

Issue 154

PS

1965 Series

THE PREVENTIVE MAINTENANCE MONTHLY

WAS DIDN'T
CHECK OUT
THOSE PARTS
BEFORE TAKING
THEM OFF THE
EQUIPMENT ???

DO YOU DO IT?
(See page 24)

**PARTS
FOR
REPAIR**

W. E. Foster



There's a big push on nowadays to keep down the cost of running the Army.

You have a big part in that job. The way you operate and use your equipment and the way you maintain it all play a part in this cost-reduction battle.

Operate your gear like it should be . . . no banging and slamming. Keep it clean, adjusted, lubed and parked just right. It'll last longer . . . and won't have to be replaced by a new one so soon, then \$\$.

Get your auto mechanic in for the tough jobs. He has the know-how, tools and parts to keep your gear purring. When the job's too big for him, he gets the support maintenance outfit ready to keep you moving, shooting and communicating.

If you're a mechanic, one of the biggest keys for keeping down the tab is using your test equipment to check for bad parts. Use the built-in diagnostic meter on your trucks and tanks, for example, or take tests on radios. Know, for sure, before you junk a part and replace it with a new one. Saves \$\$.

Supply stock, too, know what to do! Go and work only when you *really* need it. No "holding for 'em in case they're out." No "oh, no, here!" Remember that when the whistle blows, you go with what you've got — including parts and supplies. Who don't waste more than you can spare. Saves \$\$.

Buy at an "approved" and authorized dealer. Saves \$\$.

Use standard tools before you work. Get more life.

Use built-in test meters and diagnostic meter to find out if you're doing it right.

Try. It's good for finding out what works better.



CO\$T REDUCTION

+ GOOD PM



COMBAT READINESS



100 WASHINGTON MONUMENT AVENUE
 WASHINGTON, D.C. 20540-0001
 (202) 755-1220

GROUND MOBILITY 211

1000000000	1000000000
1000000000	1000000000
1000000000	1000000000



AIRPOWER 20-27

1000000000	1000000000
1000000000	1000000000



ARMOED 21-41

1000000000	1000000000
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COMMUNICATIONS 40-50

1000000000	1000000000
1000000000	1000000000



GENERAL AND SUPPLY

1000000000	1000000000
1000000000	1000000000



For more information on our products and services, contact us at (202) 755-1220. We'll be glad to help you find the right solution for your needs.



HEY! HOLD ONE! ARE YOU OUT OF GAS?

I DON'T BE WORRY ABOUT THE FUEL GAUGE WITH THE HOT PLANTS.

BECAUSE THE GAUGE IS NOT THAT HELPFUL. BECAUSE THE FUEL GAUGE IS NOT THAT HELPFUL IN THE FIRST PLACE.



The way your engine rattled may tell you whether to look into the fuel or the ignition line. If it coughed and choked as it took . . . sounds like the top-joint! If it just wouldn't start when you came back to it, then you can't be sure. So let's check out both systems, one at a time.

BUT FIRST . . . HOW'S YOUR BATTERY?

Suppose you get little or no signs of life when you try to start the engine. No starter action, no lights, no horn and no flashing of the wiper motor needle mean you either have a dead battery or it's not able to get out. So you head for the battery . . .



CHECK FOR BATTERY (BATTERY) UNDER LABEL WITH THE BATTERY CLAMP.

BE SURE YOUR CABLES ARE TIGHT ON BATTERY TERMINALS AND THAT POSITIVE CABLE IS TIGHT ON CHASSIS OR GROUND POINT.

If you get a very weak start out of the battery, the battery is too weak to crank the engine . . . stop right here and go for help.

OK... ON TO IGNITION "FIRSTS"

If your starter turns the engine over feebly, you can eliminate the battery, ignition switch and starter as suspects.

With only the ignition switch on, look for a sharp drop in voltage on the ammeter. If your vehicle has an "idle light" instead of ammeter, it will light up to show discharge, but it doesn't tell the difference between heavy and slight discharge. A heavy discharge means a short in the primary circuit — and there's nothing you can do about it. But, if your primary's okay ...



START ON THE IGNITION SYSTEM



See that the rotor-distributor cap was fit firmly seated in the socket at each end. The other two end fit in the middle.



Wipe the Spark!

Wipe dirt and moisture from spark plug porcelain (don't make sure spark isn't hot or weakened) — remove one valve at a time. Then try to start again.



Wipe the Plug!

While cranking engine a healthy spark should jump from plug wire to the head.



To spark engine, you sometimes the starter pinion will engage with the handle of engine. Be sure the gear shift is in neutral — if the ignition switch is "on" your vehicle may come to life.



A SPARK PLUG
WRENCH IS THE ONLY
TOOL YOU NEED TO
REMOVE A SPARK PLUG.
IT'S A SPECIAL WRENCH
WITH A RING AT THE
END THAT FITS OVER
THE SPARK PLUG'S
HEX HEAD.

IT'S AN EASY
JOB TO DO, BUT
NOT EVERYONE
KNOWS HOW
TO DO IT. WE
WILL SHOW YOU.

IGNITION CHECKS



1.



Try the starter with the ignition on. If's already on when your starter operates with the ignition key! If it's on the answer then your primary circuit is okay — unless the distributor capacitor is shot (more on that later).



2.

Go back to where you were looking for a spark with the sparkplug wire. If there's no spark at the plug wire, raise the rotor head of test this time by pulling the coil to distribute cap wire from the cap. Hold the rotor by the rubber insulation then bring the metal tip about 1/4 inch from the block with cranking the engine.

A spark here shows that the coil is OK, but something's wrong in the distributor, keeping the juice from the spark plugs. Could be the rotor's gone bad or the cap is cracked, letting moisture in.



3.

Wrap the leads of the distributor cap down and by. Compression, in being mostly or not matter, can have leads and heat up the electrical system.

4.

Hold the distributor point, open while doing by and the coil-to-distributor wire (and the distributor cap) about from the distributor connection to the block. If you get a spark at the block . . .

5.

Loosen the points. Tilt the distributor until the high point on one of the cam lobes drops under the floor block on the movable contact point. This looses the points with open.

If they're pinned, loosen or adjust, check you will with a small file or the next best thing you've got.

6.

Ground the moving ignition point. If you don't get a spark, make sure the connection's tight where the movable point's broken spring and the contact or's paper stick to the distributor's primary terminal.

Now, if you get a spark . . .

7.

Make sure the points are opening about 0.015 inch. If distributor wear's thickness is about right. The adjusting screw holding the distributor point sometimes loosens and allows the gap to change.



8.

With the points open and working as far as together as they can if the armature is not so close to the — it should be. If you get a heavy discharge, remove the condenser clamp screw and bend the condenser out and away from any contact with the distributor. If your condenser now comes up to you, the condenser is dead.

CONDENSER



Wipe it
down
with
a
clean
cloth
or
oil
cloth.

**9.**

Look for a dust under the movable point. Bend the finger holding and the cam follower back. The follower may be worn down so far that the dust forming it to the movable point breaks the cam.



Going back to where you tickled the points while starting the coil: distributor wire at the distributor, if you didn't get a spark . . .

10

Start the pole on the coil where the coil distributor wire is attached.



A battery
will
make
the
coil
work
if
it
will.



FUEL SYSTEM "BUGS"

1

Hold your hand flat on the air filter while cranking the engine. If it'll pull a strong vacuum on the fuel system and you pull through a lot of dirt clogging the valve.



If you feel any gas on your hand or if the engine starts, pull your hand off quickly.



WILL MY CARLY
ENGINE RUN BETTER
IF I CHANGE MY FUEL
FILTER...



2

Look for gas dripping from the carburetor and spray all the fuel line connections back to the line coming to the tank. Make sure they're tight. This gas is the vacuum-feed on the fuel pump, too.

