

You can look at it two ways next time your NCO or other maintenance supervisor repeats words you already should have heeded, and undoubtedly know. . . .

Words like, "You should read the TM" or . . . "Read the TM" . . . or "It's in the TM, Mastermind. Just turn the page!"

You can listen like it's coming from a record that's "in the groove."

Or you can listen to it with a "broken record" attitude, like the words have lost all their meaning. This results in a communications gap — with immediate and sometimes explosive results.

Sad as it may seem, there are some operators and organizational maintenance men who get in a bind out in the boonies when their equipment quits, and are not even aware that the trouble-shooting charts in the TM would get 'em back in business quick.

What's even sadder, there's the occasional guy who doesn't even know the trouble-shooting charts exist!

Frustrated indeed are the maintenance

You can look at it two ways next time munications gap - with immediate and 4. Troubles

TM" or . . . "Read the TM" . . . or "It's in the TM, Mastermind. Just turn the

record that's "in the groove."

all their meaning. This results in a comrecord" attitude, like the words have lost Or you can listen to it with a "broken You can listen like it's coming from a

have heeded, and undoubtedly know. . . . visor repeats words you already should your NCO or other maintenance super-Words like, "You should read the

sometimes explosive results.

erators and organizational maintenance

Sad as it may seem, there are some op-

even aware that the trouble-shooting business quick. when their equipment quits, and are not men who get in a bind out in the boonies charts in the TM would get 'em back in

trouble-shooting charts exist! What's even sadder, there's the occa-

sional guy who doesn't even know the Frustrated indeed are the maintenance

Jon Jon	and I	Dear
in DS	tell me what	this card out
	1	

about	(descr	ibe you	ur orga	aniz ation	al main	tenance	problem	):
				1400	3			
		V.						
	14			Y				
	100	71 1 14		1	47.		11-11	



Magagine, Knox, Ky. Half-Mass 40/21













DEAR CONNIE OR BONNIE: I would like PS Magazine to run an ar about (describe your organizational maintenance problem):

Jear this card out and tell me what you want to see



Europe; Other

Korea;

CONUS;

am in\_

DEPARTMENT OF THE ARMY

PS MAGAZINE FORT KNOX KENTUCKY 40121

OFFICIAL BUSINESS

# PS MAGAZINE FORT KNOX KENTUCKY 40121

Jear this card out
and tell me what
you want to see









DEPARTMENT OF THE ARMY

PS MAGAZINE FORT KNOX KENTUCKY 40121

OFFICIAL BUSINESS

POSTAGE AND FEES PAID DEPARTMENT OF THE ARMY

#### PS MAGAZINE **FORT KNOX** KENTUCKY 40121



unit-level repair people don't even have Dash 10 or 20 TM. Or what's even more to a unit in trouble . . . only to find that ulcer provoking, to find that operators or the solution to the trouble was in the technicians and DS types who hotfoot it TM's with them! The message, of course, is obvious: Now, I ask you....

Read . . . and be all you can. And then need — and do all you can. Groovewise and PM-wise, you'll really

P.S. Magazine, MSG Half-Mass B-I Maint Platform 48-50 OH-L Engines Oils 51 Fire Aircraft Jacks 52-53 2,75 M134 Minigun 1

New Publications
Gas Pump Nazzle
Flashlight Tip
Crane Decals 62-63

COMBAT SUPPORT EQUIPMENT







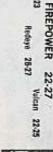
522

0H-58A Fire Exlinguisher 1 2.75-in Rocket Tool 1 igun 56 48-56

AIR MOBILITY







M551 22-23





11/4-Ton Truck PM 2-12 M726 12

lgnition Timing Light 14-21

GROUND MOBILITY 2:21

IN THIS ISSUE

Issue No. 227 1971 Series THE PREVENTIVE MAINTENANCE MONTHLY





technicians and DS types who hotfoot it to a unit in trouble... only to find that the solution to the trouble was in the Dash 10 or 20 TM. Or what's even more ulcer provoking, to find that operators or unit-level repair people don't even have TM's with them!

Now, I ask you. . . .

The message, of course, is obvious: Read . . . and be all you can. And then heed — and do all you can.

Groovewise and PM-wise, you'll really be with it.



Published by the Department of the Army for the Information of organizational maintenance and supply personnel. Distribution is made through normal publication channels. Within limits of availability, older Issues may be obtained direct from U. S. Army Maintenance Board, Atin.: PS Magazine, Fort Knos, Kentucky 40121.

THE PREVENTIVE MAINTENANCE MONTHLY

Issue No. 227 1971 Series October

#### IN THIS ISSUE

#### **GROUND MOBILITY 2.21**

134-Ten Truck PM 2-12 M151 13, 21 M726 12 M715 13 Ignition Timing Light 14-21



FIREPOWER 22-27

M551 22-23 Vulcan 22-25 Redeye 26-27



#### COMMUNICATIONS 37-47

	MICHIN	UND 3/-4/	
RT-524, -246	37	VRC-12, -53	42
AN/PRC-25, -77	38, 39	ARC-102	43
AN/PRC-25	39	AN/PPS-5	43
Antenna Tip	40	SB-22/PT 44	4, 45
TT-4C/T6	40	TE-508	45
Canvas Covers	41	TV-7 Tester	46
AT-784	41	TA-L/PT	47
AN / GRC-105	42	TA-312/PT	47
			100



#### AIR MOBILITY 48-56

<b>B-1 Maint Platf</b>	orm 48-50	0H-58A	54
Engines Oils	51	Fire Extinguish 2.75-in Rocket	er 54
Aircraft Jacks	52-53	2.75 in Rocket	Tool 55
The state of the s	M134 Minig	un 56	



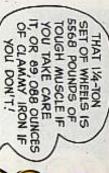
#### COMBAT SUPPORT EQUIPMENT

New Publications	28	Generator Scoop	60, 61
Gas Pump Nozzie	57	MHE 203	61
Flashlight Tip	58	AR 710-7	62-63
Crane Decals	58	440HA Grader	63
Air Compressor	59	Reportable Items	64
Fuse Puller	59	Supply 12, 23, 37,	40, 41,
		43, 44, 45, 50	. 55, 56,
10.00		57, 58, 54	and 61.



Use of funds for printing of this publication has been approved by Headquarters, Department of the Army, 22 January 1971. DISTRIBUTION: In accordance with requirements submitted on DA Form 12-4.

PS wants your ideas and contributions, and is glad to assest your questions. Name and address are kept in conficence. Just write to MSG Half-Mast, PS Magazine, Port Knox, Ky. 40121



KEEP THAT 5-QUARTER MEAN ...

STAY SHARP



YOUR ENVIRONMENT. TB 9-2300-402-10. AND READ



"NO - GO", here's whether it's "GO" or the guy who decides Since you, the driver, are

what you watch for:

FRONT

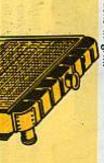
SHACKLES ... Stow behind bumper (exbumper. cept when used for towing) to keep from busting up both the shackles and



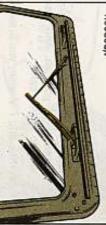
loose, bushings worn. SHOCK ABBSORBERS — Leaks, pins



against core, mounts (lower right espe-cially) cracking at corners; hairline cracks in grill. RADIATOR-Leaking, shell vibrating



WINDSHIELD WIPERS - Should swing clear of each other (adjust 'em if needed). WINDSHIELD WIPERS -



WINCH — (If present) Cable rusty, loose the drive shaft will drop right out on the gency substitute or replacement pin don't move vehicle without an emeron drum, parts missing; shear pin (left front shaft) broken, missing (if so,

# UNDER THE HOOD

between hood and fender, 1 at rear of good shape (1 at top of radiator shroud, ANTI-VIBRATION BUMPERS - All 6 in at each side of radiator, I on each side



ed, burning from touching exhaust (there're several ways to keep 'em up off manifold), hose clamps missing. SPARK PLUG CABLES - Fraying, twist-



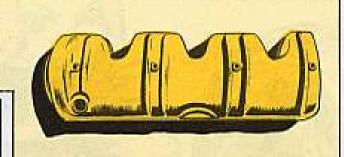


ω

N

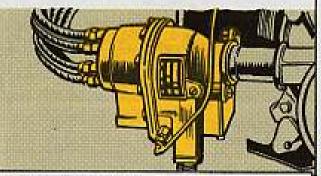
ROCKER ARM COVER — Cracked, gasket leaking, (may be installed wrongside out), top nuts too tight (7 lb-ft is the limit, otherwise aluminum cover cracks. Oil filter tube cracked, loose.

EXHAUST MANIFOLD — Cracked (look closely, they could be tiny). Flange joint to exhaust pipe broken, leaking between manifold face and block.

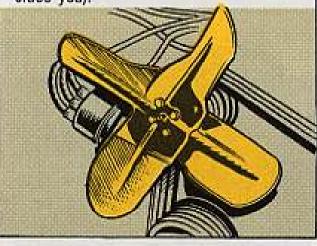




DISTRIBUTOR — Ignition leads frozen to top; cap screw loose on base; vent line loose, crushed; primary feed frayed.



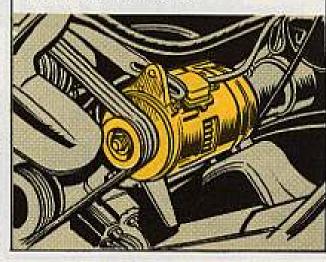
FAN — Bent, hitting radiator or shroud (a ticking sound under acceleration clues you).

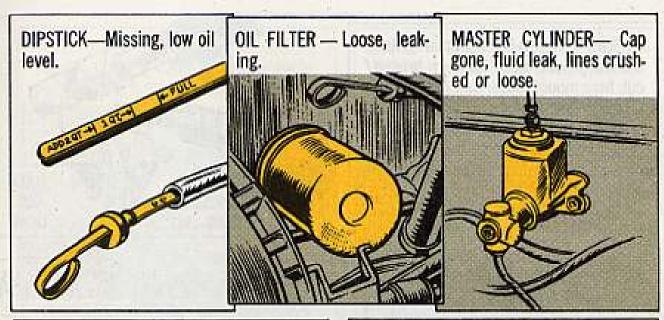


WATER PUMP — Leaking, pulleys and fan not alined, alternator or fan belt tension too tight or too loose (should be ½-in deflection).



ALTERNATOR — Pulley chipped, wobbly; dirty, leads fraying.





STEERING LINK — Loose, boot missing, too much play.



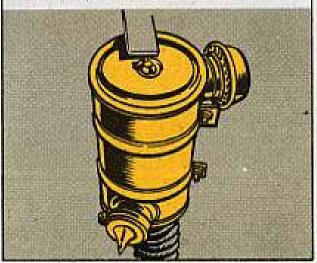
HOOD SUPPORTS — Springs broken, hinges bent, pins sticking or worn.



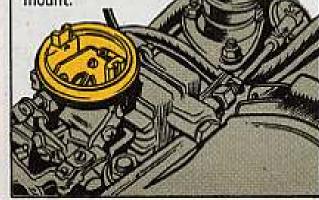
HEATER — (If so equipped) harness, fuel/control lines loose or broken, blower loose on mount.



AIR CLEANER — Disconnected power train breather line, fuel pump breather hose, or master cylinder breather tube; flexible air tube cut, loose; top or bottom clamps loose.

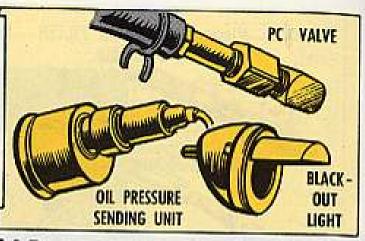


CARBURETOR/MANIFOLD — Fuel leaking, linkage loose or broken; vacuum advance sticking; manifold cracked at joints, stud nuts loose; carb loose on mount.





