Issue 46

PS

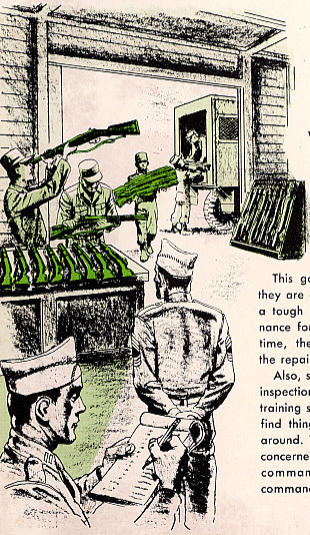
1956 Series

THE PREVENTIVE MAINTENANCE MONTHLY

WEAPONS INSPECTIONS

Dear Editor,

We here on the weapons inspection team of the 702nd Ordnance at Ft Lewis are proud of our method of serving our customers (the using units) while at the same time helping them keep on-the-ball with their maintenance.



Our inspection team goes out in a shop truck, with armorers and spare parts right with us. We find that there are a whole lot of minor repair and parts replacement that we can accomplish right along with our inspection.

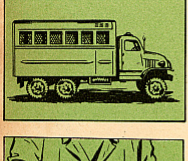
We take care of things that leave a weapon right on the borderline between usable and due for Ordnance repair.

In making our reports, while we're strict as hell about any neglect or abuse of the weapons, we don't pile up a huge gig sheet of minor deficiencies, because we don't gig for what we fix up at the unit.

This goes over big with the units, because they are on a hard training program and have a tough time getting a weapon back to Ordnance for all the little things. But at the same time, they're taking care of the cleaning and the repair work they can do.

Also, since we're dealing with new men, our inspection repair visits serve as good practical training sessions for the unit arms men, and we find things in better shape next time we get around. This program has the approval of all concerned—our Ordnance officers and the unit commanders all the way up to the Division commander.

Sgt F.P.L.
Ft Lewis, Washington



PS MAGAZINE

Issue No. 46 — 1956 Series

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IN THIS ISSUE

PS Magazine wants your ideas and contributions, and is glad to answer your questions. Just write to: **Sgt Half-Mast, PS Magazine, Raritan Arsenal, Metuchen, New Jersey.** Names and addresses are kept in confidence.

The printing of this publication has been approved by the Director of the Bureau of the Budget (4 Aug. 1953). DISTRIBUTION: Active Army: Gen Staff, DA (1) except DCSPER (2); SS, DA (1); Tec Svc, DA (5) except COFENGR (75), COFORD (275); Admin & Tec Svc Bd (5); Hq CONARC (10); OS Maj Comd (5); OS Base Comd (3); MDW (5); Armies (50); Corps (3); Div (2) except Armd Div (100), Tng Div (50); Brig (3); Regt/Gp (3); Bn (5); CO (18) except Cml Co (8), Med Co (6), QM Co (8); Ft & Cp (5); Gen & Br Svc Sch (5) except Engr Sch (100), Ord Sch (25); USMA (25); Joint Sch (5); Specialist Sch (5); PMST (3) except PMST Ord ROTC Units (25); Gen Depots (5); Sup Sec, Gen Depots (5); Depots (5); AR (5); RTC (100); Trans Terminal Comd (3); Army Terminal (3); OS Sup Agencies (2); PG (5); Arsenals (25); DB (25); Cmdt Main Sta (3); Div Engr (2); Dist Engr (28). NG: State AG Special List. USAR: Mil Dist Special List. For explanation of abbreviations used see SR 320-50-1.

Lots of you infantrymen'll be meeting the M59 full-tracked armored infantry vehicle shortly. This baby may not be exactly your dream car, but it takes the foot out of paddlefoot—and comes a lake or a river, it'll paddle for you, too.

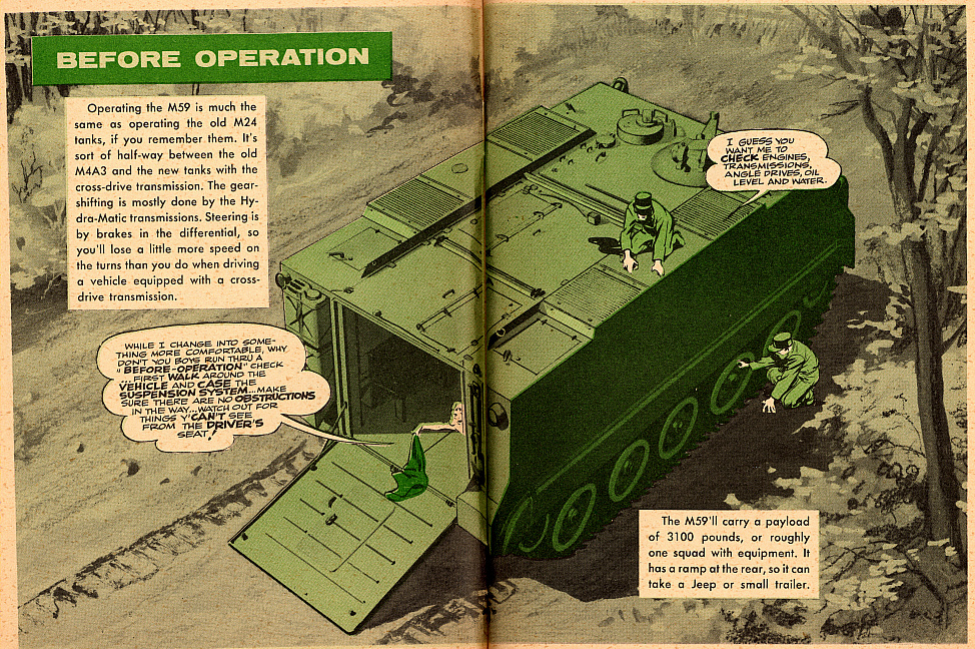
What is it? It's a full-tracked armored vehicle powered by two GMC 302 engines with Hydra-Matic transmissions, almost the same power train that's used in the GMC 2½-ton trucks. Only in the M59, the two engines drive one controlled differential, which has steering brakes and drives the tracks.

It's not designed for ship-to-shore work, but it can swim across rivers and lakes of any depth.

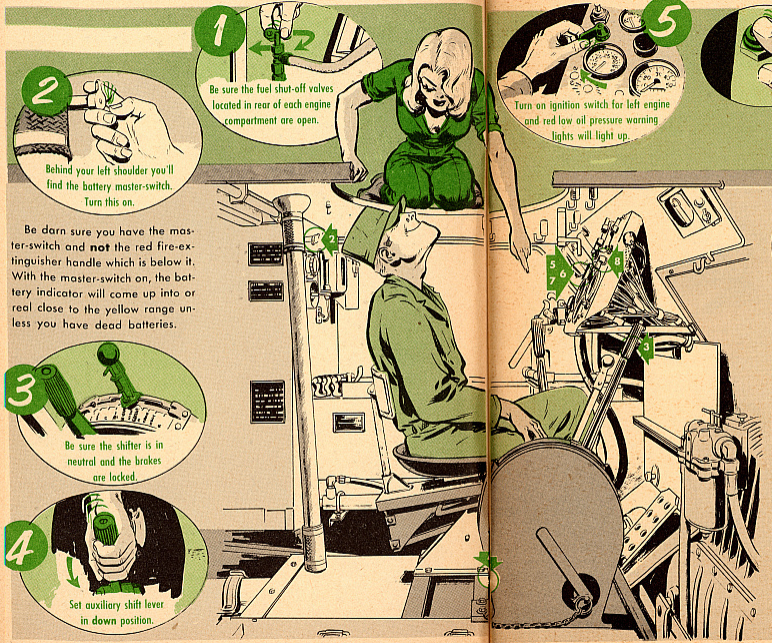
The hull is armored against small arms and machine gun fire, but won't turn direct artillery hits. It has the new 100-ampere AC charging system which provides enough electricity to operate radios and other communications equipment.