If gas isn't leaking out of a loose connection, air may be getting in. Either case spells trouble.

3

If you see gas around the carburetor or smell cranking after it's gone, you may have a leaking float control needle valve and may be able to fix it. Use the float test tool — partly, too...with a small hammer, sometimes handle is over a small screw. This may dislodge the dirt and free the needle valve.



WILL MY ENGINE
RUN BETTER IF I
REPAIR MY
CARBURETOR?



4

Detach the vacuum-to-fuel pump line at the carburetor and pump the starter with the ignition off.



If you get a good squirt of fuel, the trouble's in the carburetor's gaskets — a job for your direct support.

But if you don't get gas at this point either, look it back up and . . .

5.

Take off the handle-fuel pump line of the pump. Blow into the tank that opening to get pressure on the fuel.



NOT WORKING!

If you're alone, wrap a rag around the end of the line and then use it to work up any fuel while you blow into the tank.



NO GUY AROUND!
IF IT'S AT THE
PUMP, YOU CAN
EVEN GET THE
LINES OFF TO
LIMIT DAMAGE
A BIT MORE
ON THAT LINE!



6.

Remove the short length of flexible line that connects the fuel pump to the fuel line on the chassis. If the obstruction is in the section, blowing may get it out.



If you finally get gas through to your fuel pump . . .

7.

Replace the lines and try again to start your vehicle.



If it's still no-go, you're stuck with a bad fuel pump—and it'll take a mechanic to get your vehicle rolling again.



SAFETY FIRST...

KNOW YOUR POLARITY

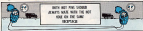
THE POSITIVE IS POSITIVE!

THE POSITIVE IS POSITIVE!

Some of these three-cable assemblies come to you with each connector installed one of two ways . . . right or wrong. So when you go to use one, it's anybody's guess which pin's positive— or negative—of . . .

Anyway, if you don't know which way your polarity's coming, you can't count on it that your cable does not have crossed wires. So the next time you connect up this cable to a dead vehicle's slaved receptacle, you're taking a chance on letting the heat out of that vehicle's electrical system by reversing its polarity. This practice also causes arcing at the receptacle.

The positive pins in both plugs should meet with the positive holes in the same receptacle. If the cable is wired correctly, the same wire will connect both positive pins . . . the other wire will connect both negative pins.



To be sure the cable wiring is correct, plug in one end to a hot slaved receptacle. Then use a lamp or voltmeter to read current flow by clamping one wire on the positive pin at the other end of the cable and grounding the other end wire on the same vehicle. If the lamp lights, or the voltmeter registers current, you're straight.

If you get no reaction, take one connector apart. Then pull out the correct pins and recheck 'em.



MISI SEAT PIN

Gold is where you find it — and so are those non-resaler pins for your 1/4-ton M151 truck. These pins aren't in supply — at least, not where you'd expect to find 'em. But you'll find that a good substitute is the pin used in the 1/4-ton 80841 truck's clutch linkage. Ask for Pin, Straight, Thread: FSM 5111-074-4198.



SEE TRUCK —
SEE 4 0000 128



GAS CAN GUARD

So your drag-along gas can gets dented up because it bumps on the left bumper of your M151 1/4-ton truck?

Well, that's easy to cure. All you need is a couple feet of rubber tubing. Tuba, rubber, compressed, ID 7/32-in., is listed as Item 2 on page 65 of your TM 9-2100-118-20P (Doc 654). You order it by the foot as FSM 4728-203-1068. It only costs six cents a foot.

Make a continuous slit along the tubing with a sharp knife and then press it in place along the top edge of the bumper.

Now your gas can (which costs \$1.25) will ride on a rubber cushion (which costs 12 cents and it'll last longer).



SEE TRUCK
ACT 51 8078

SEALER SEAL

It's general knowledge that the M151 1/4-ton truck's oil filter gets changed every 5000 miles or so automatically. But it's not generally known that when you're putting on a new filter, the sealing gasket should first be soaked in oil.

These gaskets may become dry and hard while in storage. A brittle gasket can tear, leak or leak.

It's also good practice to put a thin smear of Grease on the filter's sealing surfaces. This'll let the seal slide in place while the filter's screwed down tight.

SEE TRUCK
ON GASKET



BY THE EACH

You may get short-changed when you order replacement spark plug sockets for your 3/4-ton GM41-series truck if you don't dig your SOP.

Page 41 in TM 5-2110-212-SOP (Feb 68) lists Cable Assembly, Power Electrical, PN 2928-028-2044, for five spark plugs. This item will not automatically bring you five cables.



YOU ORDER FOR CABLES TO REPLACE SPARK PLUGS ON YOUR TRUCK. THE MAN IN THE STORE SHOULD HAVE LEFT A SET OF 'EM.



3/4-TON U-JOINT NUT

Are the prop shafts on your 3/4-ton GM41-series truck doing the right because the universal joint bolts are working hard?

If so, then you need a new self-locking nut that comes under PN 2928-028-2055. This'll keep the U-joints tight. These new nuts are compared to 40-50 foot-pounds.



The nut is not in supply yet for SWS GM41 use. Have your support people order them from the US Army Tank-Automotive Center, ATAC MILITARY, Warren, Michigan 48090.

M35A1'S NEW DIGITS



Yep. That's right. IO 9-2526-209-12 that came out in May of 1968 is the same IO for the M35A1 metal-rod work.

No doubt many 170-ton jobs are wondering why the M35A1 is now covered by this new numbered IO. Well, the M35A1 has been put in the COME metal group — the "C" group and the IO now covers all the weights with 170-ton results.

This means that all future publications on the M35A1 will come out under this 9-2526-209- number instead of the old 9-2526-205- number.

HIT THE HOLES

Some homemade guides can save you a lot of 'swearing' and 'muttering' when you're lining up holes for reassembling equipment.

The holes of the same size as you'll be using in completing the assembly. Cut the head off with a hacksaw, round off the top with a file or grinder and cut a slot across the top for a screwdriver.

Screw these guides in and then you can use the guides and calibrators — or whatever you're putting together — right down over 'em like 'ol' straight. As you remove each guide with a screwdriver, replace it with the proper bolt.

You can make different size sets of these guides and keep 'em handy for different jobs.



800-368-0762 ... WHERE TO FIND IT



Where, oh where, are the lists that give the numbers on equipment and tools that're supposed to be on your tracked vehicle?

You know, the lists have items that some parts call **BEI** (Basic Item from List- or OOM) (On Equipment Manual) or **OVMI** (On Vehicle Manual) or **YTAB** (Yalestar Tools and Equipment).

Well, that list can be found in several places—where it is depends on the vehicle. It could be in the operator's TM—or a change to the TM. The right TM for your vehicle may be one of the new -E-Series or one of the old ones, put out about 10 years ago, that cover both operation and organizational maintenance.

Before you start looking, it's best to know the **Graco** group of your vehicle. If you don't know it, you can find your vehicle's **G** group in the front section of TM 9-1508-125-20P, the **Consolidated Authorized Organizational Packaging List of Repair Parts for Tank-Associated Equipment**.

Where, where, are the lists that give the numbers on equipment and tools that're supposed to be on your tracked vehicle?

VEHICLE SERIES

PUBLICATION

0-148 1/2-ton M200	OM 1-200 2-760 2-60 20
0-150 1/2-ton (M204), etc.]	Change 4 0-1 2-60 1-20 to 2-60 1-204 2-60 20
0-200 1/2-ton M210	2-60 1-200 2-60 2-60 2-60 20
0-222 1/2-ton M210	2-60 1-200 2-60 2-60 2-60 20
0-271 1/2-ton (M21, M270, etc.)	Change 8 2-60 2-60 to 2-60 1-200 2-60 20
0-272 2 1/2-ton (M21, M21, etc.)	2-60 1-200 2-60 2-60 2-60 2-60 20
0-274 2 1/2-ton (M21, M21, etc.)	Change 7 2-60 2-60 to 2-60 1-200 2-60 20
0-274 2-ton (M21, M21, etc., including the operator and trailer with multi-bed support)	Change 1 2-60 2-60 to 2-60 1-200 2-60 2-60 2-60 20
0-275 2-ton (M21, M21)	Change 1 2-60 2-60 to 2-60 1-200 2-60 2-60 2-60 20

FOR MORE DETAILS . . .