OTHER — Wire to blackout marker lamp broken or cut; horn harness broken/cut; horn mount loose; water temp sending unit line frayed, cut, transmission breather line crushed, bent; PCV valve line disconnected, damaged; oil pressure safety switch/sending unit wire broken, frayed.



CAB

ROOMY CAB, UH, CONNIE??

DOORS—Panels damaged; handles broken/sticking; glass broken, loose; latches not working, hinges bent or loose; rust or cracks showing.

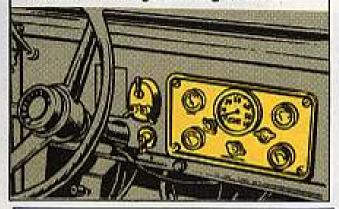
TOP — Canvas torn, seams ripping, holed, rotting, loose.



SEATS - Torn, loose, cut, bent.

BATTERY BOX COVER — Corners rough, edges cut so as to endanger operator's hands. (If someone has switched the cover end-for-end to make a 3rd seat, switch it back — only 2 men are allowed to ride in the cab. Besides you can rack up your arm on that cover in the wrong position.)

CONTROLS — Switches loose, broken, handles missing; handles unserviceable, handbrake linkage sticking or loose.

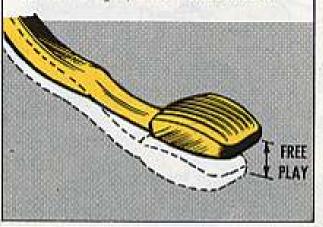


MIRRORS — Cracks, dirt, loose brackets.

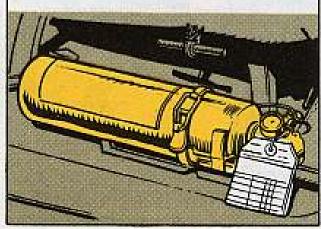
WINDSHIELD — Glass pitted, 'frosting,' cracked; gasket (rubber that holds windshield in frame) cracked, cut, loose.



BRAKE PEDAL — Check free travel; — ½ inch is right, 1 inch is too much.



FIRE EXTINGUISHER — (If present) Unsealed, discharged.

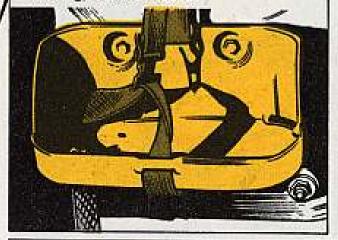






SIDE THE SAME LOOK SEE.

FUEL CAN MOUNT — Straps broken, missing, bracket loose.



PANELS — Canvas tiedowns broken, missing; tiedown lines dangling; cracks in metal, deep dents or rust showing.



TANK FILLER — Cap loose, clamps loose, leaky. (Take a special check if you have the M725 ambulance: Check clamps top and bottom — if any fuel moisture shows, that's too much. Then get in the rear body, remove litters and cushions, and scan the seams inclosing the filler neck — if you see any fuel seep, report immediately. While you're there, eyeball the heater fuel pump to be sure it's living right.)

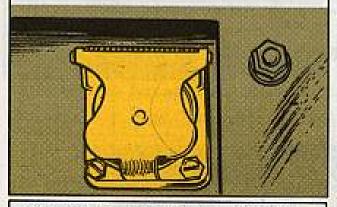


WHEELS — Lug nuts (need 300 lb-ft torque) loose, missing, studs stripped; air-drop eyes damaged; pressure too low/high; tires cut, worn to fabric; wheel discs twisted out of line, rims out of round or badly bent.



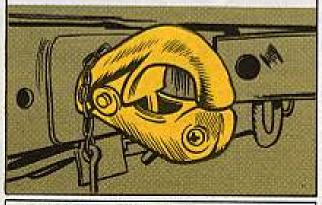


TRAILER RECEPTACLE — Lid gone, spring out; gasket missing, assembly dirty, corroded.

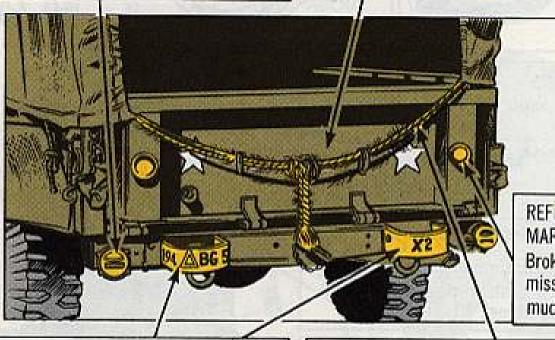


COMPOSITE LAMPS/TAIL LIGHTS— Lenses broken, lamps missing, gaskets hardened and cracked (see operating tips).

PINTLE — Won't work, broken, spring or pin stuck, unlubricated, won't swivel.



TAILGATE — Chains broken, panel bent, rubber bumpers gone, hinges sticking, bent; rusty.



REFLECTORS, MARKERS — Broken, missing, loose, mud-caked.

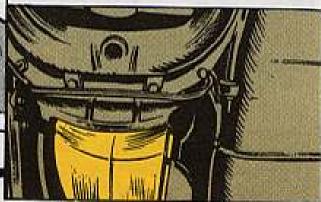
BUMPERETTES — Bent, rusty; shackles missing, pins stuck.

FITTINGS — Cargo tiedowns bent, missing, loose rope ends fraying.

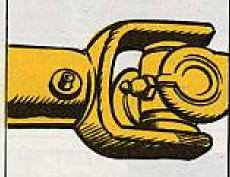




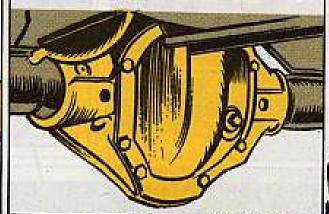
TRANSMISSION-TRANSFER — Bolts loose, leaking (slight drip from the fording plug hole in bell housing is normal); lube level low in case.



DRIVE SHAFTS — U-joints rattling, unlubed.

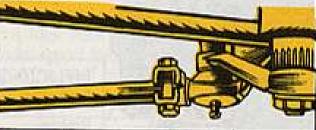


DIFFERENTIALS-Low lube level, leaky.



ENGINE OIL PAN — Dripping, plug loose.

STEERING — Pitman arms, idler arms, shafts loose; grease fittings missing, broken.



FRAME — Bent, cracked, support arms breaking or bent.

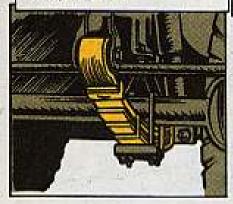
SHOCKS — Drip showing on lower end; broken.



SPRINGS — Leaves broken; clamps loose.

BRAKE LINES — Broken, crushed, loose.

SPARE TIRE — Loose, flat; support damaged, parts missing.





EXHAUST SYSTEM — Pipe cracked at turns; clamps missing, broken; holes in muffler; tailpipe rusted thru; U-bolt clamp loose (see operating tips).

GAS TANK — Mud or stones on top; support straps or tank bottom gashed, dented.

TOOL BOX — Holes; fastener broken; lid gasket missing; tools missing, broken.



#### **OPERATING**

STARTING — Starter button loose on mount, ignition erratic, rough.







#### **BONUS INFO**

Here's some supply poop for your 5/4 that may be hard to find:

ITEM	FSN OR P/N
Lamp, surgical light,	
for M725 (also XM 737)	4940 20E 2423
Lens, surgical light,	0240-293-2421
for M725/XM737	6220-368-4940
Washer, rear cowl	
Pin for washer, cowl	_P/N 11640866
Boot, steering shaft	P/N 65909-940583

ITEM	FSN OR P/N
Tire Chains	2540-054-0022
Spotlight, Maintenance Truck M726	e P/N 6500-KJ(78977)
Wrench, bearing nut (both front & rear)	5120-168-2286
Jack assy w/handle	5120-403-0953
Wrench, socket (lug) .	5120-168-2345

#### M726 SPOTLIGHT BRIGHT

If you bust up the spotlight on your M726 1¼-ton telephone maintenance truck, don't try to get replacement parts. Order a whole new unit by exception-data request, Use P/N 6500-KJ, Mfr. Code 78977. RIC is B24.

Or you can local-purchase (per AR 715-30) direct from Unity Mfg. Co., 1260 Clyborn Ave., Chicago, IL. 60610. Use the same PN and Mfr. Code.

The FSN for "spotlight" in your TM-9-2320-244-20P (Oct 68) just gets the wrong item, so forget it.



#### FINGER-TIGHT-BUT T-I-G-H-T!



The brake master-cylinder plug on the M151-series 1/4-ton trucks should be installed only finger-tight.

A lot of guys've been messing up the plug and cylinder by turning it down too hard with a wrench. Sometimes the whole works has to be replaced with a brand-new cylinder.

When you finger-tighten that plug, get a good grip on it with your thumb and finger and then pour some real muscle into it.

Don't worry about hurting the plug or master cylinder. And—remember, no wrench!

11/4-TON TRUCK . . .

#### AIR CLEANER FIX

Dear Half-Mast,

We're using up an awful lot of those air cleaner-to-carburetor clamps on our M715 1%-ton trucks.

It's hard to keep the air cleaner snug on the carb, so the guys really put the muscle to that thumb screw — and this strips the threads.

So, what's the answer?

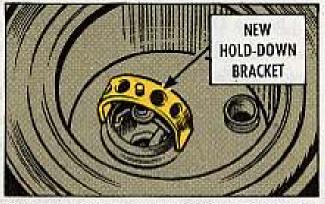
CW3 M. L. R.

Dear Mr. M. L. R.,

The answer to this problem came out in TB 750-981-2 (Apr 70), Article 45. With this poop, you don't even need that clamp.

You can fabricate a hold-down bracket and a bail-and-stud that'll keep your air cleaner tight on the carb.

Or, instead of making your own bailand-stud part of this deal, you can get a ready-made job from the manufacturer. Your support asks for Part No. 945264 at your local Jeep parts supplier, or write to American Motors,



General Products Division, Jeep Corporation, 701 W. Chippewa Ave., South Bend, IN 46623.

For this "local purchase," you'll need your CO's nod and you'll use AR 715-30 (Mar 65) as authority.

Half-Mast



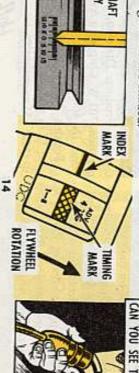
an engine purring instead of on dead The ignition timing light can keep

Here's the way you go about putting the hook it up and put it thru its paces. do the job. But it needs a groovy cat to motive Common Tool Set - waiting to 5724, is in every organizational Auto-The timing light, FSN 4910-937

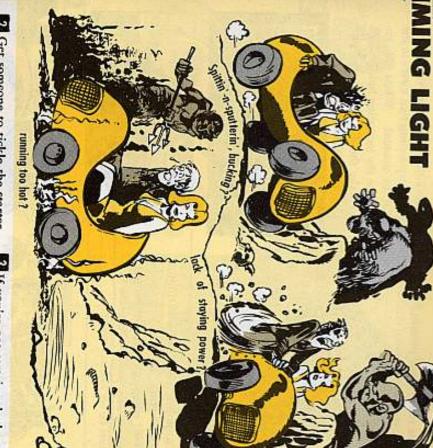
BEFORE HOOKING UP...

