

Issue 348

PS

November
1981

THE PREVENTIVE MAINTENANCE MONTHLY

NOW THAT
YOU'VE GOT
THE GEAR BOX
PACKED,
WRAPPED AND
TIED...

... HOW ARE YOU GOING
TO GET THE 2410
INSIDE THE PACKAGE?

?



MURPHY
ANDERSON

See page 29

**PASS THIS
COPY ON!!**

Are
You...

READY for COMBAT?

Some odd and interesting (maybe disastrous) things are being found by CLRT (Command Logistics Review Teams) and LAAT (the Army's Logistics Assessment and Assistance Teams).

THEY MAKE YOU WONDER IF SOME UNITS ARE REALLY COMBAT-READY!

HERE ARE A FEW OF THE THINGS THEY ARE FINDING...

"Operators, mechanics and supervisors don't know how to use tech manuals."

NAHHHHH... I KNOW ALL THERE IS TO KNOW ABOUT MY TRACK!

NEED TH' TM?

"Drivers are not trained in operator maintenance and not being supervised in doing maintenance."

WONDER WHAT MY MEN ARE DOING ON THAT APC?

"Commo (dry cell) batteries not stored right."

WHO STORED THESE BATTERIES OVER THE RADIATOR!

NO WONDER THEY'RE NO GOOD WHEN WE PUT 'EM IN OUR RADIOS!

"Battery acid on hand. Units activate lead-acid batteries."

HOLD IT! OUR DSU DOES THAT!

"Unserviceable tools and test equipment on hand."

THE WHOLE ELECTRICAL SYSTEM SHOWS 0 VOLTAGE!

IS YOUR TESTER OK?

"PLL clerks not trained right. Supervisors don't know how to supervise PLL operations."

"Tech manuals missing. Some tech manuals in use are old, out-of-date."

Y'SURE THIS 1945 MANUAL IS THE LATEST ON YOUR GENERATOR?

"Shortages of tools and test equipment."

"AOAP (oil analysis) not being done right."

YEP--WE SEND IN SAMPLES EVERY YEAR!

BUT TB 43-0210 SAYS IT'S BY HOURS OR MILES!

"Operator and organizational maintenance not done on equipment turned in to direct support."

Would you want to go into combat if that's the way it is in your unit? It's a sure way to return in a plastic bag.

NOW'S THE TIME TO GET CRACKING! GOOD MAINTENANCE WILL HELP KEEP YOU AND YOUR UNIT ON THE WINNING SIDE!

PS THE PREVENTIVE MAINTENANCE MONTHLY

Published by the Department of the Army for the information of all soldiers assigned to combat and combat support units, and all soldiers with organizational maintenance and supply duties. Within limits of availability, older issues may be obtained direct from Editor, PS Magazine, c/o US Army Materiel Readiness Support Activity, Lexington, KY 40511.

ISSUE NO. 348 NOVEMBER 1981

FIREPOWER

Identifying Tanks	2-5	M901 ITV Tips	12
Torquing Bearings	6	Choparral	13
Starter-Relocation	7	GMSE Test Leads	13
Fuel Filter Kit	7	FAAR/TADDS	14-16
Hatches & Latches	8	M203 Barrel Grip	17
Personnel Heater	9	.38-Cal Revolver	17
M109 Air Cleaner	9	Tanks Get BFS	65
M113/A1/A2 FOV	10-12	Howitzer Lube	65
		Ammo Rack Parts	65

GROUND MOBILITY

M880-Series Trucks	18-19	Truck Chocks	24
Engine Leak?	20-21	M911 Gages	25
Access Panels	22	5-Ton Trucks	25
Lug Nuts	23	Mirrors	26-27
M915-Series Trucks	24	Trailer Cable	27
Tire Valve NSN's	24	Unsafe Truck	65
		Truck Horn Fix	65

AIR MOBILITY

Save the Parts!	29-36	UH-1	39, 40
Decol Update	37	Aviation Messages	39
DA Form 2408-13	37	Power Wrench Tip	40
OH-58 Seat Fix	38	Drive-shaft	41
First Aid Kit	38	Safety Wire	41

COMMUNICATIONS

AN/GRA-39 Radio	42-44	Switchboard Fuses	49
AN/VRC-12 Fan	44	TA-312 Telephone	50
OE-254 Antenna	45	TT-98	50
AN/PRC-74 Radio	46-47	CX-4720 Cable	50
MT-1029 Mount	48	CW-592 Cover	50
Projector Bulb	48	AN/PVS-2	51
Shelter Pub	49	Bad Batteries	51
		Circuit Boards	65

TROOP SUPPORT

New Publications	28	M2 Burner	56
M177/M17A1 Masks	52	Power Unit TM's	57
Mask Faceform	53	Mil Std Engines	57
Mask Modifications	53	3-KW Generator	58-59
M1 Mask Bag	53	15-KW Generator	59
Earplugs	54	Supply How-to	60-61
Air Mattress	55	DA Form 2406	62-63
		DA Form 2408-4	64

PS wants your ideas and contributions, and is glad to answer your questions. Name and address are kept in confidence. Just write to: PS Magazine, Lexington, KY 40511.

Use of funds for printing of this publication has been approved by Headquarters, Department of the Army, 23 February 1979 in accordance with AR 310-1.

DISTRIBUTION: In accordance with requirements submitted on DA Form 12-5. Private subscriptions: Order from US Govt Printing Office, Supt of Documents, Washington, DC 20402 \$11. per year to US and APO; \$13.75 to foreign address.

FIRE -
POWER

Tanks...

Identifying M60A1's and M60A3's

PUZZLED BY ALL THE MODELS IN
THE ARMY'S FAMILY OF M60 TANKS?

THIS WILL
HELP YOU TO
SORT 'EM OUT!...

The M60-series tank has undergone many changes and improvements in the last 20 years.

There are now 8 models in the family. Except for the original M60 and the M60A2, there are enough similarities to make the M60A1's and M60A3's mighty hard to tell apart.

Not all models are correctly identified on their data plates, which only makes for more confusion.

No sweat on the plain M60. It has a chisel-shaped bow (characteristic of all 60-series tanks), and the dome-shaped turret similar to the older M48-series tank.

M60



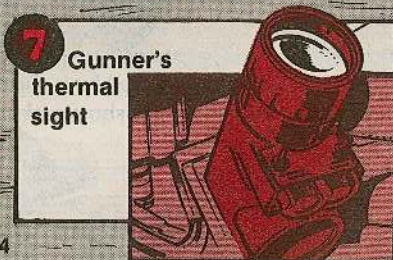
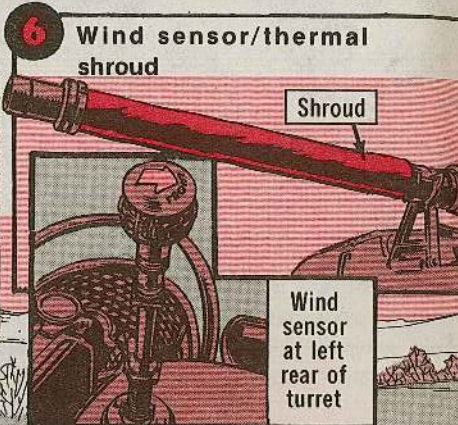
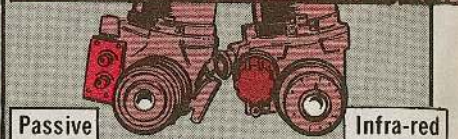
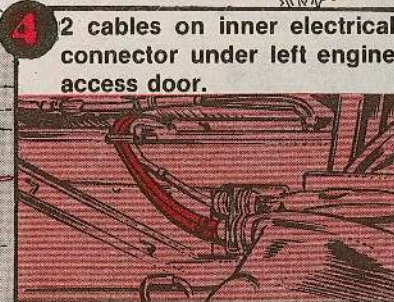
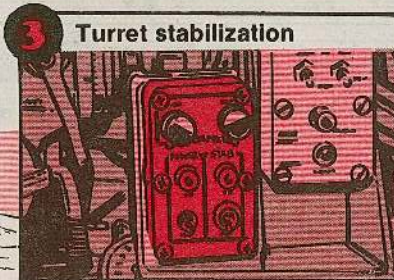
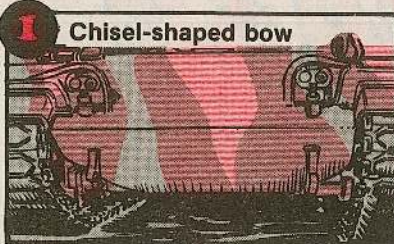
The M60A2 was removed from the Army inventory as of 1 Oct 81. It is easy to identify because of its short and stubby gun tube used to fire Shillelagh missiles.

M60A2



PS MORE

Use these features to identify your tank on the opposite page. There are other features, but these make the difference:



IF YOUR DATA PLATE IS WRONG, GET HELP!

M60A1- 1 2

M60A1 (AOS)- 1 2 3 *

M60A1 RISE- 1 2 3 4 **

M60A1 RISE Passive- 1 2 3 4 5

M60A3 Passive- 1 2 3 4 5 6

M60A3 TTS- 1 2 3 4 5 6 7

* May have 2A or 2D (RISE) engine. The 2D (RISE) engine does not make it a RISE tank. The engines are identified by checking under the left side engine access door. No electrical wiring on top of the engine means the engine is AVDS 1790-2A. The AVDS 1790-2D (RISE) engine will have 1 cable on the inner electrical connector.

** All tanks having 2 cables on the inner electrical connector are equipped with the AVDS 1790-2C engine.

If your tank is incorrectly identified on the data plate, let your direct support unit (DSU) know. They and the local Logistics Assistance Office will help you.

If the data plate is correct, but your tank is being carried on your unit property book as some other model, send the paper work in the manner shown in PS 346, Pages 12-13.

WHEN YOU'RE DONE WITH THIS, YOU'LL KNOW FOR SURE WHICH MODEL 60 YOU'RE TRACKIN'!

PS END

More Torque Talk

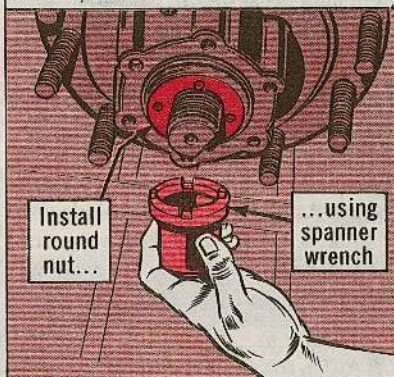


You M48 and M60 mechanics can save yourselves time and muscle strain if you'll follow your TM when servicing roadwheel bearings and support roller bearings.

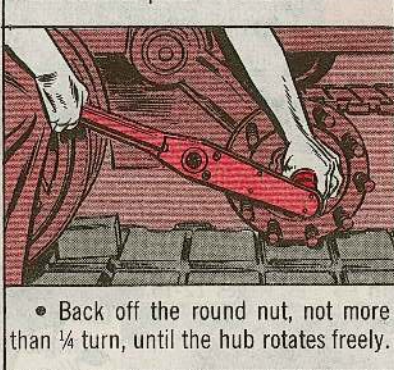
Seems a lot of bearings are failing because of wrong torquing and poor bearing clearances.

Altho the hubs for these vehicles are similar, be sure to follow the -20 TM that applies to your tank. Make sure you:

- Install round nut with dowel, NSN 5310-00-752-1166, using a spanner wrench, NSN 5120-01-048-8640.



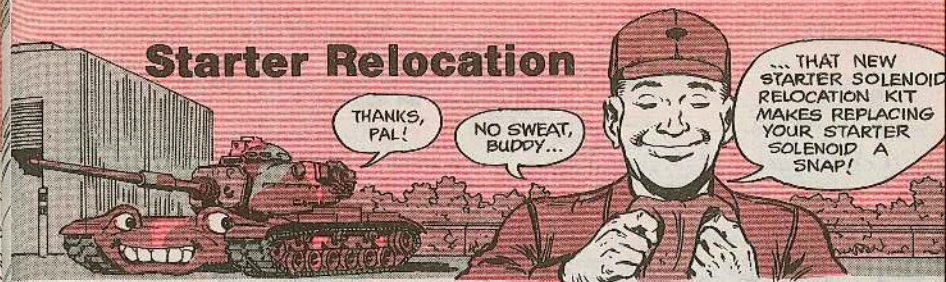
- Torque the nut to 50-70 lb-ft while rotating the hub backward and forward to make sure all parts are seated.



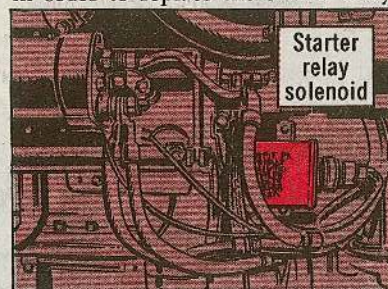
Disassemble and inspect all parts if you don't get free rotation. Replace any defective parts and repeat the procedure.

Then complete the installation according to your TM.

Starter Relocation



Tired of having to pull the power pack on your M48- or M60-series tank in order to replace the starter relay solenoid?



Well, starter solenoid relocation kit, NSN 2920-01-073-4321, should put a smile on your face.

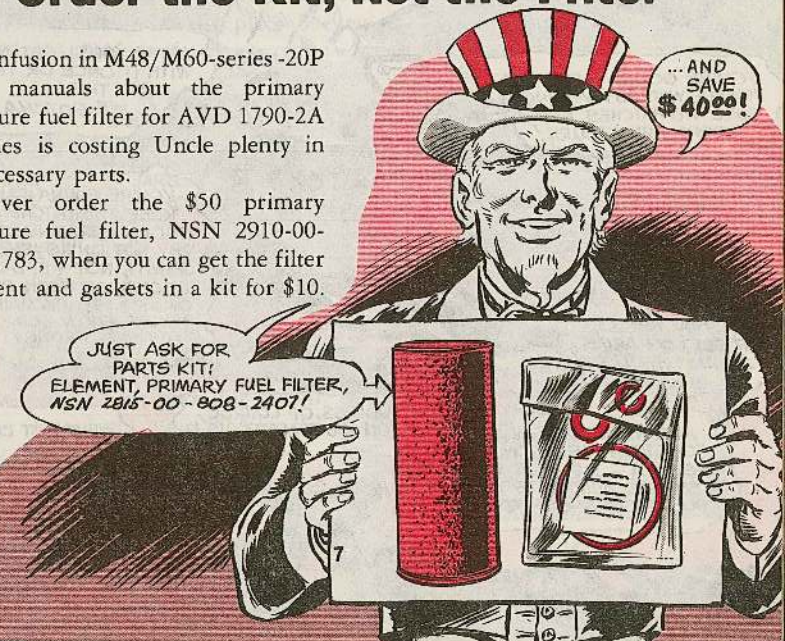
It has all the wiring and hardware to relocate starter solenoid, NSN 2920-00-487-9461, on top of 2C and 2D tank engines.

All the poop on how to make the change is in TB 43-0001-39-5 (Apr 81).

Order the Kit, Not the Filter

Confusion in M48/M60-series -20P tech manuals about the primary pressure fuel filter for AVD 1790-2A engines is costing Uncle plenty in unnecessary parts.

Never order the \$50 primary pressure fuel filter, NSN 2910-00-795-1783, when you can get the filter element and gaskets in a kit for \$10.