MUZZLE DOWN, BREACH UP

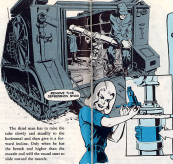
If you have an M106 or M106A1 mortar carrier, here up.

Change 7 (M106) in TM 9-2300-224-10 (Mar 62) points slightly off target in para 141, page 43, where it tells you what to do if the mortar misfires.

Change the range like we said you'll be target-center when you read para 141 for effect. . .

In 431 on page 43 of the Change 7 it tells you to elevate the mortar as high as you can. What they mean is depress the mortar as low as you can.

In 431 on page 43 it says the third man has to raise the tube slowly and steadily to the horizontal and then give it a forward lurch. Only when he has the breach and higher than the muzzle end will the second man slide toward the muzzle.



M106 MORTAR CARRIER STOP STUFF

When you had an M106 mortar carrier the depression stop assembly was a real useful device. It kept you from racking your elevation so low you might hit your own vehicle with a round.

The assembly (M12483) is being used by some outfits with their M106 or M106A1s, when it's not needed at all.

With the M12483 you don't have a problem. Because of the ratchet stop and the way the vehicle is made, you can't ratchet low enough for a round to hit the vehicle. In a way, you don't need the depression stop assembly. In a way, here it is to supply already.

Before you do, though, make sure the ratchet stop change is in place and secure like it says on page 27 of Change 7 (M106) in your TM 9-2300-224-10 (Mar 62).

THIS'LL (PIVOT) STEER YOU RIGHT

The pivot arm on your M106 or M106A1 mortar carrier is the handsomest steel girl . . . but, like girls,



FOR MORE DETAILS



it can be dangerous if you don't handle it right.

Thing to remember, when you pull back on a pivot arm, lower you look out track on that side. This is OK if you're going slow, like under 10 miles an hour. But if you pull out the pivot arm when you're going fast, you make your vehicle a possible disaster area.

If you're lucky you merely throw a track and break a final drive. Most

likely you'd also wreck your differential. If you turned your drive could also be heavy damage to the human components of the vehicle.

So why make business for the mechanic and the equipment?

Here's one to get rid of it: under 10 MPH. Use your regular steel handles if you're going faster.

With pivot arm you'll get lost results with your M106 or M106A1 (M106).



Smart operators keep the valve loose by exercising it at the end of each day's firing or at inspection times. Right . . . they push the valve in and out till it's loose, then they turn it on and off a couple times. That'll get rid of the carbon.



You don't have to worry about lubing the back end of the pin, either. It'll get plenty while you're covering the outside surface of your weapons with the lubricant prescribed in your TM.

Just don't forget to seal up that exercising bit with the valve shut and down for normal firing . . . or your rifle'll end up as a one-shot Lucey.

FIG. 301 586C



There was a time when a seal tight gas cylinder plug was believed to be necessary to keep from losing gas to the plug. Not now. Experience shows that if carbon gets on the threads of a seal tight plug, it'll freeze in tight.

So, get off the plug straight, like so:

Turn
it back
that . . .



... NOW A NEW
GUY WOULD
WITH THE
FORGET THIS.



That's only one right way to hold the M14 when plugging or unplugging it. Put your left hand over the barrel and cylinder, or if the legend's unworkable, hold on to that. Of course, if the legend's less, you can use a screwdriver between the barrel and the cylinder for a little leverage when removing the plug. But, don't ever tighten the plug when the barrel's hot. You might never get the darned thing off.



And, for Pete's sake, to remove a stubborn plug, never grab hold of the handguard or you might hurt it. Also, never leave the gun between your feet or get more bark on the plug or you'll hurt the stock. It's OK to pinch the ribs between your ribs. It's like a shove in the old T&E, but don't use your feet like a vice. If the plug's frozen that night, let your armor get to work on it.



Sometimes, your armor may not work. In that case, don't forget to use the T&E. Please and thank you. That's all.

A couple more tips on the plug: Never take it off all you have to . . . and when you put it on be sure it's good and dry or you'll be locking the big carbon frozen. And watch those threads. They're real fine. You could screw 'em up if you're not extra careful.

As a general rule, you'd only remove the M4's gas plug if the gas piston's on the loose . . . meaning to say it won't slide, or it's installed wrong.

CHECK THAT PISTON

You don't have to take anything apart to see if the piston's working right. Just look the slide to the rear, then turn the weapon end for end, keeping an eye or ear at the exhaust port (near the drain hole). If the piston slides freely, good, all is well. If it won't slide, you've got a cleaning job.

Sound's kind of easy, but it could happen that the piston'd be installed wrong—and you wouldn't be able to tell the difference by looking at the assembled weapon. Oh course, that'd mean that the plug threads would have to be crossed and the plug overtightened. Way bad. That'd lead to a bearing inside the cylinder. Way, way bad.

So, get that that slide up every time when installing it, huh?



To check for correct installation of the piston, turn off the stock. The flat side of the piston must be facing forward toward the barrel. If the round side's up, the piston will work, since the gas port'll be blocked.



OPERING LOCK

YOU CAN TELL BY LABELING AN OPEN OPERATING LOCK THAT IT'S OPERATING LOCK AND NOT A LOCK.

If you see the shoulder of the lower barrel on the barrel as you pass over the lock, the lock is set right but if it appears to be working, then the lock is set wrong. Which means the primer's not seated right in the cylinder and the gun's not set at all.

Here's the sure-fire way to get it right every time. Turned the lock so far as it'll go, then back off enough so you can insert the operating plug through the lock into the cylinder.



THE FIRST STEP

Removal of the operating rod guide's no problem as long as the operating rod'll slide without binding. To check this out, though, you'll have to strip your rifle a bit further. You already have the work coil, right? Now remove the receiver assembly, the operating rod spring guide and the operating rod spring.

OK, with the rod in place, attached to the lock, tilt your weapon and fire it. The lock should come back under its own weight. If it does this, everything's under control.

But, if you run into any binding whatever, you'll better make a thorough check. Be really careful here — like don't wiggle a loose shell in the loading chamber, or on the operating rod, but at your expense and take care of these.



But, if it's worse than that — like if the long shoulder part of the operating rod's cracked or bent, or the case locking lug area has chipped or burned bad — let your commander strip the lock. Don't use the weapon.

Now, during this test the operating rod guide might lock loose. But don't let this shake you up — and your superior shouldn't get excited, either.

A guide that's real loose in the disassembled state like this could be plenty tight enough when the weapon's assembled since the inside contour of the stock would hold it in place.

No, don't let anybody tell you you ought to tighten that guide by putting in spring pins. Just 'cause somebody can see daylight through the pin doesn't mean it's loose or damaged. The new split-type pins all look that way. The old pins, of course, were solid. As long as the pin's in place, leave it alone . . . it'll do a better job if you don't tighten it.

In other words, you keep loose. (A)

NO LUB

Of course, you know you don't ever put any lube at all in the M1's gas system parts. You certainly can't absolutely dry — and clean. Those parts are made of corrosion-resisting steel that don't need lubing. Matter of fact, oil'll only make trouble — die, corrosion, sluggishness, no-go!

But sometimes it's pretty hard to keep oil out of there when you're cleaning and lubing the rest of the weapon. So, here's a little trick to protect the cylinder, piston and plug before you start cleaning and coating the inside of the bore with prescribed lubricant.