BEFORE OPERATION

Operating the M59 is much the same as operating the old M24 tanks, if you remember them. It's sort of half-way between the old M4A3 and the new tanks with the cross-drive transmission. The gear-shifting is mostly done by the Hydra-Matic transmissions. Steering is by brakes in the differential, so you'll lose a little more speed on the turns than you do when driving a vehicle equipped with a cross-drive transmission.



The M59'll carry a payload of 3100 pounds, or roughly one squad with equipment. It has a ramp at the rear, so it can take a Jeep or small trailer.


1
Be sure the fuel shut-off valves located in rear of each engine compartment are open.
2
Behind your left shoulder you'll find the battery master-switch. Turn this on.
Be darn sure you have the master-switch and **not** the red fire-extinguisher handle which is below it. With the master-switch on, the battery indicator will come up into or real close to the yellow range unless you have dead batteries.
3
Be sure the shifter is in neutral and the brakes are locked.
4
Set auxiliary shift lever in down position.
5
Turn on ignition switch for left engine and red low oil pressure warning lights will light up.
6
Now hit the starter button for the left engine. It turns the alternator and provides extra current to help start the right engine.
You can tell that your alternator is working OK by the high whine it gives off. The battery indicator will slowly move up into the green.
7
In cold weather, you can use the choke which is located to the left of the instrument panel.
When your left engine is running smoothly, check warning lights on left engine. They should go out—if not, check why. If everythings OK—
8
Turn on the ignition and start your right engine.
This is a little more difficult, since you can't hear it fire. But by watching your right-hand tachometer you can tell when it catches and get your thumb off the starter button. Also check warning lights—they should go out.

YOU'RE READY TO RAISE YOUR RAMP, IF IT'S DOWN.

9

Reach down beside your shift-lever-box and get hold of the auxiliary shift lever and pull it up.

This puts your transmissions in gear, but not your differential. You now run your engines up to about 2500-RPM, watching the tachometers. Don't get excited if the tachometer hands jump around a bit on the way up. It only means the transmissions are up-shifting.

10

You reach up behind your right shoulder and swing the ramp-lock down and back.

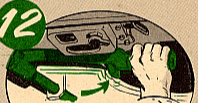
It releases with a thumb-latch. Now you look back to be sure the ramp is clear, and then—

11

Push in on the ramp-actuating-lever which is located on the hydraulic power pack at your left side.

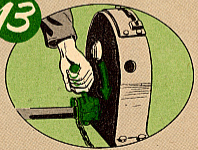
Be sure the ramp-locking-lever is all the way back or you may bend the locking hooks. When the ramp is fully raised—

12



Bring the ramp-locking-lever forward until it catches its thumb-latch.

13



Put transmissions in neutral by pushing down on the auxiliary shift lever.

DRIVING

Now you're ready to move out. Except in combat conditions you'll probably want to run with the hatch open and the driver's seat raised. But be sure you're in the seat and that the hatch is open first. You see, there's a spring which helps raise the seat. If you aren't in it, it'll fly up too fast.

The seat is raised by releasing the latch-lever at your right side.

Pull back on the steering brake levers with your thumbs clear of the lock-buttons and release. They'll go forward and release the brakes.

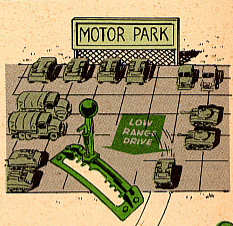
To start, shift into the range you need.

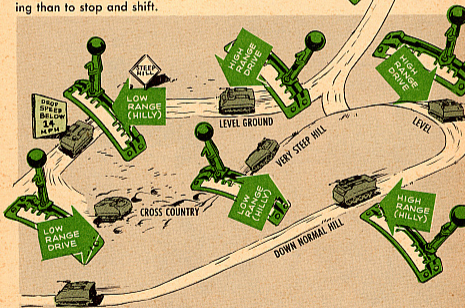
For braking, pull back both levers with pumping, jerking movements.

If you're in a crowded tank park, you'd better use low-range DRIVE to get clear, since it gives you better steering control at low speeds. Follow whatever rules your local commanders have set up about ground guides, o'course.

SHIFTING

A word about shifting: You can shift into any range **except** reverse while the vehicle is moving. When shifting, a **steady push** against the lever'll give you the best results. There's a built-in resistance to help keep you from clashing gears by jerking the handle, and there's a synchro-mesh device in the differential which'll help you shift if you'll just keep a steady strain on the lever. When the gears come to the same speed, they'll drop in gear. It's easier to shift while the vehicle is moving than to stop and shift.





LEVEL GROUND (BACK TO HIGH RANGE DRIVE)

OK so you start out in low-range, and get out onto the road or tank trail. You can go from high-range DRIVE to high-range HILLY at any speed, and you can shift down into low-range any time your vehicle speed is below 14-MPH.

The M59 has ample power to climb a 60 percent grade. Moreover, this baby will cross streams and lakes regardless of depth, and without any fording ducts.

Besides, who needs to go more than 32 MPH?

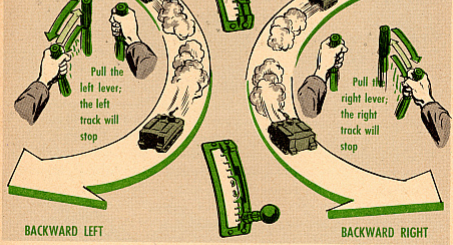
STEERING

Now, steering this vehicle is a bit different from driving the new tanks with the cross-drive transmissions. In the first place, your steering brakes are going to slow you down plenty on turns. If you keep any drag on them they'll wear out too soon and cause overheating.

On the other hand, since this baby is no hot-rod (top speed 32-MPH), you can handle it very nicely at any speed.

You'll find that it steers much better at higher speeds. Do your steering by quick, hard pulls on the levers, not by holding 'em back. In fact, you want to make your turn with two or three quick pulls rather than one long one. Let your steering lever go all the way forward between each quick jerk. This'll get you turned with a minimum loss of speed. Keep your engine up around 2200-2700-RPM.

You'll find that at slow speeds your vehicle'll steer better if it's in low range. Keep your RPM's up—shift down early when you see a hill or a sharp corner coming up.

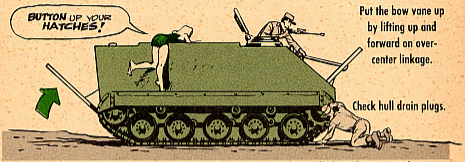


Now, there's one more important difference between this vehicle and the tanks with the cross-drive transmission. When you're backing this one, you don't have to cross your steering.

Just like any tracked vehicle, of course, you can't see back very well, and you should have a ground guide help you back it.

WATER OPERATION

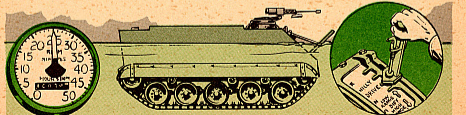
How about water? Well, the M59 is propelled on the water by its tracks. You don't have any propellor and rudder assembly. Which simplifies going into the water. But there are some things you must do to be safe.

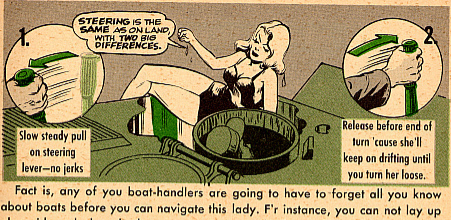


Now, close your hatches, both the cargo hatches and the driver and commander's hatches. In other words, button up. You do this because the M59 floats sorta low in the water, and you don't want to slosh her full when you go in. Naturally, it's far better to enter the water where you have a nice easy sloping beach and bottom, but if you can't pick your spot, go ahead anyhow, but go ahead easy.

If you dive in too fast, you'll bust the bow vanes. The periscope may go under water; don't worry, she'll come up. Under normal, cautious operation, you shouldn't get water down the engine air-louvers. You want to avoid that, tho she should come out OK. After all, your ignitions are waterproof, and you have a 140-gallon-per minutes bilge pump to bail you out. Just keep your RPM's up.

