping up tires and struts, plus cleaning a variety of aircraft parts.

TO KEEP THE AIR FLOWING,
BE-YOUR-OWN-INSPECTOR!

HERE'S WHAT YOU LOOK
FOR TO KEEP YOUR BABY
TROUBLE-FREE!

COMPRESSOR AIR CLEANER—Dirty,
loose in mount.

INTERCOOLER, AFTERCOOLER—
Dirt packed between fins. Fins and
tubing broken.

DRIVE BELTS, GUARD—Belts worn,
frayed, cracked. Belt tension beyond
the $\frac{3}{4}$ - to 1-in limit. Guard loose.

ENGINE DIPSTICK—Oil level low.

ENGINE AIR CLEANER—Loose in
mount. Dirt in oil.

SAFETY, RELIEF VALVES—
Loose in mount.

PRESSURE GAGE—Glass broken.
Needle does not register in the
normal operating range of 140-175
PSI.

FUEL TANK—Leaking, loose in
mount. Fuel level low.

AIR RECEIVER—Loose. Drain
rusted, indicating condensation has
not been removed.

COMPRESSOR OIL LEVEL GAGE—
Broken.

WHEELS, TIRES—Wheel lugs loose.
Tires worn, cut, cracked. Tire
pressure below required 24 PSI.

FUEL STRAINER—Broken, dirty.

FIRE EXTINGUISHER—Inspection
date expired.

Operator Tip: The extinguisher may
not be mounted on your compressor. If
not, keep an extinguisher handy when
you run your baby.

Record the fact that you pulled PM
services in the logbook, DA Form
2408-1. While you're at it, make sure
the compressor is in compliance with
TB 742-93-1 (16 Nov 73) on inspect-
ing and testing air compressors. Low-
pressure types get tested every 6
months.

For more details on your Champion
handtruck mounted compressor, page
thru a copy of TM 5-4310-242-15,
with Ch 3 (Sep 73).

YOUR AN/PPS-5() RADAR SET



M-A-A-N...
DOES YOUR
PIPSY NEED
SOME PM
ATTENTION...

IT'S GIVIN' ME A
CRAZY READING...
NINE OBJECTS, FOLLOWED
BY A LARGER, CRUISING
JUST OVER THE HORIZON...
AT BETTER THAN
1000 PER...



HERE ARE
CLUES TO
WATCH FOR.

THE
FAULTS IN
BOLD TYPE
CAN PUT
YOUR
PIPSY
OUT OF
ACTION!

Your super-duper trooper snooper is your best buddy when it comes to knowing what's going on around you at a distance or in the dark.

To keep it looking out for you, you need to look out for your set. The best way is to look it over for tips that lead to trouble and silence.

RECEIVER- TRANSMITTER

CONTROL KNOBS—Loose, missing.

INDICATOR, COUNTER, TEST METER
WINDOWS—Dirty, fogged, broken.

PROTECTIVE COVER—Missing.

ANTENNA DRIVE UNIT—Dirty.

ELEV ADJUST HANDWHEEL—
Sticking, dirty.

TR CIRCUITS BOX—Dirty, protective
brackets damaged, missing.

PHONES JACK COVER—Missing.

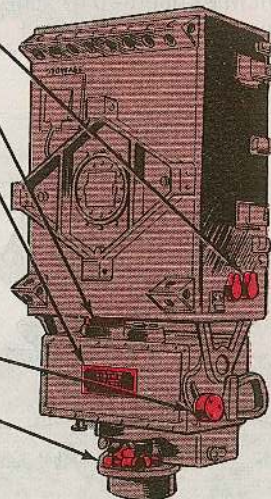
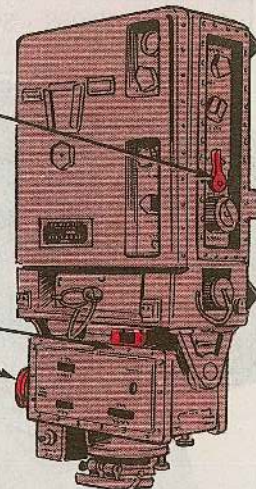
CABLE BELLOWS—Missing.

NAMEPLATE—Dirty, unreadable,
missing.

RUBBER BOOTS, SEALS ON CON-
TROLS, SWITCHES—Missing.

ELEVATION LOCK LEVER—Slipping,
dirty.

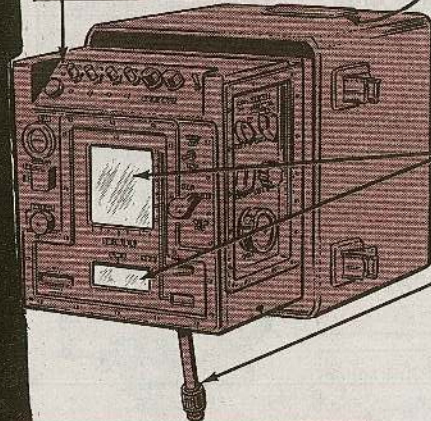
MOUNTING, LEVEL ASSEMBLY—
Dirty.





C-4610() CONTROL INDICATOR

CONTROL KNOBS, SWITCHES—
Loose, missing.



NAMEPLATE—Unreadable, missing.

RUBBER SEALS, BOOTS—Cracked,
torn, missing.

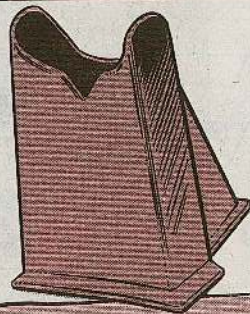
SCALES, CONTROL MARKINGS—
Unreadable.

