

Issue 165

PS

1966 Series

THE PREVENTIVE MAINTENANCE MONTHLY

GO FURTHER AHEAD,
GIVE BUCK... PETS!
FROM THE **PS**... JUST
CHECKING OUT YOUR
SCHEDULES... IN THAT
LAST **PS** FOR GIVE,
SHOWS EACH
SYSTEM.

ALWAYS
KEEP
BUCK'S
READY-TO-
READ!

SPECIAL FEATURES
1966-1967... 12 Months...
1966-1967

YO FLEO

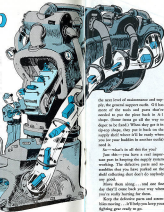
THE SUPPLY SYSTEM

Every repair gun in assembly you get this supply in one box, break out of the factory.

Each of 'em have been used, checked out, reconditioned or otherwise fixed and put back in the supply channels. This is especially true of real expensive items on aircraft, mobile systems and heavy equipment.

You want in a repairable or non-repairable defective gun or assembly in your direct support unit, and they'll have a good one. 100 checks on the hot one and five if it they can.

If not, the hot gun right along to



the next level of maintenance and supply, the general support unit. It'll have more of the tools and parts that're needed to put the piece back in A-1 shape. (Some items go all the way to depot to be fixed.) When they get it in ship-shape, they put it back on the supply shelf where it'll be ready when you see your buddies in another world need it.

Now what's in all this for you?

Just this—you have a real important gun in keeping the supply system working. The defective parts and assemblies that you have putted on the shelf collecting dust don't do nobody any good.

Take them along... and one day they'll come back your way when you're really hurting for them.

Keep the defective parts and assemblies moving... it'll help you keep your fighting gear ready to go.

PS

THE PSYCHOLOGICAL SERVICE
CORPORATION
10000 W. 10TH AVE., SUITE 100
DENVER, CO 80202

COMMUNICATIONS 3-14
1-800-333-3333

PERSONNEL 20-27
1-800-333-3333

AIR MOBILITY 3-14

1-800-333-3333

GENERAL SUPPORT 20-27

1-800-333-3333

OPERATIONAL SUPPORT 20-27

1-800-333-3333

FOR MORE INFORMATION, CONTACT
THE PSYCHOLOGICAL SERVICE
CORPORATION, 10000 W. 10TH AVE., SUITE 100,
DENVER, CO 80202

Get Along With
The Messengers
That Carry the
Message



OPTIONAL PA. PROGRAM...

OR
\$0

A DOZEN ON YOUR VICTORY-12

1977

THE ONLY COMMUNICATIONS EQUIPMENT THAT'S BEEN AWARDED THE "1977" HONORARY AWARD BY THE NATIONAL ASSOCIATION OF RETAILERS.

Look around Suburbia, it's here. Then, Everywhere! You've stood about it for a couple' years. Maybe you even see it in some other lucky Joe's quarters. Oh yeah, that's just around a block. A lot of Joe did.

So now your joy is unshared and your partner's crowded — you've finally got the AN/VRC-12 voice radio set!

Pull up a bench and sit old steady while you eyeball those poles in the major components — the RT-246 and RT-244 master-transmitters and Base2 receivers.

BEFORE YOU PUT THE
FLUKE TO WORK ON THE
CIRCUIT BOARD, YOU
MAY WANT TO TRY



MAJOR COMPONENTS

your dual pins for the lead from the multimeter assembly. The keypad board can stay in place.



The keypad goes in the AM200 assembly and pins games with you on the wiring and keeping your multimeter keypad very accessible, naturally. Your idea that it's sitting, pop, is a blower means that won't quit.

A sensitive case is to remove the relay, give it a 100-degree turn that'll

work, then flip and replace it. Otherwise, get a new relay.

And, say, when you're working that relay in or so for the PA tube of your 80-120 or -180 to warm up, don't let the cooling in of the switch fool you. It's an indication that the PA tube is warm.



If you walk about a ball relay after the sparks stopping, make sure, the tube should be warm enough to let you try the test.

Another indication that it's warm enough. The coil light will stay bright when you flip the test. If the coil light dims or's you can notice, hold one with the lighting. The tube's not warm, and you can make with the above like the next part.

Watch with the second gear, the first or other handy has weighty items when you're around the 120-122 cable to the ANT-DEPT component on the panel of the multimeter/ammeter. If you show the cable you might as well tack a "Going Out Of Business" sign on it.



The AM200 module board of the main component houses a couple hinge pins that you should never have to remove — despite the component, instead of unclipping the board out of the

As a temporary fix that is not totally sturdy but your C-rings you can loop wires through the eyes of both pins — or wrap their wire in the C-ring groove and route it.



While you're unclipping the board, stop at the gear lead that runs from the FL-104 line to the 88-100 board. The 88-100 has hinges, too, and if you don't position the gear cable carefully, you can break or break the cable and may be concerned by snapping it.



wrap on the hinges, some join pop the C-rings on the hinge pins, remove the pins, slide the board out... and line those two C-rings.

Naturally, they put the pins back in without the resistance, which you don't. The pins are first to work loose, fall in the gear scale below, and even the lead of damage that has your no wiring loops for a good long time.



SPARING OF CABLE

If you need a replacement connector for the cable of your audio accessories, forget the U-185 connector. It's been replaced by the U-208FU, P/N 1094-900-9016, which features a spring at the base of the connector instead of the rubber foam.

REPLACING
CABLES?



Working with cables for awhile, reversing polarity with the CX-4728 power cable can cook the wiring in the source and make components — and make the source components look like you've cooked 'em in a complex.



The easiest way to avoid the problem is to be sure the stranded leg with the red and white leads goes to the positive (+) post of the vehicle battery and the leg with the black and green wires goes to the negative (-) post. Marking the legs or leads with positive or negative signs helps considerably.

A FINAL STOPPING CAUTION

If you accidentally clamp or pull the R.P. cable lead from the connector head, it causes one easy, strange issue: liquid or plastic rubber and dirt in the end of the cable that goes into the connector. Put the connector back in, and the cable should be as good as or better than the original. Keep the "cover-pieces" glued off the connector.



1000000

CAPS

Keep your eye peeled for authorization, TB 158-106. For Digital (Din) sets, no exception for RT-800 radio covers, P/N 1820-081-1752, for the radio enclosure on the YBC-11 radio component.

The covers, not previously available for the 111 components, prevent corrosion... what else!

P/N 1820-111-1752



These protective covers for the main components (RTW-603, P/N 1820-081-1741 for the RT's and CW-640, P/N 1820-081-1741 for the E-441) can hold water from a good downpour for several days afterwards. Which means the wet can get your set.



Oh... hold on, Harry, with that **VOLUME** control switch on the RT's. Maybe the volume knob runs off your pocket portable or table model radio, but it ain't necessarily so here. The switch twisting trying to turn your set off with the volume knob can put your volume control out of action.

To turn the set off use the **POWER** switch—just above and to the right of the **VOLUME** knob.

Talking about protection, in case you didn't know it your support can now get you a protective mat that fits your antenna jack like a glove. It's guaranteed to not down considerably on heated jacks.

There's plenty room for the RF cable connector.

The mat goes by: Building Services, Electrical Company, P/N 1000-158-1118. It's going good in a change to the TB 11-0000-404-20 part list.





If the screws that loose the switches and knobs of the control panel are missing or corroding, you can pretty 'em up with clear fingernail polish (you can scrounge it almost anywhere). Give the screws a light scraping to get rid of the rust, etc., before putting the polish on 'em.



WATER IS A GREAT ENEMY OF ELECTRICITY. THAT'S WHY IT'S SO IMPORTANT TO MAKE SURE YOU HAVE A GOOD GROUNDING SYSTEM FOR YOUR BOAT.