Once you have her into the water and floating level, operate in low-range, DRIVE (about 2500-RPM).

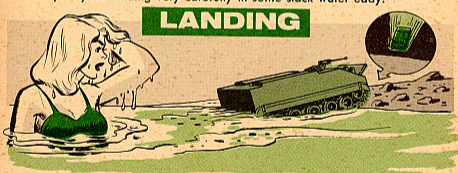




Fact is, any of you boat-handlers are going to have to forget all you know about boats before you can navigate this lady. F'r instance, you can not lay up alongside a dock and rely on your reverse to check your forward way.

It is possible to back the M59 while in the water, just by reversing it (use high range reverse), but it takes about three to four lengths of the vehicle before she stops and begins to go astern.

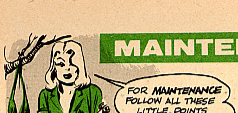
Within her limits, she does very nicely, but her practical limits are smooth water (not over 1-ft waves) and currents at the landing of less than her 4.3-MPH water speed. In fact, if you have to cross a river with even this much current, you want to pick your landing very carefully in some slack water eddy.



When coming out of the water, be careful to hit your bank square and easy, particularly easy if you can't tell what sort of footing you have under you. You can climb any reasonable bank, but remember, even if it isn't muddy, you'll make it muddy with the water spilling out from under your track shrouds. Hit the bank as square as you can, or the track that hits first will rear up and tilt you. Could turn you over if the bank was steep enough.

What if she gets sunk? You're in serious trouble, but it figures that if you don't flip your tip, you ought to get out OK. You won't be able to open any hatches until the hull fills with water, but you'll have air to breathe until it does, and the hatches can be opened when the pressure equalizes.

MAINTENANCE

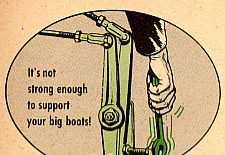


Oils—When you're servicing the engines, and particularly the transmissions, be extra careful to be sure that your oil, the measure and the container are all clean. This can be difficult in the sand-storm areas, and makes for extra work. But not as much extra work as replacing an engine or transmission.

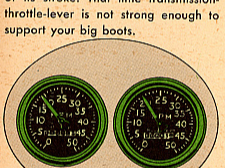
On your differential, the Cuno oil filter is sitting right up in front looking at you, twist its tail once a day, and again whenever you think of it. You won't wear it out. Drain the shell weekly, and dismount and clean the element monthly. Naturally if you find either metal chips or pieces of brake band in the filter, you'll tell Ordnance—but fast.

Now, some guys sorta forget those two grease fittings behind the engines on the fan-drive-shafts. And, of course, only an idiot would neglect his bilge pump grease fittings. You may never need that bilge pump, but like a parachute, if you need it, you need it bad and you need it now.

There's a fitting on the front of the ramp operating hydraulic power pack which needs grease, too. It's hard to see, and often is overlooked. Maintenance on this baby'll take time. You can't find all the 90-odd grease fittings inside her at once.

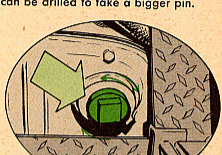


Linkage—Just like in the M135 trucks, it's important to keep your linkages correctly adjusted. Follow the TM, but be sure the throttle stop is high enough that it takes effect just a fine hair before the transmission TV linkage reaches the end of its stroke. That little transmission-throttle-lever is not strong enough to support your big boots.

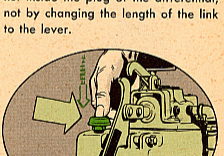


Synchronization—The engines should be synchronized so that they are within 100 revs of each other at 2000-RPM with the engines hot and the transmissions in neutral. It's not serious if they're as much as 500-RPM off. Once a week should do it, and have your vehicle on the level when you check it. Those engines are flexibly mounted, and if you're on a slant, the sag of the engine mounts can be enough to affect throttle and throw 'em off a little.

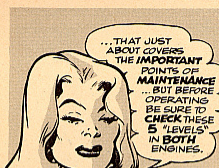
Some of the torsion bar anchor pins which hold the inside fitting to the floor plate may vibrate around enough to shear their cotter pins. Later vehicles have heavier cotter pins. Older models can be drilled to take a bigger pin.



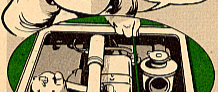
On brake adjustment, you should be feeling brake when the lever reaches the third notch of the quadrant, but get your adjustment on the brake-adjusting-nut inside the plug of the differential, not by changing the length of the link to the lever.



When you're filling your ramp operating hydraulic-pump, have the ramp up, that way you won't find hydraulic oil running out the breather next time you raise it.



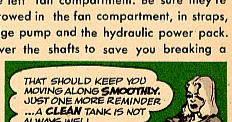
Radiators—The only check you have on this cooling system is to fill your radiators until you can see the coolant in the filler neck.



The only things you stow in the engine compartment are the stowage straps, which go in the wire mesh basket in the left fan compartment. Be sure they're strapped down. Spare fan belts are stowed in the fan compartment, in straps, except for the ones that operate the bilge pump and the hydraulic power pack.

These belts are already slipped over the shafts to save you breaking a U-joint; they're stowed on the bulkheads in clips—a neat trick.

Another thing about fan belts—they come in pairs, and you've got to replace them in pairs, otherwise the tight one'll carry the load while the loose one rides idle.



HOOKUP-MIXUP

Watch yourself when you hook up the batteries in your M59 APC. This vehicle has a negative ground electrical system, just like all your new vehicles. **But** it has sorta screwy looking battery cables. The **positive** cable (the one put on at the factory) is a short flat braided strap. Looks just like the ground lead on your car, except that it has a thin plastic cover on it. This cable runs from the battery to a junction block on the bulkhead, and is less than a foot long.

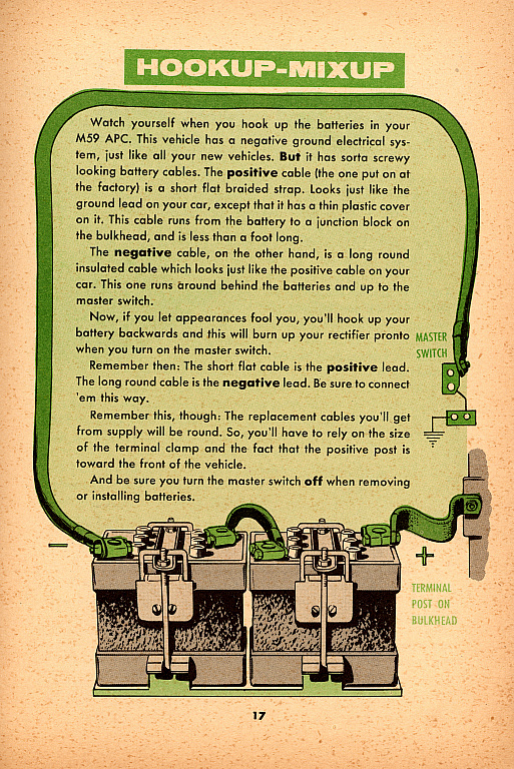
The **negative** cable, on the other hand, is a long round insulated cable which looks just like the positive cable on your car. This one runs around behind the batteries and up to the master switch.

Now, if you let appearances fool you, you'll hook up your battery backwards and this will burn up your rectifier pronto when you turn on the master switch.

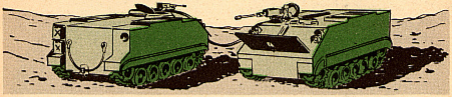
Remember then: The short flat cable is the **positive** lead. The long round cable is the **negative** lead. Be sure to connect 'em this way.

Remember this, though: The replacement cables you'll get from supply will be round. So, you'll have to rely on the size of the terminal clamp and the fact that the positive post is toward the front of the vehicle.