Just Get A Little Careless,
And... We

GOTCHA!

SOONER OR
LATER WE'RE
GONNA GETCHA!

JUST LET THAT
SINK IN FOR A
MINUTE!

YES, INDEED,
SOONER OR LATER...
WE'RE GONNA GETCHA!

YOU'RE GONNA LET
YOUR GUARD DOWN!
YOU'RE GONNA FORGET
JUST HOW DANGEROUS
WE ARE AND...
ZAP... WE'VE
GOTCHA!!

YOU'RE GONNA THINK
THAT LOCK-OPEN LATCH
IS SECURE AND YOU'RE
GONNA PUT YOURSELF
RIGHT WHERE WE WANT
YOU AND THEN...
GOTCHA!

YOU'RE GONNA MOVE THAT
VEHICLE WITHOUT MAKING
SURE WE HATCHES AND
DOORS ARE SECURE!

MAYBE YOU'LL GET AWAY
WITH IT ONCE OR TWICE,
BUT THEN...
WE GOTCHA!

YOU'RE GONNA
FORGET ABOUT
WATCHING WHERE
YOU PUT YOUR
HEAD AND HANDS
(OR FEET OR ARMS
...WHATEVER)!

YOU'RE GONNA FAIL TO
KEEP THE LATCHES IN
GOOD OPERATING CONDITION
BY NOT LINING 'EM UP
RIGHT, NOT REPLACING
BROKEN OR WORN PARTS,
OR NOT LETTING MAINTENANCE
KNOW SOMETHING'S WRONG!

AND WHEN YOU FAIL OR
FORGET, WE'RE GONNA
GETCHA--JUST LIKE WE'VE
SNARED HUNDREDS OF
SOLDIERS BEFORE YOU!

UNLESS, OF COURSE,
YOU OUTSMART US!

WE DON'T CLAIM TO
BE SMART--JUST
UNFORGIVING!

Combat Vehicles... New Heater Repair Parts

Where are the organizational repair parts for the new Stewart-Warner C-model personnel heater, NSN 2540-01-083-0691?

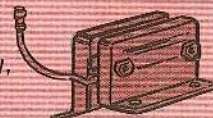
LATER THEY'LL BE LISTED IN THE VEHICLE TM'S BUT FOR NOW THE ONLY PLACE YOU CAN FIND THEM IS RIGHT HERE...

Heater igniter,
NSN 2540-00-217-5782



Thermostatic switch,
NSN 5930-00-283-6562

Ignition control assembly,
NSN 2590-01-102-6857



The C-model heater is now the prime heater for all combat vehicles except the M113A2 carrier. It will replace the Stewart-Warner B-model heaters, NSN 2540-01-013-0846, as they wear out.

M109
Howitzers...

Air Cleaner Parts

and the latch assembly, NSN 2590-01-115-6281.

HERE'S
SOME GOOD
NEWS FOR
YOU M109-
SERIES
CREWS!

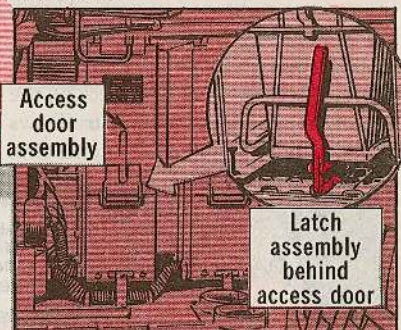
THANKS,
SARGE!



Now you can get parts for the air cleaner instead of paying \$551 for the whole thing.

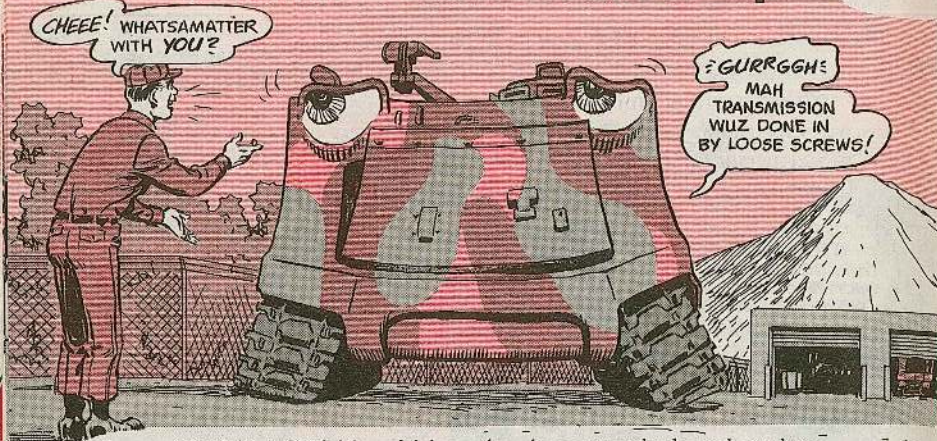
What's available are the access door assembly, NSN 2590-01-116-2642,

Access door assembly



Latch assembly behind access door

U-Joint Screws Screw-Up



Some M113A1/M113A2 vehicles are getting wrecked because screws work loose in the power train universal joints. Shafts or U-joints lose their screws and batter the transmission housing to pieces when they break loose.

The screws (bolts) securing the U-joints are loose on many vehicles. The screws got this way because they were not properly torqued when they were installed or serviced. Screws that have been over-tightened stretch. They'll back out, and whatever they were supposed to hold becomes loose.

You mechanics should check all the drive train U-joint and shaft screws for looseness. If there is evidence that

they have stretched, replace them.

If they seem to be holding the torque of 35-40 lb-ft, leave 'em alone.



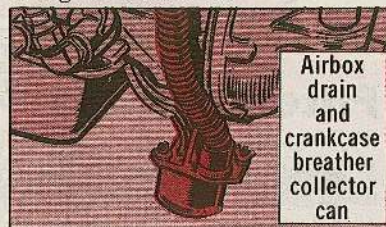
IMPORTANT!
MAKE SURE YOU DON'T TIGHTEN THESE SCREWS (BOLTS) MORE THAN 40 LB.-FT. BECAUSE THAT CAN STRETCH THEM SO THEY WON'T HOLD!

Service Frequency Change



Idling at low RPM's, especially in cold weather, is tough on the engines of M113-type vehicles.

Crud builds up in the airbox drain and crankcase breather collector can because the engine's not running hot enough to burn it off.

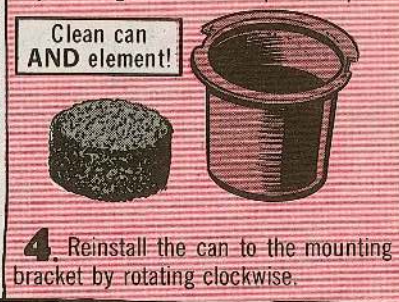


When that happens, the monthly maintenance interval for the can is not enough. There's too much pressure in the crankcase and the engine may burn more oil than normal. Performance suffers, too.

Plus, there can be even more gunk in the engine compartment when the can overflows.

So, maintenance on the airbox drain and crankcase breather collector needs to be pulled weekly, instead of monthly.

1. Weekly, remove the airbox drain and crankcase breather collector can from the mounting bracket by rotating it counterclockwise.
2. Empty the can and remove its plastic element.
3. Clean the can and the element with drycleaning solvent SD-2 (P-D-680).



4. Reinstall the can to the mounting bracket by rotating clockwise.

Changes are being made in your LO 9-2300-257-12 and TM 9-2300-257-10.

Caution: Drycleaning solvent can explode, and it's toxic. Never breathe in the vapors and keep it off your skin. Never use it near an open flame or high heat. The flash point of the solvent is 130°F.

OW!
OW!
OW!

ITV Tips

HIS OPERATOR
ERECTED HIS LAUNCHER
WITH TH' SIDECOVER
REMOVED!

I GOT A PAIN
IN MY ERECTION
DRIVE!

?

Dear Editor,

Many M901 Improved TOW Vehicles have had erection drive geartrain damage because the erection drive was operated with the left-hand sidecover removed.

That sidecover supports the outboard ends of 2 erection drive gearshafts. When the erection drive is operated with the sidecover removed, those gearshafts are not held in proper alignment. This causes stripped gear teeth and broken gearshaft bearings.

If you're a mechanic troubleshooting an erection drive problem, first erect the launcher, bleed down the hydraulic system pressure, support the launcher and then remove the sidecover.

Norman Kelsey
APO New York 09403

(Ed Note—Thanks for the good words.)
Carriers...

Differential Oil Filter Savings

FILBERT
NEVER
RE-USES
O-RINGS!

ATTA
BOY!

There's no need to replace the entire differential oil filter assembly every time the filter element or O-ring needs replacing on your M113A1/A2 family of vehicles.

In fact, unless the filter element is damaged, all you need to do is clean it

with Type II drycleaning solvent and re-install it with a new O-ring, NSN 5330-00-291-3069.

Never re-use the old O-ring. Throw it away.

If the filter is damaged or is too clogged by oily dirt, replace it and the O-ring. They can be ordered as kit, differential oil filter, NSN 2520-00-767-3153.

The only time the entire oil filter assembly should be replaced is when it has leaks or cracks in the filter housing.



Clean element
with solvent



Replace
O-ring

Chaparral Safety Pin

C'MON! IT'S YOUR
TURN TO FIRE!

NO WAY...

...NOT 'TIL THEY
REMOVE OUR LOCK PIN
AND SAFETY STREAMER!

The lock pin and safety streamer must be removed from your Chaparral missiles before firing or the missiles won't launch.

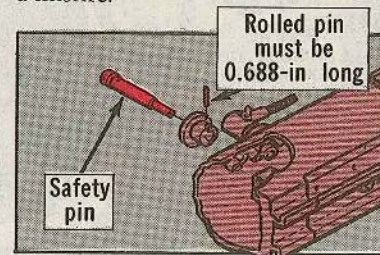
The rolled pin should be 0.688 inch long, just a hair over $\frac{2}{3}$ inch. If it's not, replace it. A shorter pin can cause a misfire.



Lock pin

The time to remove the lock pin and streamer is when you prepare the system for firing...the next step after you set the MISSILE CAGE/UN-CAGE switch to CAGE.

Another item you need to worry about in the safety pin assembly is the rolled pin that fits in the base of the bushing.



Rollled pin
must be
0.688-in. long

Safety
pin

Be sure system power is off before you check the length of the rolled pin.

GMSE Test Leads

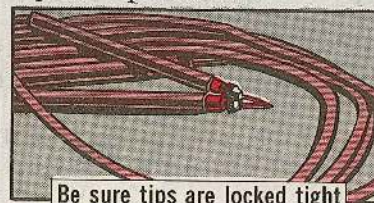
LOCKNUTS AND
LEAD TIPS NEED
EACH OTHER!

...AND IF YOU
LOSE ONE, YOU
CAN'T GET ANOTHER!

Test lead tips and locknuts come loose, get lost and otherwise make it hard for repair types to use the leads in Improved HAWK guided missile shops AN/TSM-104, -105, -106 (and elsewhere).

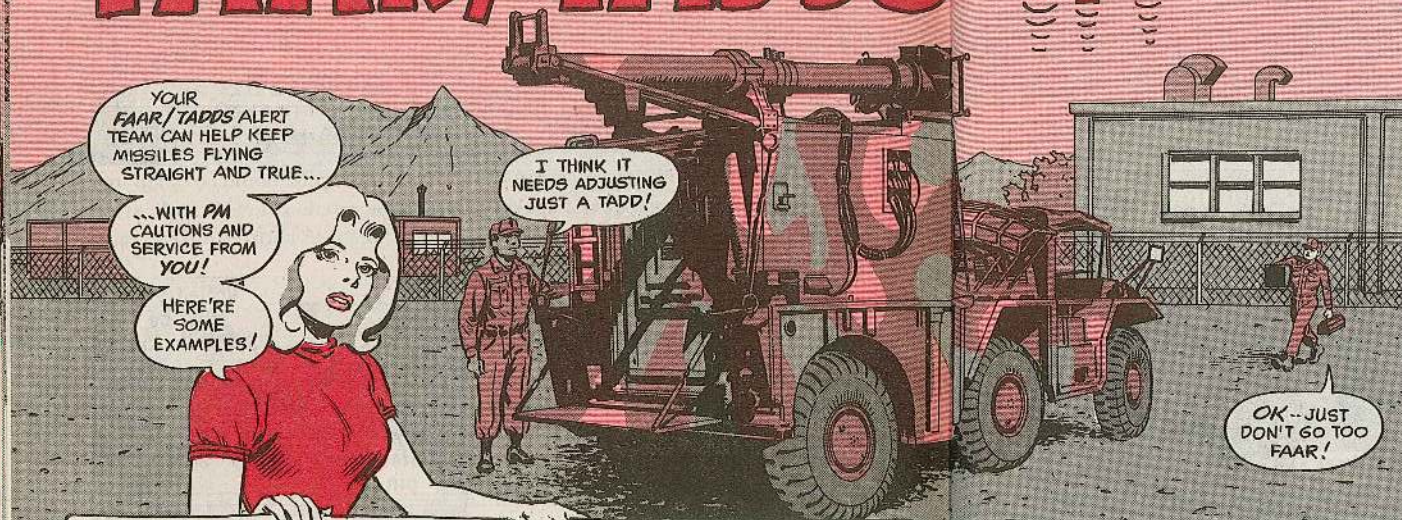
If you want to avoid problems, be sure the tip is tight before you use it. Also, guard the locknut on the test

leads. If you lose it, you can't get a separate replacement.



Be sure tips are locked tight

FAAR/TADDS Ups and Downs



YOUR
FAAR/TADDS ALERT
TEAM CAN HELP KEEP
MISSILES FLYING
STRAIGHT AND TRUE...

...WITH FM
CAUTIONS AND
SERVICE FROM
YOU!

HERE'RE
SOME
EXAMPLES!

I THINK IT
NEEDS ADJUSTING
JUST A TADD!

OK--JUST
DON'T GO TOO
FAAR!

FAAR Facts

If you don't want to be the dummy when you remove the dummy load from the J6 connector on the shelter wall of your forward area alerting radar system (FAAR), remember this:

Remove the dummy load. As you connect the W20P1 cable to the J6 to replace the dummy load, be sure you



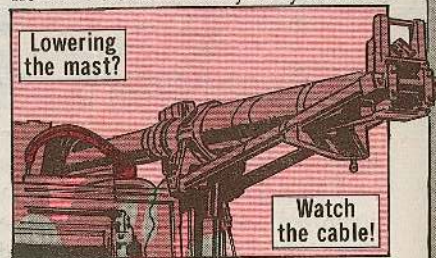
Be sure W20
to J6 is snug

get the W20P1 on snug and tight.

If the connector's not tight, you'll burn out the RF pin in it. Then, you're out of business.

Another "watch it" item is the whole W20 cable assembly.

When you lower the mast from the march order position, you've got to hold the cable assembly away from the



Lowering
the mast?

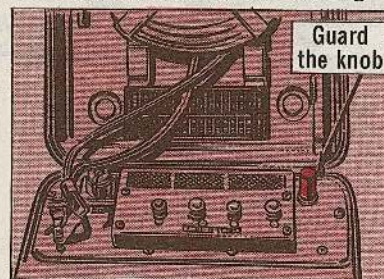
Watch
the cable!

mast. Otherwise, the cable can be pinched between the mast and the shelter. If so, forget about operations that day.