This way, if any oil from the patch should happen to seep into the opening in the cylinder and so, Sargeant Gerry'll throw it back down so's the patch can wipe it off next time through. No oil will reach the cylinder plug this way, that's for sure.

But, again, don't forget to keep the cylinder valve upright when you're through.

Your TM 9-1009-211-02 (Feb 64) is divided up into an correct methods for cleaning the M1's gas system parts — pay hard attention to it. Especially, don't use sand, rust, a wire brush or scrapers of any kind on these parts. You might change some of the critical dimensions and ruin your die.

Use CE bore cleaner (FSM 6850-001-0011 — Use and for normal cleaning and carbon removing compound) PG-111s (FSM 6850-020-0018 — S-gal) and for real tough carbon deposits. In a pinch, you can try dry-cleaning solvent or mineral spirits paint thinner, but never use gasoline, because no high-pressure water, steam or air.

USE A GENTLE WRENCH



There's a place for muscle—but it's not between the ears and definitely not on the wrench that comes with your M79 grenade launcher.

You need help when you're installing the firing pin retainer or when attaching the machine group to the stock could put your weapon on sick call.

Like *Frasier*, unless you use your wrench just right in the retainer's holes and do the twist and snap, you could snap off one or both lips. A bent neck's only part of the war, too. Worst of it is, the lips are in the retainer—and it takes a long trip to support maintenance to get 'em out.

So, next time, try it this way: Set both lips of the way in the retainer holes by following the line of the tool against the retainer. Then turn the wrench and give it your usual assistance. That's not it, either. Remember, any extra pressure at the point will bend a lip or two.



To save your M79 some major surgery for a split stock, move the heavy hand when you're tightening the gun-headed machine screw into the stock.

But make sure you get those two workers on the screw in the right order like in Fig. 20 of TM 9-214-200-11 (20-4-1). That, not the screw itself, it's easy... the old design is too tight with the wrench, though, already!



And here's a special tip to guys who've been using a screwdriver instead of their wrench on this job: It's OK to use a screwdriver if you're having wrench trouble, but be sure the blade's wide enough—and, say so that much!

LOPE IN
SLICE AND
BITE

SHAKE THE FLAKE



POUR INTO
CARTRIDGE
CASE



Here's how:

Maybe you'd like to pour along this tip to wobble with shell cleaning guns. Before you hit the field, put your carbonyl mixture in a plastic bag before dropping it in the carrying case with the spare barrel. This'll keep the nasty white carbonyl flakes from getting into the nice oiled bore. Also, it'll make the glass feel longer.

SP-4 Ray Farnham
MPO New York 10008

(Ed Note—Carbonyl does.)

HEAD TO THE REAR... ALWAYS!

What is your friend's name, too?

Then put this lens and fan on the perforating shoulder for your M58 machine gun:

Make darned sure the gas piston's in sight—with the head facing the rear toward the trigger.

If it's the other way around, you could get an explosion when you press the trigger. You may be lucky and not get hurt, but your weapon'll be dead.

That's all!



DON'T BUG YOUR RIFLE

Oops, hold everything! If you've been tempted to use a 2-in plastic foam eggbeater (bug juice) handle to hold your rifle off on maneuvers or otherwise—hold that! It's hard to get those M7 handles absolutely clean and dry inside, and if you don't, the water and acid from the bug juice can corrode the oil and foul up your weapon's internal. So, better stick to the free metal silencer that's attached to you unless you're absolutely sure your plastic container is clean and dry.



Vehicle Trade Go Pin-Point



Vehicle publications shared since 1 Nov 61 will be distributed by pin-point. Get your unit's requirements in chain channels before 30 Oct 61 to the St. Louis Publications Center on—

01 items 12-21 — for Trucking Vehicle Publications.

02 items 12-22 — for Wholesaler Vehicle Publications.

03 items 12-23 — for Dealer and Retailer Publications.

See DA Circular 118-14 (10 Jun 61) for the word on this new pin-point distribution.

Any items that cannot receive after 10 October will get delayed in getting set up on the pin-point system, so beat that deadline.

A general list of new publications is printed in Supplemental Tables under "Publications" in a large volume that goes with every issue. Tables are also printed in each issue. Tables are printed in each issue and are used to identify publications.

Supplemental Tables

01 items 12-21 — for Trucking Vehicle Publications.
02 items 12-22 — for Wholesaler Vehicle Publications.
03 items 12-23 — for Dealer and Retailer Publications.
04 items 12-24 — for Trucking Vehicle Publications.
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JOE'S DOPE

THE GUY FROM
A.U.T.F.S.

IT WILL BE
PHYSICALLY
SMALL. THE
ONLY GUARANTEE
GUY WANT AN EVIDENCE
OF REPLACING
UNRELIABLE PARTS.
WELL, THEN.

...BUT YOU'D THINK AT
THIS IS NEARLY 17
YEARS SINCE THE
CONCRETE STRUCTURES.
IT'S WORSE THAN THE
CONTAMINATION BIT.



I WANT
SOME MORE
...AND WILL
PROCEED WITH
CREATION
THAT'S WHAT
TAKES ABOUT
% OF THE
[?]





WAAH...
A NEW
OUTFIT
OF THE OLD
PANTS-BLEPPED
OVERALL
OH, OH-OH?

KVITCH HAS DONE IT AGAIN!
IT WAS EASY FOR THEM... INCLUDING
KNOWS OF THE SOLDIER'S NATURAL
TENDENCY TO JUST CHANGE
PANTS INSTEAD OF
PROBLEMSHOOTING.

* Against Economic, Commercial Traffing and Hoarding (all parts)



YOU KNOW
WHAT WILL HAPPEN
IF THE "CANCER"
IS ALLOWED TO
CONTINUE!

YES... IT WILL
UNDERMINE
THE RELIABILITY
OF OTHER OUTFITS
AS WELL, AS
THEIR OWN.



RIGHT! IT'LL
KEEP PANTS
FROM GOING
WHERE THEY'RE
BARELY NEEDED.

IT'LL ALSO
LOAD BUREAU
SHOPS WITH
UNNECESSARY
WORK... AND
BURY UP THE
NECESSARY.



YOUR REASONING SEEMS SOUND...
CLUTTER UP LOGS GOING WITH
UNNECESSARY WORK AND
SEND A MASS PICTURE ON
SHORTAGE OF PARTS...



LINE UP MAINTENANCE
COSTS, LABOR WAGES
AND DEBATE
INCREASES BY DEMAND
ON SUPPORTS OR-
GAINLY SHOWS FASTER
THAN THEY CAN
BE REPLACED.

OUR
MECHANICS
GET SCARED
OF A JOURNEY
TO FRESHEN
KNOWLEDGE
THEY'RE
TRAINED
FOR.



What? It's your
blame, doesn't it?

First the man said it perfectly
clearly I quote him, the
rest is easy.

And so, next day...



But...

Don't worry
about a
thing
because
the
culprit
is
easy
to
find.



I'll just
blend into
the
background,
you
just
pretend
to
not
see...

Well,
good
to
see
you.



Oh, I'm going
to hit the
shop
first!



AAAH!
I've
noticed
him!

How
did
you
do
that?

What a
frustrating
volume
of
comic
books!

Joe's Dope Sheet

THE "SWAPPER"

1. Endangers combat readiness of your outfit.
2. Keeps good repair parts from going where they're REALLY needed.
3. Overloads repair shops, making them spend vital time checking out forward in pairs. Just say "O.K." while the really bad parts wait.
4. Builds up paperwork and log book entry chores.
5. Gives a false picture of parts usage and makes P&L lopsided.



I NEED
YOU...
NOW-

JOIN UP!