Have a race with those small right-angle connectors inside the boxes. Push 'em straight in and pull 'em straight out every night to keep from breaking or bending those small contacts.



Also, when you replace the PL-401 filter in the RT's, don't force it into place. Be sure the lower connecting cable is in place before you lower the filter. Then, let the filter settle gently.

If it doesn't slide down flush with the chassis, slip your finger under the filter and give the connector a slight clockwise rattle.

It should fall right in. Hey — don't force it!



Also, those guards on the front panels of the main components may look handy, but they're not handles. If you want to head off a long repair wait for your cut, forget about using them as handles. You can pull 'em right off the panel.



MINOR COMPONENTS

Here are the items for minor components of the -43 series and a Change 4 (C3, Oct 87) or TM 11-1820-481-28. Units which've been bought for the -30P manuals should receive a deep cut over the Functional Part List in the Change 4, which supersedes 13 parts manuals.

AM-1780

AM-1780 AMPLIFIER



Voltage surge and ground cable run-out has been bothering the AM-1780 for many moons, but you can help make the days sunny for it by being extra careful which receptacle you attach the CS-4715 power cable to.



The cable, which comes from the moon, attaches to the J181 receptacle of the amplifier—only. Try putting it in the other receptacle and you might've well forget about using the amplifier for awhile. There's a cable maker kit, FM 1871-918-8184, from Sacramento Army Depot specifically for making the right cable and receptacle.

Another way to prevent ground-up cable damage is to keep the link in the MT-1028 moon in the correct position. PL 168 gives you the long story on the ground cable problem.

Also, there's a perimeter collar nut for the amplifier early models that goes by FM 1826-078-0703, Flange, Perimeter Collar Bracket. It makes a wild collar (no song ridged) around the AM-1780 to prevent switches and knobs. Late model amplifiers have a built-in flange.

To keep your loading pins from giving you in a bind, have a man that nobody sees them as loading yours. And, when you're connecting or disconnecting the field wire leads, don't try to shove the pins through the rear of the amplifier. They break. A little weight-in pressure will do the job.

Use, next time you test impedance capability, try a couple' ohms less than you suspect the ACO assembly in your AM-1760. Likewise, suspect your CL-1120 cables . . . especially those coming off the receptacle of the amplifier.

Your trouble may just be a loose connection or a broken or loaded cable. A multimeter (like the ANFLRM-100) will tell you quickly whether you've got a broken circuit. It could save the time and trouble of replacing an ACO.

Finally, turning power off at the AM-1760 as well as the RT before starting or stopping vehicles is a "best" protection for the amplifier. To be double sure your amplifier's getting the protection it needs, you might double check that it has its MPPC 11-5820-406-2174 (Just RT) label on it. If it doesn't, get your support to apply the MPPC. It's added insurance against damage from voltage surges, or spikes.



CVC HELMET



The cabling on the number vehicle operator's helmet has been modified, improved and otherwise worked over for better-than months now, but as operations and accidents (mostly suspension) will beg for benefits of writing.

The suspension is to carry the helmet by the cable, which is about the same as thinking it's OK to sit on an egg since you've got the shell between you.

In other words, the cable may look sturdy, but if you flex it or stretch it with the weight of the helmet, the wiring breaks. In the trade the wiring used in the cable is "lead cord," if that suggests anything to you.

If you need a quick clamp for the cable, perforated clamp strap ESN 1428-185-9055, which comes as part of the vehicle radio installation kit, makes a mighty fine job. It's stiffer and more flexible than the hard plastic clamp that was made for the CVC cable.

Just double it over, slip the screw through the ready-made perforations—and away a few cables.



Contacts on the quick-disconnect of the cable are a problem because they spread or pull apart faster than hot lead rolls off molten metal.

You can keep the connector in action indefinitely by slipping a piece of green tape or such at the junction of the connector and receptacle.



You can still make a fast disconnect—and the tape will separate without strangling you if you should snag it—but you've got insurance against a bad connection during normal use.

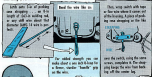
To insure a good connection, you can leave the tape in place and disconnect at the control box end of the cable. It saves spring contacts.



If you've been wrestling out the problem of a toggle switch for the CVC helmet accessories, never again. There's one going in the system for the SR-115 and -116 headset-microphone kits, to be used with Standard A, FM equipment. The new one goes by Switch Lever Assembly, P/N 1004-115-116. It will be added to TM 11-5001-211-20P (Dec 64).



Meanwhile, if you're in a bind because of a busted toggle, a few minutes' work can keep you in business.



IF YOU'RE EVER SHORTEAGED OUT A SOURCE FOR THE ABOVE, TALK TO THE CVC TEAM AT HELICOPTER AIRCRAFT WARE, INC. AT 1000-280-250 (24 HRS.)

Meanwhile, the cord that changes in the rear of the helmet, the CE-803, is P/N 1004-004-1164. The lower retractile cord, CE-804, is listed under P/N 1004-010-1002.

RADIO SET CONTROL GROUP

Next time you're about to secure the WD-1 field wire after you've attached it to the binding post of the C-2525, AN/CRN-11 radio set control group, be sure that more than the wire is secure. Like, make sure you're not setting up the standard for a yank that'll put it out of service.

Previously, consider the case of Scorp-Above-That Smith. Of Scorp-Above-That contacted his field wire and cable to the C-2525, connected the other end of the cable . . . and looped a bundle of field wire around the guard handle of the C-2128.

That an hour later some Joe came barrel-rolling through the woods, damaged

pull the line from the field wire, which pulled back at the control, and yanked the C-2000 clear off the top of the roller set.

That wouldn't have so bad, but in order to get off the roller, the C-2000 had to pull its connecting cable out by the roots. That didn't help communication. Naturally, *of course* about that was easy about that, but . . .

If you want to take the field wire clean off the control's binding posts, loop the wire around some stationary object. Use a tree or even the vehicle. That way, if somebody trips over the wire, or pulls it, you won't have to worry about the C-2000 flying into space. You might break some WB's, but the connecting cable and control won't be broken in any.



LIKE THIS

No! No! No!



Control's roller points on the GBA-20.

1. Easy about is when you receive or install the batteries in the control center. Those solid springs are strong enough to keep plenty of tension on the BA 30's, but if you abuse them accidentally, they can break off. Slip the batteries straight out. And, it takes a minimum process to get 'em back in.



REMOVE
THE
ROLLER

2. If you've been twisting over replacing the binding post screws, never so more. They go by ESN 9540-216-2244, and you can find 'em in TR 11-1620-675-200.

3. If you get a charging relay after the GBA-20 is connected to your RT, turn the RT's volume control down to mid-point or lower . . . or until the relay stops chattering. Then, turn the volume up on the GBA-20 control.



SMALL
TUNE
OFFICIAL
FOCUS

ANTENNAS



HEY, THERE, ANTENNA SUPPLY GUY! I'M A BIRD, AND I'VE GOT A FEW QUESTIONS FOR YOU. I WANT TO KNOW HOW TO KEEP MY ANTENNAS FROM FALLING OFF. WHAT CAN I DO TO MAKE THEM STAY ON?



The O-ring for the AB-719 antenna base has been redesigned. For \$300-895-0027.

Also, those red screws in the top of the AB-719 that are forever snapping out now can be fixed with P/N 300-728-0213.

That long mounted antenna that doesn't seem to be fixed to things A to Z? It's 300-895-7910, order P/N 300-898-0044.

Stick on those AB-719 ant screws, though.

Millions more eyes-on-ant keep the screws from backing out with a dab of silicone, Superglue gelatin, or "people powder" talcumum known as Talcum, women, people, P/N 300-866-7315, use glue.