TADDS

Fact: The volume control knob of the FM receiver sticks up on your AN/GSQ-137 TADDS. Bad news.

Fact 2: Because it sticks up, the knob is damaged when the lid is closed...if the charging cable is stored wrong.



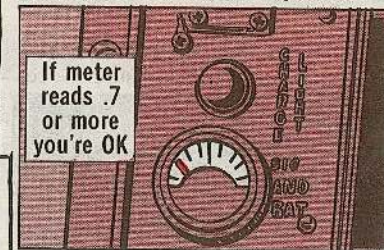
Guard
the knob

Remember it. Watch it, and keep your TADDS operating.

Batteries

The nickel cadmium battery in your TADDS has more than enough power to perform a mission when fully charged...up to 30 hours operation at 80°F when TADDS is receiving data.

But unnecessary tests, even on a full charge, will run the battery down.



If meter
reads .7
or more
you're OK

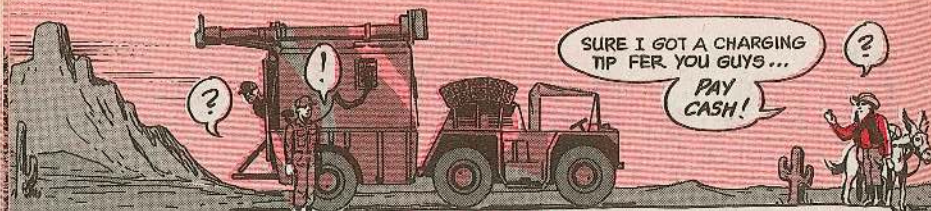
What to do? Test the charge before you start an operation. If you get a .7 or more reading on the SIG and BAT meter, you're OK. No need to test it during the day's operation.

If the meter reading is .63 or a little lower, test the battery several times during use to be sure you've got enough charge left for the remainder of your operation.

A READING OF
.59 AND LOWER
MEANS YOU'VE GOT
2 HOURS OR LESS
USE LEFT IN THE
BATTERY!



PS MORE



Charging Tips

You must discharge the battery to .5 on the meter before you charge it. Either keep using it or just leave the set on till you get that .5 reading.

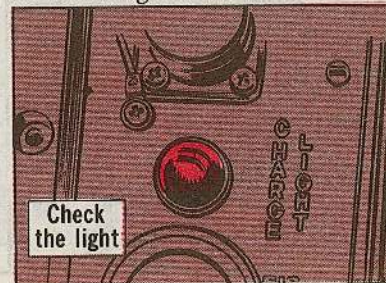
TADDS will not operate below .5, a reading which indicates deep discharge. Do not discharge below .5 or you can damage the battery.

Never charge the battery in temperatures below 32°F or above 122°F.

When you hook up the required 24-VDC charging source, be sure the red

cable clip from the set goes to the (+) or positive post of the charger and the black clip goes to the (-) or negative post. That prevents reverse polarity.

The TADDS' green CHARGE LIGHT will go on when the cables are



hooked up right. Check the light. Also, check the lamp if you know the cable hookup is OK but the charge light won't come on.

If you have to operate the TADDS during charging, add 20 minutes of charging time to each hour of operation while charging.



Cautions

During operation, keep your TADDS at least 30 feet from any transmitter of 75 watts.

The greater the wattage over 75, the further you have to keep away. For instance, for a 100-watt transmitter, keep 40 feet away; 150 watts, 60 feet, and so on. Or, 10 feet more for each added 25 watts.

TO OPERATE TADDS WITHIN 260 YARDS OF FAAR, YOU MUST REMOVE THE TADDS ANTENNA OR DETUNE IT!



Need a new grip for the barrel on your M203 grenade launcher?

Your direct support can now get it with NSN 1010-01-065-3704. It's been added to the repair parts list of TM 9-1010-221-24 by TB 43-0001-36-4 (Apr 80).

The handgrip permits repair of the barrel assembly. Previously, the assembly had to be declared unser-

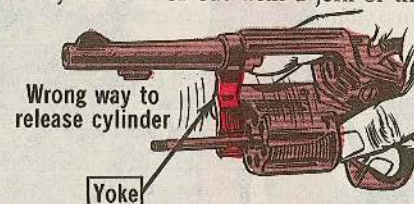
viceable when the handgrip was broken.



Resist Wrist Twist



Cowboy-style gunslinging can get a revolver into a heap of trouble. Like, slamming your .38-cal revolver's cylinder in or out with a jerk of the

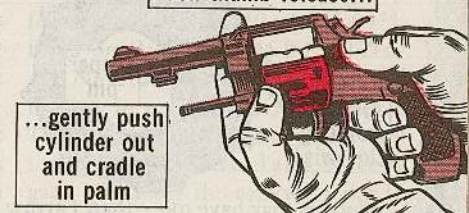


wrist damages the yoke and throws the firing chambers out of alignment.

If that happens, bullets could graze the edge of the barrel walls, sending bullet shavings flying out the sides of the cylinder. You could blow up your .38 or even fill yourself full of hot lead.

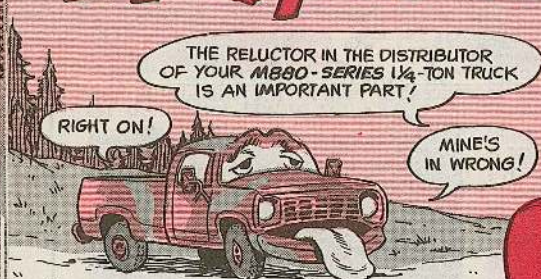
So, when you load your 6-shooter, take it easy. Push the thumbpiece. Then gently push the cylinder out and cradle it in your left hand. Close it with your thumb.

Push thumb release...



Do yourself and your .38 a favor. Leave the cowboy stuff to the horse operas.

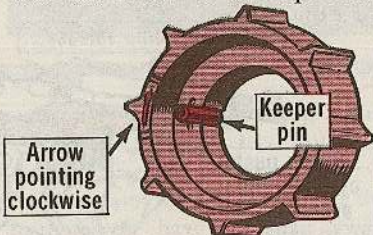
Proper Reluctor



Wrong installation or damage to the reluctor will put your truck's ignition system out of whack.



Install the reluctor on its sleeve shaft so that the rim of the reluctor with the arrow is on top. Some



reluctors may have more than 1 arrow stamped on the rim.

Be careful not to let the reluctor teeth touch the magnetized pickup coil



...IT HAS TO BE HANDLED WITH CARE!

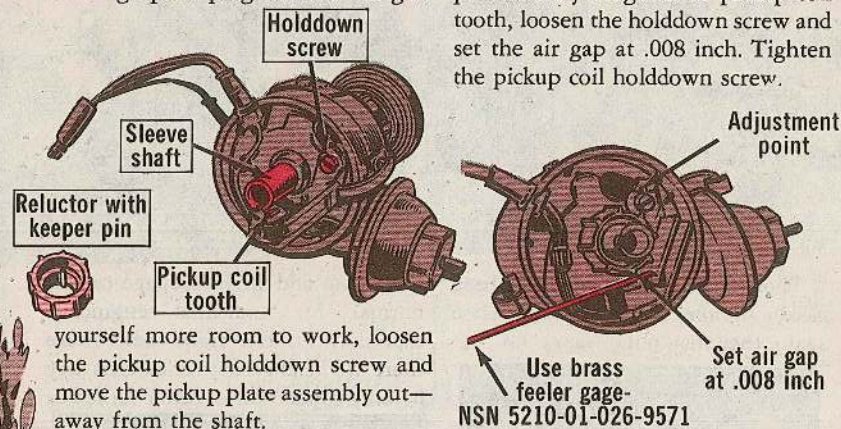
MINE'S IN WRONG!

Care's a MUST



tooth. It could magnetize the reluctor, causing spark plug misfire. To give

Aline 1 reluctor tooth opposite the permanently magnetized pickup coil tooth, loosen the holddown screw and set the air gap at .008 inch. Tighten the pickup coil holddown screw.



yourself more room to work, loosen the pickup coil holddown screw and move the pickup plate assembly out—away from the shaft.

Position the reluctor on its sleeve so that the keeper pin is next to the clockwise arrow. If the reluctor is installed with the keeper pin on the opposite side of the clockwise arrow, it will create a timing problem.

Proper air gap between the reluctor teeth and the pickup coil tooth is crucial. If the gap's too wide or too narrow, it can make the truck hard to start or make the engine run rough or not at all.

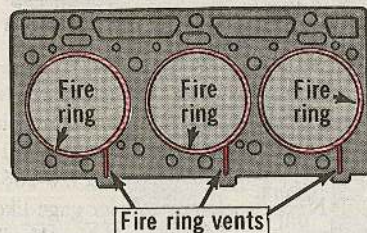
When measuring the air gap, make sure to use the special non-magnetic feeler gage, NSN 5210-01-026-9571, listed on Page 3-1, TM 9-2320-266-20P. Never use a steel feeler gage like the one in your Common Number 1 Tool Set. Remember, the pickup coil tooth is magnetized and a metal feeler gage will allow the reluctor tooth to become magnetized. Magnetized reluctor teeth will make your engine misfire or perhaps not run at all.

Engine Leak? Maybe Not

Time and parts are being wasted fixing "leaks" that're not leaks at all. Perfectly good engine head gaskets are being replaced by DS just because someone spots small bubbles or seepage or hears hissing noises from the engine.

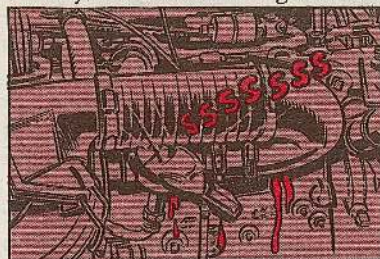


Those signs may mean a bum head gasket or loose cylinder head. Then again, they may not.



These vents are open at the edge of the cylinder head. Moist air may be sucked in when the engine cools down. Then, condensation—water—will be forced out and can make a hissing sound when the engine heats up again.

Hissing and slight seepage can be normal for multifuel engines—especially on the right side where there are head gasket vents. This may be only condensation being vented as



the engine heats up. If so, it'll stop in a short time. But, if the hissing pulsates or if the seepage doesn't stop, your support should check it out.

Prove It Yourself

A few simple checks will show whether you've got leaks—oil or coolant—inside or outside.



- ✓ No loss of power. Make this check when the engine's up to normal operating temperature and it's under a load—like traveling uphill in your truck.
- ✓ No engine oil in the cooling system. Check your cooling system when it's cold. Since oil floats on top of water, it's easy to detect when you stick your finger into the radiator or surge tank. You can also see oil as a slime or rainbow color on top of the coolant.
- ✓ Engine is not missing. Your engine should sound smooth when you get it up to its normal operating temperature.

- ✓ No coolant in the engine oil. Water will show as blobs on the dipstick.
- ✓ No hydrostatic lock in your engine when you're trying to start it. If this check procedure's not in your operator's TM, take a look at FM 21-305, Manual For The Wheeled Vehicle Driver, Page 3-4, Para 3-2g, Hydrostatic Lock. Coolant that has leaked into a cylinder may even prevent your engine from turning over. That's hydrostatic lock.
- ✓ No excessive leaks between the cylinder head and engine block.

GET THIS! YOU'LL SAVE YOURSELF AND EVERYBODY ELSE A LOT O' HEARTBURN IF YOU DON'T PANIC AND DON'T JUMP THE GUN!

YOU CAN'T JUDGE MANY SUSPECTED ENGINE PROBLEMS UNTIL THE ENGINE'S RUNNING AT NORMAL OPERATING TEMPERATURE!

"Excessive" means oil or coolant actually running down the block. Remember, your engine's lube and cooling systems are under pressure when the engine's running, so double-check any damp spots or streaks after your engine's up to normal operating temperature. Pressure buildup may bring out a leak that doesn't show when the engine's cold.

5-Ton Truck Access Panels

Missing some of the engine access panels in the front fenders of your M39-series or M809-series truck?

They're not listed in TM 9-2320-211-20P or -34P (M39-series) or TM 9-2320-260-20P or -34P (for the M809-series), but you can get some of 'em with the NSN's below:



M39-Series Gasoline

Right Fender:

Rear splash panel, P/N 10871397.*
Front splash panel, P/N 10871398.*
Rear panel, P/N 10871396.*

Left Fender:

Rear panel, NSN 2510-00-177-7799,
P/N 10871389.
Front splash panel, P/N 10871098.*

M809-Series

Right Fender:

Front end panel, P/N 11664587.*
Upper panel, P/N 10931944.*
Door panel (with studs) NSN 5340-01-075-2619, P/N 11664589.

Left Fender:

Front panel, NSN 2510-00-880-4657,
P/N 1161572.
Door, front panel, NSN 2510-00-107-4237, P/N 11608902.
Panel, louvered, front panel, NSN 5340-01-075-2625.
Panel, louvered, steering gear (without studs), P/N 11664251.



M39-Series, Multifuel/Diesel

Right Fender:

Lower front panel, NSN 2510-00-420-5050, P/N 10931943.
Upper front panel, P/N 10931944.*
Door panel, NSN 2510-00-104-4501,
P/N 10864585.

Rear panel, P/N 10938266.*

Left Fender:

Rear panel, NSN 2510-00-880-4655,
P/N 11611574.
Front panel, NSN 2510-00-880-4657,
P/N 11611572.
Door panel, NSN 2510-00-107-4237,
P/N 11608902.

***If you need a panel that's not listed, or one that only has a part number given above, check with your cannibalization point. Those panels are not available thru supply channels yet.**

Turn-lock Fasteners

Some of the M39-series and M809-series vehicles use louvered doors with turn-lock fasteners.

YOU MAY ALSO
NEED SOME OF
THESE ITEMS TO
INSTALL THESE
DOORS...



Stud, turn-lock, NSN 5325-00-290-8240
Receptacle, stud, NSN 5325-00-637-2369
Eyelet, turn-lock, NSN 5325-00-449-2797
Rivet, receptacle, NSN 5320-00-994-7075

2½-Ton & 5-Ton Trucks... Torque Wheel Lug Nuts

THE FIRST LUG NUT WAS NOT TIGHT ENOUGH...
THE SECOND LUG NUT WAS TOO TIGHT...
BUT THE THIRD LUG NUT WAS JUST RIGHT!

AHHH... THAT'S
MY FAVORITE
BOOK...

GOODY! NOW
READ ABOUT MY
PART IN TH' STORY,
GOLDILOCKS!



Are you getting the inner and outer wheel lug nuts tight enough—but not too tight—on your 2½- or 5-ton truck?

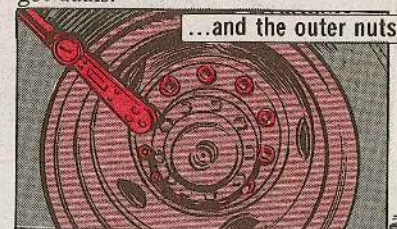
If you don't get them tight enough, they may come loose on the road. Too tight, and you could break the stud or warp the brake drum.

What's "just right," and how can you tell when you've got it?