Check the vehicle's -20 TM (or manufacturer's manual if it does not marks. The marks could be on the damper, crankshaft, pulley, flywheel housing, ring cam, etc. have a DA-type manual) for timing instructions and location of the timing

timing marks are shaded. Although the light is pretty bright, it's best to position the vehicle so the to be removed, make certain you tape over the opening next to the intake. What does your pub say about the vacuum line to the distributor? If it's







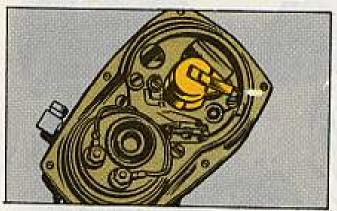
2 Get someone to tickle the starter comes in sight. Clean and chalk it. the marks as close as possible. until the rotating timing mark is hard to see, chalk it too. Match If the pointer or stationary mark



3 If you're not certain whether the distributor cap. No. 1 spark plug. Now remove the the timing is made. On most spark going to the spark plug on which mark the position of the cable rectly on the distributor base, distributor rotor is positioned corignition engines this would be the



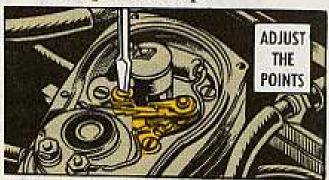
If the rotor is not pointing to the mark you made, loosen the distrib-

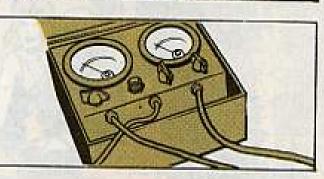


utor plate bolt — not too much, and turn the whole distributor until it does.

To polish off your distributor point setting, hookup your tach-dwell meter and check them out. (See PS 218, page 6) Point dwell must be set before timing.

Now adjust the points for the specified gap setting like it says in the TM or manual. When set, retighten the mounting bolt enough to make the distributor stay put; then replace the cap.





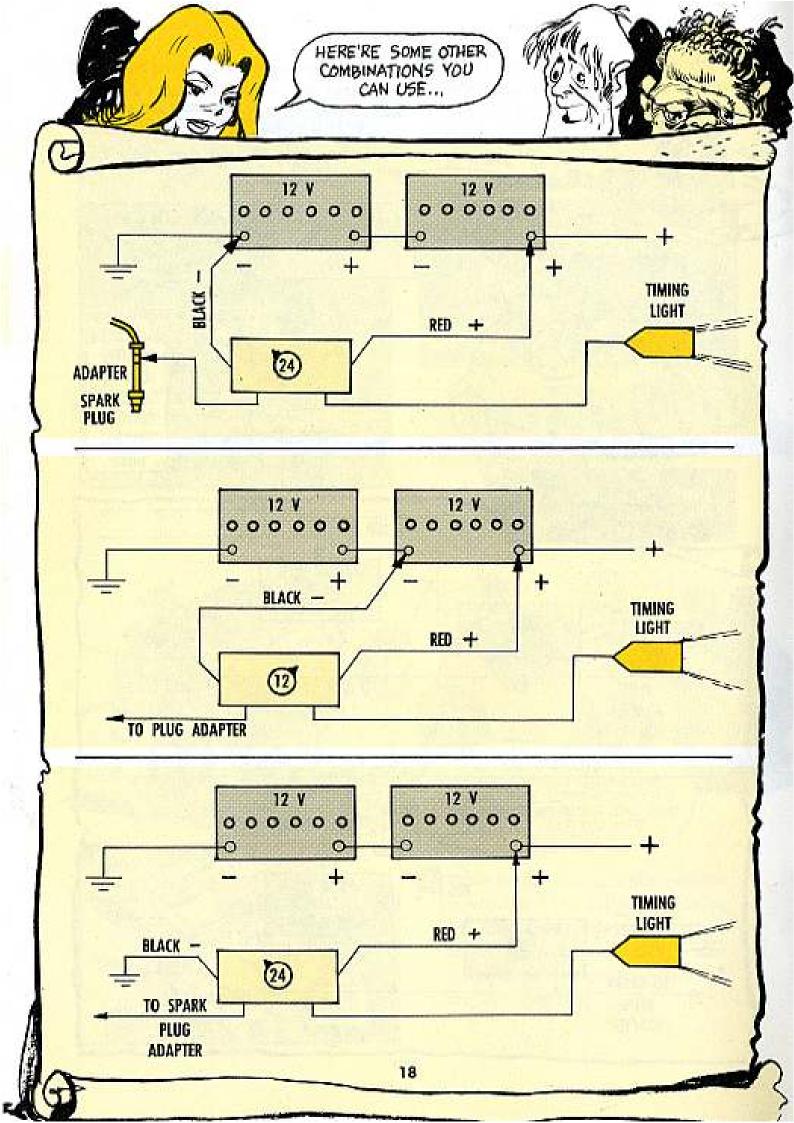


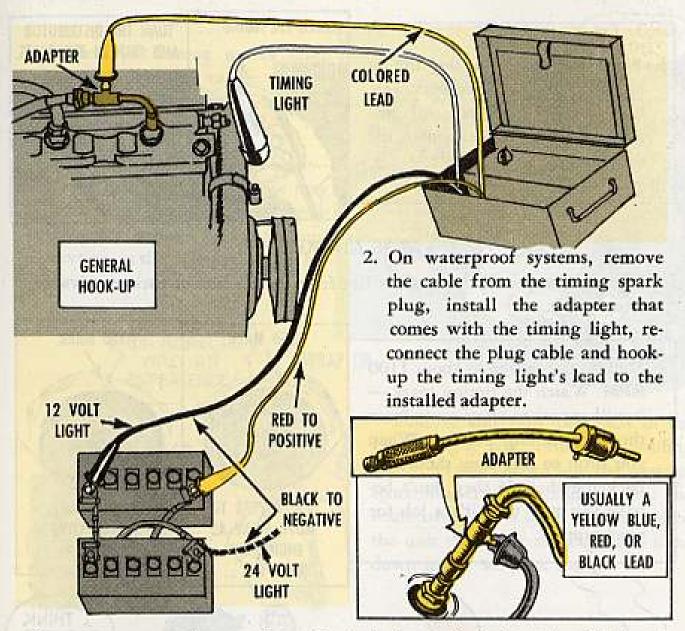
TIMING
MARK

TIMING
LIGHT

Back to the timing light—place it where it won't fall while you're working. Find a safe place to stand and a spot to hold the light while it flashes on the damper—clear of the whirling fan.

#### TIMING LIGHT HOOK-UP ... 1 String out the battery leads— RED is positive (+) and BLACK is negative (-). Connect them to the vehicle batteries. GROUND LEAD TO NEGATIVE TERMINAL (BLACK) POSITIVE LEAD TO BATTERYS POSITIVE TERMINAL (RED) ANY OF THESE COMBINATIONS CAN BE USED . . . RED + STARTER WITH **SWITCH** BLACK -ATTACHED 24) LIGHT TIMING TO SPARK PLUG **ADAPTER** FROM BATTERY STARTER WITH RED DETACHED BLACK -MAGNETIC SWITCH 24) TIMING LIGHT TO SPARK PLUG **ADAPTER** 17





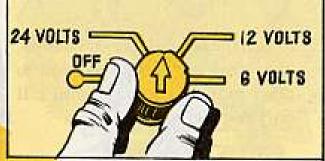
On non-waterproof systems just slip back the spark plug's rubber shield and make the hook-up direct. It's a good idea to use an adaptor to keep from damaging the rubber shield.

#### TIMING ...

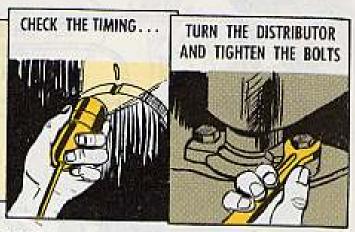
1. Start the vehicle engine and run at idle or at the RPM called for in the vehicle's manual.

2. Now set the timing light selector switch to the voltage setting that'll match your battery hook-up (12 or 24 volts).



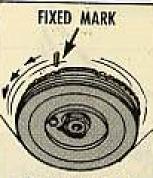


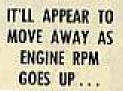
 Flash the light on the timing marks. If they are not matching, turn the whole distributor until they do. Then tighten down the distributor.

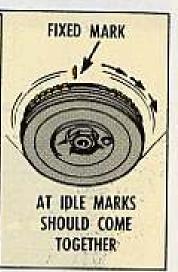


#### TIMING ADVANCE...

- If you disconnected the vacuum line from the distributor vacuum advance, reconnect it.
- Step up the engine to about 1100 RPM. Watch the timing mark it will appear to move away from the fixed timing pointer. When you drop to idle they should go back together. If they don't behave this way then it's a job for your support.











I THINK IT'S THE TIMING... LET ME CHECK IT!

- If the flash tube gets hot, don't worry—it's normal.
- When the light gives extra flashes, your spark plug lead is too close to other plugs. Re-route it until it'll only respond to No. 1 plug.



- When the timing marks jump around, the cause can be the distributor gap, condenser, rotor or weak point tension spring.
- 4. When the line looks like a blur or an inch wide—the cause may be a worn distributor shaft, weak governor springs, or a loose connection in the primary circuit between the battery and distributor.



THAT HOUSE OF HORRORS WAS AN WRAP U

Remove and stow the leads in the timing light box. Instead of stuffing the cables and clamps into the stowage space like crushed spaghetti, coil the leads around in a loose loop on top of the unit then stow the clips and light down in the stowage space.

You may get the Repair Kit, FSN 2530-887-1341 for your M151 truck family . . . or, you may only get a small flat washer with that same FSN.

Seems that under Contract No. DAAE07-70-D-0352 a soft washer was mistakenly put into the kit, and shouldn't be used. The right washer ended up packaged with the same FSN as the kit, so you may get only the washer when you order the kit.

If you get the kit minus the replacement washer, or vice-versa, go back and get t'other.





COUSIN HORACE

will keep your M551 Sheridan purring like a happy pussy cat . . . A little extra effort in these 3 areas

### RECOIL SEALS

Gun mounts in storage 90 days or

so they stay in shape. leaking if you don't work them enough The recoil seals have a nasty habit of more must get exercise every 3 months. Ch 6 (Mar 70) to your TM 9-2350-230-

cated instead of repeating it only 3 operation at least 10 times to make sure of Recoil Mechanisms and Equilibrators 9-1000-234-35 (May 66) - Exercising cised every 90 days. Ch 5 (Mar 70) to TB times the way Ch 2 said the recoil slide area and seals are lubri-This change says to repeat the exercise workout through firing it must be exer-- gives your support the word on this. Unless the recoil mechanism gets a



every 40 conventional rounds . . . then on your DA Form 2408-4. write in the date and total rounds fired assembly. No matter-clean it after sign or a late design ammunition detent Your M551 might have an early de-

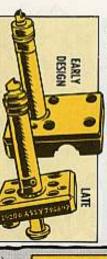


25P/2 (Sep 69).



is on page 10-20.2 of Ch 6 to your -12 IM. the compressor chemical dryer cartridge The dope on removing and installing





EVERY 40 ROUNDS FIRED CLEAN DETENT AFTER

AN/VSS-3 searchlight mounted on the M551 Sheridan? D'ya need an extra cable or 2 for your

a basic issue item in the TM for the searchlight. Like you already know, CX-11893 is

CONNECTING CONTROL CABLE BOX ROOF TO MAIN CONTROL BOX CABLE

searchlight adaptation kit that comes with the M551, including: And, you get 3 other cables in the

FSN 1025-110-9816, power cable FSN 1025-111-5284, control box connecting

FSN 1025-112-8540, roof to main control

You'll find 'em in TM 9-2350-230-

strainer and for the compressor chemical dryer-400 rounds or 30 compressor

Ch 8, page 8-85, also sets up the maintenance interval for the air intake

dust or if the compressor gets covered with water.

extra high or low temperatures, long operating periods, operation in sand or for your compressor under extreme operating conditions. This would include 230-12 (Jun 66). It clues you in to reduce the drain and refill time interval 12 in your LO 9-2350-230-12, page D-1 in Ch 8 (Oct 70) of your TM 9-2350-

If your M551 has the closed breech scavenger system, be sure to read Note

COMPRESSOR CARE



NO HANDS!