A **GAINST**
U **NECESSARY**
N **ONSENSICAL**
T **RADING and**
S **WAPPING**
(Of Parts)

How To Spot A Wanton Parts Swapper

1. Leaves test equipment lying around unused.
2. Never uses maintenance manuals . . . keeps 'em on shelf.
3. Never uses special tools and test kits.
4. Unfamiliar with **BOAAN**.
5. Makes no effort to run down real cause of equipment failure—just substitutes parts without testing and replacement works.
6. Replaces parts but does no preventive maintenance.
7. Swaps part from other good equipment without concern for the supply situation.
8. Turns in large amounts of parts for repair . . . many of them in good serviceable shape.

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



After Class...





WELL, THERE HE IS... LET'S TAKE THIS!

HOLD IT!
 YOU TAKE THAT PLACE & HE JUST PLACES THEM BY THE NUMBER! NEVER EVEN TESTED THEM... BUT HE'S OFF AT THE SUPPLY ROOM!



SUPPLY ROOM!

NO!



GOTCHA!
 YOU ARE-BLIT-TOO!



THAT TALK!

WELL, YOU'VE TO HAVE ME BLIT OUT AND THEN... WE WANT IT EARLY ON VESDAY!

LET ME TRY!

I WANT TO KNOW HOW YOU BLINK!



YOU WERE EASY TO-BLIT... ALL THE TRICKS OF A PARTY-BLITTER! EVEN A RECORD OF TURNING IN LARGE QUANTITIES OF PARTS FOR REPLACEMENT. JUST ASKING VISUAL INSPECTIONS TO SEE WHAT'S INSIDE WITH EQUIPMENT.

STOP! YOU ARE-BLIT-TOO!



YOU WERE A (PLAIN) MUGGY... PARTS OF BLOODING LINES YOU NEVER USED YOUR TEST EQUIPMENT ON THEM (UNWANTINGLY) YOU, SAID... YOU SEE YOU WERE

HYPNOTIZED!

NOW DO ME BLIT-TOO OUT OF IT!

My SPECIAL
Sweets
are FREE!



HOW DOES
THIS TASTE?
SWEET... SWEET!

MMM... BUT
SWEETS /
DON'T TASTE
GOOD... TASTE
SOME CANDY?



Back at APTHECH...



COMBATS /
FOILED AGAIN
BY ALLIED
G.I.S... BRABBY!



Attention!

GET THE GUY
WALK... REPAIR
MANY MECHANICAL
DO SOMETHING!

YOUR
GUY
WALK!

HOW ABOUT YOU
SCOUNDRELS... HAVE TALKED
US TO SHARP PARTS AND
BUSH... AND SO NOW... WE
HAVE LOST OUR SKILL
AS MECHANICS
FROM LACK OF USE.



And so, Comrade
was chosen by his
men and men...
A.I.N.T.A. triumphs
again!



From the depths
and water
A.I.N.T.A. leads
"REVOLUTION!"

AIR MOBILITY

A BELL OF HONOR
AWARDED BY
THE U.S. AIR FORCE

GARBAGE IS NOT BAGGAGE

A baggage compartment is not a garbage compartment.... whether it be an Embraer E175 (E) or any other type aircraft.

It's not the appearance at work, although a cursory look doesn't say much for your ship's loading inspection. It's the unknown weight penalty you pay in flight for that work. You also take a chance on loose cargo or papers interfering with internal operating components of your aircraft where the compartment does not have a solid partition surrounding it.



Labels must always have a PLACE in your baggage compartment. A certain appearance, size, color and this information should be an absolute necessity. Labels truly help enhance the flight!

Prohibited baggage compartments, trash can assemblies in cockpits and cabins, or even in out-of-the-way places like a Huey hoist compartment after the hoisting unit was removed. In other words, just about any open area of the fuselage is a potential dump.



WHO DONE IT?



There's nothing like a well-informed Army. In the fact you just laid off a EEI. From 2407 EEI on that aircraft part that just failed doesn't look in unless you've done right by Block 11, Item 4.

EM 24-780, para 1-3.4e(1)(2)(4), says to "name" the activity that did the last overhaul or maintenance. Sure, you're allowed to put down "N/A" or "UNK" in there. But that doesn't help the type at the big maintenance hangar any more.

Remember, the prime manufacturer or contractor does not always overhaul his own items and the government does not always buy all the needed parts from the prime manufacturer of the aircraft. So ANCOM has to know who to contact on each EEI.

No more trying to stick the prime contractor with a failure that belongs to somebody else's leg. The best way to get the most out of your EEI is to "give" with the right contractor's name, over 'nuff.

DIRTY BIRDS FLY SLOWER



While dirt on the skin of an aircraft won't slow it down significantly near its Mach or extended flap or extended cruise, it does have the same effect on a smaller scale. Over a long period of time you pay for an endless list with increased fuel consumption. Think on it awhile.

FLYAWAY TOOL KIT — FIELD STYLE

Stowing bulky general mechanic's tool chests into light aircraft cockpits has always been sort of a weighty problem during field exercises.

Stripped-down Flyaway tool kits are a lot easier to handle around working tailquads and field strips. This is not a subject to be taken lightly when you stop to consider all the necessary field gear that has to accompany your Piper (XIII-13), Kavan (XIII-21) or field Dog (X-1) on routine, observation or salute missions in the field.

HERE'S A FLY-
away kit of 12
tools that fit in 100 lbs.
weight kit. Includes
and includes that
will get a better
job. Includes
12-1/2" 1/2" wrench
at 100 lbs.



But you'll want to choose your own tools, after thinking about what you normally use every day during and between duties. A .750 in. M16 socket bar will carry even more tools. However, no larger aircraft the space problem disappears . . . and you can carry the whole chest of tools around wherever you go.

Better get your CO to give the CRE an inventory of related kit.

NO RINGS AROUND AIRCRAFT — PLEASE

Finger rings, including wedding bands, don't belong on the flight line. It's not easy for them to scratch fiberglass cowcatchers and windshields, or the soft metal in aircraft tire bearings. If you're a mechanic, a ring can catch the paint cover and let corrosion get a foothold. Besides, you can hurt your hand if that ring catches on some protruding part of the aircraft or hangs up in a tight corner . . . and to mention what can happen if any hand or wrist jewelry comes in contact with certain parts of an electrical system.

On
traditional
aircraft
that has
before
you
and
the
crew.



LOOK WHEN YOU

LUBE, RUBE!



He 's on a lube here.
He 's on a lube there.

He 's on a lube everywhere!

This is "NO" when grease gun is hand, you're making the opposite sounds called out in the lube-down for your kind.

But there's a lube (most) to lubricating that lubeing you grease lubeing after another. In many places you want to grease and see that a bearing is getting a full square of grease before going on to the next lubeing.

A GOOD EXAMPLE IS THE MAIN BEARING FOR THE SHAFT OF THE

Every an hydraulic you make and the you will you get clean grease coming out of the shaft hole. Like the lube that is in the 10-15-20-30-40 lube oil you, a little "sassy" spout from equipment, also comes in right handy too. It's — lubeing your lubeing when the lubeing is in the right while you're checking the work to give you fully packed pole bearings.



SEEK FOR
LUBE
LUBE

BLEACH, OK —
OIL, NO!

Dear Whady,

I have observed several crew chiefs and aircraft mechanics wearing hydraulic fluids in plastic (bleach) bottles and jugs. Is this your "bleach"?

Capt. J. W. P.

Dear Captain J. W. P.

Hydraulic fluid should not be stored in a plastic (bleach) bottle or jug. These bottles, in many instances, contain small amounts of plastic which come from the manufacturing process. The stress — and any other foreign matter in the container — can cause mal-functioning of hydraulic equipment in which cleanliness is very vital.

Alamy



Course, this lube-what-you-lube advice also goes for the tail cone blade and pole bearings on your Bessie.