And be sure you turn the master switch **off** when removing or installing batteries.

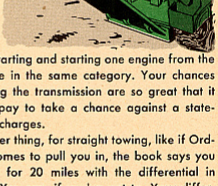


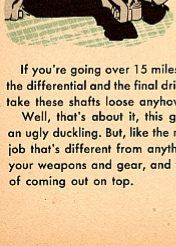
SOME TABOOS



Here are a few points to remember: First, let's look at the question of tow starting, single engine operation and starting one engine from the other. Admittedly, all of these things can be done. But don't do 'em. You can tow 'em, but it's not safe. You'll bust up the transmissions. Get a live vehicle, M59 or other, alongside to slave start yours if your batteries are down. Or you can go for new batteries.

Running on one engine would be OK if somebody was shooting at you, and the TM tells you how. But you can bet on needing at least one new transmission if you do, and those things are expensive. So except in combat, forget it. And for gossake use both engines to raise your ramp.



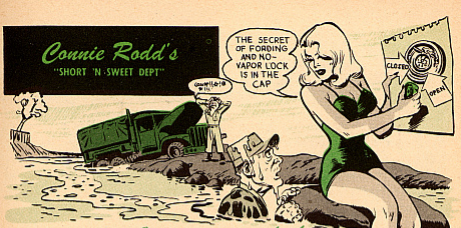


Tow starting and starting one engine from the other are in the same category. Your chances of hurting the transmission are so great that it doesn't pay to take a chance against a statement of charges.

Another thing, for straight towing, like if Ordnance comes to pull you in, the book says you can tow for 20 miles with the differential in neutral. You can, if you've got to. Your differential may not get all the lubrication it should, and since it only takes a little time to unhook the universal joints, it'll pay you to do it.

If you're going over 15 miles, disconnect the differential output shafts between the differential and the final drives. If the trouble is a broken or frozen differential, take these shafts loose anyhow, regardless of distance.

Well, that's about it, this gimmick is like most any military vehicle, sort of an ugly duckling. But, like the rest of 'em, it's designed to take care of a difficult job that's different from anything else. And it'll do it. It'll haul you forward with your weapons and gear, and you'll arrive at the trouble with a lot better chance of coming out on top.



Capping vapor-lock

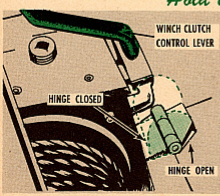
You all know that the internal-vent valve of your new fuel-tank filler-cap (Ord Stock No. G744-8333722) has two positions—opened and closed. When you're going fording, that valve is put in the closed position. You turn her to open when you're operating under normal conditions.

But there's something else about your new cap which very few guys know. If you're operating in a hot area—like in the southern half of the US or in the desert—that interval-vent valve should be kept **closed**. This will help stop vapor-lock from sticking her hot fingers up your fuel system.

One word of caution, tho. That pressure inside your gas tank should be relieved. So, when you're stopped, open up that filler cap—but be careful or you may get doused with gasoline. Back that cap off one notch to get the air out of your tank. Then, you can tighten it up again.

Be sure to read TB 9-837-8.

Hold it, man



There's a new MWO out which tells all you deuce-and-a-half truck drivers who have winches on your vehicles to get a winch-clutch control-lever lock put on to hold that lever in the disengaged position. This'll prevent the winch from accidentally engaging.

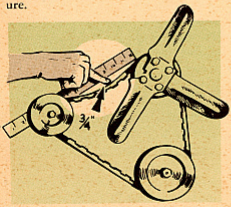
The MWO goes under the number of MWO Ord G1-W71 (31 Oct 55). When you get a little time, go ahead and do it.

Seems that there're some rumors floating around that a few guys aren't replacing the rear springs on their M62 and M246 5-ton wreckers the right way. This can make for one hard situation.

From what's been said, a lot of these springs are going back on the wreckers with their curved ends pointing up. The right way is with the curve ends pointing **down.**

Tighten your belt

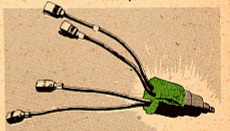
Most of you have come upon the startling observation that the fan belt deflections for the M38A1 and the M38 don't jive, altho both Jeeps use the same belts, water pumps, generators and pulleys. TM 9-8014 on the A1 says to adjust that belt to ¼-in deflection, while TM 9-8012 says to use a 1-in figure.



Cease your wonder. A change is out which tells you to tighten that M38 belt to ¾ of an inch, like the A1. From here on out, your publications for the M38 will show this.

Hot switches

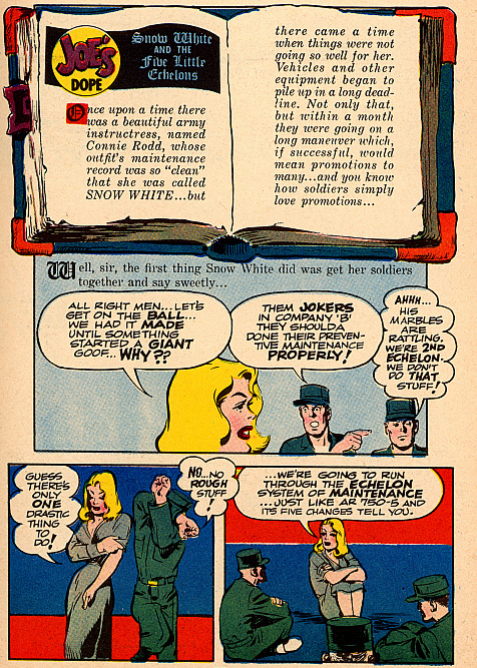
I hear tell that some ignition switches, Stock No. G742-7760409, have been going to pot. What's worse, they could set fire to the vehicle they're installed in.



Seems like the sealer, called "potting material," around the battery terminal lead has been cracking. This lets moisture into the switch. Gives oxidation, poor contact, arcing or short circuiting. Finally she burns up, and maybe the truck with it.

So keep your eyes open for cracks in the potting material, scorched insulation, or signs that water is getting into the switch.

Replace any bad switches immediately, like it tells you in TB Ord 634 (23 Mar 56) and get in a UER.


JOE'S DOPE
Snow White AND THE Five Little Echelons
Once upon a time there was a beautiful army instructress, named Connie Rodd, whose outfit's maintenance record was so "clean" that she was called SNOW WHITE...but there came a time when things were not going so well for her. Vehicles and other equipment began to pile up in a long deadline. Not only that, but within a month they were going on a long maneuver which, if successful, would mean promotions to many...and you know how soldiers simply love promotions...
Well, sir, the first thing Snow White did was get her soldiers together and say sweetly...
ALL RIGHT MEN...LET'S GET ON THE BALL... WE HAD IT MADE UNTIL SOMETHING STARTED A GIANT GOOF... WHY??
THEM JOKERS IN COMPANY 'B' THEY SHOULDA DONE THEIR PREVENTIVE MAINTENANCE PROPERLY!
AHHH... HIS MARBLES ARE RATTLING. WE'RE 2ND ECHELON. WE DON'T DO THAT STUFF!
GUESS THERE'S ONLY ONE DRASTIC THING TO DO!
NO...NO ROUGH STUFF!
...WE'RE GOING TO RUN THROUGH THE ECHELON SYSTEM OF MAINTENANCE ...JUST LIKE AR 750-5 AND ITS FIVE CHANGES TELL YOU.

ORGANIZATIONAL MAINTENANCE

DONE BY: USER...DRIVER, GUNNER, CREW

HURRY UP, WE NEED IT!

IF YOU MAINTAINED THIS BETTER ON YOUR LEVEL... WE COULD DELIVER FASTER!

FIRST ECHELON

THE PRIME JOB OF THE MEN IN THIS ECHELON IS TO DRIVE, SHOOT OR BUILD, DEPENDING ON YOUR BRANCH OF SERVICE ... THE OTHER ECHELONS ARE SET UP TO RELIEVE YOU, THE USER, FROM EVERYTHING BUT THE MOST ELEMENTARY MAINTENANCE!! THE TOOLS YOU ARE ISSUED ARE FOR THE ESSENTIAL SERVICING OF EQUIPMENT WHILE IN USE!