Another temporary way to keep your busy supply guy from being in to stop a piece of grass tape or such over the screws. That way, even if they do come loose, you won't lose them.

If your AB-1099 and AB-1095 antennas continue to be missing, about the easiest fix you can get is epoxy. Like, it's natural for this material to bond, even when it's together only a short time.

There's no easy remedy, but an screwing the antenna down over a wash fence often in damp areas can help considerably to keep the antenna from moving up permanently. A dab of silicone grease, P/N 300-826-1277, or the mounting ends also helps.



Another item that shakes and hits is the cross lead through the spring on the AS-719 antenna base. Often, when the spring snaps the antenna will come up, it hits or rubs the cross lead . . . which doesn't do much for your RF output.

It's a good idea to check the lead occasionally by bending the spring. You also might look for dry rot. Naturally, if the lead looks bad, it has to be replaced with PSM 1979-811-8371, a support job.

The lead that goes through the base of the new AS-1729/VBC antenna has a protective sheath over it, you shouldn't be much trouble. In case you haven't heard, the AS-1729 (PSM 1979-981-9024) will replace the AT-912, and matching unit MX-1799 will be replaced with the MX-6797.

However, forget about making your replacement through. The new unit will come with new AN1VBC-12 series nut. AT-912's in the field will be replaced by attrition. When you need a new antenna, you'll get the AS-1729. Any new AT-912's will in the supply system will be distributed before the AS-1729's. Both antennas are covered on parts and operation in Chapter 4 to TM 11-1028-601-10 and 11.

HEY! I REMEMBER
MY OWN SERVICE!

OH, YES! I REMEMBER
MY OWN SERVICE!
THE AS-1729 ANT!

MX-1799 MATCHING UNIT

Didja' ever have trouble switching from high to low band, or low to high, and right away suspect the matching unit?

Some repair guys do, and the first thing they look for is the check leads in the MX-1799. Some you should never touch them, unless . . .

First off, chances are a hostile man's dream that the matching unit's not causing your high-low band gain loss.

More likely, the problem is in your RT's or receiver, which you should check out or have checked. And, usually, if your problem is good output on high band but none on low, you've got a direct support repair job.



NOTE: WHEN
THE TOOLS
GET INTO
A
TIGHT



Many users in the field have found that the longer you keep that REX-1075 closed tight, the less trouble you have with it and the longer it works.

Playing with these circuit cards is like having your month's pay spent a full hour—when you're holding two pats. You always lose.

There is one bug for users in cold areas, though. If the unit stands idle awhile, it can get sluggish. The cure is not leaving it open, though. If it does get sluggish, or maybe even freezes, you may have to take it off the vehicle and out of the cold until it thaws.

Sometimes, a slight tap-on the ear will get it working right for you.



MISCELLANEOUS



If you've traveled the long trail for some kind of para-pat or audio voice, distance and trouble stop.

They've been hard to come by in some areas, but you can get TM 11-1095 (25-15 (Rev. 66), with functional parts list, for the M-136 handset and TM 11-1095-255-15P (Sep 62) for the M-88 microphone.

Hold on while the buses is on the M-136, M-88. That elusive Gating device in the U-103 connector of the audio equipment has been assigned PIN 1146-905-0062. It'll be added to revised parts manuals. When you get a replacement, or when you see one you've got, a dab of silicone grease on the Gating, or even a wet finger, can get it to slide on sockets with no sweat.



**SHOCK
COPPER**



SB 11-005 dated 14 Apr 68 introduces a bolt clip for the H-118 similar to that on the T-4-1 telephone. The clip and some heavy-duty machine hardware (washers and retaining shields) will go in a revised TM 11-9550-217-11 on the handset.

The clip goes by Cpl., Spring Training, FSN 11-68-009-28-6. The FSN includes two mounting screws, a #14 washer and installation instructions.

The handset will require no modification. All you do is remove two existing screws, discard them, and install the clip with the longer screws that come with it.

The machine shields on the H-118 have been replaced because of how they glowing reports about them under combat conditions in Viet Nam. Tougher, superior shields now come 10 to a package. Since most of the other shields are just about exhausted, you can get the new ones with the same FSN right now, like so:

Insulator Bolts, PN 545-853-104



Insulator Bolt

Mounting Hardware

If you've been trying to run down a ground strap for the MT-1029 or MT-1028 antenna, the news is not quite so rap on you. Your support line is under strain up. Considering that support gear might be busy on occasion, it could be money in the bank to take care of the ones you have.





For every year both vehicles and antenna mount distributors, more. Those of you who have VRC-13 series configurations that need antennas mounted on the spare rims of the R250 or R151 quantity cars will be delighted to hear that FSN 5805-080-0040 now gets you a 3-in. stud with enough extra threads to let you mount the antenna on the spare tire lugs.



Talking about vehicles and hard sides, even when you park your vehicle and roll out over rough terrain, slip a finger in the spacers that bracket the control box receptacle—especially on the C-120R.

If the nuts back off, the receptacle wiring leads the horses can shear off.

To prevent this, a little hand-tightening while you're underway can save a lot of damage. When you get back on land, your equipment's spacers wrench can do a proper tightening job.

Also, if the nuts back off a little, you might have a problem getting a connector on the receptacle. In which case you've got a number one idea that is worth tightening.

**IF THE NUTS
BACK OFF...
HAND-TIGHTEN
THEM.**



Incidentally, you may have been trying to get a last model R-101 bracket chosen. If so, try FSN 5805-080-0017. It'll get you the R-101A and R-101B.

FSN 5805-811-0011 was for the plain model. The new FSN and the Driving ROM for the L-102 connector will be added to the R-101's part list.

**PAUL
MOORE**

**FOR
INFO:
855-
8871**



**LARI
MOORE**

**FOR
INFO:
855-
8871**



The connector of your ARC-45/40 communication cable should be protected against rain and moisture since it's not waterproof. Some insulating tape around the connector will keep it dry . . . and operating.

Early production communication cables break pretty easily at the connector, so you're got to be extra careful with 'em.



ODDS 'N' ENDS

When climbing into or out of stacked vehicles, make the suspension sit on the rails and its control lines at top. Your feet can slip and shove off control knobs or cables . . . and its general make it downright impractical to mount 'em.

Whether using OLD squelch or NEW, there's a squelch nut don't let you to keep your squelch ON on the radio—and will be more another nut can trip your squelch. (Normally, you're in OLD squelch position if you're working with standardized one such as AN/USC-3 series, ARC-41, etc.)

Set your receiver squelch to OFF and have another station send a short test transmission. While the other station's transmitting, set your squelch to ON. If your squelch trips on each test it's clipping if the coil light goes on and



your mike or handset squelched, you can leave the squelch in ON position. However, to save all stations in your net can trip your squelch. Otherwise, leave in OFF.

And, if one or more stations in your net is on the same, leave the squelch OFF. When all stations are working, try the test and keep your squelch ON if it trips.

Use final cranks on modules. The cones plus band and break easily, so replace or remove them straight in and out. If they're positioned right, you shouldn't have to force them.





REARFACING AND TANKING...



More vital if your speed-gripped or modified M2's machine gun is tripod- or truck-mounted, or in the cockpit or turret ring — you headgear and chin rest basically do the same job. And how things are more important as a gunner than knowing those ways inside out.

Normally, you can do the head-spacing job by your own means if your M2's on a tripod or truck or in the turret from a combat vehicle. But, you'll need a buddy's help on the outside (to aim the barrel) if it's installed in a cockpit or turret or tank.