You should check the grease (what you spot, a clean working, it's the best). Don't use much grease on the lubeing (or any lubeing for that matter) because too much pressure can force the pole out of place.



Now, suppose you're pumping away steadily on the shaft of the tail cone. The grease has to go somewhere. Now that hole it's go inside the hole and bring out of the "T" ring packing in there it did.

LOOK FOR
LUBE
LUBE

You can call a fitted cavity right-off when the hole is washed up. You'll get a tight long vibration in the middle portion from the use of lubricator blades.

So, when you're other jobs to be on the lookout for during a lube job! The Service Manual in your hand later about the them — a little "sassy" will make them.



Count the days when you have to change the engine tachometer (60007) on your Sioux (OH-119, G) to see you're "in the groove."

The groove isn't a mood generated by the latest rock 'n' roll hit. It's the slot in the tachometer drive sleeve, sure as death.

When you get the replacement in according to TM 91-1120-204-10 G



Age 60 Plus 10-00 you want to put the thick edge of the tachometer shaft into the drive sleeve slot. If you don't, the job will have to be done over again, for real.

If the engine is cranked up and the unusual tachometer shaft is suddenly seized in the slot . . . snap!! Another tachometer headed for exchange with a broken shaft.

See-see . . . that slot groove, real

Caution Only . . .



BEWARE THE PITOT TUBE

A busy pilot who doesn't have a fighting chance against a steady Gulf Stream (C-119) crew chief's mood and a fearful workload.

So you're got to be extra careful when preparing to work next to the forward wing with the engine side cowling doors back.

The safe way to approach an engine compartment job is with the mast jacked to a low position. This lets you



see the tube extending out below the open cowling on the work stand next to where the pitot tube is in its normal in-line position.

When you're outside the platform will clear the tube, jack it up to working level. If you use a rigid type mast instead of hydraulic, better stand up a vertical mast to watch the aft end and help you maintain the mast away from the tube.

CHANGING A THERMOCOUPLE? LOOK-ALIKE WON'T WORK

It's surprising how much look-alikes aren't alike . . . when you get them side by side.

Take the engine thermocouple transducer in your Sioux (OH-119). Bunch of them babies will fit into the cylinder, but each uses a different method of measuring temperature. The one will work only in the OH-119 and G Models while the other one is used on the OH-119H and H Models.

So what's the deal?

Just this: Page 2-287 of TM 91-1120-204-205 G Aug 64 has Transducer, PN 6000-117-1186, for the Exact G Models — but it's really only usable on the H and S Models.

Transducer, PN 6000-116-8000, is the baby you want for the H and G Models. But there's a hitch in order to get it you'll have to requisition Local Assembly, PN 6000-116-8001, listed in TM 91-1120-204-207 112 Aug 64. Your supplier will cooperate with you on this one.

Finally, when you change a baby thermocouple you need more than a look-alike, or even a dead-like. You need one that works.

LOOK-ALIKE WON'T WORK



BE A BARREL SWITCHER



There's times when it pays to be a switcher.

Like, say, a training mission calls for firing blank ammunition in your chopper's M13 automatic submachine.

Any M100 ground gunner will tell you that he has to mount the M13 firing attachment to these blanks. That's because there isn't enough powder in the ammunition to give the needed recoil for automatic firing. The attachment partially blocks the barrel to give the necessary kick.

The problem with the M100, of course, is that there's no barrel from sight to mount the M13 attachment on.

The solution? You guess it — switch to an M100 barrel. You can even use a standard barrel.

But be, if you use an M100 barrel in the M1 submachine (or the Raven (M1-20) you need a short-cut barrel. That's because M-1 or M-1A might have to be taken off the front sight to give you that clearance.

Just have your direct support remove the flash suppressor, take off the bipod and put the suppressor back. Mount the attachment and you're in business.



Remember, also, once the blank firing mission is over, you want to reinstall both to your M100 barrel for live firing.

TWIXT-FLIGHT PM TIPS



WHEELS—The main rotor hub and blades may have a "locking" device. If so, make sure it's off.

JUST BEHIND—Make sure you're not in the way of the tail rotor.

Like us, not you crew chiefs, mechanics and ATTs decide the success of your Huey's mission even before it leaves the pad . . . meaning those MROC's bolts be ready to deliver when the main rotor and fans.

Huey's main fan opens you might re-dubcheck — and fix — between flights.



MROC BOLTS—Landed, make sure you feel through right. Any dent can fool up the landing, so wait for guys applied along these bolts for steps, check in next!

DRUMS—Closed with stones, sticks if still dented up in the draper; let fingers sliding across during change to right, during fixed (meaning the parts are both worn), wrong number of links to slide (page 54) of your TBI tell you how many each drum's supposed to have; chisel won't fit upright with connecting points in some cases, cartridge drives or supports face your adjustable wrench to bend the fitting's flanges enough to fit; set out with the cartridge drive. This way they'll fit correctly.)



The rubber pads in the buffer work like the fenders on your car. Get hit or grazed on 'em and they'll grab or rub — and the buffer and other parts of your MHC take a beating. Smart operators make sure they keep the buffer clean and dry by servicing it after every firing. And to play safe, they remove the pads when cleaning, too — the top pad always takes the worst punishment. Just be sure you assemble it right when you're through (rubber side of pads on the front of the buffer). Change 1 to TM 5-109-243-02 (Oct 85) shows you how to use the assembly tool.

CARTRIDGE BRUSH — Dirty, damaged, needs lubing or replacing.



LOCK CYLINDER PLUG — Too tight, safety wire broken or missing, key washer broken or worn thin.

You want the plug just snug enough to hold — finger-tight. PMS LCI's team will put considerable work. Don't use more and heat as you seat the plug and the cylinder.



BUFFER — Dirty, metal parts dirty, pads soaked.



SOLE ASSEMBLY —

Locking legs slipped, extractor broken, bolt plug not missing, firing pin and spring loaded, actuator bolted assembly not in place.



Any or all of these'll give you real trouble. However, you won't see that plug pin if you assemble it with the roller to the front and not to the rear. There's a hole directly opposite the roller that when it's put on wrong that would let the pin slip through.



Of course, your help'll last this longer if you keep up with your homework — like missing slippage and deformed legs that do harm to the barrel system. So, keep close tabs on these criteria.

OPERATING ROLL — Rollers wear like tires, so it's best to find, replace, forward and backward or misaligned.

There're the main parts to watch. Lubricate the rollers regularly with MIL-L-68000. You should be able to turn the rollers with your fingers. You can fix the forward part easy by moving.

OPERATING ROLL DRIVE SYSTEM — Rollers wear, broken.

Measure it. If it's less than 24.5/4-in long, it's bad. First time check for loose screws, and see if seal clear for the space that get flat by rubbing against the inside of the receiver. Most of the lubricating, though, comes from hand hand filling, so take it easy, huh?

CHECK THE PIV TIPS

HYDRAULIC CYLINDER POSITION — Always keep the pins reinforced, whether the pins are on the mount or not. This way the stronger links'll protect it from the weather and bumping into it during ops. Press the stroke assembly in the center of the rear end of the piston rod to retract it.

HYDRAULIC LINES — Make a habit of replacing 'em as you go about your business. Even a tiny hole in a line could drain the fluid's oil reserve and knock a landing land/leave after.

CROW SURFACE POSITION-CHECK PANEL — Don't make any more adjustments. Run you have to ... and be sure to let the electrical system warm up first, about 15 minutes before you do any adjusting.



LIGHTING STATION — Keep the hexagon nuts on the suspension linkage of the lighting station torqued at 12-15 inch-pounds. Since the MROC's are low-weighted in relation to the standard variable resistors in the lighting station, it's real important to have all linkage in the supporting arms torqued the same amount.