MACKEREL!

equipment in this man's Army. heads, there'd be a lot less damaged their pockets and their hands on their If some Joes would keep their feet in

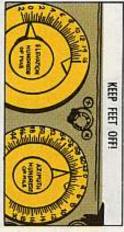
Witness the self-propelled Vulcan

"spider," or antenna guard, to haul him-The guy who grabs the radar set's



spider may be, it's no handhold. up for a repair job. Handy though the self aboard the track is setting the spider

> are no match for a boot toe or heel on a dow glass, knob and other fragile items guy stepping into or out of the mount. On the other end, the azimuth win-



wise, it'll cause excessive noise on the tion box. If it's loose, snug it up. Other-Check the W1 cable at the distribu-Watch where you put 'em down.

distribution box also can stand a check The screws on the backplate of the



to check 'em whenever possible, and to wise wouldn't be around. It's good PM suspect 'em when you get a malfunction, Keep 'em snug.

some red in the face by reading the TM. both operators and mechanics can save when you get a malfunction . . . and A good parting thought: Get famil-TM troubleshooting charts are a must



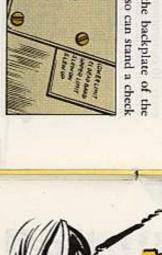
during-after operation fault isolation of TM 9-2350-300-10, the beforeiar with Table 3-2, Item 61, page 3-9 checks.

keeping water away from electrical and electronics items. They can save a blush or two, as does

25



system cause many problems that other-Fact is, loose cables throughout the





it needs to git up 'n git. training set (Redeye) can have the "go" Keep the lid on this and your M76



charger whenever you're not using it. On the battery charger, what else? The lid, or cover, should be on the



dirt, sand or whatever from getting into the battery well . . . where it shorts the switch for the heating circuit. Among other things, the lid keeps



to 40 volts out of them. If you get less go with them if you can get from 35.4V than 35.4V, replace the batteries. And about those BA-523 batteries: You Not only that, but it's hard to get out

The voltage indicator on the charger



should, have your support check it out with a multimeter. you the performance you think it 40 volts, so if your battery's not giving ing when your batteries have less than can give you a 100-percent charge read-

er when it has a full charge. tery should be removed from the chargfully charge a battery . . . and the bat-Normally, it'll take about 5 hours to

ing procedure. 6920-428-12 goes into detail on charg-Para 3.8b, Ch 2 (Sep 70) of TM 9-

you re go. going to come up to 40V. In which case, long as you've got 35.4V or more, bring it up to its peak . . . and stop. So Just remember: an older battery's not

charger well, or in the trainer, slide it in place you can break the plastic home easy-like. If you drop it or slam it When you insert a battery in the

ON BATTERY PROPER CARE REDEYE'LL DO GO EASY THREADS

threads). your support if you do damage the with a threaded metal sleeve, so check tery (some support shops have come up

leaks. If you've got electrolyte residue, Finally, check your BA-523's for



wipe it off with a damp cloth . . . and ance, your batteries will give peak perform-

threads and damage an expensive bat- volts. Clean one contact ring at a time the cloth . . . or you'll grab up to 40 hot tery contact rings at the same time with One caution: don't touch both bat-

26

This is a selected list of recent pubs of interest to organizational maintenance personnel. This But is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pom 310-4 (Jun 70), and Ch 4 (Feb 71), TM's, TB's, etc., DA Pem 310-6 (Jul 70), and Ch 3 (Apr 71), SC's, and SM's; DA Pam 310-7 (Apr 71), MWO's; and DA Fam 310.9 (May 89), COMSEC Pub.

#### TECHNICAL MANUALS

TM 5-2590-225-13, May, M-48A2 and 48A3 Combat Tank.

TM 5-2805-256-24P C2, Jun, 114 HP Gos Englises.

TM 5-3810-294-10, May, Crane, Truck Mid 20 Ton [Harnischleger Mdl MJZOTZ).

TM 5-4120-312-14 C1, Jun, 18,000 BTU Air Cond.

TM 5-4320-250-15 C1, Jun, Centril

Petroleum Pumps. TM 5-4320-250-20P C1, Jun, Centrif

Petroleum Pumps.

TM 5-4330-232-12, Apr. Filter/ Separator Liq Fuel, 50 GPM (Gen Tonk Mdl F50216A101-1).

TM 5-4520-234-24P, Apr., Space Healer, Multifuel, iWth Blower 60,000 BTU.

TM 5-6115-434-20P C4, Jun. 60 Hz 100 KW Eng Drvn Gen Set.

TM 5-6115-440-10, Feb, 7.5 KW 2B V.DC Gen.

TM 5-6115-550-14, May, 150 KW and

Up Eng Drvn Gen Sels. TM 9-1005-286-20 CT, May, XM167

20MM AAA Gun. TM 9-1015-200-12, Apr. M29 &

M29A1 81-MM Morlars.

TM 9-1300-200, Oct., Gen Ammo. TM 9-2350-217-20 C6, Mar, M108 &

M109 Howitzers.

TM 10-3530-203-20P, May, Clathing & Textile Repair Shop.

TM 10-3030-622-20P, May, 6,000 Lb Can Facklift.

TM 10-3930-625-12, Apr. 4,000 Lb Mdl MHE 218 Elec Forklift.

TM 10-5410-221-10 C2, Jun Tents.

TM 10-5410-221-24 C2, Jun, Tents. TM 11-1520-209-20 C7, Apr., CH-47A, B, C.

TM 11-5820-715-12 C1, May, AN/ FRR-40 & -41.

TM 11-5825-231-25P-2, Jun. AN/ TRD-15.

TM 11-5841-241-20P, Jun, AN/APN-158 & -158A.

TM 11-5895-227-ESC, May, AN/MRC-111 6 -112.

TM 11-6625-1568-15, May, OA 2090. TM 55-450-13 C1, Jun, OH-6.

TM 55-1500-204-25/1 C4, Jun. All F and RW.

TM 55-1510-203-ESC, Jun. U-6. TM 55-1510-204-CL/5 C2, Apr.

TM 55-1510-204-20P, May, OY-1A,

TM 55-1510-204-20-1 C11, Jun, OV-1A, B, C.

TM 55-1510-205-ESC, Jun, U-1,

TM 55-1510-205-20 C4, May, U-1. TM 55-1520-209-20PMP C1, May, CH-47A.

TM 55-1520-210-20 C15, Jun. UH-10, H.

TM 55-1520-210-20P-1, Apr, UH-1A,

TM 55-1520-214-20P, May, OH-6. TM 55-1520-217-CL/2 C1, Apr.

CH-548. TM 55-152\$-220-20 C12, Jun, UH-1C. TM 55-1520-221-20 C14, Jun, AH-1G. TM 55-1520-227-20-1 C13, Jun.

CH-478, C. TM 55-19051-201-12P, May, Landing Craft, Dal Drvn LCM 6 Mdl 1.

TM 55-1905-217-12 C1, Mar, All Morine.

TM 55-1940-205-20P, May, Marine

TM 55-2840-233-20P, May, OY-1A, 8, C, D.

#### MISCELLANEOUS

LO 5-2010-202-12-1, May, 165 HP Outboard Propelling Units. LO 5-3805-249-12-2, Apr., Road Grader, Cal Mdl 120, Eng Mdl D333. LO 5-3805-249-12-4, Apr. Rood Grader, Cat Mdl DV28, Eng Mdl D333. LO 5-3895-336-12, May, Roller, Gas Eng (Gen Steel Mdl 1503).

LO 10-3930-625-12, Apr. 4,000 Lb Cop Elec Forklift,

LO 55-1930-203-12-1, Apr. Amphib: Lighter (LARC LX).

MWO 10-1670-213-20/1, Jun, Aerial Delivery Equip.

MWO 55-1510-201-40/16, May, U.S. MWO 55-1510-209-30/15 C1, Jun.

MWO 55-1520-210-50/1 C2, Jun. UH-10/H.

SC 4610-97-CL-E06, Apr. Water Purification, 3000 GPH, Trk Mid.

SC 4610-97-CL-EOB, Apr. Water Puri-Reation, 600 GPH, Trailer Mad.

SC 4920-99-CL-A64, May, UH-1 Airmobile Acff Maint TS.

SC4920-99-CL-A71, May, Army Acit A, A Supplement, B, C, Tool Set. SC 5180-91-CL-503, Jun, Tool Equip

TB 55-1500-307-25 C5, Jun, All F &

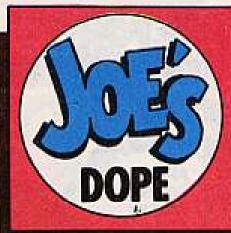
TB 55-152\$-210-11 C1, Jun.

#### MWO of the MONTH

Eye the DA Form 2408-5 in your Huey Cobra log book, Birdmen, to make sure MWO 55-1520-221-20/13 (Jun 70) has been applied. Stress corrosion on drive link, FSN 1615-133-7061, can lead to loss of the bird. The mod gives you link, FSN 1615-168-5859 or FSN 1615-914-6203.

#### Mobility Equipment Jech Pubs

You now order your Army Mobility Equipment tech pubs on a series of pinpoint forms instead of just one. DA Form 12-25 gives you the instructions for filling out these forms. DA Form 12-25A is for ordering pubs for mobility support equipment; 12-25B is for construction equipment; 12-25C is for environmental equipment; 12-25D, Section I, is for electrical generating equipment; and Section II is for rail, marine, and amphibious equipment; DA Circular 310-14 (Mar 71) gives you the word.



# BATTERIES... BABY EM! 1. LEAD-ACID

FOR GO-POWER, ON DEMAND! THEY NEED CONSTANT PM!

SODIUM BICARBONATE (BAKING SODA)



FSN 6810-264-6618 (118) OR

FSN 6910-290-5574 (100 LBS)

SCRUB BRUSH



(NO METAL BRISTLES)

BATTERY FILLER SYRINGE





BATTERY FILLER. GRAVITY FSN 6140-635-3824



2 OPEN-END OR BOX WRENCHES (NOT CRESCENT)

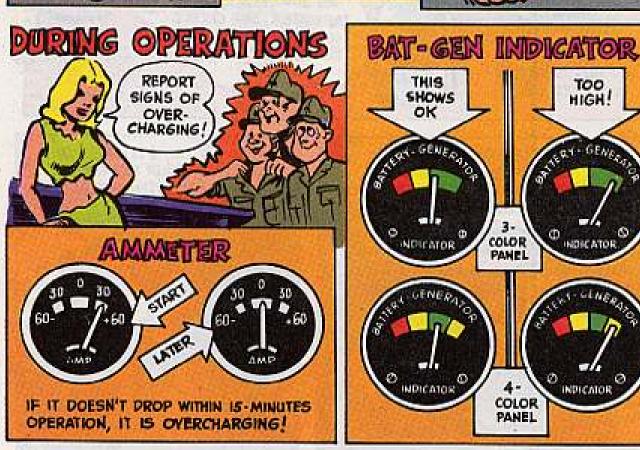


...OR RAINWATER
AS 2ND CHOICE, OR
TAPWATER 3RD CHOICE
...OR IN A REAL
EMERGENCY ANY
WATER.









## WEEKLY CHECKS AND SERVICES



REPORT THESE FAULTS TO THE MECHANIC!

FRAYED CABLE OR BARE WIRE!



CLEAN PAINT!

CRACKS OR LEAKS!



**VENTS** CLEAR?

DON'T BLOW 'EM WITH YOUR MOUTH--THAT'S ACID ON 'EM! PRESSURE AIR --CLEAR WITH STIFF



BRUSH YOUR BATTERY TOP WITH BAKING SOPA-WATER SOLUTION ..



BUT KEEP IT OUT OF THE YENT HOLES!