A-, B-SCOPE WINDOWS—Dirty,
fogged, broken.

COVER—Dirty, dented, punctured.

STAND—Dirty, bent, broken; rubber
foot damaged, missing.

VIEWING HOOD—Dirty, torn, punc-
tured; felt border damaged.



LATCH HOOKS—Broken, missing.

STOW CLIPS, STRAP—Broken, miss-
ing.

GASKET—Missing, cracked.

EVERYTHING
CHECKS OUT
OK...

46

HEY, CONNIE! OUR
PIPSY IS PICKING
UP UFO'S
AND...

TRIPOD, COLUMN ASSEMBLY

COLUMN—Dirty, wet, corroded.

FEET—Won't swivel freely, missing.

TIE RINGS—Bent, broken.

LEGS—Dirty, corroded, bent.

WING SCREWS—Bent,
over-tightened, broken,
missing, threads stripped.

LEG LOCKS—Too
teeth tight, stripped,
won't lock legs.

END CAP—Loose, missing.

GROUND PINS—Missing, broken.

... WE DON'T BELIEVE
IN FLYING SAUCERS!

HEY!
IS THAT
A RED
LIGHT
UP THERE?

HMMMM

47

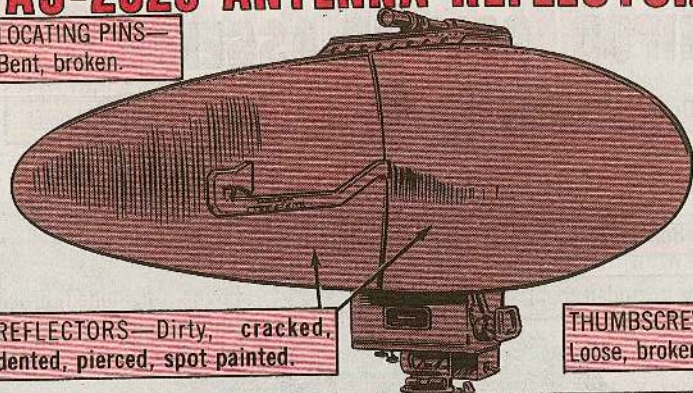
PS MORE

2

UFO'S HAVE
DISAPPEARED!WHERE'D
CONNIE GO?

AS-2023 ANTENNA REFLECTORS

LOCATING PINS—
Bent, broken.



REFLECTORS—Dirty, cracked,
dented, pierced, spot painted.

THUMBSCREWS—
Loose, broken.

WAVEGUIDE HORN

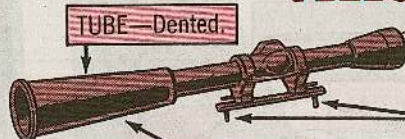


EXTERIOR—Dirty, bent, dented.

FLANGE WINDOW—Dirty, broken;
grooves dirty.

APERTURE WINDOW—Dirty,
broken.

TELESCOPE



TUBE—Dented.

LENSES—Fogged, cracked, miss-
ing.

MOUNTING SCREWS—Missing.

EYEGUARD—Dirty, missing.

STOWAGE BRACKET



BRACKET—Missing.

CLIPS—Broken, missing.

THANKS, SANTA...
WITH THESE PARTS,
THE PIPSY WILL
BE OPERATING
PERFECTLY!

MY PLEASURE,
CONNIE...

--JUST KEEP GIVING
THE LADS PM PEP TALKS!

GOTTA GO NOW...
LOTS MORE STOPS
TO MAKE!

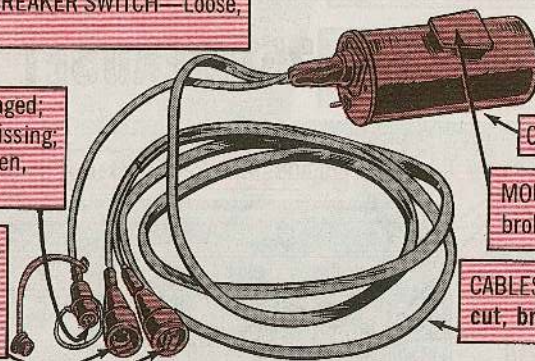
S'LONG!

PP-4450, & B POWER SUPPLY

CIRCUIT BREAKER SWITCH—Loose,
broken.

PLUG—Damaged;
cap bent, missing;
lanyard broken,
missing.

CLIPS—Bent,
broken, cor-
roded, miss-
ing.



CASE—Dirty.

MOUNT—Bent,
broken.

CABLES—Cracked,
cut, broken.

BB-643 BATTERY ASSEMBLY



BOX—Dirty, mount
damaged; carrying
rings missing; dum-
my stowage plug
missing; stowage
hook missing; plug
lanyard broken, miss-
ing; snaphooks
broken, rusted, miss-
ing; cover latches
missing; cable loose.

BB-622—Dirty; terminals
corroded; vent holes
clogged; nuts loose; plug
saturated with electrolyte.

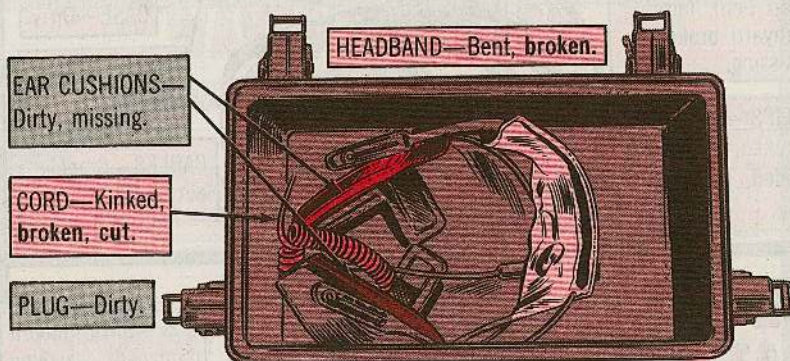
WOW!
OL' PIPSY'S
OPERATING
LIKE NEW
NOW!