Also, doublecheck the procedure in para 1102 of your -12 TM for adjustment of counter balance.)

TERMINATIONS

A SLIP O' THE TWIST

66 Have you ever, slipping the main lead connector on the antenna jack of your R-110 receiver (or use it on R-100 or some other model with the same leads, etc.)?

67 Take the main lead up to' and down, or you give the blind connector a fast push and a twist . . . and nothing.

68 Later, when things begin to happen, your R-110 (or R-100, etc.) wouldn't pull in the large and small talk.

69 Well, maybe you pushed the plastic cover free of its seat in the center of the antenna jack. Even normal wear 'n' tear gets in the way, but maintenance really matters in.

70 It makes sense to spare that extra second it takes to flip up the connector and jack, push any 'til the connector matches the locking lips of the jack, and rotate it into place gently-like.

71 How you remove the connector, don't grab it by the wires. Holding it by anything but the connector itself can bend up the jack . . . or break the main wires . . . or break the wires off. Loose or broken wires, naturally, means you get no RF output.

72 Pick the connector off and put it on in a straight line with the jack, and that jack'll give you a lot of service.

73 If you're really givin' me that receiver despite a brandy brandy cure, you might try this emergency field fix. Slice a piece of R-64 cable down to the rubber insulation and cut off a half-inch piece of the insulation. Slip it onto the center pin of the antenna jack . . . and you can transmit or receive. 74

A few words: The jack is made of soft metal and can't take much punishment that's not a rough slide the connector off.



IS PS FOR ME?

75 Magazine is written for—

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LOOK-A-LIKE PAIR BEST



Like wires and cables, repair is a keep-like-for-repairs, but it works wonders when mating the U-100A LMG plug with the U-100B LMG and U-100C on separate having matching MX-1107-02 contact assemblies.

Always connect connectors with look-alike contact assemblies. That'll keep communications telephones, telegraphs and teletype equipment putting out at peak efficiency along your 40-pair cables.

It's no secret to see the difference between the old and new connectors and matching contact assembly.

Just hold one in your hand and focus your eyes on it.



Not so with the modified ones marked MX-1107-02. Using this same eyeing routine, you'll notice the peaks of the pins are covered by a rectangular piece of green or gray plastic. You also might see that "MPWO 11-0000-000-0101" (Doc 81) stamped or painted nearby.

Don't jump to conclusions, though. It may have come through with the like-or-connector marked — MX-1107-02.

Just, any of 'em will pile up . . . or fuse for the first time. After that, don't take 'em, because one or more of those contact pins will get fouled, and be bent or broken off. And that means the whole cable has to be replaced, like it says in SB 11-100 (Doc 61).

While we're on the subject, care is your key when you connect up for communicating. Gently separate the connectors together straight-on. If you pull 'em up at an angle, you'll damage 'em.

Another thing, if your outfit has any of those separate connectors and contact assemblies around that haven't been modified, get the word to your support unit. They'll take care of the job.

TO THE RESCUE, CAP IN HAND

Here's how:

Like you know, the name at the top of page 8, 3M 11-6663-214-18 (Nov 82) tells you to use clear colliphone tape to catch or replace lost or damaged caps of the 3M-FS 30 decoder.

We think we've got a better solution . . . and it's easy to come by.

Just point your fingerborders toward the nearest water pool and scrounge some of the three-wrap tape which protects the circuitry ends of new sporting cables. When the new cables are unscraped and attached to the phone, the plastic tape is torned.

The three-wrap tape in the Landmark-made 3M-FS 30 decoders like they were made for them. What's more, they're longer and stronger than the tape found with the decoders . . . and if they fall or are displaced, they're a lot easier to find than the originals.

The real bonus is that you can read the decoder messages while without removing the tape . . . just like the originals.

One caution: The 3M-FS and the Landmark-made 3M-FS 30s in their use for the speaking wire cap. These models split the cap . . . which means you've got to wrap it with colliphone tape, but that's still an improvement over the colliphone tape by itself.

Extra caution: In if you get mistakens, you can get a signal the cap'll split. Like you know, the decoder caps are otherwise hard to come by, since they're not in the supply system.

3M John S. Collins
Scott Wiley, Kansas



3M (Nov. Good And?)

BURNED UP DUMBBELLS



Don't let the dumbbells of your ANFOSC-3 series radio set make you look like one.

This kind's circuit can burn up both you and the dumbbell — in different ways.

Like you know, the dumbbells (CS-1211 and CS-1212) either connect the power supply to the RT-66, all vacuum-transmitters and the AM-60 amplifier or the RT-76.



Before you connect them, make sure the set's power is off. This avoids a possible' job whereby the pins of the connectors get fried . . . sometimes so bad that they keep you from connecting.

In like the man says, get mean about your dumbbells.

And since you already saw the connection to the power supply, consider this point on the RF-112:

Bad thermal resistors (R-24, -24, -31, -31, -37, -38 and -48) in the power supply can throw off the RF readings of your RT-66 (see -58).

Now since your RF reading is lower



than you know it should be — and you can't bring it up so far — lower your support; check out the resistors.

First, tho, check for abnormal filament readings on your MMB series. If the readings aren't normal, suspect the resistors.

THAT
BURNED
UP
FEELIN'

I'M NOT
THEYER
SMART. THEY
CLEAN THE
FILTER!

Oh!



Maybe another laser's gotten in your eyes, but you can bet too much laser's gotten in your T-CELL transmitter if you've burned out more than just spots of color.

The filter's the thing . . . whether you inhale or not. But first, a word from Today the tube needs.

Watch out for a low-level transmitter in your ADVANCED-24 units or if the T-200 or -5016 tube types (like T200, 4016A and 4016C) and the 4020-200-AS main grid had a lot better's they ought to.



You can cool just a few quick ones down with a regular organizational PM check. Slide the transmitter from its case, take a gander at the air filter in the top of the case . . . and if there's out of it, the filter'll be as clogged with dirt and dust that doesn't let air get through it.

Really, the transmitter head gets over-heated, the tubes get too hot, and, hup!

The tip is that regular PM checks really prevent the whole mess. Like, Change 3 to TM 11-5028-287-20 (Jan 64) makes cleaning the air filter a monthly duty . . . and page 12, page 113 of the TM tells you how to clean the filter.

Basically, if you're in a shop or ready unit, you clean the filter as often as is necessary.

YOUR NEW AR 711-5 SUPPLY STATUS REPORT...

FAST
SIMPLE
DIRECT
ACCURATE



So what's with the new supply status report?

It's an up-to-date reporting system designed to tell how your specific unit stands or may get along on reportable stuff it is authorized, needs, uses . . . or is buying for. It's a snap-up version of the old "11.2" report, and it gets the message across fast by using such non-bogged things as point-to-points, count-downs, promising equipment . . . and stuff like that stuff.



It goes to be real simple. For example, if you're authorized, Active Army, Guard or Reserve, you submit an initial report, and afterwards you report only the changes in your supply status—show us how's work each month for the average unit. From time to time, if

you may be asked to submit a complete list of your reportable equipment to keep your data current and complete.

And, all units receive updates their supply status report by sending in a complete report quarterly.

Your report goes into the hands of the big brain planners and fast just as you submit it since the reports are not consolidated along the way. Each unit gets a master file at the National Major Item Data Agency—identified by unit,



type, TOE designation, location and to reportable assigned by the unit's Army headquarters.

With updated and accurate info feeding in, the supply planners can give you better service all along the line. They'll know what you have, what you should have . . . and what you don't have.

With this info, they can:

Locate a replacement item for you fast—maybe from a unit next door.

Reduce the number of non-compat-

ible makes, models, kinds and types of equipment in your unit—and thus reduce a lot of maintenance, supply and paperwork headaches, too.

Generally, support you and your unit in a manner so which you'd like to become accustomed.