Simple! Use a 0-600 lb-ft ¾-in drive torque wrench—like the one in the No. 1 Common tool set. You'll need a 13/16-in square socket NSN 5120-00-430-1687 (P/N BW 626A, FSCM 55719, Snap-On Tool Co) for the inner nuts. Order by part number till the NSN appears on the AMDF. Use a 1½-in hex socket for the outer nuts.

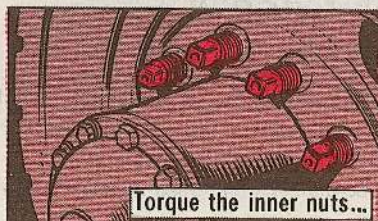
Torque both the inner and outer nuts to the torque specified for your

truck. Tighten the inner nuts before you put on the outer wheel if you've got duals.



THE WORD ON
HOW TIGHT TO GET
'EM IS IN THE -10 OR
-20 TM FOR YOUR
TRUCK AND IN THIS
CHART...

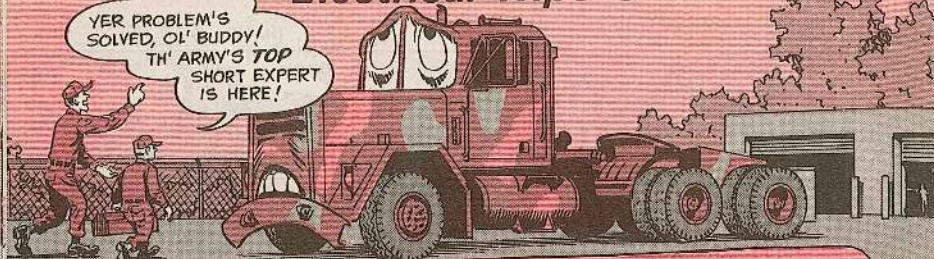
TM 209-series 2½-ton	
inner cap nuts	400-425 lb-ft
outer hex nuts	325-355 lb-ft
TM 211-series 5-ton	450-500 lb-ft
TM 260-series 5-ton	450-500 lb-ft



Torque the inner nuts...

If you have to change a tire when you don't have a torque wrench handy, get the nuts tight with the truck's lug wrench. First chance you get, tho, go back and do it right with a torque wrench.

Electrical Wipe-Out



Dear Editor,
Electrical trouble in your M915-series truck can come from windshield wiper levers rubbing thru wires under the dash.

This is because there are a couple of wiring harnesses right below the levers. If the levers rub on 'em, they can wear thru the insulation and cause a short.

Check the area around the levers while the wipers are on. Make sure no wires come in contact with the levers.

SP4 L. Maldonado
APO New York



(Ed Note: Great tip! The headshed is working on a way to prevent this. 'Till then, you drivers check this during your dailies. Check it during servicing.)

Tire Valve NSN's



Need tire valves for your TM 230-series 5-ton trucks (M656, XM757 or XM791)? Use NSN 2640-00-995-3135 to get 'em. The number in Section 1313 on Page 175 of TM 9-2320-230-20P is wrong.

5-ton Truck Chocks

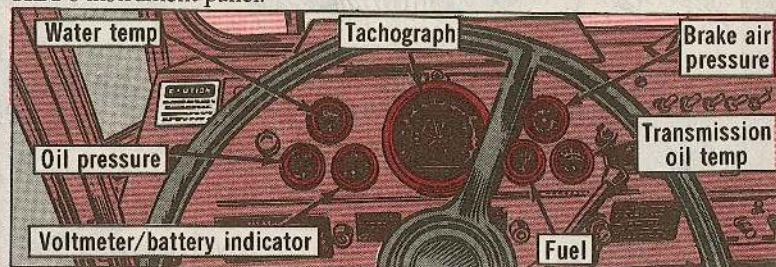


Hold one before you order a set of 2 field chocks for your 5-ton truck. The Basic Issue Item List on Page B-7 in TM 9-2320-211-10-1 codes the chocks as usable on all 5-tonners, but they should be coded BG and BM, usable on only the medium wreckers.

NSN's for M911 Gages



TM 9-2320-270-20P shortchanges you on NSN's for the gages in the HET's instrument panel.



Get replacement gages with these NSN's:

Oil pressure	6685-01-102-1639
Water temperature	6685-01-033-2562
Fuel	6680-01-102-5120
Transmission oil temperature	6685-01-085-2907

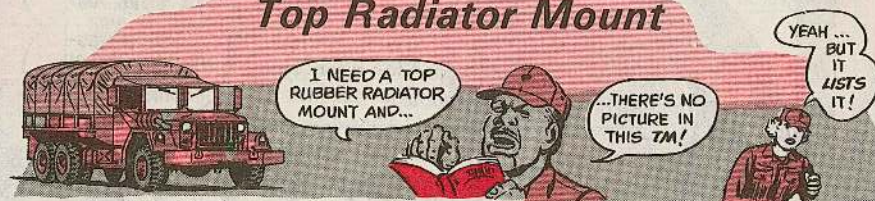
If you need a new voltmeter/battery indicator, get it with NSN 6625-01-102-7599.

If you have a bum tachograph, get a new one with NSN 6680-01-063-1439, while PN 61423DX, FSCM 45152 and RIC AKZ will get you a brake air pressure indicator.

Each replacement gage needs a voltage adapter, NSN 6625-01-096-5271.

TM-211-Series 5-Ton Truck...

Top Radiator Mount

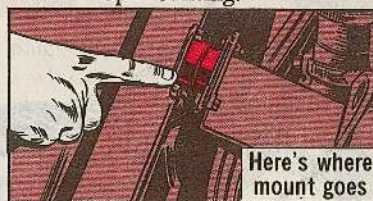


Looking for the top rubber radiator mount for your multifuel 5-ton truck?

It's listed under "Nonillustrated", on Page 2-48, TM 9-2320-211-20P, Mounting, Radiator: bottom, NSN 2930-00-919-2875.

The mounting is coded for the gasoline-engine truck, but it's only for multifuels. Pay no mind to the

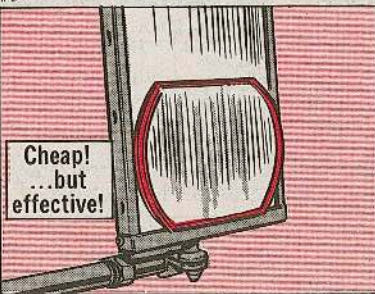
reference to Item 22 of Fig 41—that's not the top mounting.



WIDE-ANGLE

At last! An inexpensive, wide-angle (convex) mirror you can stick on your existing mirror. It comes under NSN 2540-01-079-3327.

It's standard on the M915-series trucks and is listed in TM 9-2320-273-20P by PN S46A2. Price is a little over \$3.



Cheap!
...but
effective!

If your truck's not already equipped with wide-angle mirrors, you'll need an OK from your CO to go wide-angle. If the mirror's needed for safety, you should have no trouble.

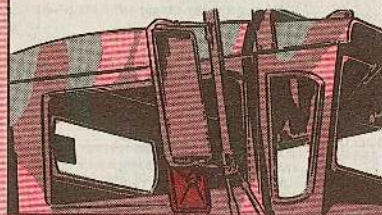
THERE'RE
OTHER WIDE-ANGLE
MIRRORS OF DIFFER-
ENT SIZES AND
SHAPES-- AND
HIGHER PRICES--
IF THE STICK-ON
JOB DOESN'T MEET
YOUR NEEDS...

Mirrors

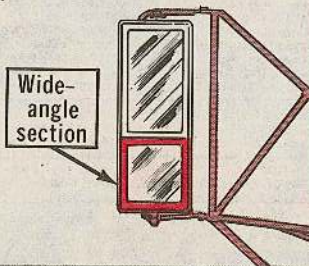


NSN 2540-00-401-8337, about \$6, can be clamped onto almost any mirror bracket.

NSN 2540-01-085-9340, nearly \$18, fastens onto the bottom of an existing mirror. This's standard on the M911 HET tractor truck.



NSN 2540-00-168-2186 and NSN 2540-00-168-2187, a pair of left (\$16.96) and right (\$10.10) combination mirror assemblies with regular at the top and wide-angle at the bottom. These're standard on the M746 tractor truck and on certain models in the TM-260-series 5-ton fleet.



Wide-
angle
section

Intervehicular Cable Tips

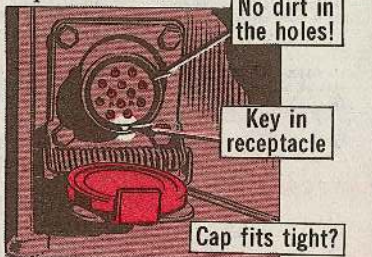
Before you connect up your trailer's intervehicular cable, eyeball the plug. Straighten any bent or distorted pins with needle-nose pliers. If any of



Pins
straight,
even?

the pins have been pushed down into the plug, use the pliers and gently pull the pins back out even with the others.

Make sure the receptacle on the truck's not plugged with dirt. Clean it out. Make sure the cover closes snug to keep the dirt out.



No dirt in
the holes!

Key in
receptacle

Cap fits tight?

Put some silicone compound, NSN 6850-00-880-7616, on the rubber plug—that'll make connection slick as a whistle. Line up the keyway in the plug with the key in the receptacle. Never force it. It'll only go one way. When you apply good PM, hooking up's a snap!



This is a selected list of recent pubs of interest to organizational maintenance personnel. This list is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pam 310-4 and DA Pam (C) 310-8.

TECHNICAL MANUALS

C 1, TM 5-2410-233-20 May Tractor, D7F
C 2, TM 5-3805-237-20P Jul Grader Mod 440HA
C 4, TM 5-3805-246-20P Jul Grader Mod 112F
C 7, TM 5-4330-211-12 Apr Filter-separator, 350-GPM Beta Sys Inc. Mod 010-2-001; Keene Corp Mod 844-18-V-350AL; Gil, Inc. Mod GFS-18-V-350
TM 5-6116-597-12 May Gen set, turbine engine 400Hz, 10-KW
TM 9-1005-224-10 Mar M60 machine gun
TM 9-1005-315-12AP Apr Blank firing attachments M2, M85 machine guns
TM 9-1010-223-10-HR Mar Mortar 60-MM M224
TM 9-1425-425-L Apr Redeye pubs
TM 9-1425-473-24P May TOW/Cobra
TM 9-1425-588-L Apr FAAR pubs

TM 9-1430-527-12-2-3 May I-HAWK
TM 9-1430-533-24P Mar I-HAWK
TM 9-1430-580-24P Apr AN/GSA-77
TM 9-1430-1528-12-4-1 Sep I-HAWK
TM 9-2320-209-20-1 May 2 1/2-Ton M44A1, M44A2-series trucks (multifuel)
TM 9-2320-211-20-1 Dec 5-ton, M30-series trucks (multifuel)
TM 9-2320-260-20-2-1 Jan 5-ton M809-series trucks (diesel)
TM 9-2320-260-20-2-2 Jan 5-ton, M809-series trucks (diesel)
TM 9-2320-260-20-3-3 Jan 5-ton M809-series trucks (diesel)
TM 9-2320-222-20-1-5 Feb M728 CEV
C 2, TM 9-2350-238-10 Apr M578
C 2, TM 9-2350-259-20 Jun M901 Improved TOW vehicle
TM 9-2350-303-20P-2 Apr M109A2
TM 9-4935-552-24P Feb Combat support system AN/TSM-93
TM 9-4935-1544-24P Mar Test station AN/TSM-120
TM 9-4935-1548-14 Mar I-HAWK
C 1, TM 11-5815-331-20P Jul AN/VSC-2, 2A radio teletypewriter sets
C 1, TM 11-5815-334-20P Jun AN/GRC-122, A-C and 142, A-C RATT sets
C 1, TM 11-5815-602-12 Mar AH/UUG-74A (V) 3 comm term
C 3, TM 11-5855-246-10 May AN/PAS-7A infrared viewer
TM 11-5895-1047-10-HR Jul AN/TRS-2 (V) 1-6 platoon early warning sys
C 1, TM 11-7440-240-10-5 Mar OA-8389
C 1, TM 11-7440-241-10-5 Mar OA-8390
C 1, TM 11-7440-253-10-3 Mar AN/GSC-21 VFMD
C 1, TM 11-7440-253-10-4 Apr AN/GSC-21 VFMD
TM 55-1500-328-25 Apr Aero eqpt maint mgt policies, procedures
C 18, TM 55-1510-201-20 Apr U-8D, U-8G, RU-8D, U-8F
TM 55-1510-201-PMS Apr U-8F
C 4, TM 55-1520-209-23-1 Apr CH-47A
C 6, TM 55-1520-209-23-2 Apr CH-47A
C 6, TM 55-1520-210-PMD Jun UH-1D/H/V and EH-1H
C 4, TM 55-1520-210-23-3 Jun UH-1D/H/V/EH-1H
C 25, TM 55-1520-219-20 Jul UH-1B
C 2, TM 55-1520-220-23-2 Jul UH-1C/M
C 1, TM 55-1520-220-PM Apr UH-1C/M
C 7, TM 55-1520-221-23-1 Apr AH-1G and AH-1Q
C 9, TM 55-1520-227-23-1 Apr CH-47B CH-47C

C 9, TM 55-1520-227-23-2 Apr CH-47B, CH-47C
C 16, TM 55-1520-228-23-1 Jun OH-58A, OH-58C
C 17, TM 55-1520-228-23-1 Jul OH-58A and OH-58C
C 6, TM 55-1520-228-23-2 Jul OH-58A and OH-58C
C 3, TM 55-1520-238-23-1 Jul AH-1S (prod), AH-1S (ECAS), AH-1S (mod)
C 2, TM 55-2840-234-23P Apr Engine, aircraft, gas turbine T55-L-7, T55-L-7B, T55-L-7C, T55-L-11ASA, T55-L-11D

MISCELLANEOUS

AR 220-1 Jun Unit status reporting
DA Form 2408-1 May Ept daily log
DA Poster 750-81 Jan Clean Fillers Keep Equipment Ready
MCRL-1 Jul Master cross-ref list Part 1 (fiche)
MCRL-2 Jul Master cross-ref list Part 2 (fiche)
MCRL-3 Jul Master cross-ref list Part 3 (fiche)
ML-A Jul Management data list (ML) basic Army (fiche)
ML-A Aug Management data list (ML) (fiche)
PAM 310-1 Jun Index of AR, circulars, pamphlets, posters (fiche)
PAM 310-2 Jun Index of forms and labels (fiche)
SB 708-4142 Jun Federal supply code for mtrs (fiche)
SC 1680-97-CL-A07-HR Jan Survival kit, individual vest
SC 3470-95-CL-A32 Dec Torch outfit, cutting and welding, OM Set No. 5
SC 3470-95-CL-A32-HR Dec Torch outfit, cutting and welding, OM Set No. 5
SC 5180-97-CL-N05 Jan Tool kit, master mech LIN W45060
SC 5180-97-CL-A01 Jan Tool kit, aircraft mech, General
SC 5180-97-CL-A01-HR Jan Tool kit, aircraft mech, General
SC 5420-97-CL-E28 Sep Bridge, float aluminum; foot
TB 9-2300-295-15/9 Jun Warranty procedures commercial motor vehicles all contracts
All Orders to Baltimore
The new word is that all orders for publications now go to the Baltimore Center. That includes your DA 12-series forms for pinpoint and DA Form 4569 for additional and replacement pubs.