RIGHT ON!
I CAN IDENTIFY
THOSE 9 OBJECTS
NOW... BUT...

IT'S
LIKE PM!
YOU
"GOTTA
BELIEVE"
TO MAKE
IT WORK!

...I HAVEN'T BELIEVED
IN THAT BUNCH SINCE
I WUZ A KID!

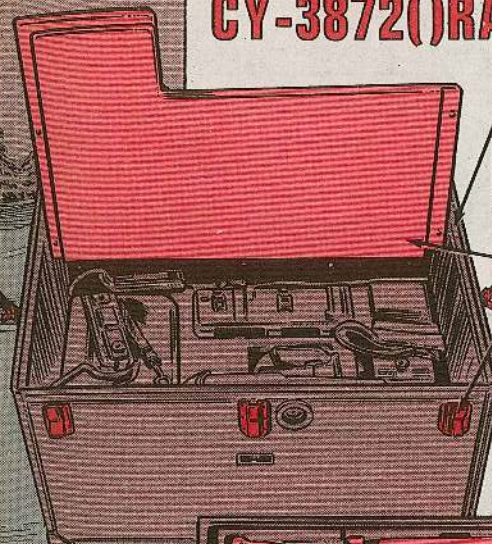
H-226, H-251 HEADSET



SO THAT SUMS
UP THE BYOI
POOP LADS!
JUST
REMEMBER...

THE PUBS TO KEEP HANDY ARE
TM 11-5840-298-12 (Juh 67)
WITH CHANGES, AND
TM 11-5840-298-ESC (Nov 73).

CY-3872()RADAR CASE SET



GASKET—Cracked, broken, missing.

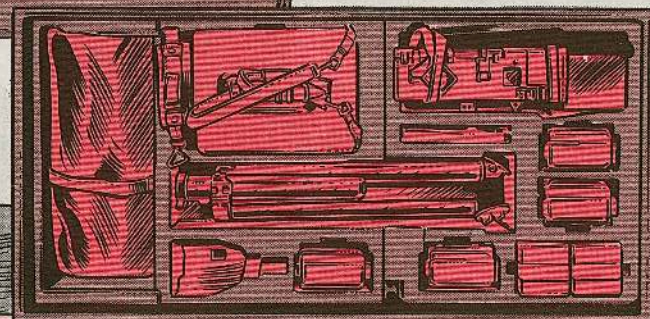
DESSICANT BAGS—Out of place, missing.

INSULATION PAD—Damaged, missing.

HANDLES, LATCHES—Broken, bent.

CASE—Dirty, dented, punctured.

STRAPS—Dirty, torn, broken; buckles rusted.



CARRYING PACKS—Dirty, pads ripped, broken; buckles, grommets, rings broken, bent, rusted.

FASTENERS—Damaged, missing.

TRIPOD RETAINERS—Bent, broken.

GOTCHA,
CONNIE!

WOT ARE
YOU DOIN',
HERM?

MAKIN'
OUT A LIST
TO S.C....
I GOT
TH' WORD!

REMOTELY SPEAKING...

BATTERY BOX NEEDS CARE



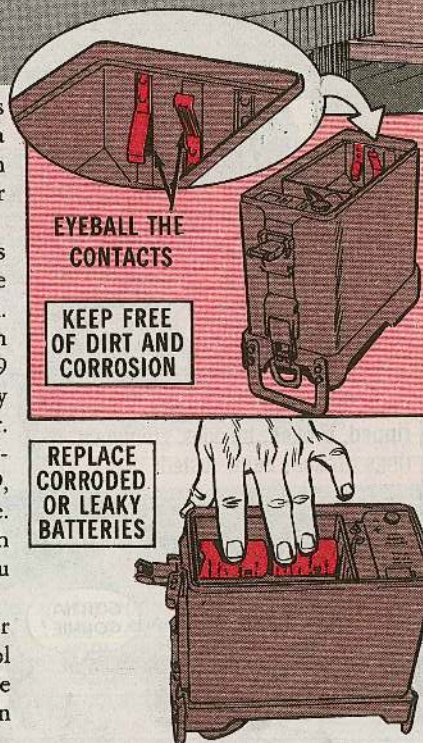
Hearing the putt-putt of your boat's motor can be music to your ears on a fishing trip. But, it's a sour note when motor-boating comes through your AN/GRA-39 radio control set.

To help knock the noise in this telephone-radio tie-in, keep the battery box free of dirt and corrosion.

Eye those contacts for tarnish in your C-2328 remote unit and C-2329 local unit. You can remove tarnish by gently rubbing it away with an eraser.