RESPONSIBILITIES

PREVENTIVE MAINTENANCE

BEFORE, DURING, AFTER OPERATIONS ON VEHICLES, FOR EXAMPLE 'A' (DAILY) 'B' (WEEKLY OR BI WEEKLY).

ON WEAPONS, DO WEEKLY, MONTHLY AND DAILY SERVICES, INCLUDING VISUAL INSPECTION, PICKING AND USING THE PROPER LUBES.

TESTING, MINOR ADJUSTING DEPENDS ON KNOW-HOW AN AUTHORIZED TOOLS.

REPORTING, SPOTTING SMALL SIGNS OF TROUBLE...REPORTING THEM FAST TO SECOND ECHELON

WHEN YOUR SHARE OF THE DAILY INSPECTION AND CARE IS DONE, IT'S IMPORTANT THAT YOU REPORT IT FAST — ANY DEFECTS NOTED — WHICH YOU CAN'T TAKE CARE OF, ON WHICH ARENT YOUR JOB TO YOUR MATES ON THE ORGANIZATIONAL MAINTENANCE TEAM — YOUR OWN UNIT'S MECHANICS. THEY'VE GOT THE TOOLS AND EQUIPMENT, THE REPAIR PARTS, TIME AND KNOW-HOW TO HELP YOU KEEP THE EQUIPMENT ROLLING. IF THEY CAN'T HELP YOU, THERE ARE OTHER PEOPLE STANDING BACK OF 'EM WHO CAN. SIMPLE AS THAT!

USER

DONE BY: REPAIRMEN... MECHANICS, ARTIFICERS, ARMORERS

SECOND ECHELON

(ORGANIZATIONAL REPAIRMEN)

THE PRIME JOB IN THIS ECHELON IS TO KEEP THE FIGHTERS, USERS, OPERATORS AND THEIR EQUIPMENT ROLLING ... TO EXPEDITE REPAIR JOBS GOING TO HIGHER ECHELONS ... HANDLE SMALL REPLACEMENT PARTS!

RESPONSIBILITIES

PREVENTIVE MAINTENANCE

PICK UP WHERE FIRST ECHELON OPERATOR LEAVES OFF...AUTHORIZED TO REPLACE, REPAIR, AND MAKE MINOR ADJUSTMENTS.

SERVICING, GIVE MORE THOROUGH INSPECTION AND PERFORM SPECIALIZED MAINTENANCE REQUIRED BY DA FORMS 461, 462, 463, AND 464...STAND BY TO LEND A HAND WHEN FIRST ECHELON PULLS THEIR WEEKLY AND BI-WEEKLY CHORES ... THE MECHANICS ALSO PULL 'C' AND 'D' SERVICES.

ON WEAPONS, THE MECHANICS GET IN ON THE WEEKLY, MONTHLY, QUARTERLY AND SEMI-ANNUAL SERVICES... SOMETIMES IN AN EMERGENCY

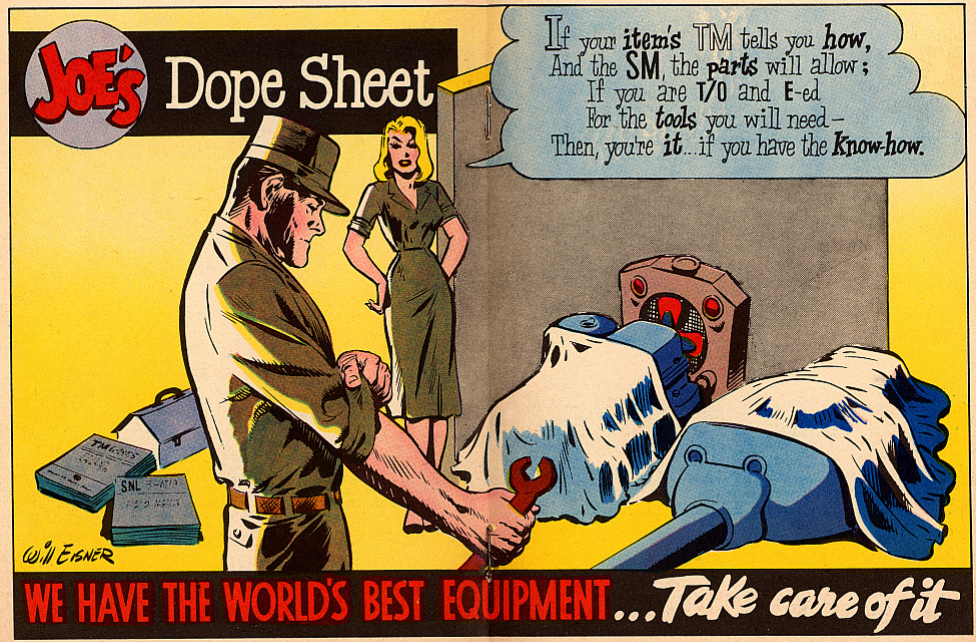
GRAAAH!! WE CAN'T SPARE IT AT A TIME LIKE THIS!

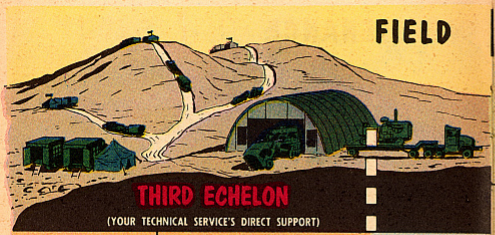
MY GANG KNOWS HOW TO DO IT... BUT IT'S REALLY 3RD ECHELON'S JOB!

OKAY, YOU'VE GOT THE KNOW-HOW ... WE'LL LEND YOU THE TOOLS AND GIVE YOU THE PARTS.

FOR A "WALL CHART EFFECT" OF THIS VISUAL, ATTACH TO THE SECOND HALF BEGINNING WITH PAGE 26

ALL ECHELONS ARE AUTHORIZED TO DISPLAY THE PIN-UP...NEXT PAGE


JOE'S Dope Sheet
If your item's TM tells you how,
And the SM, the parts will allow;
If you are T/O and E-ed
For the tools you will need—
Then, you're it... if you have the Know-how.
WILL EISNER
WE HAVE THE WORLD'S BEST EQUIPMENT... Take care of it



THIRD ECHELON

(YOUR TECHNICAL SERVICE'S DIRECT SUPPORT)

MAINTENANCE

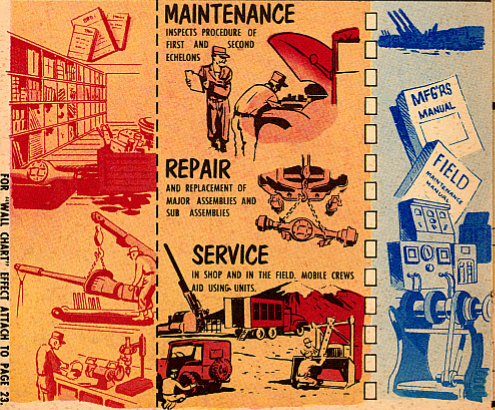
INSPECTS PROCEDURE OF FIRST AND SECOND ECHELONS

REPAIR

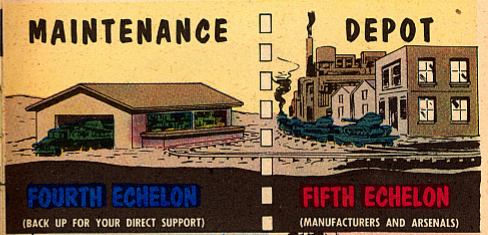
AND REPLACEMENT OF MAJOR ASSEMBLIES AND SUB ASSEMBLIES

SERVICE

IN SHOP AND IN THE FIELD. MOBILE CREWS AID USING UNITS



FOR "WALL CHART" EFFECT ATTACH TO PAGE 23.