RINSE WITH CLEAN WATER AND DRY WITH CLEAN CLOTH



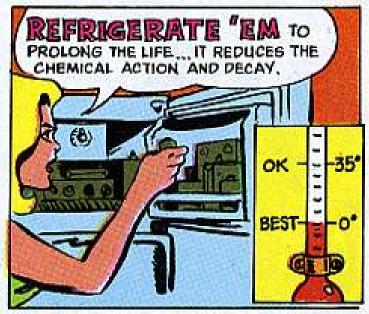
KEEP A LIGHT COAT OF GAA ON BATTERY POSTS AND CLAMPS.











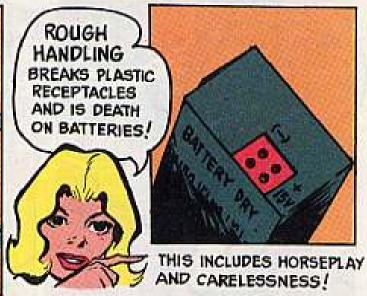












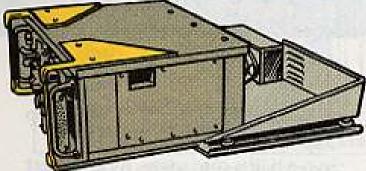






Now you can get replacements for the 13 screws that anchor the modified handle brackets to the RT-524 and RT-246 receiver-transmitters.





FSN 5305-764-0071 will bring you 1 screw.

If there's a slight protrusion of the replacement screw-head just above the countersink of the screw-hole, don't sweat it —not unless an exact fit is necessary for some reason. If you need a flush fit get DS to modify the screw-hole to take the 82-degree countersink replacement.

You may find the new R-T handles fail to line up perfectly as you insert and tighten down the replacement screws.

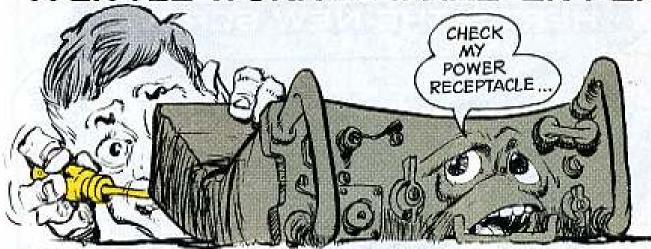
To get around mis-alined screwholes, insert the replacement screws, but tighten none of 'em until all have been inserted.

Then, tighten them all a little at a time, to about the same degree. When you give one a turn, give the others a turn, and so on.

Hard, quick tightening as you go can cause the handle brackets to be forced out of alinement—and the next screw might not fit into the mis-alined screw-hole.

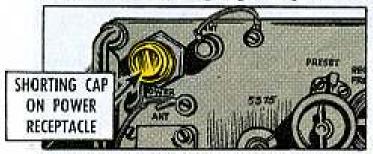
Incidentally, if you're shy only 2 or 3 of the original captive screws, use just the required 2 or 3 replacements. Don't replace any of the originals unnecessarily.

#### A LITTLE WORK'LL MAKE 'ER PERK



When you've got a downcast AN/ PRC-25 or PRC-77, and you can't figure out the ailment, try this:

Give a glance at the POWER receptacle. If the shorting cap's in place, be



sure the cap is screwed down enough to give you a snug fit.

Thing is, without that cap you've got no power. If the cap's only stuck on but not screwed down, you've still got no working set, 'cause you're getting no battery power.

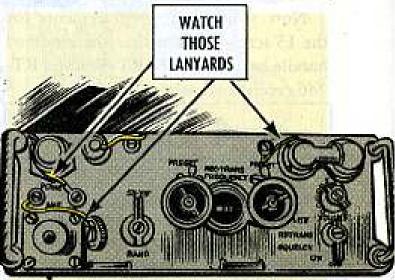
'Course, your ailin' set could've caught the collywobbles from something besides the shorting cap, but the cap always rates a good first look.

The 4 corner screws that buckle the



ged in, as well. If there's looseness, moisture can work into the Perk's innards.

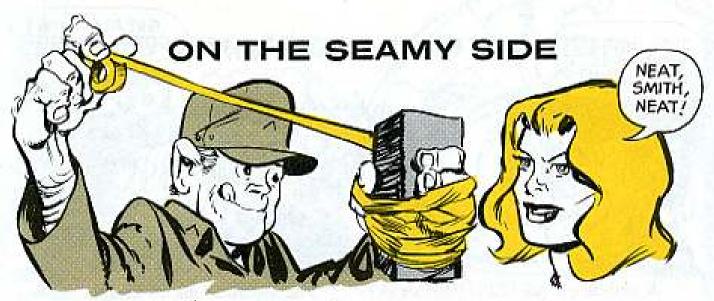
Those 4 nylon lanyards that secure the protective caps on the control panel



do their thing mighty well . . . they keep the caps from getting mislaid or lost.

So-o-o-o, if a cord snaps, it pays to get a replacement cap and cord pronto. A lone cap—minus its assisting cord can get itself lost in no time.

While you're waiting for the replacement cord and cap, attach the stray cap with anything that'll hold it to the panel.



If your BA-386/PRC-25 battery's peekin' at you with splits down the seam...

Just take some regular filament tape and apply it over the splits. Also, give the BA-386 a little extra reinforcement by encircling the unscamed sides with the tape.

You can get half-inch tape in a 60-yd roll with FSN 8135-290-8034; for the inch-wide variety, use FSN 8135-290-8036.



TAPE THE BATTERIES





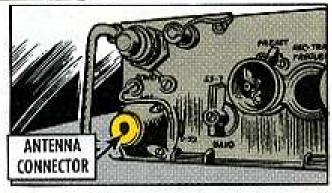
#### TIGHT-SPOT TRANSMISSION



If you're ever in a real tight spot . . . minus an antenna . . . but clutching your trusty AN/PRC-25 radio set, try this:

You can make the short-distance scene by using a bayonet as an antenna.

You don't do this as a steady thing, natch—only when the chips are down and you're hurtin' for quick contact.





A ticd-down AS-1729/VRC or AT-912/VRC antenna can be mighty dangerous.

Ask some Joe who bumped into the tip at night or during poor visibility, and zapped an eyeball.

Here's how to play it safe:

With FSN 5820-437-2353, you can go after an antenna tip assembly that'll blunt that sharp point and cut down accident danger. The assembly fits on antenna section AT-1095.

You'll find the info on page 28, TB 750-911-1 (Nov 70), Equipment Improvement Report and Maintenance Digest.

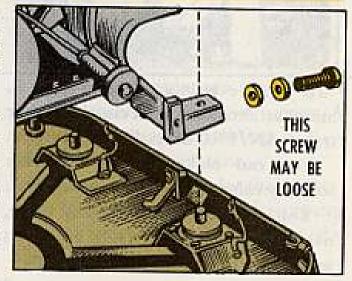
Meanwhile, if you don't have the tip assembly, you can take the edge off the AT-1095 with a ball, some tape, a cork, or anything else that will blunt the tip without interfering with antenna performance.

#### TELETYPEWRITER SCREW-UP



If you've got any TT-4C/TG teletypewriters produced under Contract DAABO5-68-C-0617, you may have some screws loose.

The 10035-01 screws holding the chassis to the mounting studs weren't tightened well enough during production, and they're not holding the way they're supposed to. So check 'em out. You'll find the contract number on the nomenclature plate.



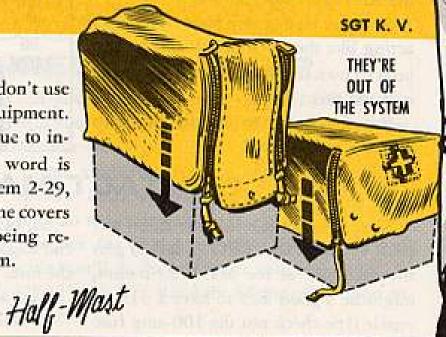


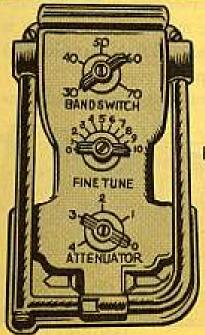
Dear Half-Mast,

What do we do about the CW-653/VRC and CW-649/VRC canvas covers? Some say we put 'em on, some say we leave 'em off. Since RT-524, RT-246, RT-505 and RT-841 are involved, plus the R-442 receiver, we'd like to know how it stacks. What's the word on the covers?

Dear Sergeant K. V.,

The headshed types say you don't use the covers on your radio equipment. They say there's overheating due to insufficient air circulation. The word is in TB 750-911-1 (Nov 70), Item 2-29, page 23 which points out that the covers should not be used and are being removed from the supply system.





#### LOOP OOP!

Oops! Take a quick look at the FSN for the AT-784 loop antenna on page B-2 of TM 11-5985-284-15 . . . and forget it.

FSN 5820-086-7651

NUMBER

The antenna, used with AN/VRC-12, PRC-25 and PRC-77 series radio sets, should be listed under FSN 5820-086-7651.

The homing, or direction finding antenna should be used to receive, only. Don't transmit with it.

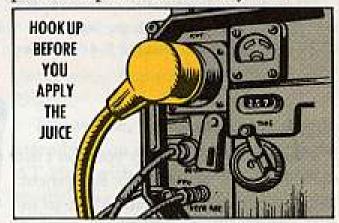


Some things and people can carry a load . . . and some can't.

And then there's the cross between the two... which can carry a load tall and straight if conditions are right, like the AN/GRC-106 radio set.

So if you wanna stop your GRC-106's acting like the town drunk and have it hold its own like the outstanding citizen it is, do this:

Put the power to it only when its antenna is connected. If you feed it the juice without an antenna hookup, you'll burn out the power amplifier tubes every time.



#### CONTACT MAKER

Next time power to your radio sets (like VRC-12- and VRC-53 series) gets short-stopped at the MT-1029 mount, might be a good idea to have a 31E-20 repair type check out the 100-amp fuse at the mount receptable.

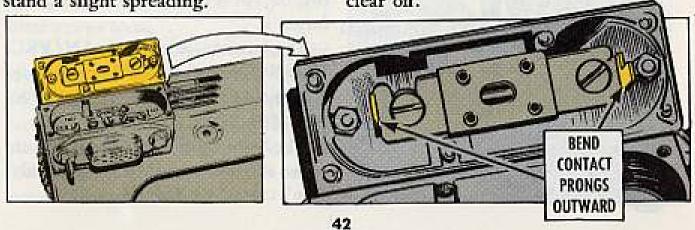
But not for a blown fuse . . . alone.

Chances are good that if your mount has some age on it, and the fuse has been pulled a time or two, the contacts can stand a slight spreading. So, bend the contact prong on each end slightly outward . . . and re-insert the fuse. That should do the job for you.

And about that mount receptacle:

Be sure the power switches on the RT's are off before you push the component into the mount. If the switch is hot, you'll burn the RT contact pins and the mount receptacle contacts.

Fact is, you can burn the contact pins clear off.

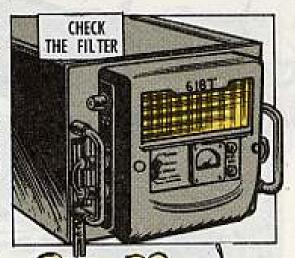


#### FILTER FRESHENER

Say, friend, if you've got to make do with the old filter in your ARC-102 radio set by turning it around so the foam insert is closest to the blower frame, wash the filter first.

Warm, soapy water will do the trick, but be sure the filter's completely dry before you put it back. You might aid the drying process with a low pressure air hose.

Naturally, there's still no sub for a new, clean filter when you can get it.







If you've tried to match up an H-251 headset with your plain model AN/PPS-5 radar set, you know it won't go.

And, since the H-251 is replacing the plain model's H-225A and H-226() headsets, you gotta do something about it, right?

So ask for FSN 5995-485-7534, an adapter cable that'll do the job. Your authority is SB 11-628 (23 Feb 71). Read the SB for other dope on headsets.