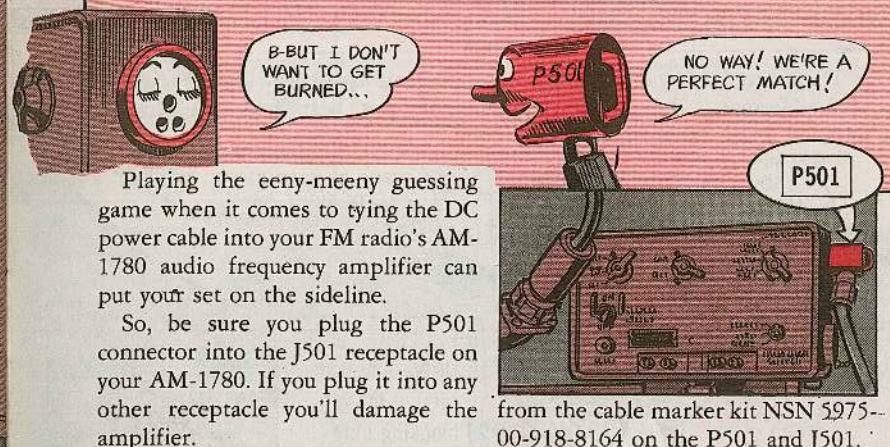
When you're installing those 6 BA-30 batteries in your C-2328 or C-2329, put 'em in 2 at a time, lengthwise. Then, roll each set of 2 batteries with your fingers. This'll help give you good contact.

If those batteries are corroded or leaky, replace 'em. When your control group's not in use, take out the batteries to head off corrosion damage.



ON AM-1780...

USE MATCH TO AVOID BURN



Playing the eeny-meeny guessing game when it comes to tying the DC power cable into your FM radio's AM-1780 audio frequency amplifier can put your set on the sideline.

So, be sure you plug the P501 connector into the J501 receptacle on your AM-1780. If you plug it into any other receptacle you'll damage the amplifier.

To make sure you're connecting to the right receptacle, put ID labels

from the cable marker kit NSN 5975-00-918-8164 on the P501 and J501.

Then, always match 'em up before you plug 'em up.



DUCT TYPE HEATERS

That heat-shoving machine you call your Herman-Nelson may never have seen Herman. But it could be everybody's best friend, Herman's included, when snow flies.

SO LEARN THE WAYS TO GET YOUR AIR PUSHER IN THE BEST OF HEALTH!

CHECK IT BEFORE YOU FEEL A CHILL, AND IT'LL KEEP THE ICICLES OUT OF YOUR EYEBROWS!

ITEMS IN **BOLD TYPE** YOU FIX RIGHT AWAY... SO LOOK FOR DEFECTS LIKE...

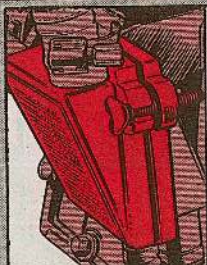
COOLING FINS—Dirty, broken, foreign matter blocking out air.



IGNITION—Switch loose, handle broken; wire connections loose; wires frayed; insulation cut, broken; spark plug cables frayed, leaking current; spark plugs loose, fouled, broken; covers cracked.

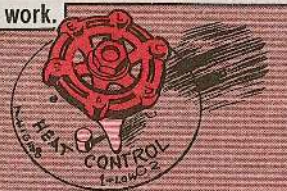


AIR CLEANER—Ducts loose, cracked; cover loose; core choked (restriction indicator red, if so equipped).

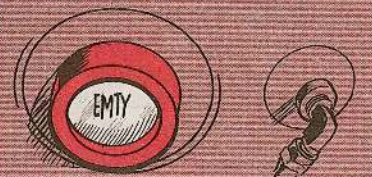


ENGINE WISDOM

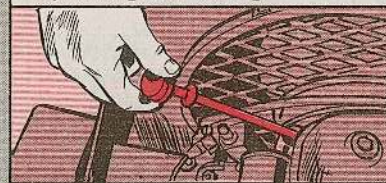
CONTROLS/INSTRUMENTS—Glasses broken, units damaged, won't work.



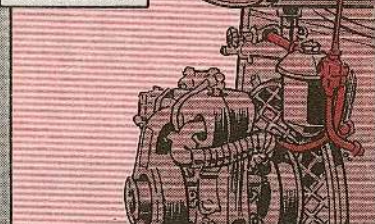
FUEL TANK—Needs filling; cap or gasket missing; leaky; dirty.



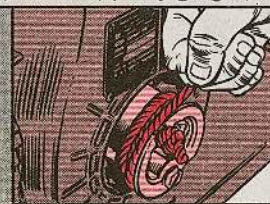
CRANKCASE—Oil level down to "add" mark; no oil showing on dipstick; gasket leaking.



FUEL SYSTEM—Lines **leaking**, obstructed; connections loose, **leaking**; gaskets defective; filter clogged; water in fuel.



START ROPE, PULLEY—Rope frayed, short; pulley gouged, loose.



EXHAUST TUBE—Dented, cracked, loose, broken. Extension damaged.

NUMBER ONE
IMPORTANT-- MAKE
SURE THE DAMPER
CONTROL
WORKS
SMOOTHLY!

CABINET

FLUE
IS CLEAR...

HAH!...
THIS IS ONE
"CHIMNEY"
THE OL' MAN
CAN NEVER
SLIP THRU!

PSSSSST!
PUT TH'
DAMPER
ON YOUR
FLUE,
ELVIS!

ER--
H'LO,
S.C.!

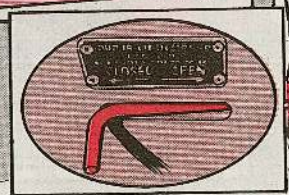
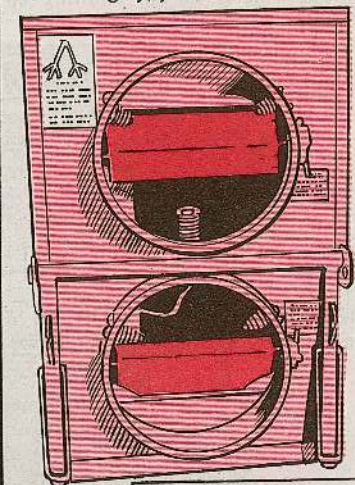
YE OLDE
WORKSHOPPE
TENT

DUCT STORAGE--Dented, rusty,
dirty, greasy; parts missing.