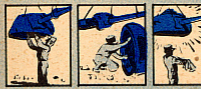


FOURTH ECHELON

(BACK UP FOR YOUR DIRECT SUPPORT)

REPAIR

...MAJOR ITEMS



REPLACE ASSEMBLIES AND SUB ASSEMBLIES

SERVICE

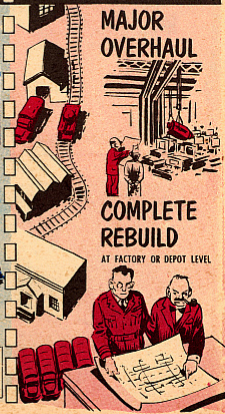
OVERFLOW STATION FOR THIRD ECHELON

PLANNING

AND DIRECTING OVERALL TECHNICAL SUPPORT IN A MAJOR AREA

FIFTH ECHELON

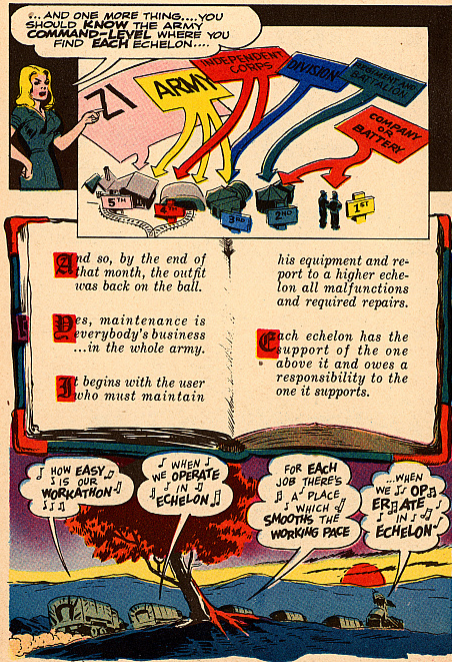
(MANUFACTURERS AND ARSENALS)

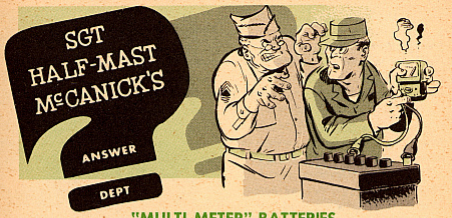


MAJOR OVERHAUL

COMPLETE REBUILD

AT FACTORY OR DEPOT LEVEL


...AND ONE MORE THING... YOU SHOULD KNOW THE ARMY COMMAND-LEVEL WHERE YOU FIND EACH ECHELON....
ARMY
INDEPENDENT CORPS
DIVISION
REGIMENT OR BRIGADE
COMPANY OR BATTERY
5TH
4TH
3RD
2ND
1ST
And so, by the end of that month, the outfit was back on the ball.
Yes, maintenance is everybody's business ...in the whole army.
It begins with the user who must maintain his equipment and report to a higher echelon all malfunctions and required repairs.
Each echelon has the support of the one above it and owes a responsibility to the one it supports.
♪ HOW EASY ♫ IS OUR WORKATHON ♪ ♪ ♫
♪ WHEN ♩ WE OPERATE ♩ IN ♫ ECHELON ♫
FOR EACH JOB THERE'S ♫ A ♩ PLACE ♪ WHICH ♫ SMOOTHS THE WORKING PACE
...WHEN WE ♩ OP ♫ ER ♫ ATE ♩ IN ♩ ♫ ECHELON ♪



"MULTI-METER" BATTERIES

Dear Half-Mast,

We've just been issued our new volt-ohm-milliameter, 17-V-808, which has recently been added to the 2nd Echelon Tool Set No. 1 Common, supplemental. What batteries do we use in this meter?

Mr. H. W. L.

Dear Mr. H. W. L.,

It depends; both the Weston Model 697 and the Simpson Electric Model 260 multi-meters are issued under the stock number 17-V-808. Both meters will do the same job, but they call for different batteries.

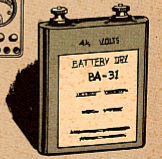
Half-Mast

The Simpson Electric Model 260 uses one BA30 or four BA58's.

BA-58's FSN6135-120-1030

BA-30 FSN6135-120-1020

The Weston Model 697 uses one BA31.



BA-31 FSN6135-120-1019

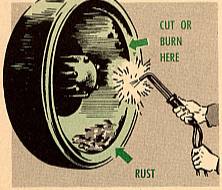
ROADWHEEL MUD SHIELDS

Dear Half-Mast,

We're still getting tracked vehicles (M47 tanks and M44 howitzers) that have mud shields on the roadwheels.

According to TB Ord 403 (with Change 1, 24 Sept 51), the shields are supposed to be removed when they "have become defective."

It's been our experience that by the time the shield has become defective (from water collecting under it and causing rust and corrosion) it's also caused the wheel itself to rust and corrode.



Since the shield serves "no useful purpose"—as the TB says—why not cut the shield off while the wheel is still in good shape and not wait until all the damage is already done?

Sgt S. E. B.

Dear Sgt S. E. B.,

A very good point, Sarge. As a matter of fact, a lot of people have been doing just that. The shields do serve to keep the mud from piling up in your wheels and really loading your vehicle down. So—you'll want to keep 'em as long as they're in good shape.

The TB doesn't spell out just how you're supposed to tell when a shield's "defective," nor just who's supposed to say. So—looks like it's up to your Ordnance officer.

And, if he feels that a shield is defective to begin with—there's no reason why he shouldn't give the word to remove 'em. Right?

Half-Mast

GENERATOR CABLES

Dear Half-Mast,

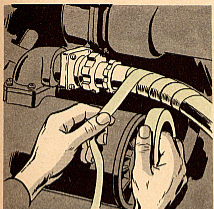
How about the generator-to-regulator cables on our trucks? Ours are beginning to check and crack. When do we have to replace 'em? I hate to put on a new $15 cable until I have to, but I don't want to hang a truck up if we ford it, and I don't want to get myself gigged. What's the score?

CWO C. W. H.
National Guard

Dear Mr. C. W. H.,

You've got a good point on those generator-to-regulator cables. The rubber covering on them is only to protect the cable from wear and abrasion. The rubber conduit inside that rubber sheath is waterproof in itself, so water which gets through cracks in the rubber sheath can't get into the wiring.

So—you don't have to replace the cables when they check. You can repair any worn spots with rubber electrician's



tape (Ord Stock No. H005-0875855) and go right on using the cable.

The specifications on these cables have been changed to call for ozone-resistant rubber, and the later ones will be identified by the letters **"OZ"** stamped into the rubber cover. They're not supposed to check like the old rubber does.

Half-Mast

A GOOD TWIST

Dear Half-Mast,

We hit a little trouble with our M63 mounts for the M2 heavy-barrel .50-cal machine guns. The trigger side plate comes with the mount, but we found the stud was so far back that we could not adjust the trigger linkage to let the gun be fired by the trigger handle on the lower set of the mount handles. (The top set worked OK).

Do you know of any method or fix that'll put this trouble straight . . . other than removing the lower trigger handle and bending the lug up about ¼ inch?

Sgt W. E. P.

Dear Sgt W. E. P.,

Best method is to adjust your linkage according to paragraph 83.5, Change 1 (Sept 44) to TM 9-226. Should you still have trouble, take it off and send in a UER on it.

Bending may work, all right, but it works too well. The gun will fire with a very light pressure on the handle, too hair-triggered if you follow me.

Half-Mast

MISSIN' A TOOL CHEST?

Dear Sgt Half-Mast,

I have a question regarding Chest, tool, empty, Ord Stock No. 41-C-853. In Ord 7 SNL A-6 (29 June 55) the chest is deleted from the allowance column but a picture appears in Fig 10, page 17.

Is this an error in printing? If not, how are the spare parts of the weapon to be carried?