JOE'S DOPE

SAVERS
of the
LOST PARTS



SO THAT'S THE STORY, SIR...

OUR SUPPLY SYSTEM IS SUFFERING FROM A HUGE LOSS OF PARTS.

UNDERSTOOD GENTLEMEN!

MY OFFICE HAS BEEN SEEKING THE KEY TO THIS PROBLEM...

"... USING THE LATEST ARCHEOLOGICAL TECHNIQUES, OUR INTELLIGENCE AGENTS HAVE LOCATED THE LEGENDARY KEY IN AN UNEXPLORED JUNGLE WHERE IT HAS LAIN HIDDEN. EVEN NOW, OUR TOP PM TEAM IS RACING TO RECOVER IT BEFORE GRIMLAND AGENTS FIND IT..."

AHHH-- JUST A FEW STEPS MORE, COMRADES... AND THE KEY IS OURS!

OH, NO! LOOK!! COMING OUT OF THE CLOUDS...

ARGHH! IT... IT'S...

SPECIAL PM AGENT CONNECTICUT RODD, GENTLEMEN...

WE'VE BEATEN THE AMERIKANSKIS! HA-HA-HA-HA!

... BETTER KNOWN AS CONNIE!

SORRY... BUT THE US ARMY NEEDS THIS CHEST... AND THE KEY WITHIN...

STOP HER, DOLT!

I... I'M TRYING, COMRADE BOSS!

GRIMLAND DEPENDS ON US!



HEAD FOR BASE, HALF-MAST!

RIGHT ON!

CURSES!



AUDIO-VISUAL STUFF

Available at battalion or post Learning Center

TV Tapes
TVT 2-55 MOPP-chemical protection
TVT 6-168 TACFIRE
TVT 44-138 Stinger
TVT 44-139 Stinger
TVT 44-140 Stinger
TEC LESSONS
043-441-5575-F Maint of I-HAWK
043-441-5578-F I-HAWK
043-441-5587-J THFIR
043-441-5590-JFE Altrenment
043-441-6011-F Vulcan maint
043-441-6012-F Vulcan maint
043-441-6016-F Vulcan maint
043-441-6017-F Vulcan
043-441-6029-J Vulcan rick-

cad batteries
043-441-7884-F Chaparral carrier, M730 PMCS Part II
043-441-7907-F Chaparral missile inspect
043-441-7908-F Chaparral missile inspect
043-441-7909-F Chaparral missile inspect
043-441-7911-F Chaparral PMCS
043-441-7912-F Chaparral PMCS
043-441-7917-F Chaparral launch sys
043-441-7928-J Chaparral electrical
043-441-7931-J Chaparral quarterly PM

231-906-3062-A AN/GLO-3B
231-906-4058-A AN/TRD-23 RDF
412-051-7208-A AN/GVS-5 laser rangefinder
412-051-7209-A AN/GVS-5 laser rangefinder
412-051-7210-A AN/GVS-5 laser rangefinder
412-051-7211-A PM on laser rangefinder AN/GVS-5
412-051-7216-A Sound/flash ranging SB-229/GB
412-061-7217-J Maint on switchboard SB-229/GB
580-113-6594-A Maint on JT-76/GGC
600-011-6623-J Swashplate, scissors, sleeve on UH-1H

600-011-6626-J Tail rotor removal, install UH-1H
600-011-6657-A Main rotor pitch links OH-58A/C
600-011-6665-J Rig OH-58A tail rotor sys
600-011-6674-J Main drive shaft, OH-58A
612-051-9677-F Troubleshoot lube and service unit
612-051-9683-F Trouble-shooting track, undercarriage for tractor
612-113-6439-A Service recovered field wire
944-171-0109-F During op checks 5-ton truck
944-171-0204-F PMCS on Coar, Part I

LATER...

AN ESCORT...??
FOR US, CONNIE?

YES, SARGE... TH' PENTAGON HAS FLOWN IN A GROUP OF BIRD MECHS WHO SORELY NEED THIS KEY! WE'RE T'MEET 'EM PRONTO!

QUICKLY...

AMAZING!

ASTOUNDING!

HERE IT IS...THE LEGENDARY CHEST SAID TO CONTAIN THE KEY SOUGHT FOR AGES BY ARMIES THE WORLD OVER.

FANTASTIC!

STARTLING!

HURRY--
OPEN IT,
CONNIE!

OK! GIVE ME
AN ASSIST,
SARGE?

THIS CHEST
HASN'T BEEN
OPENED FOR
A LONG TIME!

THERE!

WHAT
TH--!

I DON'T
B'IEVE
IT...

IS THIS
A JOKE?

?

NO JOKE,
SOLDIER...

WHY... IT'S
FULL OF...

ARMY
PUBS...

...AND DA
FORMS...

YOU SHOULDN'T
BE SURPRISED...

... THEY'VE ALWAYS
BEEN THE KEY TO
SUPPLY "PROBLEMS"...

THE REAL PROBLEM
IS GETTING TROOPS TO
USE THEM... AND
USE THEM CORRECTLY!

AWW, CONNIE...
HOW CAN THIS
STUFF GET ME
TH' GEAR BOX
MY BIRD'S
NEEDED FOR
WEEKS?

I SENT THE OLD
ONE FOR
OVERHAUL...
AND I CAN'T
GET A REPLACEMENT!

HMMM... DID YOU
RECORD THE HOURLY
FLIGHT ENTRIES
ON DA FORM 2410?

ER...

SPECIALIST, WHEN TIME-BETWEEN-
OVERHAUL (TBO) AIRCRAFT COMPONENTS
ARE REMOVED, HOURLY
FLIGHT ENTRIES MUST
BE RECORDED ON
DA FORM 2410, THE
COMPONENT REMOVAL
AND REPAIR/ OVERHAUL
RECORD!

USAGE SINCE NEW (hrs) USAGE SINCE OVER
HAUL (hrs)

SECTION II - REMOVAL DATA

TOTAL FLIGHT TIME
MUST BE SHOWN FOR
CONDITION ITEMS, TOO!

??GULP??

WHEN THE FLIGHT TIME IS MISSING AND CAN'T BE
RECONSTRUCTED, DEPOT MAINTENANCE PEOPLE HAVE
TO SCRAP THE COMPONENT SENT FOR OVERHAUL...

HOW CAN WE REPAIR
THIS GEAR BOX WITH-
OUT ITS USAGE DATA?

WE
CAN'T...

YOU'LL HAVE
TO JUNK IT!

MANY COMPONENTS ARE NO
LONGER IN PRODUCTION... SO...

...THIS RESULTS IN THE LOSS OF
PARTS TO THE SUPPLY SYSTEM...

HEY... THE
591ST GUYS
ARE ASKING
FOR A
REPLACEMENT
!

THEY'LL JUST
HAVE T'WAIT!

...AND A LOSS
OF BUCKS TO
UNCLE SAM!

RIGHT ON,
SARGE,
AND...

...HERE'S A POSTER YOU
CAN HANG WHEN YOU
RETURN TO YOUR UNITS...

IT CAN HELP
SPREAD THE WORD
TO YOUR BUDDIES!

Joe's Dope Sheet

[illegible]

COMPONENT REMOVAL AND REPAIR/OVERHAUL RECORD
For use of this form, see TM 30-180, the proponent agency is DCSDD

CONTROL NUMBER
62270

4 SERIAL NO.

5

71 REMOVED FROM SERVICE

16 DATE REMOVED

20 AIRCRAFT HOURS

REMARKS

SECTION I - IDENTIFICATION

1. NOLN NOMENCLATURE (Range)

22 DISPOSITION

1. SCHEDULED MAINTENANCE

2. TEST

3. GROUND OPERATION

4. DETECTED DURING FLIGHT

5. OTHER

6. SHIPPED

7. AWAITING SHIPMENT

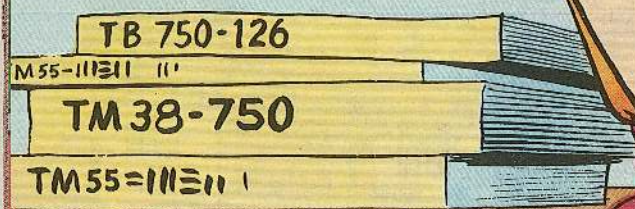
8. AWAITING REPAIR

DA FORM MAY 81 2410

EDITION OF AUG 78 IS OBSOLETE

When you send a part for repair,
Be sure it's **HISTORY** you share.
The details you pen
On the 2410
Head off supply shortage despair!

When you send a part for repair,
Be sure it's HISTORY you share.
The details you pen
On the 2410
Head off supply shortage despair!

[illegible]

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.

HMMM...I'M BEGINNING TO GET TH' PICTURE, CONNIE...

YES, COULD YOU AND SGT HALF-MAST BRIEF US ON CORRECT PROCEDURES?...

SURE!

HAPPY TO, SOLDIERS!

TO START, MECHANICS AND TECH INSPECTORS MUST WORK TOGETHER TO MAKE SURE THAT ALL PAPERWORK IS FILLED OUT RIGHT AND GOES WITH THE REMOVED COMPONENT TO THE DEPOT OVERHAUL FACILITY!

EVERY UNIT HAS ITS CUSTOM MADE QUICK REFERENCE BOARD THAT TELLS WHEN TWO COMPONENTS ARE DUE FOR REPLACEMENT!

THE PROCESS STARTS WITH A RED X ON DA FORM 2408-13, AIRCRAFT INSPECTION AND MAINTENANCE RECORD.

REPLACEMENT, AND INSPECTION ENTRIES ON A GEAR BOX, FOR EXAMPLE, ARE MADE AS THE GEAR BOX IS REMOVED!

STATUS (28 MAR 81) FAULTS AND/OR REMARKS GEAR BOX DUE REPLACEMENT

NEXT, FOCUS ON THE AIRCRAFT COMPONENT HISTORICAL RECORD, DA FORM 2408-16.

ALL HISTORICAL INFORMATION ENTRIES ARE IMPORTANT, BUT THE HOURLY FLIGHT INFO IN BLOCKS g, h, AND i OF THE -16 IS VITAL AND MUST BE TRANSCRIBED TO...

CONDITION PARTS		
TIME SINCE OVERHAUL	TIME SINCE NEW (Hours) (On Items Shown in Column a)	
INSTALLED	REMOVED	
1305	1688	1883

... DA FORM 2410, COMPONENT REMOVAL AND REPAIR/ OVERHAUL RECORD!

THE WORD ON HOW TO PREPARE THE FORM IS IN TM 38-750!

WAY TO GO, CONNIE...

TROOPS, BEFORE YOU SHIP THAT GEAR BOX TO DEPOT FOR OVERHAUL, TWO, ONE MORE FORM MUST BE COMPLETED... THAT'S DD FORM 1577-2 UNSERVICEABLE (REPARABLE) TAG-- MATERIEL!

UNSERVICEABLE (REPARABLE) TAG-- MATERIEL
INSPECTION ACTIVITY CONDITION

INFO ON THE "WHY" AND "HOW" OF THE TAG IS IN TB 750-126.

TIE THE TAG TO THE COMPONENT BEING SENT TO DEPOT AND...

... ATTACH ONE COPY OF THE DOCUMENT TO THE SHIPPING CONTAINER!

NOW THE PART IS READY TO BE SENT TO DEPOT. KEEP THE SUPPLY PIPELINE FULL-- SEND IT RIGHT AWAY!

DON'T FORGET TO INCLOSE THE COMPLETED DA FORM 2410!

ON THE FLIP SIDE, WHEN THE DEPOT SENDS THE UNIT A REPLACEMENT IT MUST BE ACCOMPANIED BY A PROPERLY FILLED OUT DA FORM 2410!

WHEN THE OVERHAULED PART IS INSTALLED, ENTER THE COMPONENT'S HISTORICAL INFORMATION FROM ITS DA FORM 2410 ON THE HELICOPTER'S DA FORM 2408-16!



Decals, placards and labels have been removed from the cockpits of AH-1's, CH-47's, OH-58's and UH-1's. The idea is to eliminate light reflection which interferes with the use of night vision goggles.



Now, bird mechs, add to the list of labels to be removed the Operating Limits decal and the GO-NO-GO take-off data placard.

A change to Para 6-34 of TB 746-93-2 is in the works.

1. DATE		2. MODEL		3. UNIT		4. CHIEF		5. PAGE NO.		6. NO. OF PAGES																																							
		RU-21A																																															
7. STATUS TODAY				8. AIRCRAFT TIME		9. NEXT INSPECTION DUE		10. HOT STARTS		11. OTHER																																							
<table border="1"> <thead> <tr> <th>AIRCRAFT</th> <th>ELECT</th> <th>ARMAMENT</th> <th>OTHER</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>2</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>3</td> <td>✓</td> <td></td> <td></td> </tr> <tr> <td>4</td> <td>✓</td> <td></td> <td></td> </tr> </tbody> </table>				AIRCRAFT	ELECT	ARMAMENT	OTHER	1	✓			2	✓			3	✓			4	✓			<table border="1"> <thead> <tr> <th>TIME TO DATE</th> <th>TIME TODAY</th> <th>TOTAL TIME</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>		TIME TO DATE	TIME TODAY	TOTAL TIME				<table border="1"> <thead> <tr> <th>INCHED</th> <th>PIE NO.</th> <th>OTHER</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>		INCHED	PIE NO.	OTHER				<table border="1"> <thead> <tr> <th>NO. 1 ENGINE</th> <th>LANDINGS</th> <th>OTHER</th> </tr> </thead> <tbody> <tr> <td></td> <td></td> <td></td> </tr> </tbody> </table>		NO. 1 ENGINE	LANDINGS	OTHER					
AIRCRAFT	ELECT	ARMAMENT	OTHER																																														
1	✓																																																
2	✓																																																
3	✓																																																
4	✓																																																
TIME TO DATE	TIME TODAY	TOTAL TIME																																															
INCHED	PIE NO.	OTHER																																															
NO. 1 ENGINE	LANDINGS	OTHER																																															
12. FUEL (Gals or Lbs)				13. OIL (Quarts)																																													
14. SERVICE NO.				15. PUZZLED BY maintenance records for your aircraft's electronics mission equipment (EME)?				Recordkeeping on your EME, such as the AN/ULQ-11 countermeasures system mounted in a modified U-21, really is simple.																																									
16. STATUS				17. Should they appear on the aircraft DA Form 2408-13? Or on their own -13? Maybe on a 2404? Maybe give 'em their own logbook? Or just forget all about them?				Record 'em in the electronics segment on the aircraft's 2408-13.																																									
18. FAULTS AND/OR REMARKS				19. UHF Radio weak receive on 225.00 at 3000 ft. H. Bursdell.				Para 10-1b of TM 38-750 says that the aircraft log is the historical record for a specific aircraft, its components and mission equipment. Never try to "save" work by maintaining 2 sets of logbooks. It's not allowed!																																									
20. DA FORM 2408-13, 1 DEC 68				21. REPLACES EDITION OF 1 JAN 64, WHICH WILL BE				22. (TM 38-750) AIRCRAFT INSPECTION AND MAINTENANCE RECORD																																									

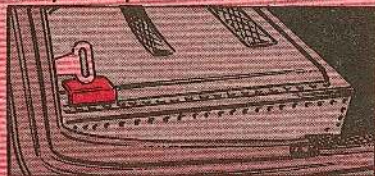
Kiowa Seat Fix



Dear Editor,

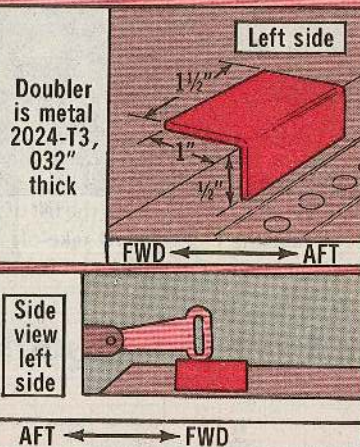
We have come up with a simple fix for preventing damage to passenger seat panels on OH-58's.