CASE--Rusty, fasteners dam-
aged/missing.

DAMPER CONTROL--Damaged,
works roughly; jammed.

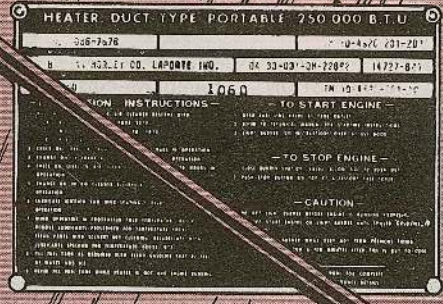
DUCTS
ARE
PRESENT
AND IN
GOOD
SHAPE!



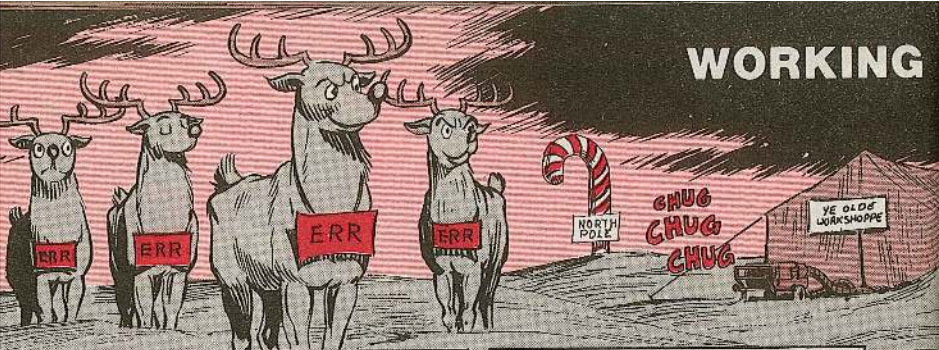
PUBLICATION CASE--Missing; pubs
out-of-date, changes missing.

FIXTURES--Hardware missing; ID
plates not legible, painted over;
baffles loose; welded seams crack-
ed.

AIR INLET DOOR--Warped; lock
won't work right; inspection window
broken; parts missing.



WORKING PARTS

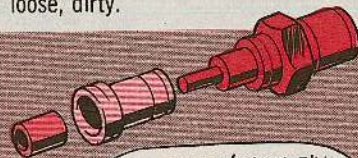


PROPELLER—Fan dirty; blades loose, bent, broken; rivets out or loose.



BURNER—Dirty, rusty, unserviceable.

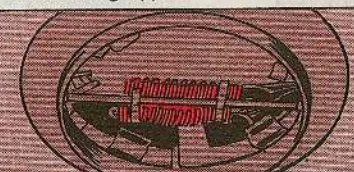
COMBUSTION CHAMBER—Spark arrester screen torn, loose, dirty; chamber sooty, rusty; fuel atomizing nozzle (if used) broken, damaged, loose, dirty.



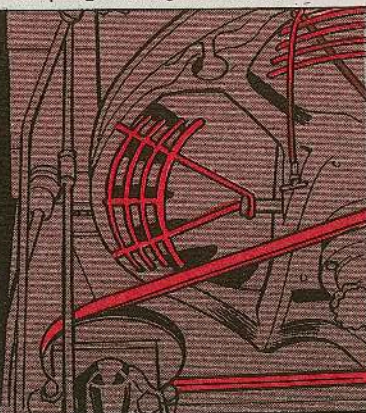
GRMMMMP! NOW I'LL PROBABLY HAFTA INSTALL AIR CONDITIONING NEXT SUMMER!



SENSING ELEMENTS—Broken, missing (operational check is a must when firing up).



ACCESSORY ITEMS—V-belts worn, loose, cracking, rubber facing hardened; fan guards loose; couplings damaged/missing.



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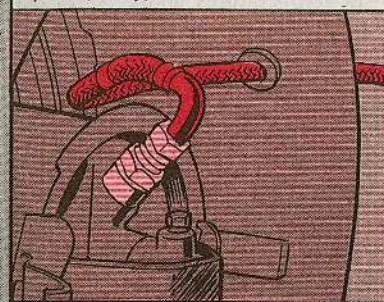
CHUG-
KA-LUMP.
CHUG-
CHUG

NO, SANTA... **ERR** DOESN'T MEAN THEY MADE MISTAKES...

ERR STANDS FOR
EQUAL RIGHTS FOR REINDEER!



IGNITER PLUG—(If used)—Cable kinked, cut, frayed; plug loose/damaged/igniter gap wrong; pitted, dirty, burned.



TORCH—(If used)—Fuel tank dry; pump not working; instructions missing from case.



DUCTS—Torn, crushed, blocked, leak excessively.



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PS MORE

SPECIAL OPERATING NOTES

BEING YOUR OWN INSPECTOR INCLUDES GETTING YOUR MIL STANDARD ENGINE IN THE RIGHT OPERATING HUMOR, TOO...

?

HALP!

YER TELLIN' ME!...

STOP!

HALP!

FINK!

GET HIM!

THE ENGINE BURNT UP!...

ALL BECAUSE HE DIDN'T DO HIS REGULAR PM!

YE OLDE WORKSHOP

For instance, winter coming on could mean carburetor icing... unless you go by the word in your technical manuals.

You may have the pub for your heater, but what about the engine? For the 1½-HP kicker, there's TM 5-2805-256-14 (Jan 76). For the 3-HP, TM 5-2805-257-14 (Sep 68) does it.

Your engine pub will clue you, for example, on your air inlet control. This little dude pitches cleaned air, heated if necessary, to your Mil Standard engine's carburetor.