#### SEEKING SETSCREWS?



Got plenty of frustration but no setscrews for replacing control knobs and levers on the AN/PPS-5 radar set? FSN 5305-926-5488 gets you I setscrew (they're packaged in lots of 100).

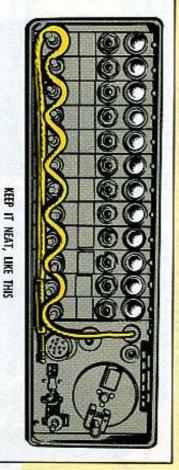


# KEEP IT NEAT

the TA-221 telephone circuit. switchboard a super neat look . . . and save you problems with the J302 jack of A twist and a twirl and a minute's creative effort can give your SB-22/PT

the J302 ... and hold them open. it back into the panel. When you tug it out, the cord can snag on the contacts of Like, if you're not careful with the operator's cord of the TA-221 you can push

J302. it's lying around unused. It keeps the cord out of the TA-221 and away from the So wot to do? So loop the cord around the line jack plugs when you store it or



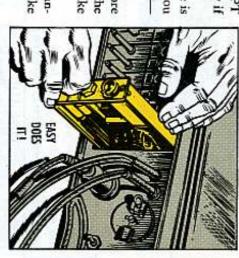
# SLIDE IT HOME

you line 'em up ahead of time. switchboard slide home sweet 'n easy if The line packs on your SB-22/PT

which puts the pack down. can break the brittle backs (plastic)necessary. Put the muscle to 'em and you The packs go straight in. No force is

nylon terminal board will seat and make you install them insures, too, that the Lining the packs up straight before

gle, the board bends - and won't make When you put the pack in on an an-





writer Tool Equipment TE-50B. Page the word. 18, TB 750-911-1 (Nov 70) gives you len-type), can be added to Teletype-9/64-in .05-in 3ZE 5120-089-5518 5120-089-5517 굦

Three keys, socket head screws (Al-20 200 1/2

7/64-in

5120-089-5519

THE TV-7() ELECTRON TUBE TEST SET

TESTER TOPICS

The TV-7() tube tester is a rugged and ready little instrument 'most any time you put 'er to the test.

It stays that way with your help.

Take the AC line cord on your TV-7(), f'rinstance. Every time you lower the case lid, the cord gets a good-sized dose of strain and pull.

You need protective clamp FSN 5975-617-7138 to ward off the bends and pulls and pinches. Look for it on page 5, TM 11-6625-274-25P (Jun 66).

If you turn the LINE ADJUST control too far to the right, you can burn out the fuse light.

So, make sure you don't give that control a full clockwise turn. That means a voltage overage and a zapped lamp.

To play safe, do this:

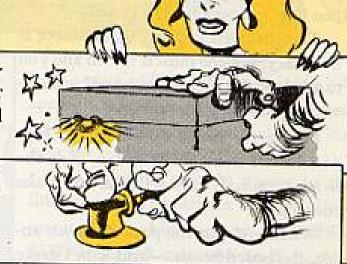
Before you power your TV-7(), turn the LINE ADJUST control fully clockwise, then back it off approximately halfway.

Next, power the tester. Then, make the adjustment to correspond with the tube to be tested, the way TB 11-6625-274-12/1 (Jan 62) and its changes tell you.

In making the test, don't hold down the pushbutton any longer than you have to for a meter reading. Too long a holddown can damage the tube.

Never leave the TV-7() powered in the extreme clockwise or counterclockwise setting.

Dust and dirt can crud up your set, especially at the switch contacts. It can











sift down through the socket receptacles, jacks and adapters.

You'll do well to keep the cover on any time the set's not in use—and frequent cleanings with the control panel removed will help keep the dirt down.

#### WANTED: BELT CLIP



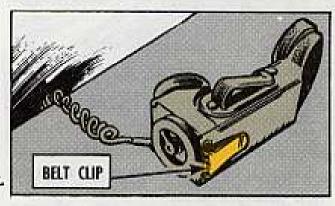
Dear Half-Mast,

We're getting some new TA-1/PT telephones in without belt clips. Are the clips required? If so, what's the FSN?

CPT H. T. I.

Dear Captain H. T. I.,

Somebody goofed, Sir. The belt clips are required, and if any new sets you get don't have 'em, turn 'em back in as incomplete. For older sets, about the only way you'll get the clip by itself is to cannibalize... or from salvage. There is no FSN, because the clip's not stocked.



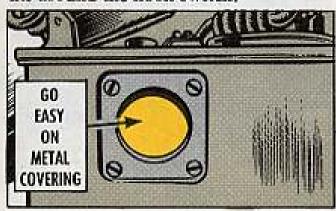
Half-Mast

A REAL SHOCK

Wanta preserve the rubber shock absorber that cushions the mouthpiece of the TA-312/PT telephone set?

Stave off fungus-induced dry-rot by swabbing the rubber frequently with an alcohol-dampened cloth, then dry the rubber thoroughly.

Same thing goes for the rubber that fits around the hook-switch.





Y'gotta have a buzzer diaphragm that's sensitive, and the one you've got has only a thin metal covering. It's so sensitive that you can probably cut down the buzzer sound by merely pushing a finger against the covering.

In other words, a sharp point or hard nudge can punch through the covering and mess up the ringer. Take care.

PLATFORMS NEED PM FOR...

THAT'S WHY
MAINTENANCE

STANDS.

AIR MOBILITY

Comes the time when you bird mechs pull way-up maintenance, like on a Chinook (CH-47) main rotor head, the B-1 maintenance platform is just what the doctor ordered.

You won't get your baby off sick call on time, tho, if you have to fumble around with a platform that doesn't rise to the 10-ft limit even when you jack like ninety with the hydraulic pump handle.



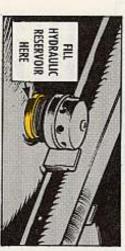
Could it be that you have a leak in the high pressure hose?

If so, somebody goofed on the PM services called for in TM 55-1730-201-12 (Oct 69) on your B-1 platform.

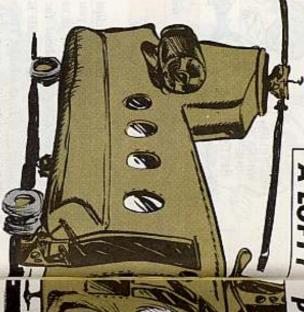
#### DAILY PM

Eye the hydraulic lines and fittings for leakage. If you find a leak, or any other damage, pass the word to the maintenance honcho. A 68H hydraulics repairman has the knowhow to make repairs.

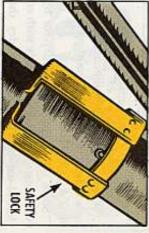
Check the fluid level and if it's low



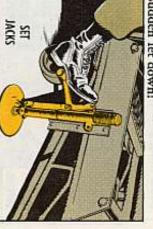
fill the reservoir with MIL-O-6083 to one inch below the filler neck.



Make sure the hydraulic cylinder safety lock is in position and the 2 immo-



bilizing jacks are set . . . could head off a sudden let down!



The hand rails should be in place.

Beats groping in space if you lose your balance.



The platform is made to hold 500 pounds—say you and your buddy, plus a tool box. An overload can break it.

When you're finished with the platform eye it once more for leaks and damage—and check the fluid level.

No records are needed for operator services. It's the type of maintenance a numbah-one mech just naturally pulls on the tools of his trade.



The monthly and yearly services are something else again. They're pulled by 67 or 68H types. A DD Form 314 has to be kept when the service is done under the supervision of maintenance personnel.

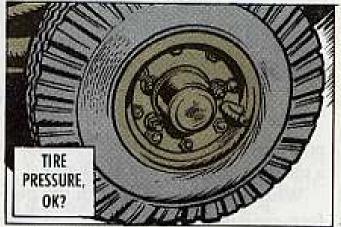
Every month do the operator's daily bit.

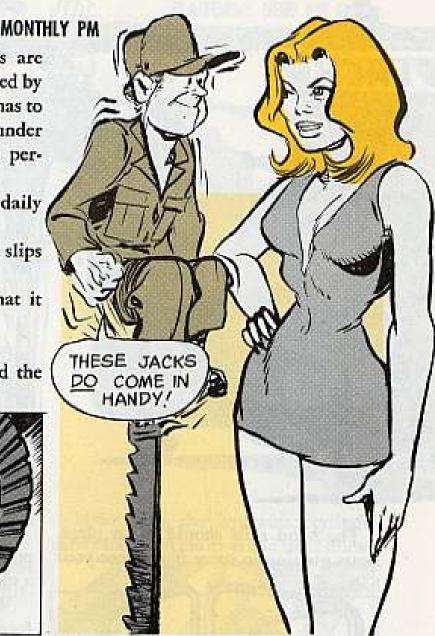
See to it the platform is clean . . . slips hurt!

Operate the platform to see that it works right.

Paint job needed?

Eye the tires for cuts, wear and the right inflation — 40 PSI.





Check the hydraulic lines and fittings for damage. Inspect the strainer screen and clean it if it's dirty.

Every 2 months lube the wheel bearing, immobilizing jacks and casters—and check the hydraulic fluid level.

Every year drain the old hydraulic oil from the reservoir and refill it with new, red juice.

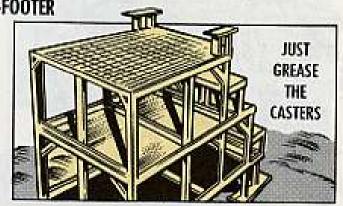
That's about all it takes to keep you rising to the occasion in your B-1.

EYE FOUR-FOOTER

The other platform in your A, B and C tool sets, FSN 1730-624-0684, needs only a little PM. There's no TM on it.

Grease the casters every couple of months.

Keep 'er clean and painted, and she'll always be ready to roll.





That's what you'll have on your hands if you change from one engine oil to another without a little planning.

Like—changing from MIL-L-7808 to MIL-L-23699 in your Mohawk (OV-1) turbine engines.



The newer MIL-L-23699 oil will loosen and circulate residual carbon and lacquer deposits in a high-time engine.

The result can be a leak in the No. 1 main bearing seal. You can spot one from oil deposits at the compressor halves, at the bleed band, and on the compressor blades.

Fumes from the leak can even enter the environmental air system . . . 'tain't healthy for airplane drivers.

'Course, a shot bearing seal can't be changed in the field, so the engine has to go to overhaul (ugh!).

Your best bet? Changeover on a newly overhauled engine. Then you won't have any internal sludge to gum up the works.

Run a high-time engine on MIL-L-7808 to TBO. You can change oils on a low-time engine under 100-hours but you have to follow the steps outlined in para 9b of TB 55-9150-200-25 (Sep 67) on engine and transmission oils, fuels and additives.

The same change-over poop of eyeing engine strainers, filters and such is in para 1-67 of the Mohawk TM 55-1510-204-20/1-1 (Feb 70).

MIL-L-23699 and MIL-L-7808 are similar synthetic base oils and are compatible. You can mix 'em if you're out in the boonies and run short of the type you use.

Mixing synthetic base oils will tend to downgrade MIL-L-23699 to MIL-L-7808, tho, so avoid it except under emergency conditions.

NEVER mix synthetic oil with mineral base oils, MIL-L-6082, MIL-22851 or MIL-L-2104. They're chemically incompatible.