The passenger seat belt yokes used to dent and even puncture the honeycomb panels. But no more!



We installed a doubler in both aft corners of the seat panel where the belt yokes bang against the seat.

Make the doubler from 2024-T3 aluminum, NSN 9535-00-084-4395, and fasten it with adhesive, NSN 8040-00-016-8662. For best results let the adhesive dry for 24 hours.



No more costly panel replacements!
SGT Christopher T. Reichert
Ft Riley, KS

(Ed Note: Good show!)

First Aid Kit Contents

The next time you need to know what's supposed to be in your aircraft's general purpose first aid kit, NSN 6545-00-919-6650, check out Page 36 of Federal Supply Catalog C-6545-IL, Vol 2. This list is also being added to TM 55-1500-328-25. You'll also find the components for the General Purpose First Aid Kit, NSN 6545-00-922-1220, and the Gun Crew First Aid Kit, NSN 6545-00-920-7125, on Page 38 of the IL.

Trunnion Bearing Change...

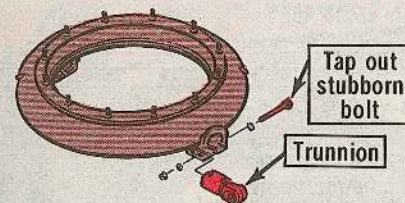
Easy Does It!



When you Huey mechs remove a faulty trunnion bearing from an installed swashplate, never use force.

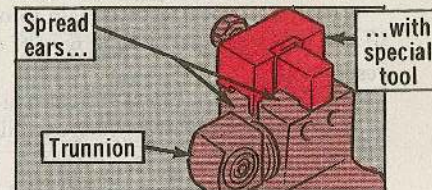
Sure, sometimes the trunnion bolts stick and won't come out with hand pressure. Never turn the bolts with a wrench during removal or installation, tho.

The steel bolts will cut threads into the aluminum bore and that's enough to ruin the swashplate. You'll have to change more than a bearing that's beyond the wear limits given in Para 5-60 of TM 55-1520-210-23.



Instead, latch on to a mallet and tap the bolts out of the housing.

With the hardware removed, the next step is to spread the housing ears so you can remove the trunnion.



Again, never use force. Use only the locally-made tool shown in Fig 5-38 of the maintenance pub...no screwdrivers, please!

Spread the ears to remove the trunnion and then remove to tool right away. Any excess spreading of the trunnion ears will damage the swashplate.

Stick with the manual on the bearing change, OK?

Aviation Messages

If your unit has not received a message in which you have an interest check with your next higher headquarters.

UH-60A-81-16 SOF Operational, Main rotor power off limitations (autorotations): DRDAV-EEB 161530Z Jul 81

UH-60A-81-17 SOF Maint Notice, Reactivation of panel lights switch night vision goggle dimming mode DRDAV-EEB 311915Z Jul 81

UH-60A-81-18 SOF Technical, Inspect gear box assy, main module, outer shaft: P/N 70351-08115-102, TB 55-1520-237

20-21 DRDAV-EEB 231600Z Jul 81
UH-60A-81-19 SOF Operational Notice, Operational panel lights switch night vision goggle dimming mode DRDAV-EEB 311920Z Jul 81

CH-47-81-13 SOF Technical, Inspect FWD and AFT pitch link assys TB 55-1520-209-37 DRSTS-MEA 081315Z Jul 81

AH-1-81-18 SOF Maint Notice, RCS CSGLD-1880, Change in overhaul and retire sched for UH-1, AH-1G Main Transmission, Univ. NSN 1615-00-163-0834, P/N 204-040-018-5, UH-1, Tail Rotor Gearbox, NSN 1615-00-918-2877

P/N 204-040-012-13, and UH-1/AH-1 Intermediate Gearbox, NSN 1615-00-918-2676, P/N 204-040-003-37 DRSTS-MEA 022120Z Jul 81

AH-1-81-19 SOF Maint Msg Internal T63-L-133/BA - engine - wash - procedures DRSTS-MEA 231930Z Jul 81

UH-1-81-08 SOF (Same as AH-1-81-18, above)
General AH-1-07 Safety of Use (URGENT) Inspect Mfg, RCS CSGLD-1880, Inspect and replace shaft, housing, rescue hoist assy P/N 423053526 (Gen-B1-07) TB 55-1603-328-20-2 DRSTS-MEA 221550Z Jul 81

Cat 1 EIR Phone: AUTOVON 693-2066 (24 hr)

Use Right Oil



If you Huey types receive main rotor hub PN 204-012-101-31, NSN 1615-01-056-4550, be careful what type of oil you put in the grip and pillow block reservoirs.

The depot put a different grip seal in that baby and it's designed to work properly only with non-detergent oil MIL-L-2104. NSN 9150-00-186-6681 will get you a quart.

Stick with the oil type stenciled on the rotor hub and you won't go wrong. The Huey lube chart is being updated.

On the Level?

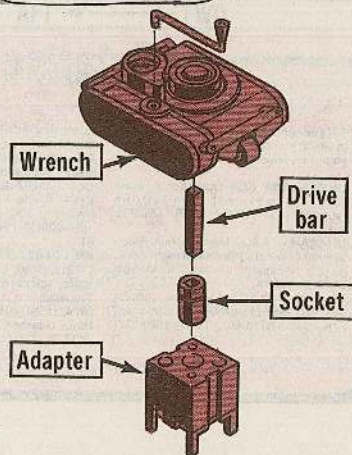


When using the power wrench on a Cobra or Huey main rotor retaining nut, make sure the blades are perpendicular to the mast—for real!

This means, for example, the blades must never be tied down or tilted when you apply torque.

If the blades are tilted, the wrench adapter is also tilted with respect to the mast nut.

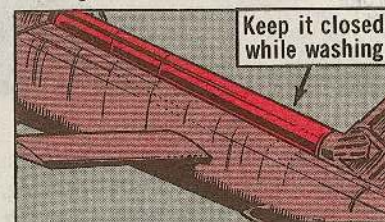
The 650 lbs-ft of torque applied unequally thru the drive bar can break the bar and the 2 reaction pins in the wrench. It happens! Those wrenches CO\$T. No tilting, please.



Keep Water Out!



Never wash your Cobra or Huey with the tail-rotor drive shaft covers open, knuckle busters. Water pressure will wash the grease out of the drive shaft bearings and cause shaft failure.



Use dry wiping towels to clean up the bearing area, but leave the seals alone.

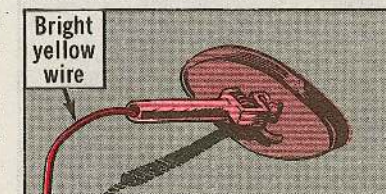
Hi-Vis Ground Wire



NSN 4010-00-286-2681 gets a 1,000-ft roll of a highly visible aircraft ground safety wire. Use the wire to make grounding cables for hangars and other non-tactical maintenance areas.

The bright yellow wire will remind you to step high when working around grounded birds and other equipment. That can save equipment and skins.

When you replace ground wire used for any aircraft operation—including POL—use this new wire.



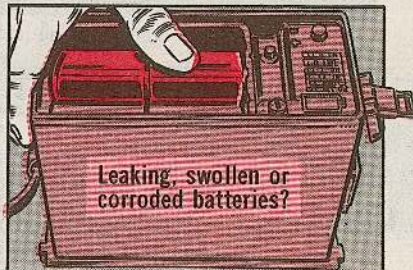
Battery Box Control

Top-notch PM on your AN/GRA-39 radio set control group starts at the bottom—in the battery box.

NOTHING QUIETS YOUR
REMOTE TALKING QUICKER
THAN A POWER FAILURE!
HEAD IT OFF
THIS WAY...

Batteries

Be sure you've got good batteries. Eyeball those 6 BA-30's for leaking,



swelling or corrosion. See any? Replace them.

Remove them when your set will be silent for awhile, too. They'll corrode and make a mess of the box if you leave 'em in.

Watch polarity. Make sure the raised positive end of each battery either hits a copper contact or the recessed end of another dry cell.

Never stretch battery life. They're only good for about 72 hours of operation (24 hours in remote set).

Making Contact

Eyeball contact strips. Tarnished? Hit 'em a lick with a rubber eraser. That shines 'em right up.

If the strips are loose, have your repairman glue them down. If they slip and slide, they louse up your operating.

Maybe the box needs a little snugging to make better contact. Put a piece of cardboard between the battery box and radio chassis. That'll pinch the batteries and contacts together.

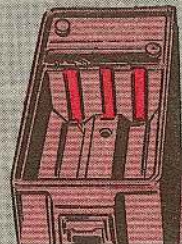
Install the batteries 2 at a time and roll them into position against the contact. Then, when you fasten the cover, don't give them a chance to move.

Lay the cover down flat on the batteries. Press it down until both latches will reach the lid. Then fasten the latches together. Your sense of touch should tell you if the batteries shifted. If so, start over.

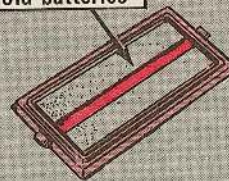
Can't reach both latches at the same time this way? Cut a $\frac{3}{8}$ -in wide channel down the exact center of the rear cover's pad. That'll also hold the batteries in right position. TB 43-0001-9-1 (Jan 81) OK's the work at org level.

Latching one side and then forcing the other side down is bad 2 ways. First, it can crack the case. Second, chances are good the batteries will slip and give you poor contact for remoting operations.

Clean contact strips

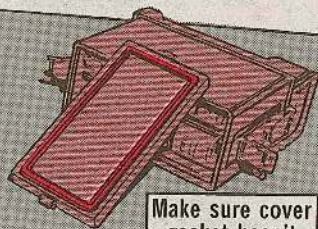


Notch in rubber pad will hold batteries



Make a Good Case

Be sure your case has a tight cover gasket. It's your first line of moisture defense. If yours has flattened with



Make sure cover gasket hasn't flattened!

wear, turn the set in for fixing.

Turn in a cracked case. Keeping one on the job is an open invite to corrosion-causing water.

Operations

FINALLY, HERE'RE A COUPLE OF OPERATIONAL ITEMS TO KEEP IN MIND...

One, be sure the field wire between the remote and local units is in good shape.

Then, hook the local unit's radio cable to the R/W connector of the receiver-transmitter. Hookup to the SPKR overloads the keying relay and sends too much juice to the set.

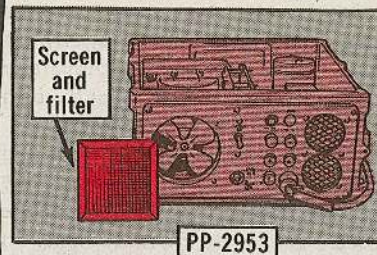
PS END

Fan(tastic) Motor PM



The ventilating fan motor on your AN/VRC-12 series radio set's PP-2953 power supply will poop out if you don't keep the filter clean.

A clogged filter keeps air from the



motor. Without air, the motor (and your commo) stops.

Keep 'em both going by thinking clean. Remove the filter monthly and wash it in soapy water. Dry it well.

Then put a light coat of oil, NSN 4130-00-860-0042, on the filter. A light coat only, tho, or you'll gum up the works.

Keep dust from the housing assembly with an air hose. For safety's sake, keep the pressure under 30 PSI.

Finally, keep the motor running and the commo coming with regular PM checks and services.

Need Replacements?

Getting new pieces for your mast antenna is tough if you only have your pubs to go by. NSN's are not yet listed in the TM 11-5985-357-13 or -23P.

HERE'S A LIST...

Mast Section Assembly (Lower)		5985-01-072-8065
Mast Section Assembly (Upper)		5985-01-072-8066
Adapter Assembly (Lower)		5985-01-072-8015
Adapter Assembly (Upper)		5985-01-072-8016
Insulating Extension		5985-01-072-4342
Guy Assembly (Red)		5985-01-072-4414
Guy Assembly (Blue)		5985-01-072-4415
RF Cable, CG-1889A/U		5995-01-085-1665
Stake Assembly		5985-01-073-6103
UG-349B/U Adapter Connector		5935-00-732-1919
Feedcone Assembly		5985-01-074-6684
Hand Hammer		5120-00-203-4656
Transit Bag		5985-01-072-4339
Base Plate		SC-B-659275 FSCM 80063
Guy Plate (Blue)		4030-01-074-7881
Guy Plate (Red)		4030-01-072-8126
Mast & Base Assembly		5985-01-072-8018
PF-211/G Strain Relief		5975-01-072-4496
AB-24 Mast Section		5820-00-240-3720
Stake		3040-01-072-8017



Bring It Back

Your backpack needs some up-front PM to do its long-range thing.

That thing is sending a radio signal when you want it to. And, when you want it to is usually when you have the least time to fix it.

Battery

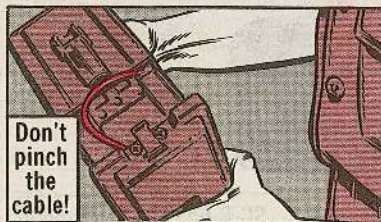
Battery connectors are fragile. Insert batteries carefully. If the pins are dirty, use a touch of trichlorotrifluoroethane, NSN 6850-00-105-3084, to clean 'em.

Receptacle
OK?



If one of your battery's receptacles is broken, don't use it. You can create a short and damage the radio if you do.

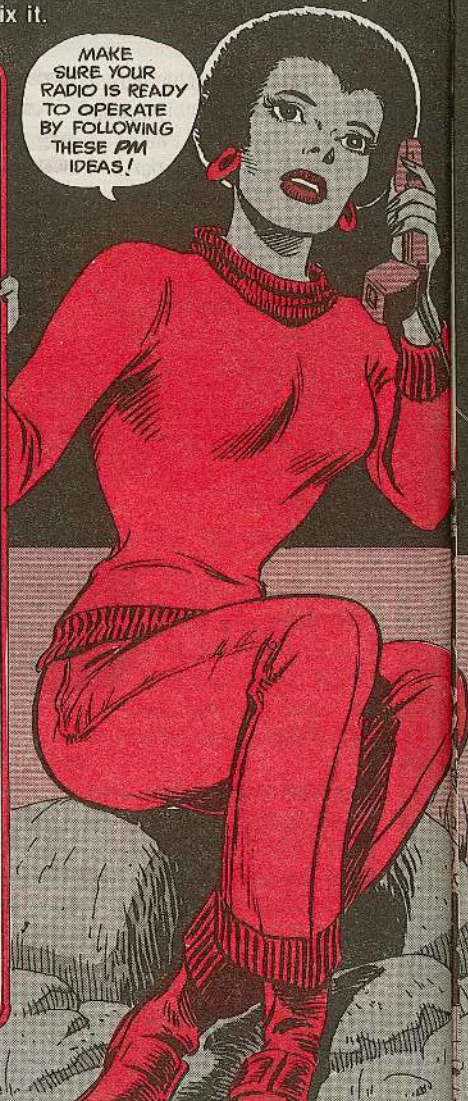
When the batteries are secured, be sure the power cable is safely tucked



inside the set. Watch for it when fastening the latches.