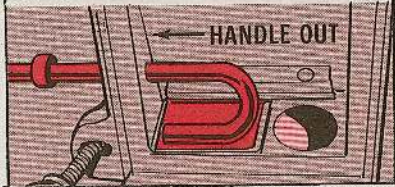
But about that icing bit—your air inlet control might be on either side of your air filter assembly, mounted left, or on the right. They come both ways.

PROPER SETTING OF THE AIR INLET CONTROL HANDLE IS THE KEY-- SET IT RIGHT AND YOU HAVE IT MADE!

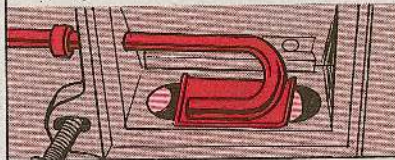
UNDERSTOOD... BUT WOULD YA DEMONSTRATE FER ME, CONNIE?

So, to stop fuel-line and carb ice, on engines with air inlet control handles on the left side, do this—

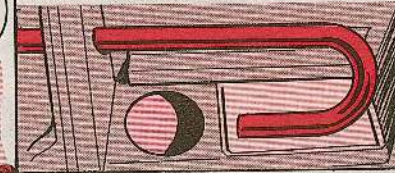
In temperatures above 50°F, pull the handle out.



When it's between 50°F and 25°F, shove the handle to the center. Some engines have a detent to mark the center; some don't.



When it's chilly, below 25°F, push the handle in all the way.



Now, if your engine's air inlet control handle is on the right-hand side, just do the same things in reverse direction.

Here's a guaranteed way to tell the position of the air control:



REMOVE SHIPPING PLUG

Take off the shipping plug, if it's been left on, and poke your finger in

the opening. If the control gate is full open, you're in position to operate at 50°F and higher. If the gate fills about half the opening, you're in good shape for temperatures between 50°F and 25°F. And if the gate closes the hole off, you're ready to go in weather 25°F and colder.

And that's about it, except to make sure your fuel's clean and you don't set anything else afire when you stoke 'er up. You can have a little bit of the tropics in Antarctica with this dude, handled right. Do it wrong, and that ice even looks thicker.

SO DON'T FORGET YOUR PUBS!

AFF BT 400-40, -40-1, -40-1A

Bastian Morley PHDT-250 and Keco H250, Vogt models

Defense Products BT-400-30 and Herman-Nelson BT 400-10

Hunter PH-150-GE

M-68 (VBM: 250)

5-4520-208-15 & -25P
5-2805-256-14 & -24P
LO 5-2805-256-12

10-4520-201-14 & -24P
5-2805-256-14 & -24P
LO 5-2805-256-12

5-4520-200-12 & -25P
LO 5-4520-200-12

5-4520-205-12 & -20P
5-2805-257-14 & -24P
LO 5-2805-257-12

5-4520-224-14 & -24P
5-2805-256-14 & -24P
LO 5-2805-256-12

M131A4C AND -5C HUMPERS ...

Mismatched

THE 4-IN FITTINGS ON THE SUPPLY-POINT HARDWARE WON'T MATCH THE 3-IN FACES ON YOUR M131A-SERIES TANK TRUCK, RIGHT?



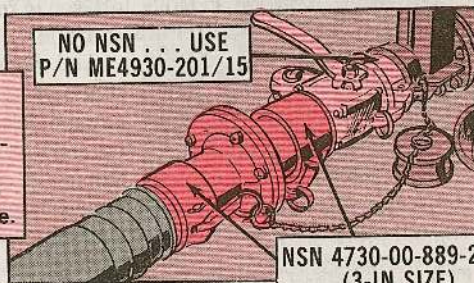
IT TOOK ALL OUR SPARE JOINTS AND PIPES, BUT...



Relax—worse mismatches than that have been hurdled ... in the dark—with no experience. There're 3 ways you can hack this.

1. Use your quick acting valve like this hooked to the double-female adapter. The hose here is 3-in size coming off the line tee.

NO NSN ... USE
P/N ME4930-201/15



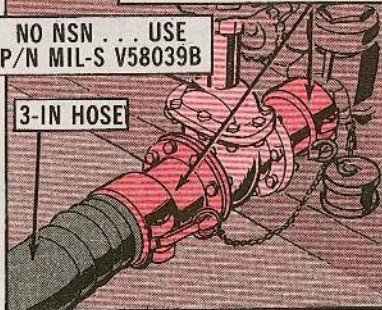
NSN 4730-00-889-2378
(3-IN SIZE)

2. Your 3-in gate valve, with halves of the double-female adapter on each side, hooks you to a 3-in hose this way.

NSN 4730-00-889-2378

NO NSN ... USE
P/N MIL-S V58039B

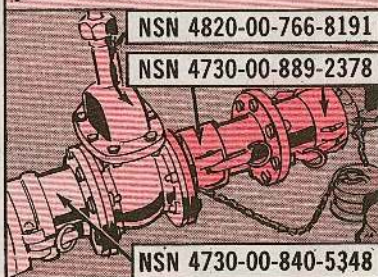
3-IN HOSE



3. You can hook to a 4-in hose this way with a 4-in half of a double female adapter and a 4-in gate valve, leading into a 3-in double female adapter and your mainfold.

NSN 4820-00-766-8191

NSN 4730-00-889-2378



NSN 4730-00-840-5348

FITTING PROBLEM?

IT'S MATED...

FLAMMABLE
NO SMOKING WITHIN 50 FT



!