OK, OK, OK! So will we meet!

Well, keep your hat, honey, for around AR 711-1 to get a hearing on the reporting procedures. Then grab a look at AR 711-140 to see what items are to be reported.



Active Army units report only their items to the A.D. National Guard and Reserve units report the AR items plus the other items listed in the supply status SOP of their higher headquarters (see para 4g, and also, AR 711-1).

REPORTING ALLOWANCES

All Active Army units, Guard and Reserve units always report their 100 percent TDR or TA allowance for all items.

Other allowances are reported like the Active Army units report select reporting allowances. The quantity represents addition or deletion made to a 100 percent full strength TDR or TA allowance, by an addition or compensation action, by a movement decrease or by special issue.

That is, if a change adds 50 to a basic authorization of 100 items, the modified quantity reported is 150. If the change cuts 50 from a basic authorization of 100, the modified allowance reported is 50, etc.

On the other hand, if the modified quantity is equal to the 100 percent TDR or TA quantity, the identical quantity is reported for both allowances.

And, in any case, a unit's report will show the quantity authorized under each authorization, or other terms will be used to show that no quantity is authorized.

NOTE ... 800 ... 7

The quantity will be shown under the 800 and 700 allowances. The 700 allowance will be shown under the 700 allowance.

Active Army units report on their Business Inventory Listing Expenditures (BITE) allowances exactly as published. If no item is actually authorized in its unit under BITE, the quantity will be reported.

And, as with other allowances, if the item isn't authorized under BITE, a report will show none for this allowance.

Guard and Reserve units report on their Organization Equipment Guide (OEG), as published by USACOMARMC for reserves and by the National Guard Bureau for the Guard units.

In cases an OEG has been published, the quantity authorized for carrying

When you lose your authorized allowance for an MIL item you report the difference under the basic LIM for the MIL item. Then you list the separate makes and models as "on-hand", "unauthorized". You continue to report the separate makes and models that way until they're transferred and deleted from your property book.

Back at the agency, you see, there's a separate card for each different LIM if your unit is authorized, or which you've reported. To get each item scratched off your unit's record you have to say you've given it up.

ON THE WAY

You report substitute items by LIM, POY, identification, quantity method, etc., just like an authorized item. The report must say exactly what a substitute item is substiting for. And, remember, a sub item must be related in some reasonable fashion to the authorized item.



If you're using a sub item which **ISN'T** responsible for an authorized item which is responsible, your report must say so. Ditto if it's the other way around.

And, incidentally, an item that's classified restricted is not reported as a substitute for the preferred, or the restricted, or model of that item. If you've authorized a 195-ton truck, for example, and you happen to have the older (classified RE) model . . . you have the authorized item . . . not a substitute.

ON THE WAY



You don't report responsible items you've borrowed from another unit, or an installation, etc. The items continue to be reported by the owner. If you have something out on loan, of course, it remains on your report.

HERE'S THE TRICK, MA'AM . . .

A report that starts out wrong at the unit can feed wrong supply along all the way up the supply line. It might take you and everybody else concerned a good spell to finally get the record straight . . . and, in the meantime, the original goof could lead a lot of people astray, mangle up a lot of important supply decisions, transactions, and the like. And, before it's over it might even come back to haunt you in the form of shortages, overages, backorders, and similar and inconvenient.



Normally you'll get your info on supplies from a master list provided by support, but sometimes you may work right from AR 711-140. Along with the AR, of course, you'll likely have your supply RCP which'll spell out the details on how you tally-up your changes, when you need 'em to support and how.



HI-LINE CAUTION PLATES

As you know, a high-voltage line can kill you if your crane touches it.

Before you get within yelling distance of a high-voltage power line with the American H&D 1300 or W1300 crane-derel, better check to see if a hot power line caution plate.

The identification plate at the front of the revolving crane frame will do you.

Serial numbers 02881097 thru 02881797 (Crane No. 88-5-00794-11) were issued without the hi-line caution plate. If you've got one of these, ask for caution plate with mounting screws and instructions from USA Mobility Equipment Group, ATTN: SALES/REPAIR, 4380 Goodfellow Blvd., St. Louis, Mo., 63110. Give your equipment serial number and mailing address.

So, until you get the caution plate, you'll have to keep reminding yourself of the high-line danger. Course that's a good idea anyway.



SO THAT'S IT!

You, then, with the lung, and fast!

You say the face mask of your M17 protective mask has a cylindrical Mount . . . and 28 1/2-26 (26 Jan 60) pure the 118 eye is absolute's here . . . and that it's a Type 1 device . . . and that's enough to make say face and!

Smith, Change 2 (10-Mar 61) to the 28 eye to device that pure 118. That pre-1961 that is supposed to be there to protect the mask — and it's no device after all.

**TAKE
OFF
THAT
BLANKET**



This gap for breath from your Hollingsworth J-KW generator could mean that it's overhauled — even on a mild day. So, maybe it's time to take off the blanket that holds it in the box air.

There's three generator models that may overheat when the weather is above freezing (32°F) — the JRGV1A, JRGV2B and JRGV3C. And the cure is the same for each — take off its heat shield.

After the heat shield is removed, replace the screws that hold it with four new screws.

Use Inco, corp. 1/4-in-20 x 1/2-in. stainless steel plated, FSN 1401-012-0028. They're listed in DoD readings C2001-EL-A, Vol 1, page 182 (Jul 68) and C2001-01-A, Vol 1, page 14 (Apr 68).



The guides for getting the job done are:

JRGV1A — Para 714, TM 5-6115-107-15 (Jan 62) and Fig 411A, -21P (Aug 62).

JRGV2B — Para 714(1), TM 5-6115-108-11 (May 64) and Fig 11B, -15P (Apr 64).

JRGV3C — Para 714(1), TM 5-6115-140-11 (May 66) and Fig 717, -25P (Jan 66).

Parts removed should be kept handy for re-installation when and if needed — just in case you head for a cold country or have a cold winter coming.

Connie Rodd's BRIEFS



Never Use Gasoline

Some soldiers and their gear get burned up every year and then when somebody uses gasoline for cleaning.

You use gasoline as a fuel only . . . in engines, stoves and lanterns. Never use it for cleaning, any spark can set it off.

Forget about using gasoline, too, for that "gasoline-soluble" paint used to mark Army equipment. PG 121 mentioned it on page 27. The people who write AR 160-5 say that paint is "solvent-soluble." So you can use your standard solvent.

A Script in Time . . .

Light corrosion and rust trying to bubble up with your telephone set . . . like, P-100000, your M-210VT, or J-107? To help guard against these telephone invaders, use a little dab of liquid furniture polish (FOR TPOC-244-P11) on a clean cloth after wiping the outside of the set dry. Better care is called for when using polish around terminals and switches. The quart-size polish is listed on page 109 in the GSA catalog, dated December 1964.

Oh, yes, if you're thinking of putting a wire on your telephone, forget it.

Perfection Igniter

Wondering how to get the lighter for your G113 Perfection Mower M-0028-B7U burner? It's in Parts Kit, Heater, P261 2140-404-0015. The kit's one of the depot.

Save M113 Cannon Track Pin Hats

Maybe the suppliers have been sleeping these away for the winter. Anyhow, track pin hats for the M113 series vehicles are hard to get. So when you take all one of these hats do it real careful like. You might not be able to get it now and then if you know the nomenclature — which is not, extended washer, double hexagon, part number 874485, FMN 3310-400-9642.

No Training Packages

These training packages on GSC and TARE described on pages 24-25 of SA Pamphlet 7804 were distributed to Field Army units long ago, and the U.S. Army Maintenance School has none left. Check with your local command and when you locate copies make sure you update them to agree with current regulations.

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



P M I
PAYS

800-872-5477 GIVES THE DOPE ON HOW YOU CAN WIN THESE BADGES