Bent or broken latches? Best turn that box in for repair. Do the same if the interconnecting lug is missing its rubber insulator. In an emergency you can use it without an insulator. Training is not an emergency, tho.

MAKE
SURE YOUR
RADIO IS READY
TO OPERATE
BY FOLLOWING
THESE PM
IDEAS!



ALIVE



Receiver-Transmitter

Natch, you'll want to be sure all switches and knobs are present and secure. Tune and load controls must rotate freely.

Controls must
turn smoothly



eyeball your binding posts. They should close completely when depressed and released. Be sure the color-coded (red=ANT, black=GRD) rubber covers are on.

If the colored covers don't fit snugly, remove 'em and put a touch of rubber cement on the inside top. Then secure it to the post.

The covers not only protect the post from moisture, but you from RF burns.

Accessories

All the little extras that come with your radio need care.

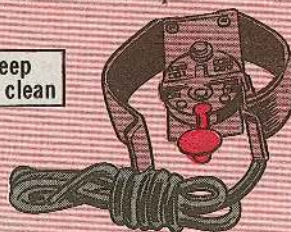
The telegraph key, for example. Dust and dirt build up on contacts and

can garble your message. A rubber eraser will shine 'em up.

Protect the spade lugs on the key cable by removing the cable before stowing the key. Lugs break easy enough during normal operation.

Stow cables by folding them into an S and wrapping them with a rubber band or something similar. This protects inside wiring. If connector pins tarnish or need cleaning, the ol' rubber eraser again does the job.

Keep
Key clean



Antennas

Switching your radio to TUNE before hooking up an antenna is one way to zap power amplifier transistors. It's a good idea to hook up even before switching ON. It takes only a twitch to turn the knob to TUNE.

Your output stage is the victim if you use the AS-1887 whip antenna at or below a freq of 3.5MHz. At this range, use the slant wire or dipole antennas.

With long wire, be sure to use antenna lengths of at least 100 feet. If the formula in your pubs comes up with a shorter wire, use a different antenna.

Too short an antenna sends power back to the set and can knock it out.

Think Link for Control

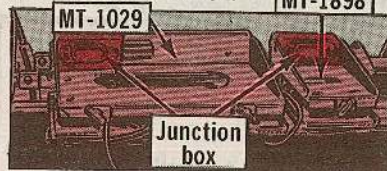
DRAT!!

RADIO'S OUT!
DID I FORGET T' SHUT
OFF TH' COMMO B'FORE
STARTIN' UP?

NOPE! THE SET FELL OUT!
THE THUMBSCREWS MUST
HAVE BEEN LOOSE!

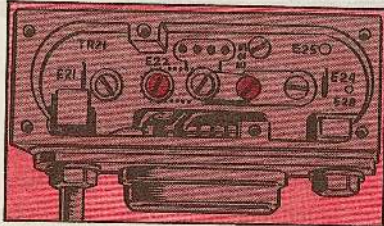
The power control link in your MT-1029 mount's junction box can put control of your tracked vehicle's commo in one switch.

MT-1898



That could save you an RT or AM-1780 amplifier if you forget to switch one or the other off before you fire up your vehicle.

The secret? Have your org maintenance pivot the link from the E23 terminal board hold-down screw to E22.



This puts the on-off function in the AM-1780's switch.

Before you make the switch, cut off the mount's power. That'll save you a shock. Para 2-10b, TM 11-5820-401-12 has the dope on the switch.

Mount Memo

Your track can shake your commo gear loose like a bronco sheds a cowboy if you don't tighten the mounting clamp thumbscrews.



Mounting clamp thumbscrews

Bulb Projection

Careful when ordering bulbs for your Cue-See projector. PS 324, Page 55 said NSN 6730-01-081-6555 is the one and only. That's true if your projector is a Model 2300. New Cue-See Model 2205, 2305, 2405, 2255, 2355, and 2455 are hitting the field. They use a Type DDF, 17-volt, 55-watt bulb. It has no NSN, so ask for P/N 625-30-35. The Federal Supply Code for Manufacturer is 07055.

Wondering what organizational maintenance can do when it comes to commo shelter repair?

TB 43-0124



TB 43-0124 tells you. It has the poop on S-141, -144, -250, -280 and -318 shelters. Needed parts and tools are listed with info on how to use 'em.

IF YOUR UNIT DOESN'T HAVE
ONE, HAVE YOUR PUBS CLERK
ORDER WHAT YOU NEED!



Switch(board) Fuses

NO GOOD, LIL...
THE CIRCUIT'S
BLOWN!

BUT THE FUSE
DIDN'T BLOW!

Your SB-3614 telephone switch-board is overfused.

TM 11-5805-695-12 calls for a 5-amp slow-blo. That won't self-destruct fast enough when problems develop. Circuits go before the fuse does.

Solve the problem by substituting a 4-amp fuse, NSN 5920-00-236-8188. Get 2, 'cause you need a spare.

Your pub will be changed to list this new fuse.

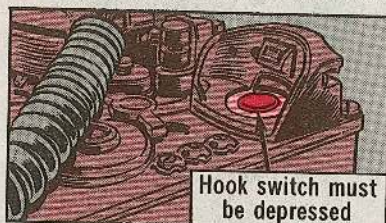
No more 5's.
Give it a 4!



Unlisted Number?



Think you've been forgotten 'cause no one rings up your TA-312? Maybe your handset's off the hook.



The hook switch, that is. It must be depressed by the handset before someone can buzz you.

So, when you complete a call, seat the handset fully. Scope out the tension on your retainer assembly, too.



It should hold the handset easily when the TA-312 is placed on end. If it won't, have your org repair shop adjust or replace the retainer.

Carbon Copy?



Get an original and one copy with a roll of teletypewriter paper under NSN 7530-00-262-9178. NSN 7530-00-285-5030 makes 2 copies.

If a single print is enough, the standard roll, is NSN 7530-00-223-7966.

Connector Protector

A CW-592 connector cover is the protection you need for your MK-1009 mast extension kit's CG-3443 cable assembly. Get it with NSN 5935-00-892-9068.

CX-4720 Terminal Lug

A terminal lug that hooks the CX-4720 cable assembly to your vehicle batteries is NSN 5940-00-113-9819.

No Glue Is Good Glue



If keeping the rubber eyeshield assembly on your AN/PVS-2 night vision sight is turning into a sticky problem, turn it in.



Too many troops try to replace the shield themselves. They use any kind

of glue that's handy.

A sloppy glue job can foul up more than the rubber shield. Not only can it foul the lens, it can really screw up a few sets of threads. On top of that, a do-it-yourself job might undo itself when you really need the sight.

Some eyeshields in the system don't have enough adhesive for the job. They were made under contract DAABO7-74-C-0073.

The headshed's purging them, tho, and new supplies of NSN 5855-00-925-0114 are OK.

Bad Batteries



The BA-1100 (NSN 6135-00-926-0827) and -1567 (NSN 6135-00-485-7402) mercury dry cells used to power your night vision equipment can be dangerous.

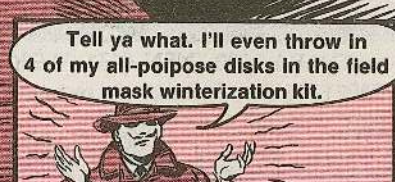
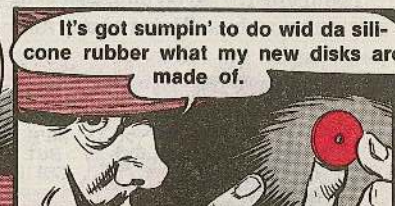
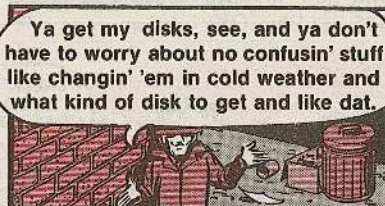


Some batteries made under contracts DAABO7-76-D-6352 and DAABO7-77-D-6328/6125 have exploded. Look over your dry cells stocks. If you've got some of these bad ones, follow the disposal instructions in CECOM Msg DRSEL-SF-E 051456Z Mar 81.



M17/M17A1 Protective Mask...

This Disk Does It All



Mask Faceform NSN

ER... CONNIE, AS AN EXPERT ON THE SUBJECT, CAN YOU GIVE ME SOME ADVICE ON FORMS?



Dear Half-Mast,
Your article in PS 342 on the M24 and M25/25A1 protective masks was informative and helpful, but I have one problem you didn't cover. I can't find the NSN for the M6A1 faceform in my TM's.

SGT L.T.S.



Dear Sergeant L.T.S.,

No big problem, Sarge. The NSN is 4240-01-032-6050. It gets you 10 M6A1 faceforms. You'll find it in

Change 1 (Jun 77) to TM 3-4240-280-23&P, Page B-4.

The change includes pages throughout the TM, and I've seen a number of TM's in the field without the change. For you and others who don't have it.

M6A1 faceform



NSN 4240-01-032-6050 gets you 10

GET WITH YOUR PUBS CLERK!



Mask Modifications

There's a new place to send modification requests for the protective masks. Instead of the Chemical Systems Lab at Aberdeen Proving Ground, MD, you NBC NCO's send requests to get mask modified for the

hard-to-fit folks in your unit to this address:

Commander
US Army ARRCOM
ATTN: DRSAR-MAD-AC
Rock Island, IL 61299

ARRCOM WILL TELL YOU WHAT TO DO NEXT!



24-Hour Mask PM

Forget that desert maintenance tip on Page 27 of TB 43-0239 about keeping your protective mask in the M1 waterproof bag until you need it.

Use the waterproof bag only in wet weather or when fording.

Earplugs Can Help

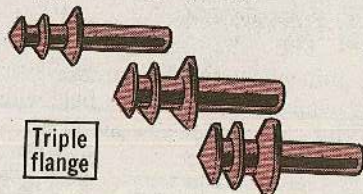


HE DOESN'T BELIEVE
IN KEEPING HIS EAR-
PLUGS WARM IN HIS
SHIRT POCKET!



Extreme cold weather makes a difference in the type of hearing protective devices you need.

Triple-flange preformed permanent-type earplugs are the preferred kind. They'll save wear and tear on the ol' ears at almost any temperature. They're available in 3 sizes: Small (green), medium (orange), and large (blue).



Triple
flange

When you have to use a disposable earplug, use the silicone-rubber type,

Silicone



NSN 6515-00-133-5416. You'll have to warm and form 'em with your fingers for the best fit and ear protection.

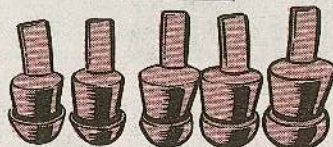
Foam



No sweat if you've got single-flange preformed or universal foam disposable earplugs, NSN 6515-00-137-6345, tho. They work great in all but

the most severe weather. The preformed single-flange earplugs come in 5 sizes: Extra small, small, medium, large and extra large.

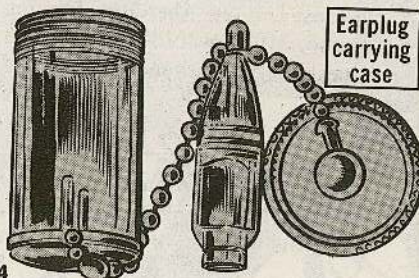
Single flange



Other hearing protective devices may be OK for normal conditions, but they're not much good when they're frozen hard as a rock.

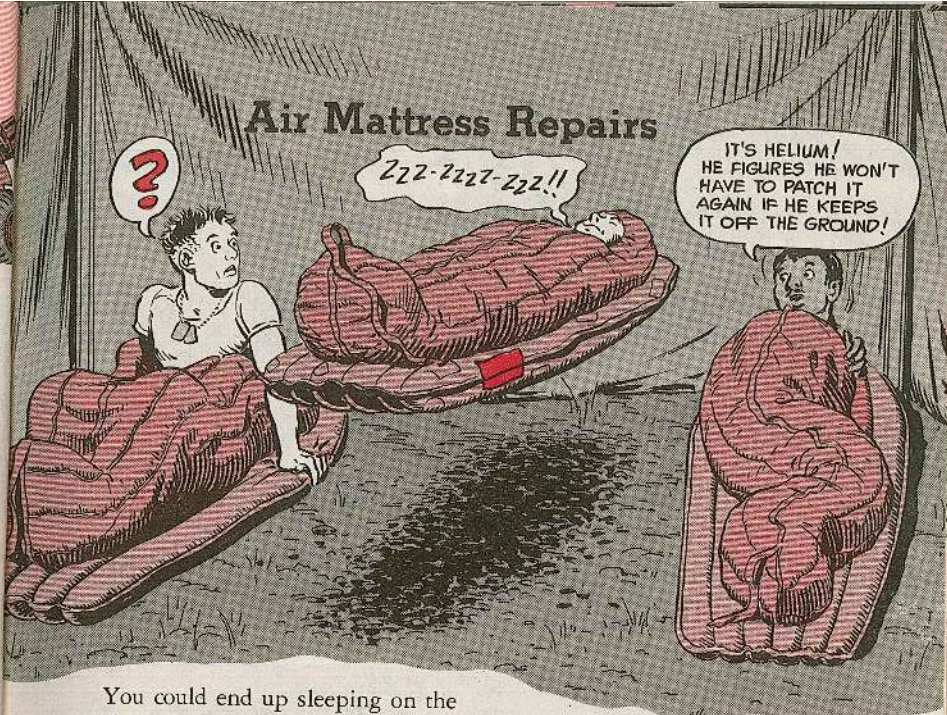
Whatever permanent-type earplugs you use, have 'em fitted by a medic. Carry earplugs—whether permanent or disposable—in an inside shirt pocket when they're not in your ears. Warm earplugs work better and are more comfortable.

Earplug case, NSN 6515-00-299-8287, helps you hang onto your earplugs and keeps them clean.

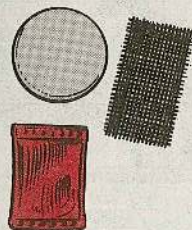


Earplug
carrying
case

Air Mattress Repairs



You could end up sleeping on the cold, hard ground if your air mattress springs a leak.



Mattress
leak air?
Order kit!

NSN
8465-00-
753-6335

Repair kit, NSN 8465-00-753-6335, gives you everything you need to fix small leaks, including how-to instructions.

For bigger holes or rips in the mattress fabric, you'll need bigger patches. Cut them from unserviceable air mattresses.

Use toluene to clean the air mattress so the adhesive will stick better. NSN 6810-00-281-2002 gets a gallon.

Handle toluene with care. Wear solvent resistant gloves when you work with it. Use it only in a well ventilated area. The fumes are hazardous. And keep it away from open flames and high heat or it'll explode.

Apply adhesive to the back of the patch and to the surface to be patched.

NSN 8040-00-515-2246 gets you more adhesive.