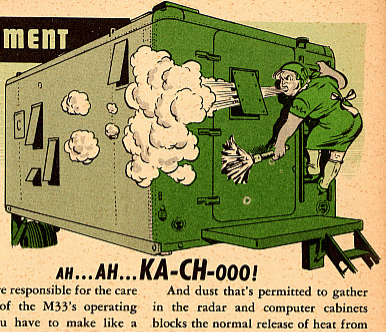
Sgt G. M. L.

Dear Sgt G. M. L.

You rate one tool chest per major item . . . the next revision to Ord 7 SNL A-6 (Gun Machine, cal. .30 Browning, M1919A4 fixed and flexible, M1919A4E1 flexible, M1919A5 fixed and M1919A6) will authorize it.

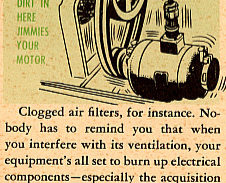
Half-Mast

ARMAMENT



AH...AH...KA-CH-OOO!

When you're responsible for the care and comfort of the M33's operating equipment you have to make like a snoopy mother-in-law when it comes to checking for dust. Let the stuff gather unmolested for any time on your operating units and you'll soon be plagued with all sorts of ailments.



Clogged air filters, for instance. Nobody has to remind you that when you interfere with its ventilation, your equipment's all set to burn up electrical components—especially the acquisition magnetron.

And dust that's permitted to gather in the radar and computer cabinets blocks the normal release of heat from those units. In short order the equipment'll be suffering the same symptoms and effects as excessive heating brought on by actual equipment failure.

If the stuff's allowed to collect on the vanes of ventilation blowers it'll unbalance the blowers, and from this mishap comes vibration and excessive wear of bearings in the blower motors. Vibration will also cause bum operation of other units, and you can look for the acquisition automatic frequency control unit to be especially disturbed by vibration.

The only way you can avoid this kind of grief is to keep operating equipment as dust-free as possible . . . chase dust . . . just follow the cleaning instructions in the preventive maintenance section of your TM's . . . it'll save you and your equipment a lot of irritation.

BRAKE BUZZER

Man sez that while he was testing the electric emergency brake on his acquisition antenna trailer (M243) as per TM 9-6092-1, he couldn't get the warning buzzer to sound off. But the brakes worked.

Found out that it was a poor buzzer ground. Took the better part of a day to find the trouble. Everything was hooked up tight, but corrosion had slipped in and spoiled the connection.

You can save yourself this trouble by pulling loose your buzzer ground strap and brightening everything up with a little emery cloth. Then bolt up good and tight again. Check it every now and then.

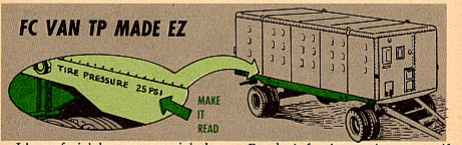
HOLD THAT MOISTURE

To prevent condensation inside the cover of the R. F. coupler on M33 systems, use non-hygroscopic tape to put bags of silica gel inside the cover. Just remember that the crystals need replacing when they're saturated.

6083A IS OK

Acquisition antenna control units in the T/M33 FCS should be oiled with OHC (MIL-0-6083A) Stock No. 14-0-2832-51 instead of OHA (MIL-0-5606). The 6083A is better 'cause it contains a rust inhibitor.

FC VAN TP MADE EZ



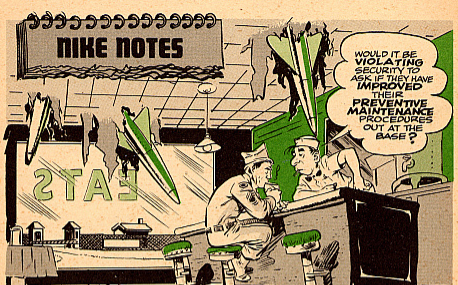
It's confusin' but not amusin' the way some guys are popping their safety valves about tire pressure for M242, M243 and M244 Fire Control Vans.

In TM 9-6092-1, para 40-b says the pressure should be between 21-27 PSI. But if a guy happens to see Fig 70 and has keen enough eyeballs to read that stencil on the side of the van, it says "Tire Pressure 30."

But don't fret 'cause it's no sweat if you keep cool—the tires, that is.

Here's the scoop: When the tires are cool, pressure should be 25-PSI.

The load carried by those vans doesn't vary much, so there's no need for variance in the TP. Get the tires cool—like you on payday night—and make the pressure 25 PSI. That's it.



READY TO LAUNCH?

Connie ran across a new one the other day that just goes to show you how the little things can foul you up.

Nike sitting on the rail, all ready to go. Only, the round electric-power-plug dust-cover was lying under the plug instead of being clamped into its proper holes. Also, the round hydraulic-power-bayonet dust-cover was lying loose under the bayonet mechanism instead of being on the post where it belonged.

If they had flown that round neither plug mechanism could have latched down out of the way as it should. Even if it didn't foul up the shot, the thrust structure would have knocked the blazes out of the bayonet and the power plug, which would have put the launching rail out of service for sure.

Watch that stuff, will you?

ON ITS WAY

Cleaning Nike GS-15462 zero set switches which were lubed with grease or are real gummy and dirty—or both —is a rough job without a solvent.

Ord 7 SNL Y-4 is going to include Varsol, Stoddard solution or mineral spirits on an "as required" basis, so you'll be able to get them.

But don't use cleaning solution unless the switch has been lubricated with grease or is dirty enough to warrant it. Ordinary care and cleaning just calls for P-38 (Mil-6085A) oil.

NEED A SUB, BUB?

You've got substitutes now for the Nike antenna waveguide coupling Y018-8015675, which has been breaking because of strain at the screw-points.

They're couplings Y018-8021249 or Y018-8170738, and Y018-8021263 or Y018-8170739.

If couplings Y018-8021249 or Y018-8170738 are the ones you'll be using, these modifications are needed:

Remove the big aluminum flange and rubber dust cover. Use the dust cover already installed on the GS-15709 Saddle.

Use four 6-32x⅝-in machine screws with nuts and lock washers to mount to the conversion waveguide section within the saddle.

Because breakage of the poly-iron component of antenna waveguide coupling Y018-8015675 has been common, a design modification has been made. Be on the lookout for coupling Y018-8171082. To repair any coupling except Y018-8015675 when the failure is only with the poly-iron block, use coupling Y018-8170734 and pad Y018-8170736.

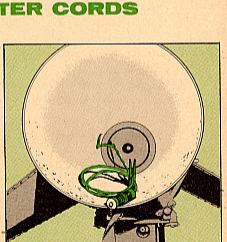
NIKE IGNITER CORDS

Connie saw a real sharpie on Nike the other day.

This outfit had the booster igniter cords all coiled up inside the booster nozzles so the sunlight wouldn't get to the plastic cord cover, and so the plug and grounding cap wouldn't dangle and drag the cord across the sharp edge of the nozzle, maybe wearing it out.

This you may have seen. But what was sharp about this one, the boys had the cord held in the coil with a spring-type clothespin instead of taping it. One easy pull and they're in business. No fumbling with ten wraps of cold plastic tape some night in a rainstorm trying to get hooked up.

Happy thing was, two bits worth of clothespins fixed every missile in the battery. Real neat.



A SPRING-TYPE CLOTHES-PIN WILL HOLD THE LOAD IN PLACE

THERE'LL BE

NO MORE FLUBBING...

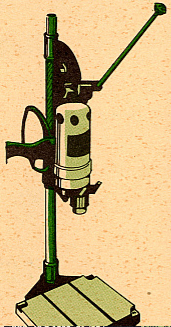
If your tool's bending or breaking when you use it, could be you're using the wrong tool for the job you're trying to do.

There's a tool for every job, and you'll not flub when you've got the right tool for that job.

This'll give you an idea what your **Tool Set, Organizational Maintenance (2nd Echelon), Set No. 2, Supplemental** looks like. If you get an item that doesn't look exactly like the picture--don't blow your top. Chances are they're made by two different manufacturers, and they'll do the same job and just as well.