Continue to use MIL-L-7808 if the operating area for your Mohawk is the frigid North, birdmen, at temperatures below -25 degrees F.

each foot. This is a yes-yes during the rainy season when jacks settle in the the ground is soft, use a plank under ground. If you're out in the boonies and Plant the jack feet on solid, level Keeping your jacks rising to the oc-

to the fusciage. thru the inboard 2 feet will be parallel Place the jack so that a line drawn

use and maintain those 5, 10 and 12-ton of equipment. That's why you want to birds you're lifting an expensive piece

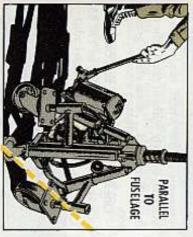
When you jack up one of Uncle's

jacks in your organizational mainte-

nance tool sets by-the-book.

the landing gear on a Mohawk (OV-1). Say, for example, you need to cycle

SAFETY FIRST



evenly. the same time by jacking slowly and from your buddies. Raise all 3 jacks at To head off any "tilt" get an assist

When the landing gear is clear tight-



and tighten the retainer screw en the ram lock nut against the cylinder

her tail due to a shift in the center of chart in the pub, and it'll be ready to allowed. Otherwise, she'll be draggin' tail tiedown for support . . . no jacking gines on a Mohawk put a jack under the By the way, when you pull the en-

casion takes just a little effort. for oil leaks, loose or missing bolts, nuts, loose hose connections, kinks in the hose Before and during use, eye the jack



and damage. Repair 'em on the spot or honcho if the talents of a hydraulic repass the word to your maintenance pairman are needed.

filler hole. bring the level to within 1 inch of the fluid as called for in the TM, to before use. If needed, add hydraulic Check the oil level in the reservoir

cylinder and ram for leaks. the hose connections, pump and the Before, during and after use, cycball

A little GAA grease will keep 'em roll-Before and after use rotate the casters.

clean the grit from the screw and ram threads. To save wear and tear on your jack,



give your baby a lift. Lube the jack according to the lube

ROPE OFF THE PLAY IT SAFE AND READING ...

> CAUTION, AIRCRAFT ON JACKS

AREA, PLANT A COUPLA SIGNS a lifting height from 2 to 6 feet on the B-5 and from 3 to 12 feet on the B-6. The word on raising and lowering

nance pub to locate the wing and fuselage jacking points and the weight of the load to be lifted. Eye the bird organizational mainte-

can take out or add jack sections to get ward jacking point will fill the bill. You jacks—one at each wing jacking point - and one 5-ton capacity jack at the for-Two of those 10-ton capacity B-6

the B-6, is a no-no . . . could strip the es on the B-5, or more than 18 inches on

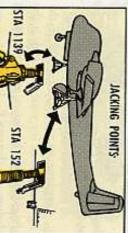
screw threads under load

screw out of the ram more than 12 inch-

Remember that turning the extension

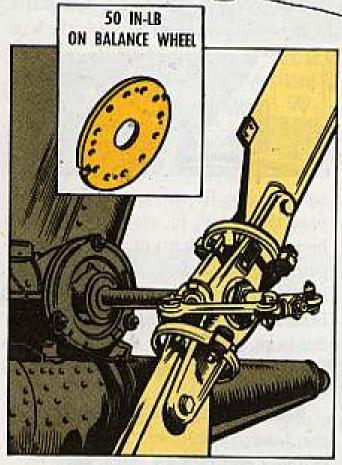
208-13 (Jun71).

your B-6 is in Chap 2 of TM 55-1730.









The next time your favorite Kiowa (OH-58A) throttle jockey writes up a high freq "buzz" in the tail rotor, don't sweat it!

S/N 70-15110, and later birds, now have a balance wheel. By making adjustments on the wheel, blades can be balanced quickly without taking the tail rotor off the bird . . . saves elbow grease, too.

One installation point, tho, called out on page 8-19, Ch 1 (Jan 71) to TM 55-1520-228-20:

Too much torque on the wheel will strip the wheel threads.

So, using a spring scale hooked in the wheel slot, torque the wheel to about 50 in-lb - no more.

#### TAG IT NOW!

You birdmen weight-test the CF3Br fire extinguisher in your aircraft every 6 months and make the inspection entry on the DA Form 2408-18, right?

Right-on! Also tag the extinguisher so you'll have inspection dope in case the extinguisher is moonlighted or strays from one bird to another.

That word will appear in a change to TM 55-1500-204-25/1 on general aircraft practices. Use a materiel serviceable tag, DD Form 1574, and enter the next inspection-due date.

TB 750-126 (Oct 70) tells you how to fill out the tag.



MAXI-HELP FROM MINI-TOOL



Loading and unloading 2.75-in rockets armed with M151 warheads is a pickpocket's paradise!

It takes a mini-skinny hand to do the rocket put-or-take bit in any 7- or 19-tube launcher.



Here's a tool that'll help you push the rocket rearward till it engages the detent, or to remove the rocket when unloading.

You can make it from pick-up items found in any unit.

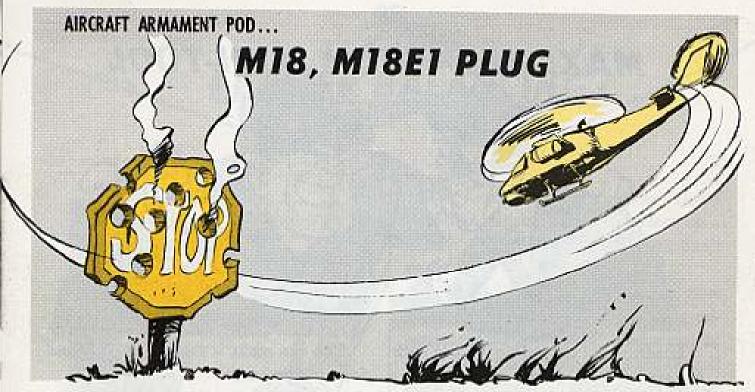
Don't baby the job when you use the tool. A firm, smooth push after starting it over the rocket fuze will set it firmly on the tapered part of the warhead.

A suction — vacuum — is formed and you can easily, quickly, and safely load or unload the rocket.

Always load and unload from the front—and you won't forget to release the detent on the launchers before unloading, will ya?



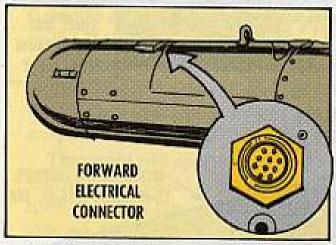




A runaway M134 minigun—after trigger release while airborne—can give you a case of instant drymouth and puckeritus.

'Course, there could be more'n one goofup to cause such a snafu . . . like maybe a short in the battery and control assembly circuitry of the M18, M18E1 armament pod.

When you get a new pod, you'll find a plastic cover on the forward and aft electrical connectors—to protect the cannon plugs from getting beat up during shipping.



You'll probably toss one of the covers "thataway" when you make the first electrical hookup on the 'Cobra, Don't count on using the remaining one as a permanent seal against the weather. Deterioration and normal chopper vibrations will lose it for you. When this happens, water . . . rain or condensation . . . gets into the connection and shorts out the cannon plug.

And that's all she wrote . . . b-r-a-t-t-t!!!

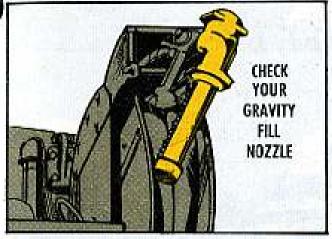
A permanent type bayonet plug, FSN 5935-904-4469, will stop this bummer trip. It makes a watertight cannon plug seal—ready for use time after time.





On your toes, you gas pumpers.

Be on the lookout for the gravity fill nozzle that's about to go on a freeflowing spree.

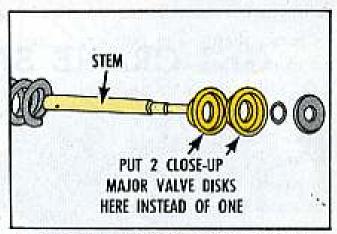


You probably have one around if you operate the Highland Model 2000 truck-mounted tank and pump unit, liquid dispensing, FSN 4930-877-8678 or the Highland Model TRL2500 trailer-mounted tank unit, FSN 4930-752-9983.

The liquid dispensing nozzles don't stop the flow of fuel when the lever is released, especially when a container or a vehicle can't take the full 50-gal-perminute stream.

Here's how to make the nozzle behave.

Put 2 major valve discs, PN 13601-3, (item 19) on the nozzle stem, PN 13601-5A (item 11) instead of only one shown



in Fig 17 of TM 5-4930-227-24P (Apr 70). The disc is a component of the fuel nozzle repair kit under FSN 4930-770-8430.

That extra disc should stop the flow when the lever is released.

If it doesn't, send an EIR (DA Form 2407) to:

Commanding General U.S. Army Mobility Equipment Command ATTN: AMSME-M 4300 Goodfellow Blvd St. Louis, MO 63120

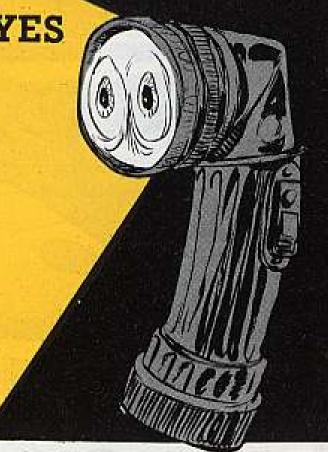
**BRIGHT EYES** 

Your explosion-proof flashlight can be souped up for special jobs like inspecting POL tanks.

All you do is replace the 2 standard BA 30 batteries with 4 E94 cells. You can get 'em through local purchase. 'Course, along with this, you replace the PR-6 bulb with a PR-13, FSN 6240-844-1758.

The end result is a 6-volt light output.

The same deal will work with the standard flashlight. But for POL inspection and such, use only the MX 212/U explosion-proof flashlight, FSN 6230-161-6422.



#### GET CRANE SAFETY DECALS



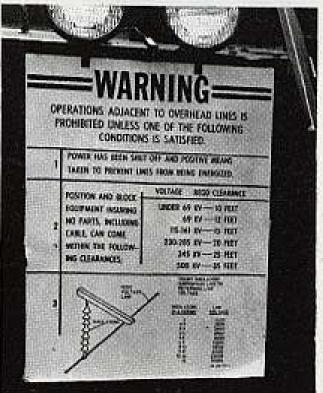
THIS DECAL COULD SAVE YOUR LIFE.

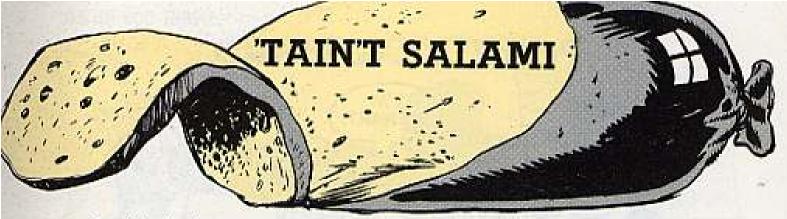
Come and get 'em . . . for safety's sake.

They're warning decals required on cranes and other such equipment operating near electric power lines.

TB 385-101 (Jan 71) tells you how to use 'em. The decals give the clearances required when working near high-voltage lines and other safety info that may save your life.

The warning decals are a one-time free issue. They come in a set of four under part number 385-101 (19099). Source of supply is A12.

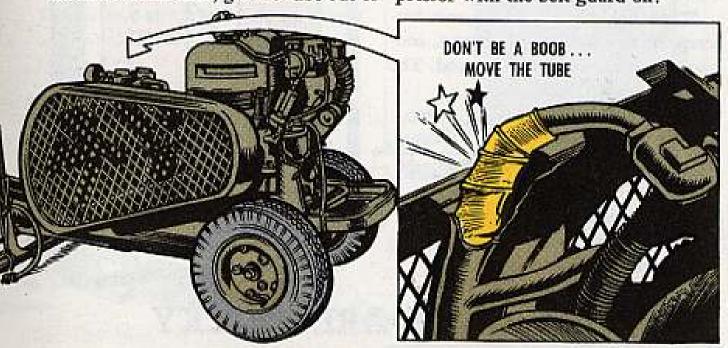




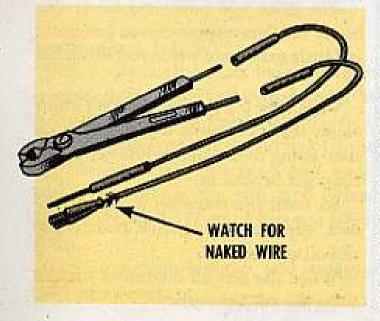
Cuttin' off the nose to spite the face never did work. So it is with your LP-832-ENG-2 or LP-512-ENG-2 air compressor.