Lost your inflating tube stopper? No sweat. A replacement is NSN 8465-00-319-4183.

TM 10-8400-201-23 gives you the details on repairing air mattresses.

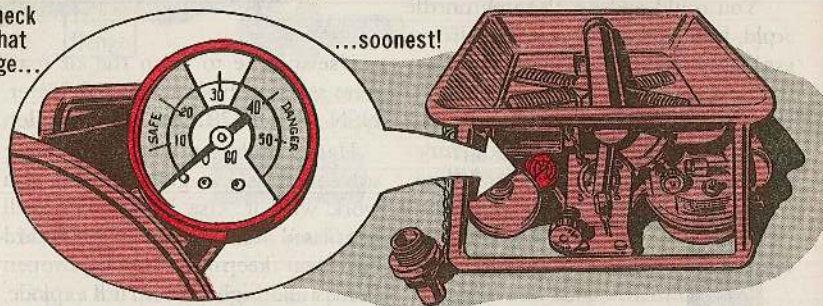
M2 Burner...

Check Air Pressure Gage!



Doublecheck the air pressure gage, NSN 6685-00-999-2503, on your M2 burner unit soonest...in storage or ready to use.

Check that gage...



Some gages in the supply system have plastic lens that can melt and freeze the indicator in a fixed position. You could get a false air pressure reading when an excessive air pressure is building up...a no-no and a no-go deal for cooking, baking or lighting off operations.

Be sure your gage has a glass lens. If it doesn't, replace the gage—now! Send in a SF 368 Quality Deficiency Report—EIR—on any gage with a plastic lens that's on your burners.

If you receive a gage with a plastic lens from your support, send in a SF 364 Report of Discrepancy immediately.

Power Unit TM's



You need 4 pubs for your trailer-mounted generator power units (PU's).

MAKE SURE YOU HAVE...

- | | |
|---|---|
| 1. TM 5-6115-376-13 & 23P
or
TM 5-6115-594-14&P
or
TM 5-6115-365-15 | For PU-407/M, PU-699/M, PU-408/M & PU-700/M
For PU-405A/M, PU-406B/M, PU-732/M, PU-760/M, PU-707A/M, PU-495A/G, AN/MJQ-10A & AN/MJQ-15
For all other PU's |
| 2. TM 9-2330-series | For the trailer |
| 3. TM 5-6115-series | For the generator |
| 4. TM 5-2805-series | For the gas-driven, Mil Std engines on 0.5-10 KW generators |

DA Pam 310-4 has specific TM numbers for your equipment.

Mil Std Engines...

Handle...Carefully

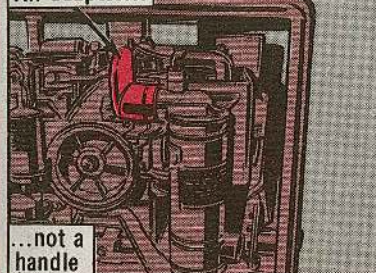
When you're working on the 10-20-HP Mil Std engines, be careful what you grab to push, pull or lift 'em. Replacing broken or damaged parts adds to your maintenance load, downtime and parts cost.

One thing you never use as a handle is the carburetor air adapter. It's made

of synthetic rubber less than 1/8 inch thick. You'll damage its shape or tear it up when you try to lift or move a 200-lb plus engine with it.

Use a helper to move the engine. Grab the bottom of the engine side shrouds for the lift/move.

Air adapter...



'Course, when the engine's mounted on a 5-10-KW generator set, use the generator frame or lifting bracket.



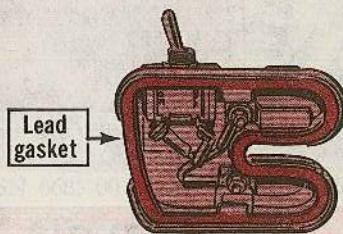
Keep the

Your Mil Std 3-KW generator set PM-purrs best when you keep the ignition system dry. Like d-r-y!

Moisture—and corrosion—inside the breaker point housing assembly ruins the points and condenser...stops the generator cold.

PM ON THESE 3 TROUBLE SPOTS WILL EASE YOUR HEARTBURN AND MAINTENANCE DOWNTIME!

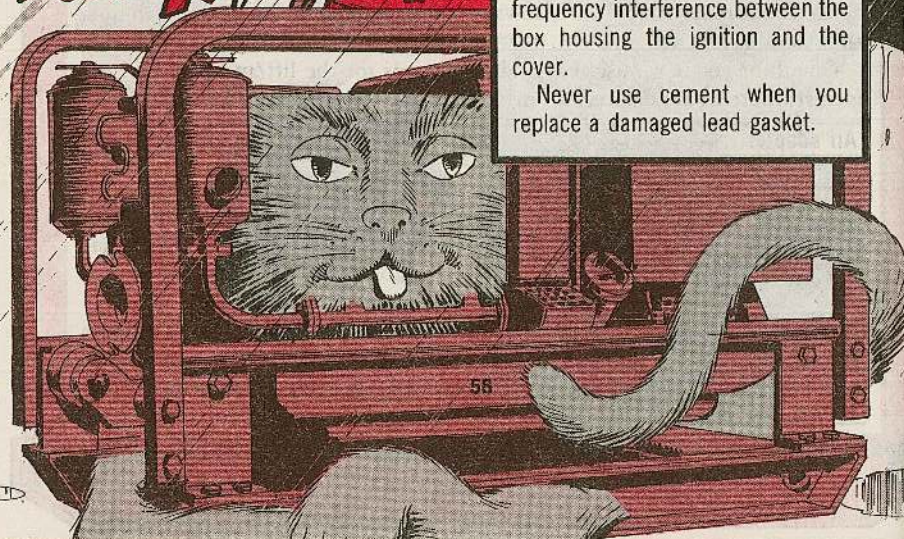
1 The lead gasket—NSN 5330-00-103-8793, Item 4, Fig 14, TM 5-2805-203-24P—takes a beating



when you have to get into the assembly often. The gasket does not make a water-tight seal. It's made of lead so you will have no radio frequency interference between the box housing the ignition and the cover.

Never use cement when you replace a damaged lead gasket.

PURR-RRR



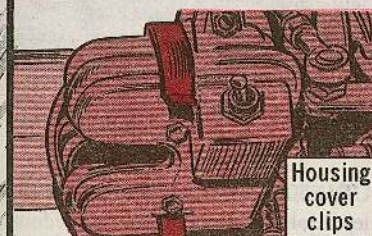
Points DRY!

2 Check the toggle switch. Water can get into the breaker point



housing if you have a loose retainer nut, NSN 5930-00-655-1514, Item 5, Fig 14. Replace the switch if the threads are burred or stripped. Keep the nut tightened and on straight. Vibration can loosen it.

3 Be sure the breaker point housing cover clips, NSN 5340-00-797-5966 Item 11, Fig 15, are doing their job. Replace a weak, cracked or broken clip.



Finally, keep the generator cover, NSN 6115-00-960-2703, on the set when you're not using it.

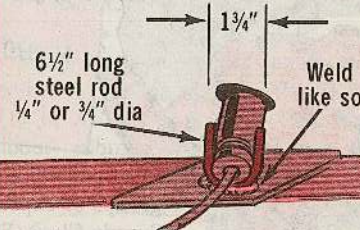
15-KW Generators...

Cable Carrier

IF YOU TROOPS HAVE A PROBLEM WITH CABLE CONNECTOR DAMAGE, EYEBALL THIS NEAT SOLUTION THAT YOU CAN FABRICATE YOURSELVES!



Here's a fix that'll stop damage and replacement parts cost to the inter-vehicular electrical cable connector on your trailer-mounted 15-KW generator set, NSN 6115-00-089-5099.



Put the end of the cable in the carrier to keep it from getting banged around when the set is "at ease."

Parts Not in the TM?...

Here's How to Get 'Em

You can find most of the repair parts for your equipment in parts manuals like the -20P TM's.

But, what about some tools and other items you may need that are not in the parts TM's?

You can get those, too. It's just a matter of finding the right authorization document.

A good place to start is with the Common Tables of Allowances (CTA's). They authorize items that almost every unit uses, like safety and training equipment, tools, clothing and office equipment.

HERE'RE THE CTA'S TO CHECK...

CTA

8-100	Expendable/Durable Items
50-900	Clothing and Individual Equipment
50-909	Field and Garrison Furnishings and Equipment
50-970	Expendable/Durable Items (except medical, class V, repair parts and heraldic items)

Appendix A of CTA 50-970 also authorizes many groups of expendable/durable items just by the Federal Supply Class (FSC), the first four numbers of the NSN.

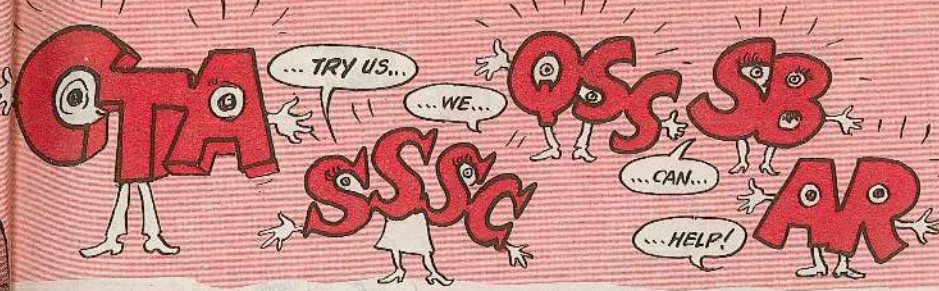
Each FSC has a footnote number by it, so be sure you read the instructions for the footnote number by your FSC.



COMMON TABLE OF ALLOWANCES

NO. 50-909

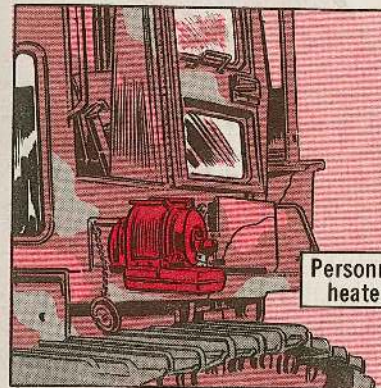
FIELD
AND
GARRISON
FURNISHINGS
AND
EQUIPMENT



For example, the 1/2-in drive torque wrench in your tool kit won't work with your commercial-design vehicles. Socket wrench adapters will do the job. To find out if they're authorized, look in CTA 50-970. They're not listed in Sect II, but the FSC, 5120, is in Appendix A with a "1" beside it. That "1" tells you that since the adapters are not listed in Sect II, they're authorized as required.

If you can't find the items you need in the CTA's or at your SSSC or QSS, don't give up.

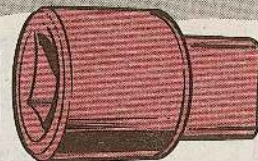
Supply Bulletins also authorize many items. For example, SB 9-16 authorizes personnel heaters and winterization kits for vehicles.



Personnel heater



Winterization kit



Socket wrench adapter

SB 11-547 authorizes additional tools for your TK 88/U tool kit when you have to install radio equipment in your vehicles.

SB 11-559 authorizes the TK-90/G tool kit for nickel-cadmium battery users.

You can find Supply Bulletins listed in DA Pam 310-4, Index to Technical Publications.

If the item you need is not authorized by any publication, read Para 2-18j (1) in AR 710-2 w/C6. It tells you about submitting justifications in writing for items not authorized.

AUTHORIZATION MUST BE OBTAINED BEFORE THE ITEMS ARE ORDERED!

NEW Materiel

DA Form 2406...

Out with the old and in with the new!
That's right!

The readiness terms you use and the way you measure your equipment's ability to go to war have changed.

Your equipment is still reported on DA Form 2406. But the name of the form has changed from Materiel Readiness Report to Materiel Condition Status Report.

THE READINESS TERMS USED WITH THE OLD DA FORM 2406--OR, NOR, NORM, NORCS--WERE REPLACED BY THESE NEW MATERIEL READINESS (CONDITION) TERMS...

MATERIEL CONDITION STATUS REPORT

FROM: 1084		TO: 1175		DATE: 11/75		BY: ON		REMARKS: 1		REMARKS: 2	
TO: THE COMMANDER 3d Bn 12th Army Ft. Cyrus, VA 12312				FROM: THE COMMANDER A Co, 3d Bn Ft. Cyrus, VA 12312				REMARKS: 3			
EQUIPMENT		EQUIPMENT		EQUIPMENT		EQUIPMENT		EQUIPMENT		EQUIPMENT	
1	CARR MORT	M106A1	GBD10741	15	1562	1490	60	5	10	7	
2	How	M101A1	BAK57372	10	9	320	270	20	7	11	12

These new terms are used with your report:
FMC = Full Mission Capable
NMC = Not Mission Capable
NMCM = Not Mission Capable Maintenance
NMCS = Not Mission Capable Supply

DA FORM 2406

The procedures for using the form and the equipment to be reported are in Chap 4 of TM 38-750.

Readiness Terms

Full Mission Capable FMC

is the status of equipment that is on hand and able to perform all its combat missions without putting the life of the operator or crew in danger. The equipment must be fully operable with no Not Mission Capable faults.



Not Mission Capable NMC

applies to equipment that cannot safely perform its combat mission.

Your equipment is NMC when:

- It has a fault that shows up in the "not ready" column of the operator's PMCS. (If your equipment does not have a "not ready" column in the PMCS, use the old ESC as a guide until a new PMCS is published), or
- It has an overdue urgent or limited urgent MWO.
- Your CO decides it cannot perform its combat mission.



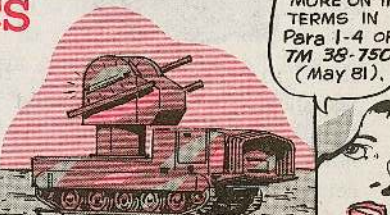
Not Mission Capable Maintenance NMCM

covers equipment that cannot perform its combat mission because repair work is being done or needs to be done at organizational, DS or GS level. NMCM time does not include regularly scheduled maintenance services or inspections or minor repairs like paint jobs and body work.



Not Mission Capable Supply NMCS

means the equipment won't be able to perform its combat mission because you're short the needed repair parts. NMCS time is counted from the time maintenance work stops to the time the repair part arrives.



YOU'LL FIND MORE ON THE TERMS IN Para 1-4 of TM 38-750 (May 81).

A caricature of a man with a large, bulbous nose, wearing a red baseball cap and glasses. He is looking down and to the left. The drawing is in a bold, black-and-white style with some color accents.

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

EQUIPMENT

under

WARRANTY?

**Report Defects
on DA FORM 2407!**



● **Save Uncle
a bundle**

● **Keep your
equipment
ready**

● **Reduce
your
maintenance
work
load**

**See
TM 38-750 (May 81)**

For aircraft: Para 10-18
For other equipment: Para 12-2



DA FORM 2407

997205

AFD New York 66074

84TAA

No 75 200

Transmission 3053A 20.0 2530-00-941-9520

Model 3042, Transmission, 24 Jun 81, AUTOVON 745-3555.

Remarks: Replace defective transmission parts. Contract No. AA-570103. Date warranty began 10 May 81. USA Reg No. 04070259. Reg No 161111-16291-0002 Supp Add Code AT-1023.

Trans. No. 101

by name 176