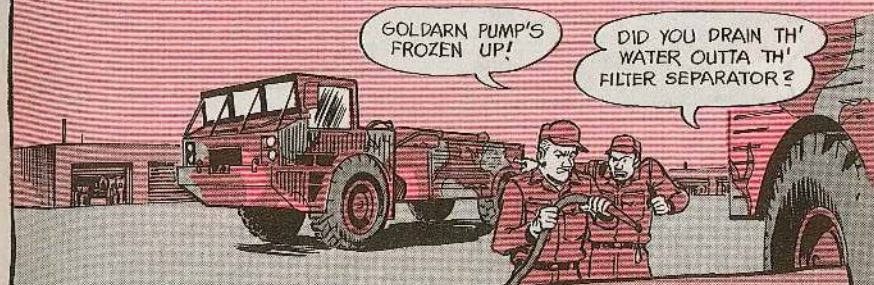


M559 2500-GAL TANKER TRUCK ...

DISPENSING PUMP FREEZING?

GOLDARN PUMP'S
FROZEN UP!

DID YOU DRAIN TH'
WATER OUTTA TH'
FILTER SEPARATOR?



Dear Half-Mast,

The dispenser pump on our Goer tanker sometimes freezes up because of water in it. Is there any way we can keep it from collecting water? I'd sure hate to have one of these pumps freeze up and break the housing.

SFC J.D.R.

Dear SFC J.D.R.,

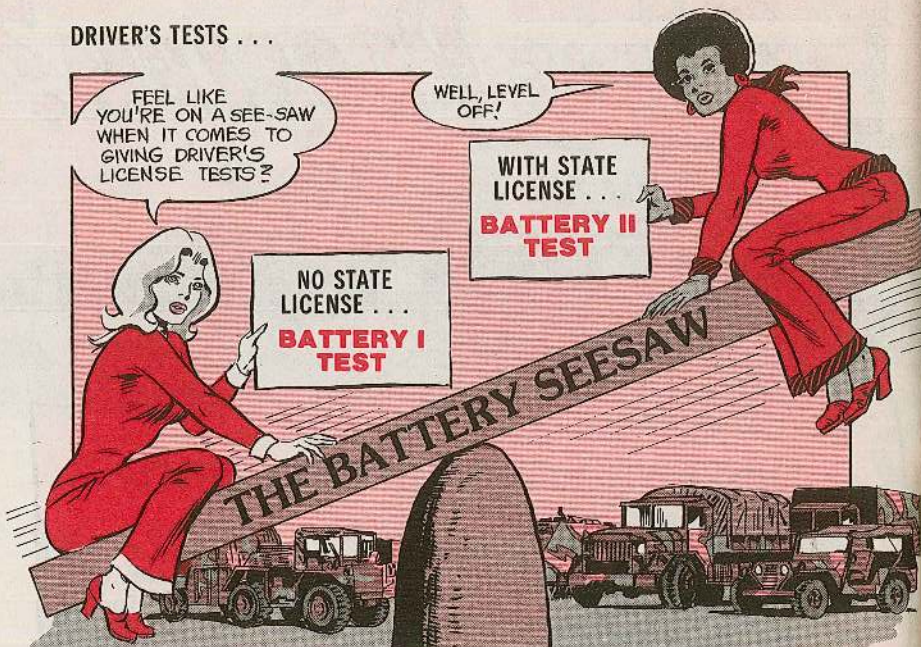
The way to get rid of water in this pump is to drain it out of the filter separator every time you finish using the pump. That's what it says in TM 9-2320-233-10 (Jun 76), page 2-39, under "Filter Separator."



HANDLE

Half Mast

DRIVER'S TESTS . . .



Many people are confused over a couple of Department of the Army messages that came out in 1975 on people holding valid state driver's licenses.

Make sure you have a copy of DAIG-SD message 161902Z (Jun 75). That message said organizations could issue driver's licenses based on a passing MDB-I score, or a valid state driver's license and a passing MDB-II score.

A second message told reception stations to give Battery I tests only to people whose MOS requires a driver's license and who do not have a state driver's license. So, soldiers may arrive with no Battery I score—just a note stating they have state licenses.

Units then arrange for these soldiers to take Battery II, the physical evaluation and road test to get a government license.

Life Preserver Pub

Need a maintenance book for your yoke type oral-inflation life preserver? You can write Commander, TROSCOM, ATTN: DRSTS-MMM, 4300 Goodfellow Blvd., St. Louis, MO 63120, for a copy to cover NSN 4220-00-783-6609 preservers.



Airmobile Shelters TM

If you're scrounging commercial literature to maintain your airmobile shelters, here's some good news. Ask your unit clerk to order TM 55-4920-376-14&P (Apr 75). The pub covers shelter erection and preventive maintenance.

Lube Intervals

Play it safe. Follow intervals in the LO for your equipment. TARCOM MSG DRSTA-MT 161720Z Sep 76 rescinds lube articles in TB 43-0001-39-1 (Apr 76), page 66.1, Article 10, and TB 43-0001-40-1 (Apr 76), page 15, Article C. PS 288, page 42, goes out, too.

Change 4 to AR 710-2

AR 710-2 is scheduled for restyling. Change 4 is on the way with new instructions for property book actions and inventories and reporting weapons and other sensitive equipment. You'll find new requirements on high priority (01-08) requests and PLL procedures.

Organizational clothing and equipment record-keeping has been updated. NORS/ANORS and petroleum management have been brought back in line with other regs. There's new info on adding or keeping DX items—and much more!

Change 4 will affect your every-day supply activities. Keep a sharp eye out for it.