HOW TO'S FOR ALL M2'S



WITH GO-NOGO

GAGE (FORM 9005-2-50-1227)

1. Raise the cover and pull to point the retaining slide handle or pull the charge handle back.

... all the barrel locking spring legs is retracted in the 12 o'clock position to the side of the receiver.



2. Hold the bolt right there — either by inserting a nail or metal link between the receiver block and the barrel extension or by putting your hands to hold the handle for you — and then move the barrel all the way into the barrel extension.



3. Remove the barrel two number (B2N), between the metal link on the left and the...



4. Next, push the receiver to make sure the firing pin's not striking through the face of the bolt where it'd get in the way of the gas.



5. Now pull the retaining or charge handle back far enough to separate the barrel extension from the receiver block by about 1/16 in.



4. Take the contractor end of the rope and then check for tight or loose fastenings by trying both the 00 and 00-00 ends of your gage in the Tabot between the floor of the hull and the sea-end of the barrel. Make both entries from the center of the slot — and never from that gage!



TOO TIGHT... TOO LOOSE...

00 end won't go in slot.



00-00 end does go in.



TO GET RID OF TIGHT FASTENING.



Remove the barrel sea end (00) at a time, making adjustments ... starting with the gage after every click ... until the 00 end will slide in snug up to the clicking stop.

TO GET RID OF LOOSE FASTENING.



Secure the barrel sea end (00) at a time, adjusting ... starting with the gage after every click ... until the 00-00 won't rattle at all.

HOW STRONG MUST

That? Gages to count the total fish or to count the transfer before each click to line up the locking spring leg with the hole in the side of the receiver ... so's you'll be able to run the barrel.

That's a good tip to save you ever have to pass your fastenings in the deck. It's a nice

trick to the 00 end of the gage as your diagonal run the gun or using the right end of the gage at the right time.

you'll see
HELL YEAH!

you'll
HELL!

WITHOUT A GAGE

Measure headspace without a gage unless you're in a real bind — the standard kind.



1. Raise the cover and pull the point of the winding handle or pull the trigger handle till the barrel locking spring leg is retracted through the "L" hole in the rib of the receiver.



2. Push the barrel into the barrel extension as far as it'll go. You should be able to see or feel the rear end of the barrel inside the barrel extension.



3. Remove the barrel two inches thick.



4. Now let the winding or trigger handle go till the winding parts are all the way forward in battery.



5. Let the barrel locking spring leg back into and catch.
6. Now measure the barrel one more inch thick — but only one

1. Now tell your wife, if should she be.



TIP

As soon as you've got the headspacing OK, use your gun's string. If the string's too long, the winding parts will get changed. If it's too early, your weapon will fire two rounds and then quit Your the cartridge won't go far enough forward to pick up the third round.

There're a couple small differences in the way you get on to check the string on the sports-grip M1's and the modified ones.

HERE'S THE DIFFERENCE...

ON THE SPEAKER

1. Push the gun and pull the retracting slide handle all the way to the rear position, push it all the way forward.



2. Push the trigger and pull the retracting slide handle back till the front end of the barrel extension is about 1/2 inch from the trigger block.



3. Push the ball back release and let the ball go forward. That's just what the trigger does.



4. Now insert the gap-end of the barrel extension close closely on the gaps.



ON THE TVC

Whether you have a Load-Release Trigger or not, you simply catch the gun, let it go forward into the tray and remove the back plate.



OK, now, in both cases, you're ready to try the FIRE and TVC-FIRE gauges to the dot between the barrel extension and the trigger block, depressing the trigger firmly on the speak-grip-type and pulling up on the trigger bar on the read-type, each time.



LAST THING . . . The firing pin won't release when the FIRE gauge is used.



LAST THING . . . The firing pin does release when the TVC-FIRE gauge is used.



TO CORRECT LATE THING



STAGE:
CHECK & BACK
PAGE

**TURN ADJUSTING
KNOB ONE
CLOCK TO RIGHT**



**REPLACE BACK
PAGE & SEND
NEXT THINGS**

Keep on doing this . . . until the thing you ordered on the ELLR page.



Turn the trigger bar stop adjusting and use switch to the right and pull the trigger bar. Keep on doing this . . . till the thing you ordered on the ELLR page.



TO CORRECT EARLY THING



STAGE:
SEND & BACK
PAGE

**TURN ADJUSTING
KNOB ONE
CLOCK TO LEFT**



**REPLACE BACK
PAGE ONE
PAGE, RESEND EARLY
THINGS SEND &
NEXT THINGS**

Keep on doing it the way . . . till the thing you will send orders on the ELLR page.



Turn the trigger bar stop adjusting and use switch to the LEFT. Reorder the page, send the page, insert the page and pull up on the trigger bar. Keep doing this . . . till the thing you will send orders on the page.



now DOUBLE CHECK

1 REORDER
PAGE
PAGE

2 LOOK
DOWN

3 ADJUST
KNOB ONE
CLOCK

4 REORDER
ON FULL UP
ON TRIGGER BAR

IF THING YOU
ORDER NOT REORDER,
THING IS CORRECT

1 REORDER
KNOB ONE
PAGE

2 LOOK
DOWN

3 ADJUST
KNOB
CLOCK

4 REORDER
ON FULL UP
ON TRIGGER BAR

IF THING IS
REORDER, THING
IS CORRECT

WOT'S THE ELLR?



HERE'S A TRICK TO HELP
YOU GET THE BEST OF
THE ELLR. IT'S CALLED
"DOUBLE CHECK"
CORRECTING THINGS.

E L L R

EARLY SEND LATE ORDER

ADJUSTING THE SOLENOID

So, OK now, your MP's headspace and timed—manually. But on the modified types there's one big step you still have to make: Adjust the solenoid so that electrical firing will be no-fire, too.

This adjusting treatment is about the same for all modified MPs, no matter where the solenoid is located—on the top, side or back of the weapon.



Now, BEFORE YOU START ADJUSTING THE SOLENOID, IT'S BEST TO DO A FEW SHOTS AT TARGETS AND SEE IF YOU NEED... ACCORDING TO THE POOP IN YOUR MINDERS... YEA.



1. Connect the power wires.



2. Push in the adjusting cap and turn it to the right to meet the H&H position as far as it will go.



3. Cook the weapon and slide the H&H gaps between the barrel extension and the trigger block.



4. Turn the adjusting cap to the left toward the H&H position and try to fire, using the firing trigger—and the trigger bar. If the firing pin won't release, keep on turning the adjusting cap toward H&H one notch at a time, trying to fire at each notch till the firing pin does release.



It's good to get three positive firings at this setting. The first firing pin release just might be false (cause of the repeated cocking of the solenoid plunger against the trigger bar).

1. Now, mount the engine and — with the



100-page roll in position — keep turning



the adjusting cap toward 60.2 one notch at a time while trying to fit. Be sure you count each notch of the firing pin roll nut release — it's important.



14. Now your vehicle's all set. Replace the cover and put the electrical fire control box switch in the OFF position.



Next, rotate the 100-page roll, turn the adjusting cap back to the right toward 60.2 one full tick number of notches you counted since the firing pin release in Step 1. If you turned 14 notches, say, toward 60.2, you'll now turn about toward 60.2. If you made 15, you look in at seven.



**JOE'S
DOPE**

YOU...

WELL... WELL?

**FEED THE SUPPLY
SYSTEM.**



A SPECIAL DELIVERY MADE TO AN OUTPOST IN THE CENTRAL HIGHLANDS OPERATIONAL BASELINE HAS HELPED TO REPAIR BRUSH STOCKS, AND MUST BE FEARED FROM THE DARK, RAINY NIGHT.

WELL... WELL... WELL... HOW AM I SUPPOSED TO SUPPORT A FIGHTING UNIT?

WELL... DO YOU EVER REFUSE ANY REQUESTS? FROM THE ASSEMBLY?