If its drive-belt guard is slicing into the aftercooler tube, get the tube out of the way. It's as simple as that.

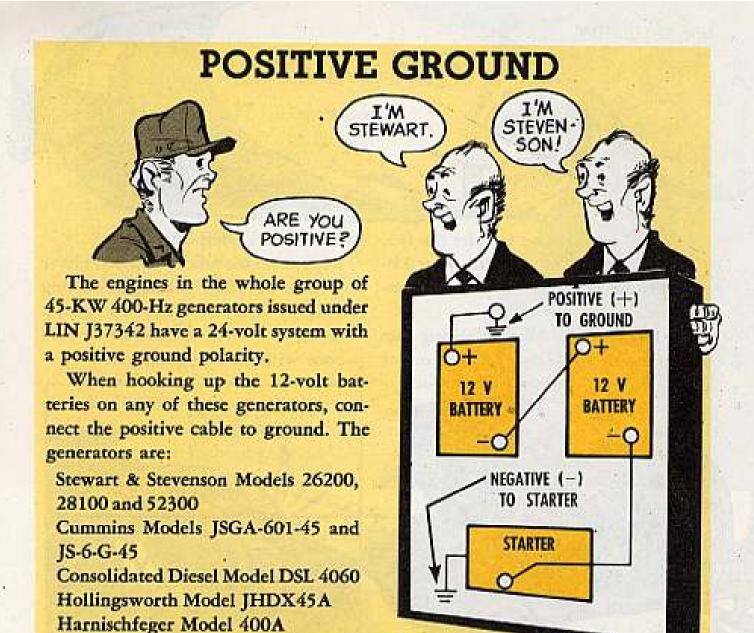
Reposition the tube so you don't have any more rubbing, chafing or cutting caused by the vibratin' belt guard. 'Course, you never operate an air com pressor with the belt guard off.



#### TOSS THE PULLER



Before testing an electrical circuit with your fuse puller and test light FSN 5120-224-9458... stop, look and scrutinize. If the puller was made by Star Fuse or Midway Electric—watch it! The insulation on the lead with the clip pulls back leaving a naked wire—making things ripe for a shocking time. Either tape the leads or replace the puller with a new model made by Superior Fuse that's now being issued under the same FSN.



#### **NEW ONES ARE TRICKY**



It's what you might call a swap-off.

The price you pay for getting that brand new gas-engine-driven generator is a little extra care while you break her in.

One of the big things you don't know about that new piece is how much oil shes' going to consume while her piston rings get broken in.

So, until you learn her habits and oil diet, slip her the dipstick hourly and add oil as necessary.

When she gets all broken in you can go by the LO intervals. PASS SOME BY

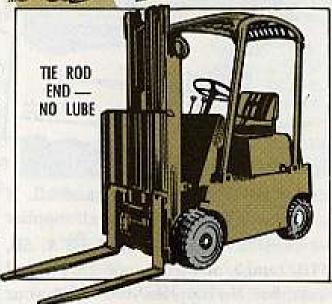


Some tie-rod ends need lubing and some don't.

The ones on the 4000-lb Hyster S40CP (Army Model MHE 203) forklift fall in the do-not-need lubing class. They're the scaled type with permanent lubrication and are not equipped with lube fittings.

Although LO 10-3930-607-12-1 (May 69) shows they're to be lubed pass 'em by.

. HOW MUCH FOR A LINK . . .?



## MAYBE LESS'N Y' THINK

Dear Half-Mast,

Bead-type chains on outlet covers, cable yokes, and generator panels are always breaking or letting the cap or lid get lost. Commo and generator TM's never give chain FSN's, so we scrounge. Got a better idea?

Dear Sergeant J. L. W.,

Yea, verily—chains are bulk hardware, and are expendable items authorized under SB 700-50 and listed in Fed Cat C-4000-IL-A. But do pick a stronger type like the flat link (Illustration 1005) which is only 5 cents a foot under FSN 4010-262-3123. Or the sash type (Illustration 1003); FSN 4010-171-4512 gets you 100 feet for \$2.83.

Retaining chain is cheap, and it pays its cost many times over.

Half-Mast
61

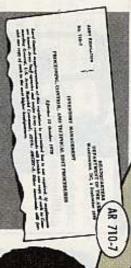


SASH 1003
FLAT LINK, SHORT PITCH 1005

# THE BOTTLE-NECK

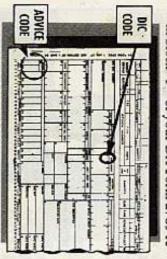
That's right. No more confusion on who does what on requesting and issuing your supplies.

AR 710-7 (Sep 70), Processing, Con-



the record straight for one and all. It gives you SOP on requesting all supplies — TOE/MTOE equipment, CTA, SB, PLL, fringe, non-stock, non-FSN'd, and unauthorized supplies. And it tells your supply support outfit how to handle all your requests — whatever your problems may be with publications, item identification, authorization, etc.

The AR also introduces you to the use of Document Identifier Codes (DIC's) in block 1 of your DA Form 2765 re-



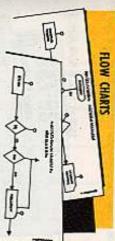
quests. The DIC's spell out whether your request is routine, or whether it's carrying exception data—which means you don't have all the identification or authorization info you need, and supply

### BUSTER

support owes you special help with the request.

The AR also spells out the advantages of using Advice Codes to speed-up your supplies. Those codes go in block 22 of your request, when you want to give supply support firm instruction on specific requests.

You can browse through the supply support section of the AR—so's you'll know how your requests are filled. But, your important SOP is in the AR's paras 1, 4 and 9. The step-by-step SOP on making out a repair parts request is setup in a flow chart in the AR's Fig 1.



Making out a request for other items is covered in a flow chart in Fig 2.

#### THE DICS

The DIC you use in column 1 of your 2765 depends on where you are, and what your request covers. For example:

AØA—Says you're stateside and the request has an FSN.

AØE — You're home, but you're using exception data.

AΦ1 — Is for 2765's with FSN's, when you're overseas.

AØ5 —For requests with exception data when you're over there.

The DIC's are listed in App D, AR
735-35. The Advice Codes are in App A.

#### 440HA CIRCLE RELIEF THE CIRCLE REVERSE

Step lively... The circle reverse gear assembly on your 440HA road grader may need relief right now.

GEAR!

Check out the vent hole of the relief valve.

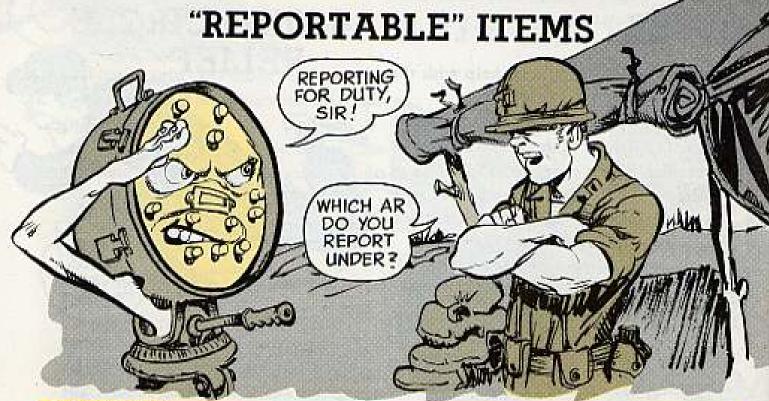
Look at it straight in the eye to see if the small hole is open.



If it's clogged or painted-over, lots of pressure can build up in the gear assembly.

Next thing you know an oil seal blows and a worm gear or a drive gear goes to pot.

So, keep it clean as a whistle, man.



Dear Half-Mast,

How can we tell which equipment items are "reportable" and which are not? Everybody has a different answer.

AR 135-8 38 700-20

Dear Sergeants M. L. S. and A. F. S.,

You might say with accuracy that there are as many lists of "reportable" equipment items as there are reports. You have to read the rules for each report.

For DA Form 2406, f'rinstance, basic rules are in para 3-6c and Appendix C of TM 38-750. The Appendix lists "reportable" items either with an X after the specific item or opposite the ECC and generic nomenclature. If the X is opposite the ECC and generic nomenclature, para 2a of the Appendix says "all corresponding makes and models" are reportable whether listed or not.

For DA Form 2715 (unit readiness), basic rules are in para D-1, Appendix D, of AR 220-1 and its Change 1. You

SSG M. L. S. & SSG A. F. S.

TM 38-750

DEPARTMENT OF THE ARMY TECHNICAL

ARMY REGULATION

ARMY REGULATION

ARMY REGULATION

STOCK CONTROL

REPORTING

ARMY EQUIPMENT STATUS

CONTROL

REPORTING

get the list of reportables from SB 700-20. Comparable info for DA Form 2841, Reserve Unit Readiness, is found in para D-1, Appendix D, AR 135-8 and in SB 700-20.

Equipment reportable under AR 711-5 also is listed in SB 700-20. But the list is longer (including items with RICC's 1, 2, 5 and 6). Guidelines are in para 1-6f, AR 711-5.

So don't try to put all your "reportables" in 1 basket.

Hall-Mast

DEAR CONNIE OR BONNIE: I would like PS Magazine to run an artic about (describe your organizational maintenance problem): Europe; Other Korea; CONUS am in

Jear this card out and tell me what you want to see



DEPARTMENT OF THE ARMY

PS MAGAZINE

OFFICIAL BUSINESS

## KENTUCKY 40121 PS MAGAZINE FORT KNOX

Jear this card out and tell me what







#### M715 Pin Jale

Here's the pin-down, lift-up and come-along deal on your M715 truck.

Tow it and tiedown it with shackles, FSN-2510-253-1098, reaching thru the front bumper (or under rear bumper).

To lift, take out pin, FSN 5315-455-6884, and use it to fasten the shackles to the hubs (in pairs) onto bracket, lift, FSN 2530-410-2275.

#### Trailer Brake Cable

Here's how you order a handbrake cable for your M101A1 or M116A1 ¾-ton trailer — ask for it by FSN 2530-967-6278, This's the cable listed with Part No. 10926095 in Ch 1 (Mar 70), TM 9-2330-202-14P.

#### Fix For M548

Haul out your TB 750-981-2 (Apr 71) and check Article 3-18. This tells you how to fix the latch-hinge setup on your M548 cargo carrier so the cargo door can't be taken off so easy. This'll help keep from busting up the hull — and it can save somebody from getting a busted leg, too, because that door can come down with a heckuva wallop if both sides are unlatched at the same time.

#### Heads Off Big Boom!

Anytime your bird is parked for servicing — for fueling, defueling, arming with rockets or ammunition, oxygen and hydraulic fluid replenishment — it's got to be grounded. That's the word in Chg 3 (Dec 70) to TM 55-1500-204-25/1 on general maintenance . . . para 1-52.

#### Azimuth Indicator Decal Needed

The see-'em-in-the-dark pointers on all series of M27, M28 and M31 azimuth indicators can be radioactive. That's why MWO 9-2300-395-20/1 (Mar 71) says to put a warning decal, FSN 1290-453-5624, on the azimuth indicator so no-body will get hurt.

#### Split For M114-Series

Check Item 1, Fig 26, page 31, TM 9-2320-224-25P (Dec 64), Insulation, PN 10925584. Now FSN 2990-933-5520 brings you the blanket (that big piece on the left in the picture). And FSN 2990-982-9670 is for the back pad. Usually the pad needs replacing more often than the blanket. This goes for all M114-series recon carriers.

Would You Stake Your Life wow on the Condition of Your Equipment?