☆U.S. GOVERNMENT PRINTING OFFICE: 1976 - 757-002/1

TOW ¼-Tonner Can Tow

You can tow a trailer with your ¼-ton truck carrying the TOW missile launcher—so pay no mind to that restriction mentioned in PS 287, page 22, "Your ¼-Ton's Tricky." That—and the decal, or plate, by the tow pintle—applies to the ¼-tonner carrying the 106-MM recoilless rifle. There's no change in the truck's suspension when it's fixed up to mount the TOW.

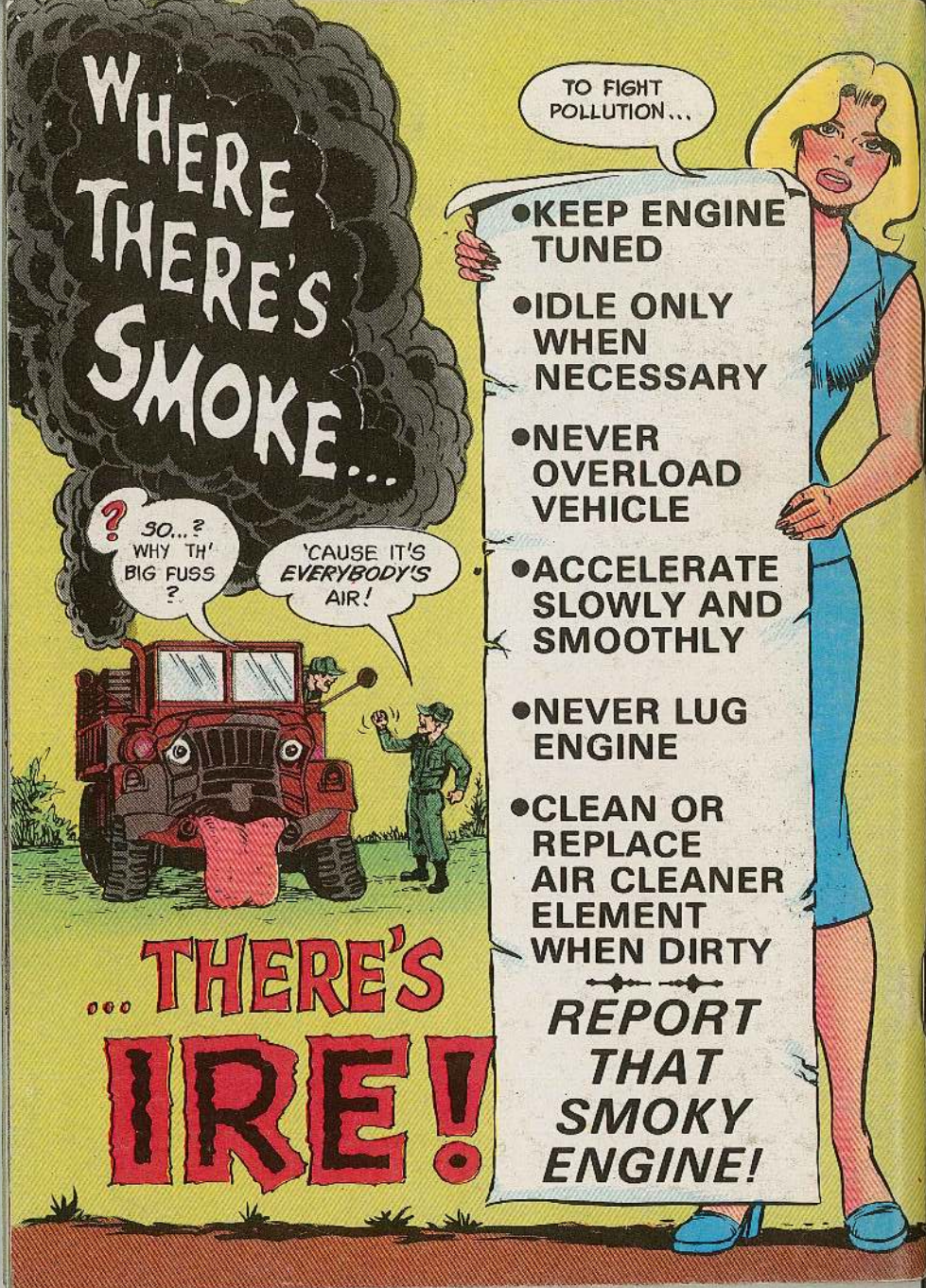
5-Ton Truck MAC

Replacement of multifuel and gasoline engine air compressors is not a Direct Support job, as Ch 1 to TM 9-2320-211-20 (Jun 73) indicates. Page B-9, Group 1209 should read that replacement is an Organizational level job. A TM change or revision is being made to update the MAC to include this info.

5-Ton Wrecker Hoist Cable

When you're looking for ½-inch wire rope for the hoist of your 5-ton wrecker and wrecker tractor, look at NSN 4010-00-269-9297. This brings you a 320-ft reel. For authority, use Note 1, Appendix A, CTA 50-970 (Jul 74). Your M62, M816, and M543-series hoists take 95 feet of this wire rope. The M246 and M819 take 104 feet.

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



WHERE
THERE'S
SMOKE...

? SO...?
WHY TH'
BIG FUSS
?

'CAUSE IT'S
EVERYBODY'S
AIR!

TO FIGHT
POLLUTION...

●KEEP ENGINE
TUNED

●IDLE ONLY
WHEN
NECESSARY

●NEVER
OVERLOAD
VEHICLE

●ACCELERATE
SLOWLY AND
SMOOTHLY

●NEVER LUG
ENGINE

●CLEAN OR
REPLACE
AIR CLEANER
ELEMENT
WHEN DIRTY

REPORT
THAT
SMOKY
ENGINE!

...THERE'S
IRE!