WELL... WELL... WELL... WELL?

WELL... WELL... WELL... WELL... FEED THE SUPPLY SYSTEM!



WHEN YOU GET A REPLENISHMENT LINE, THE UNEXPECTED ONE MUST BE KEPT AWAY UP THE AIRBORNE CREW!

OH!



THE REALITY THOUGHT THAT 'WARRANT' WASN'T THAT THAT 'STUFF' IS MANUFACTURED TO KEEP US GOING.



THAT IS WHY AND TO MAKE SURE THERE IS NO MORE STRANGING WORD AND SHAPES UP AND ARE ALSO PUT INTO THE SUPPLY LINE.

WOW IS IT GOING TO BE THERE?



DOES QUALITY IN MANUFACTURING PART OR APPROXIMATELY IS LEFT UP THE LINE. IT'S APPEARED AT THE LOWEST LEVEL OF MAINTENANCE THAT CAN BE DONE. THEN, IT'S PUT BACK ON THE SUPPLY LINE AND WILL WORK FOR MEY BACK TO YOU WHEN YOU NEED IT.

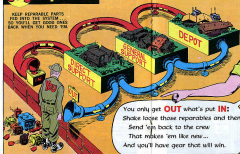


THE ARMY DID NOT WANT AN ARMY OF 'GOD', 'SUFFERING' 'MATHS' AND 'SUFFERING'. THERE WAS 'THESE' 'THESE' HAVE TO BE RETURNED FOR 'THESE' WHEN THEY GO BAD, LIKE THE 'THESE' 'THESE' ARE, IT WOULD WORK LIKE A 'CLOSED LOOP' SYSTEM, WITH THE 'THESE'.



Joe's Dope Sheet

KEEP REPAIRABLE PARTS
FEED INTO THE SYSTEM...
SO YOU'LL GET GOOD GEAR
BACK WHEN YOU NEED 'EM.



You only get **OUT** what's put **IN**:
Shake loose those repairables and then
Send 'em back to the crew
That makes 'em like new...
And you'll have gear that will win.

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

JOE'S
DOPE

**DON'T
FIGHT IT!
WRITE IT.**

FOOINNGG

POW!

ZIP

FOOINNGG

[TUT TUT!]
A... A... A... A... A...
A... A... A... A... A...
A... A... A... A... A...
[TUT TUT!]

**MOVE
OVER,
AND
GET
OUT!**

NOOO!
OH... OH...
OH... OH...
OH... OH...
OH... OH...





HOW DO I FIND OUT WHERE THE BOMBERS ARE GOING TO STRIKE?

DON'T WORRY BY THAT, BUT COMING TO THE U.S. AIR FORCE OFFICE HERE IN WASHINGTON... ALL THAT... TRY TO FIND OUT WHAT THE AIR FORCE IS DOING... BEHIND THE SCENES... YOU CAN GET THE BEST INFORMATION...



...NOW I KNOW JUST WHICH PART THEY CAN REACH, BUT I'M NO OPERATIONAL...

CHOOSE A PHOTO OR SKETCH OF YOUR BOSS OR IDEA APPROX. THE DIRECT TO THE NATIONAL AIR FORCE... PORT FOR THAT AREA.



HOW DO I FIND OUT WHERE THE BOMBERS ARE GOING TO STRIKE?

NO PROBLEM! TRYING TO FIND OUT WHERE THE BOMBERS ARE GOING TO STRIKE...



IT WOULD BE AN EMERGENCY IF YOU WERE TELETYPE IN THE AIR FORCE OFFICE? HOW DO YOU FIND OUT?



HEY... WATCHA DOING?

HOLD-ON... I GOT INFORMATION THAT'S SOME INTERESTING READING UP HERE!

NOT PROBABLY THE BEST INFORMATION AVAILABLE, BUT A GOOD FIRST STEP AND SEND IT DIRECT TO THE ADDRESS YOU FIND IN THE FRONT OF THE PUBLICATION.

HUEY CLAMPING NUT TOOL



Dear Editor,

Whenever you put the crossplate and collector down assemblies on the Huey 528-120 240 valve system, there is a bit of a problem torquing the clamping nut on the tapered spring to 170-120 foot-pounds.

When you use a standard spacer wrench it only has a one-point contact with the 9 plate in the nut. The contact slips and damages the clamping nut, we had to replace several nuts . . . and once some finished breakfast!

That was the situation here until we came up with this (see clearly little nut) made from 1/2-in flat steel stock, 1.00 d1.00, heat treated, with 4 one-point points, (three-sided) and 1-in-dia. The nut makes a great template for making this body.

Whether you're putting the plates assembly together, or just checking the nut torque on a vertical wrench, this little jewel grips the nut safely in 4 places.

MP4 Joe Colander
East Boston, Ma.



THROW AWAY
YOUR SPACER
WRENCH!



TOOL GRABS
NUT IN FOUR
PLACES.



Old Note—Right. No doubt your nut has at least a 4-in-1 preference for using this tool! (Course this tool adds to the length of the torque wrench as you would use the standard convention formula to find out the smaller amount power needed on the wrench handle.)

THE SPRING'S THE THING

REPAIR KIT
WITH COILS FOR



The next time you check the washplate area of your Hair-Less-It, you have a look-out for the helical extension spring, P/N 304804-511-1, P/N 1380-076-T009, is attached to the inner washplate ring.

If the spring is held by a bolt, 2 washers and a nut, better make some changes ... minor. A new washplate doesn't include the proper pin assembly used in the old (over-tightening of the attachment bolt) can crack the washplate arm.

Course Fig 478 of TM 91-1020-210-200 (14 Feb-66) doesn't call for any use on the LSS-1B model — the same as the LSS-1E model. The pins don't fit a corner pin to secure the straight pins, either. But future changes will add the corner pin.

To secure the helical extension spring you need — pin, straight-headed, P/N 304803-503-0, P/N 5115-001-7018, two flat washers, P/N 404901FD-001, P/N 5110-1077-2114 and corner pin, P/N 304804-511, P/N 5110-2110-008.

When you actually hook-up the spring — or any spring for that matter — be sure you don't use a pair of pliers. Pliers will cut into the wire, leading to corrosion and failure of the spring. Your duckbill pliers, with tape on the jaws, will do the trick. You might even make the hook up by hand with the cyclic ball right-forward.

FOR MORE INFORMATION
SEE PUBLICATION NUMBER
AND MATERIALS LISTINGS



Here's better.

Checking the timing on installed timing chains requires you to do a bit of a dance, with each timing bolt secured against the block and with many lines to snake through, in order to get at the gears.

Once the cover is off and you look up the obligation stamp of each timing light head there's always the possibility that the clamp on the movable points may contact the mag casing and ground out the light.

Of course in order to get the ungrounded "live" mag you need for the check you get a piece of cardboard between the automatic grounding spring and the case of the mag . . . all this is 1977.

But here's a way we found to make

the timing check without taking off the cover.

Make a two-foot long "F" (primary) lead and leave one end of the wire loose. Stick the timing light lead to the live wire. Remove the ignition switch "F" lead from the mag and put in the fabricated "F" lead which will do the same job as the standard—compressed the mag to make it "live."

When the prop shaft is rotated and the globe in position one cylinder comes to the proper degree BDC (Six-Five-top dead center.) as the compression stroke ends the mag points will be open, the timing light will come on and your mag is fixed.

This 1976 "F" lead is a real three-modular cover . . . works like a charm.

Robert Schuman
 Fort. Ord, Calif.



HOW DO WE LIVE
 BY LOCALLY-MADE
 "F" LEAD?

Old Flamingos made like a wheel if you're just making a spot check but I wouldn't follow this guide regularly. Use an a Periodic — for good reason. The timing check is the organizational maintenance jobs call for taking the

mag cover off and visually checking the condition of points and related mag parts. Of course if you're putting a mag on the engine the cover also comes off so you can get the "F" gap for your mag-to-engine timing.)

COPTER CABLE CHOPPER



When, ever okayed?

Before you're in the tail of your Chinook (CH-47) helicopter, be sure your WH-417U (HM-645-645-1500) harness walking cable's clear of the ramp. If the cabin is hanging over the edge of the ramp when you push the hydraulic lever, discommunication will be cut short (even the ramp has a hole like a burrhead).

After coming back inside the aircraft, flip the 21th cable handle and take a quick look to see it's clear before closing the ramp.

WATCH YOUR STEP



The next time you climb into a Chinook (CH-47) it's a capital idea to give the C-140CAJ (HM-1120) water-made pilot flight controller a wide berth.

To make sure you're not stepping on the flight controller's feet, the flight controller sticks up on the console like a nose thumb. A misplaced pair of trousers, or even a dropped APM-1 helmet, will crack the controller glass—for real.

Of course, the right glass is an ordinary type. It has lighting bulbs right inside it . . . even the replacement ones up camp-two dollars, sure enough.



POWER CUPOLA For M114A1

SO NOW YOU'VE GOT
POWER TO THE
CUPOLA. YOU CAN
SEE AND HEAR THE
LIGHT CHANGES.



POWER CONTROL

This looks like the gunner's dual control handle from a tank (which it is) and it works the same way. Pull back to depress the gas, push forward to depress it. Pull down right to rotate right and down left to go left. Naturally, you have to keep one of the push switches depressed. If you don't the magnetic holder will be on and you can't operate.



The holder you pull the lever the motor will be on and you can combine motion, shooting or depressing, while you are reversing. To stop motion in any direction hit the manual handle go back to the manual position.

POWER TRAYBAR

Power tractors with the power control handle will generally work pretty fine unless you start to bump continuously at road-edge speed for over five minutes at a time in shooting. The electric drive motor will get overloaded and may break down. Give the motor a change around call between periods of that or use what you should have on standby.



Two things that you cannot do on the electric motor and hydraulic pump are you have a limit in the oil pressure and you have a stoppage for the transmission.

To check the oil level do this...

1. Stop gear with 20.



2. Move brake handle to forward.



3. Rotate oil discharge with 1 to level.



4. Transmittal or right-hand adjustment of the pressure from road and the signal motor for 20.



1. Without double-checking the fit on the split pipe, never touch your control. It'll soon be filled with 1000 lbs of air and you'll pump 1 hole in it.



When they're installed because if the gun is not level, you'll get a false reading. If the gun is high the sight gauge will show more oil than is really there and if the gun is low the oil level will also be low.

Strap pressure should be 1000 PSI ± 50 PSI as checked by your direct support mechanic with a pressure gauge. If it checks low have your support add nitrogen to bring it up to snuff.



When a mechanic has to be split-tagged when he puts the gauges on and when he takes it off or a bit of the nitrogen will escape.

For general operation be sure your brake handle is in the POWER position.



MANUAL OPERATION

By pumping up and down on the manual operating handle you get pressure for both elevation and steering. You can use this in place of power operation if the electric power goes out or you can use it in place of power to conserve your batteries. (By the way, you have 4 batteries insured of 1 with the power output 500-141.)



MANUAL
OPERATION
HANDLE

MANUAL
STEERING
AND
ELEVATION

MANUAL
OPERATION
AND
STEERING

MANUAL
STEERING
HANDLE

MANUAL

STEERING



"IN CASE OF EMERGENCY
USE MANUAL OPERATION"

This handle is not like the manual elevation and steering hand wheels on a tank because you pump it straight up



and down no matter what you want to do, elevate, steer or both at once.

(Watch out this. The manual handle is long and if you get rough and force it, it'll break.)

Course, you will have to work the



control handle (with gain pressed down) while you're pumping up and down.

For either elevation or steering you line up your brake handle in the left manual position.

OUT OF OPERATION



Even when you think you are out of operation with both the steering control wheels and the manual control wheel OFF, there is still enough hydraulic pressure on the closed control handles to move the gun fast enough to hurt somebody.

Check this out just to see how much zip you will have with both switches OFF.

Your best bet is to stream and slip past the gun a couple of times to use up the energy so there won't be an accident if somebody brakes against the control handle. The gun will stop moving when all of its energy is used

up. If the driver would also work except the gun barrel would project further beyond the side of the vehicle and would be more likely to snag on something.

DRIVER'S HELMET

Wearing a helmet can mean, for the driver, the difference between a small bump on the head and a possibly fatal skull fracture.



TRAVEL LOCK

The safest thing is to keep your main gun in travel lock unless the situation is critical. When you have it out of travel lock you are in control of a weapon that can kill somebody even when it is not locked.



A lock stream-minded pressure on the commander's control handle can whip the gun barrel down and crash the driver in the head. Make it a habit to hold the gun with the barrel high and to the right of the driver. This will

Even with a well-maintained, hanging a gun barrel down on the driver's head happens every so often. If that head is bare, well, what can the chap take up about a cheap soldier!



HEAVY AND TO RIGHT



INTERCEPTS

When you power through the main gun you soon find out that there are two places, one to the left and one to the right, where the gun comes to a jolting halt and won't go ahead until you press the override button.

These steps are to prevent the observer, but they can do their job only if you remember this rule . . . Once you press the override button and go through a step, your gas will not be stopped again until it has gone around in a complete circle. It can be a good mistake to depend on the other step to keep you from hitting the observer because this step works only when hit from the opposite direction.



after you hit the first step. The only way to get a step to work twice without coming all the way around after you have hit it is to back up and come back in again from the same direction. This is true no matter if you hit the left or the right step first.

The way to think of it, the step is a warning to the track commander to tell the observer to duck. The TC should not press the override until he sees the observer is out of the way and the main gun barrel is rising high enough to clear the observer's machine gun.



INTERRUPTER RELEASE OVERRIDE!

When the interrupter stops the signal you can start again (override) by pushing in on the red button near the power control handle.

MAGNETIC BRAKE

In both of the commander's dual control handles there is a palm switch and you have to press in on either one of these switches and hold it while you are tracking.



If any of these things happen the brushes are not doing the job the way they should so buffer for your car cheaply.

1. Brushes make a lot of noise as the front spins around.



2. Frontline to show you are a little easier behind the front electrical control stop.



3. You get the smell of the electrical burning behind the stop.



HYDRAULIC LINES

If you tighten the hydraulic lines too tight you can break them. Tighten them so there is no leaking at the end you wouldn't see that's outside it.



SCIENCE CONNECTION

You can't fix your main gas electrically without the electrical connection to the internal wiring in operating condition. Check it often to see if it is

frayed, worn, broken or cracked and get a new one if it is.



ELECTRICAL CABLES

The cables and wiring harness should not get loose or fall down if you install them right and use the securing clamps.



CEPULA RING

Keep the high pressure water hose away from the cepula ring when you are cleaning because water could leak into your intake and electrical system. Also, you don't take the bearing or gear teeth because oil or grease would get forced against electrical items like the ring and brushes and damage them. Grease would also damage the plastic balls. Cleaning them is a job for repair.



CONTROL BOX

The radio control box has been re-located to the lower left hull plate and mounted right side up so the commander's helmet cord won't get tangled up. When you clean with water you have to be very careful around the control box no matter which way it is facing so you don't get water in the connection. This is even more true when the connection are facing upward.

COMMANDER'S SEAT

When you mount the capsule with the commander's seat in either of the two top positions the motor body will hit the seat backrest. This not only tears up



the padding, it shakes up the hydraulic lines and wire links. You can prevent this by swinging the seat out of the way before you traverse. Just pull the arm retaining pin and push the seat out of the way — then you can traverse the turret 360° without banging the back-



CRASH PAD

The crash commander's crash pad takes such a beating that after a while the glass no longer holds. When this happens, replace it, using green tape to help the glass.



CIRCOLA HATCH COVER

If the capsule hatch vibrates when you mount with it in the locked open position, the hatch is not locked. Have your friendly company mechanic check the adjustment nut and put more grease



into against the bumper before he tightens the nut again. Also, it says on page 268 of TM 9-2500-234-20 (Jan 65).

YOU GETTA HOLDERS THAT... TEND TO GO AWAY

SLEEPING GIANT



A lot of smart guys worked a long time making the compression-ignition engine stop to start—the same engine you’ve got in your 2014 car or truck modified to diesel track.

It’ll start easy, all right, if everything’s in up-to-snuff working order. Then the big holder may be stable, slow roll as a rock and then suddenly take off across country alone — if you forget to put the gearshift in neutral and the parking brake.



Just a little sideways wedge by another truck may be enough to start the engine and turn your truck into a raging monster—knockin’ down fences, buildings and even people.

A gear won’t start if the transmission’s in neutral, but it’s important to have the holder on eye, to see your truck’s pushed on a slope where a bump could send 10 or 15 tons of steel to knockin’ down just about everything in its path—not to mention the damage to the truck.

The reminder, when you’re shuttin’ down, along with stopping the engine and moving off all electrical switches — transmission in neutral and parking brake on.

SPRING-LOADED BOLTS



Great stuff, Steve.

When torque is required for proper tightening of these spring-loaded breaker mounting bolts on your 3-ton GM chassis truck!

By J. G. L.



Great, Sergeant J. G. L.

When the springs in new 'n' breaker, the nut should be turned down on the bolt until the spring is compressed to 1/16 inches. There's no torque measuring involved, so you use an ordinary wrench of the right size.

These springs absorb some of the torque you use on the breaker, especially in your country store. When the springs get old or badly used and lose their bounce—or if they're broken—they should be replaced. Your supplier can get 'em for you from TM 9-1130-211-111F (May 64).

Half-Price

2½ TON

EYE THE

You say you just got one of these new modified M1142, 2½-ton cracked good deal!

While you're spring this beauty, the focus is on the power cutoff shift-link plate in the cab. The hand lever positions may not line with the positions marked on the plate.

To avoid all shifting difficulties, before make an adjustment on the lever control and linkage, according to para 145 of TM 9-1130-209-50 (7 Apr 63), on the lever and plate again.

WAKE UP — TURN IN



Wake, keep-and-keep (and) wife can wind up inside your 3-ton GM or modified truck's breaker-mounted air cleaner when the air cleaner needs to get out.

So just install the needle and valve and turn it until the needle falls to where the handle and side panel come together. That'll put the needle in a safe corner where it'll just pull in air.

This is especially good to keep water from getting into the air cleaner when you're washing your vehicle.

Even with the needle turned in, this you always want to make sure the air-

filter's not spinning during a wash job. Water's bound to splash around the needle where it'll be sucked in—may be even into the engine.

Water in the cylinder will give your engine hydraulic lock, which means the water can't get a connecting rod and other parts in the angle where the engine's created up.



DATA PLATE



FOGGING SMELL



Dear Half-Dozen,

We keep getting plagued for a brake fluid smell in a foggy atmosphere coming from our 1972 2½-ton truck's air cleaners. This happens when we use the service brakes repeatedly.

Our friend's expert told us the air-hydraulic unit was faulty and needed changing. We did this twice but it didn't get rid of the fogging smell.

Do you have any suggestions?

CHAS. E. L. M.

Dear Mr. E. E. M.,

Your smelly problem is an old one, especially on the K742-series 2½-ton trucks. And it's caused by one or more of the following three conditions:

PLUG AND O-RING GAPS ...

No baffles on the master cylinder filler plug. The first batch of G742-series trucks built didn't have this baffle installed. Later issued trucks do. It's needed to restrict the movement of the brake fluid and the air-hydraulic unit's exhaust air from getting into the rear system when the brake pedal is released.

If your filler plug has no baffles, replace with Cap, Brake Master Cylinder, Filter, P39V 2530-703-26M. Or replace the master cylinder. The one that comes under P39V 2530-703-25M has a baffled plug.

SEALS AND PISTON LEAK BRACK ...

Over-filling the master brake cylinder reservoir. The correct fluid level is 1/4 inch below the reservoir opening. Filling it above this level will kill the action of the baffles.

SEALS AND LEAK BRIST BRACK ...

Brake fluid leaking into the air-hydraulic unit and getting into the air system. If it does, then the air-hydraulic unit (P39V 2530-640-1198) needs replacing.



Half-Dozen

ENGINE WORK
MOTOR

ADD A WASHER



These front engine mounts, or pads, in your 2½-ton (6000-lb) series modified truck should last until the engine's changed. Even if the pads get mashed down in the hole's a little more, there's probably no reason to get them up. You may even be able to remove the holes with your fingers.

But if the holes are visible—and the pads aren't compressed in there—all you need is another washer (PN 5110-810-7048) under each front mount hole head, just like the washer that's already there. The two washers will take up most of the slack, but the hole still may be turned easily after the nut's tightened to 80-95 ft-lbs torque. That's OK, too.

Never add washers at the rear end. The one (PN 1010-721-1047) that's already there is enough.

If the pads get so loose up that the cross holes are out of line, they should be replaced with new ones. Read in TR 9-2110-300-30P (Jan 87).



SOLE WASHER
5110-810-7048



WASHER
5110-810-7048

TURN SIGNAL TEST

No matter what model (wheel) vehicle you're on, if its turn signal system was installed by MFD 9-2000-203-20 (28 Aug 86), troubleshooters can use Table IV in Change 8 (May 88) to TM 9-8030 (May 71). Although this covered electrical check-out is for the ½-ton truck, it can be used for other vehicles.

NOVA 1/2-TON TRUCK...

NEW BELLCRANK SYSTEM



There's no need for your M/MBA 1/2-ton truck to suffer from steering troubles due to a worn out bellcrank system.

The redesigned bellcrank wrap that comes out with M/MBA's after Serial No. 87002 and MY10 ambulances after Serial No. 11528 can replace the whole system on older models. And it's better because it's got a dust cover for the bearing.

Here's the parts you need:

Bellcrank Assembly, P/N 1220-700-177

Roll Pin, P/N 1220-400-761

Bearing, Shim, P/N 1220-400-148

Kit, 88 P/N 1220-700-078

Kit, 88 P/N 1220-700-077

Cap, Bellcrank Seal, P/N 1220-701-048

Cap, Bellcrank Seal, P/N 1220-701-047

Washer, 88, P/N 1220-400-882

Washer, P/N 1220-400-149

Kit, Bellcrank, P/N 1220-701-177

M151 RADIATOR HOSE



MR. CLEAN



Dear Mr. Clean,

Our M500 and M100 1-ton water wash need their water tank interior cleaned and refinished. Do you think this was done by MWD? 8-2228-274-2279, case. For info the MWD has been contacted.

Yours truly, W. L. R.
Tpt. W. L. R.

Dear Sergeant W. L. R.,

The MWD was contacted by DA Ch 118-00 (June 81). But the details on cleaning and refitting the water tank interior are now covered in para 279 of TM 5-2228-274-14 (Jan 84), and in Ch 2 (Oct 85).

The only situation a new tank needs before it's put in use is a rinsing with a solution of 100 ppm (parts per million) calcium hypochlorite and water.

Half-Hearted

19-108 1188

CLEAN THAT AIR LINE FILTER



Just like a giant fan, weighing two or three tons, or more, trying to run you through a building or off a curve.

That's your G-Force 14-ton trailer (body) when the brakes don't work — maybe all because of a little gadget no bigger than your own fan, the air line filter.

Like TM 5-2228-274-14 (Jan 84) says, "no brakes or weak brakes" can come from a clogged air line filter element. Para 73 tells how to drain condensate from the filter and how to clean or replace the element. This should be done regularly before operation.

And the TM gives you FSM 21-28-026-0001 for an air filter parts kit, including element, because it's the new TM for operation, maintenance, repair parts and special tools. There's a Change 1 (Feb 84) and Change 2 (Oct 85) to the TM.

In ordering your supplies there are some things you've got to know before you start.

UNIT OF ISSUE

Buy
like



UNIT PACK — There's a number of the same item packed up in a handy package or container. You might see 1, 2, 3, 4, 10 or 20 in a unit pack, or it might be 10 cans, 10 gallons, 1 quart, 20 feet or 25 pounds.

Now, the big question . . . how do these affect your ordering on *DD Form 2550* and *2550-2*?



If you need 10 bolts, order 10 bolts; if 4 bolts decrease, order 4. If your gallons are listed by case, order the number of cases you need, not the number of gallons.

You're never concerned with using the quantity of unit pack on your request forms. You leave that entirely up to support types. Check out the *DD* codes that may give you special instructions on unit packs of some items, or, better yet, look!

You only have to remember that if you need as many or more than are in a unit pack, you'll get one or more unit packs. (Some special things you need come in unit packs of 8 each. You order 10 on your *DD Form 2550*, and your support delivers 2 unit packs of 8 each.



WRITE THE NUMBER OF UNITS YOU NEED

YOU DO NOT WRITE BY THE QUANTITY

In some cases your support may give you a unit pack when they feel it's in the best interests of supply economy. This usually happens with little things like bolts, nuts, washers and screw pins. When this happens and you get more than you ordered, note the "extra" items and note on your records that the items were issued as a unit pack. That'll show some inspectors why you have more than your demands call for.

But in all cases, tell your support exactly how many you need . . . and forget unit pack.

SHORT/SHORT FORM



Needn't fret if you've caught short of DD Form 1190, Request for Issue and Turn-In. For the time being you can use the longer DD Form 1194-1 wherever AR 734-21 (21 Dec 85) calls for the colorful, 3-part short form.

Just add carbon as needed and the 1194-1 will take care of your hand-recipe lists.

Stacks of the short form are being used up as purpose, and next time around the short form will be called DD Form 1122.



Dear Staff Sergeant,

Please write a big flap for our supply section.

Our HQ has handwritten accounts which run 4, 16, 28, 40, even 100 pages (AA Form 2002). I say that it's a lot of unnecessary work, and a tremendous waste of time and Old Forms to have the H/N holder sign the back of each separate form.

Others here tell me each separate page must be signed, whether the H/N number of one page or 100.

What's right?

Sgt. C. S. C.

Dear Sergeant C. S. C.,

You are

An flap on the page can be separate and correctly identified, only the last page of a fat H/N needs the holder's signature.

TM 38-750's PARA 4-26h STORY



Hold one if para 4-26h of TM 38-750 is putting question marks in your eyes.

The paragraph on communications equipment, requires a DA Form 2409 on major components only when the configuration (such as AN/ARC-11) has a line item number listing in para 4-26, plus the notation "para 4-26h" after the number.

For example:

Radio set AN/ARC-11 is listed in para 4-26 under line item number 00110. But, doesn't say "para 4-26h" notation. Therefore, Form 2409 is not required on each major component.

Radio set AN/ARC-11, line item number 41010, does have "para 4-26h" after it. Therefore, you keep 2409's on the major components.

If your TM's don't pile down major components, you need a Form 2409 when:

1. The component is totally non-fixed, non-replaceable (NFR), and requires organizational or support maintenance services (aside from upgrade service).

2. Such items include receivers, transmitters, RT's, power supplies/packs, indicators, modulators, relays and ADF antennas, interpositioners and wave controls.

You do not need 2409's on replaceable mounts, handles, brackets, antennas and cable assemblies. If info in item 1 above applies to similar small components, they get a 2409.

Naturally, your own CG has the option to require a 2409 even though it might not be required by TM 38-750.



FILTER FIX FOR PHIBS

You won't have any luck out of your LARC-V or LARC-VI if you let it sit after it's been parked a while, and a foam filter makes it even less.

Although LARC's like to run on dry, there's a part inside that doesn't like to sit still and... the anti-corrosion filter. It comes apart and blocks the cooling system if it's left too long, so if your LARC's been around for as much as 3 months, replace the filter every failure you make for age—the you won't go far. PM 2930,793-8011 gives you the filter details.



FOR DARK LIGHTERS



Label points on the LARC-VI and LARC-VI drive shafts can lead to fuel in the tank—and the shafts have to be covered in gas at 'em all.

It makes the job easier if you make arrows on the shafts so they point to fuel tanks. Then, you can use a flashlight you can see clear of the running machinery, shoot the label points, and look up far just by watching the arrows.

NOT BY THE NUMBERS

You may see lots more MRAJ gas particulates than you do with serial numbers painted on 'em, and you'll find others without serial numbers. No problem.

Most of the units get serial numbers when they were manufactured. And those with numbers so-called acquired 'em for some legal reason when they hit the field.

But, for TM 31-750 reports on the units you don't need a serial number. Just use the PTA (see appropriate note) in the form's serial number block.

Cornie Radt's BRIEFS

1982 and on
pages 14, 28 and
30 of this magazine.

Serco's Double?

You don't have to rub your eyes if you run across an M111 (or M120A1) 1/2-ton truck that has identical engine, tire and serial numbers. Give a few of 'em some oil with twin numbers.

Hot Your Job

You say the business lettering in your John-Deere work has faded so much you can just about read the different dies when the lights are turned down? Here's what to do. Ask your support people to come on the scene with whatever it takes to clean and renew the lettering. Their DA 9-1400-200-20 (20 for 82) gives them all the scoop on the work.

M113 Cool Communique

You all would get because the ignition coil on your M113 personal service is busted? Well, mail yourself and order Kit, call, FIM 3950-089-3407. This kit includes installation instructions (wiring diagram) and is the best replacement for your coil. See the latest DA 9-2380-204-20.

Lochie Pin? You're In

Hang up for a set of quarter-inch pins for your front loader. A quarter-inch beam? Scribble on page 145, page 86, of your DA 9-1480-200-20 (May 82) or DA 3990-000-3854. The numbers in Red Cat 22000-0-0 of Jul 82, page 3-74.

Carburetor Controls

Funny thing about choke and throttle cables—they can freeze on you during the summer and leave you splutter' and splutter' in the winter. An eyeball the fine print of your 20's for guidance on spurring some OC now and then to the linkage to keep it sliding free and easy.

M117 A/C Wheel Studs

If your M117A1 or M117A2 1/2-ton distributor needs wheel studs, you'll find 'em on page 47 of DA 9-2390-201-249 (Jan 82). Get 2700, Shouldered, FIM 2307-385-4157, for the right wheels and 80-7, Ribbed neck, FIM 2307-712-4159, for the left wheels.

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



WHERE IT'S HOT AND DUSTY
AIR FILTERS WORK OVERTIME!
THIS MEANS THEY NEED EXTRA ATTENTION!

**KEEP FILTERS CLEAN
OR CHANGE 'EM!**

DON'T SUFFOCATE YOUR EQUIPMENT