The Ordnance Stock No. for the whole set is 41-T-3538-870. The Federal Stock No. is 5180-754-0743.

TOOL SET, Organizational Maintenance (2nd Echelon) Set No. 2, Supplemental ORD 41-T-3538-870 FSN 5180-754-0743



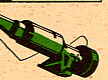
DRILL, twist, HSS, stght shank, long series, fractional size.

ORD 40-D-1830	33/64 in	FSN 3455-266-9457
ORD 40-D-1831	17/32 in	FSN 3455-266-9462
ORD 40-D-1832	35/64 in	FSN 3455-266-9463
ORD 40-D-1833	9/16 in 2 auth	FSN 3455-266-9464
ORD 40-D-1834	37/64 in	FSN 3455-232-2867
ORD 40-D-1835	19/32 in	FSN 3455-233-6455
ORD 40-D-1836	39/64 in	FSN 3455-266-9465
ORD 40-D-1837	5/8 in 2 auth	FSN 3455-266-9466
ORD 40-D-1838	41/64 in	FSN 3455-233-6395
ORD 40-D-1839	21/32 in	FSN 3455-266-9467
ORD 40-D-1840	43/64 in	FSN 3455-232-2868
ORD 40-D-1841	11/16 in	FSN 3455-266-9468
ORD 40-D-1842	45/64 in	FSN 3455-266-9469
ORD 40-D-1843	23/32 in	FSN 3455-266-9470
ORD 40-D-1844	47/64 in	None
ORD 40-D-1845	3/4 in 2 auth	FSN 3445-266-9471

GOGGLES, eyecut, protective, chippers and grinders, impact resisting flat lens.

ENG 37-4458.300.100 FSN .....

GRINDER, elec, portable, 1/2-hp, 115-v, univ current w/stand, wheel size 6 in.



ORD 40-G-128-10 FSN .....

HELMET, welders, shade No. 10, 2 auth.

ENG 37-4822.500.500 FSN .....

JACK, automobile and motor truck, hydraulic, w/handle, 30-ton cap., 11 in contracted height.

PULLER (set), bearings, gears, etc., yoke type, push and pull, w/9-1/2-in legs, complete with attachments, in metal case.

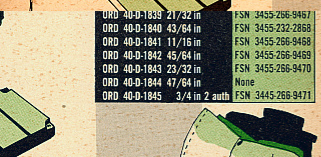
ORD 41-P-2905-60 FSN .....

SCREEN, welding, collapsible.

ORD 41-S-1015 FSN 3375-357-7111

TACHOMETER, engine, elec 0-4000-rpm range, w/o batteries.

ORD 18-T-231 FSN .....



ORD 40-D-1839	21/32 in	FSN 3455-266-9467
ORD 40-D-1840	43/64 in	FSN 3455-232-2868
ORD 40-D-1841	11/16 in	FSN 3455-266-9468
ORD 40-D-1842	45/64 in	FSN 3455-266-9469
ORD 40-D-1843	23/32 in	FSN 3455-266-9470
ORD 40-D-1844	47/64 in	None
ORD 40-D-1845	3/4 in 2 auth	FSN 3445-266-9471

HELMET, welders, shade No. 10, 2 auth.

ENG 37-4822.500.500 FSN .....

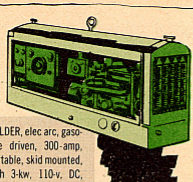
JACK, automobile and motor truck, hydraulic, w/handle, 30-ton cap., 11 in contracted height, 17-1/4-in extended height, 2 auth.

ORD 41-S-1015 FSN 3375-357-7111

TACHOMETER, engine, elec 0-4000-rpm range, w/o batteries.

ORD 18-T-231 FSN .....

DRILL, elec, portable,



WELDER, elec arc, gasoline driven, 300-amp, portable, skid mounted, with 3-kw, 110-v, DC, aux generator.

ORD 17-W-1715 FSN 3375-255-9991

WHEEL, wire, S, w/std 2 in opng, w/o adapter, diam of wheel 6 in, thickness thru arbor hole 1-1/8 in.

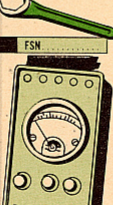
ORD 40-W-995-30 FSN

WRENCH, brake adj, sgle end, tubr, hex, size of opng 1-1/16 in.

ORD 41-W-642-200 FSN

WRENCH, flare nut, sgle-hd, open box, 12 point, 1-3/8-in opng.

ORD 41-W-637-455 FSN



VOLT-OHM-MILLIAMETER, portable, AC or DC, voltage ranges 0 to 7.5-15-150-750, (1000 ohms per volt) DC current ranges 0 to 7.5-75 milliamperes, ohmmeter ranges 0-5000 ohms (35 ohm center), accuracy 2% DC, 5% AC, w/test lead and leather carrying case; Weston Electrical Corp Model 697, less batteries or equal.

ORD 17-V-808 FSN

WRENCH, engrs, angle 15-degree, dble open end, spear head, size of opngs 1-1/2 and 1-3/4 in.

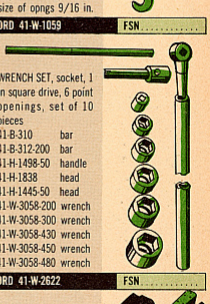
ORD 41-W-1036-10 FSN

WRENCH, engrs, angle 15-degree, dble open end, size of opngs 1-5/16 and 1-11/16 in.

ORD 41-W-1065-80 FSN

WRENCH, obstruction, angle 45-degree and 90-degree, dble open end, size of opngs 9/16 in.

ORD 41-W-1059 FSN



WRENCH SET, socket, 1 in square drive, 6 point openings, set of 10 pieces

41-B-310 bar
41-B-312-200 bar
41-H-1498-50 handle
41-H-1838 head
41-H-1445-50 head
41-W-3058-200 wrench
41-W-3058-300 wrench
41-W-3058-430 wrench
41-W-3058-450 wrench
41-W-3058-480 wrench

ORD 41-W-2622 FSN

WRENCH, torque indicating, 3/4 in square drive, capacity 0-600 foot pounds, Snap-on No. TQ-602A or equal

ORD 41-W-3635 FSN

HERE'S A LIST OF ADDITIONAL OFFICIAL PUBLICATIONS ON ORDNANCE EQUIPMENT WHICH ARE OF INTEREST TO A LOT OF YOU.

DA PAM 310-29 Mil Pub—Index Sig'l Ord Corps, Dec 55

SUPPLY MANUALS

ORD 7 SNL A-50 Vol 1, C2 Gun auto 40-mm M1; carg; gun AA 40-mm M2A1; mt gun 40-mm M3; lnch, radar equip M62/MPG-36 Feb 56

ORD 7 SNL D-68 Gun auto 75-mm T83E6, T83E7; mech recoil T62E2, T62E3; loader rammer T23; mt gun AA 75-mm T69 (incl FCE T38) Jan 56

ORD 6 SNL F-242 C1 Mt sight 7576757; sight M35; sight reflex M58 Jan 56

ORD 6 SNL F-296 Mt 'scope M65, M82 Jan 56

ORD 6 SNL F-301 Mt 'scope M50 Jan 56

ORD 6 SNL F-358 Sec 2, C1 Range Finder T42E1 Jan 55

ORD 6 SNL F-338 C1 Mt perisc M88, M89, M90 (T170E1), T170E2, M90 (T177E1) Feb 56

ORD 9 SNL G-182 C1 Tractor 13-ton HS M5, M5A1, M5A4 Dec 55

ORD 7 SNL G-209 155-mm gun SP T97; howitzer SP T108 Jan 56

ORD 7 SNL G-262 C2 M47 tank, tank gunnery trainer, 90-mm gun M36 Dec 55

ORD 7 SNL G-279 155-mm howitzer SP M44 (T194) Dec 55

ORD 9 SNL G-742 Truck 2½-t M34, M35, M44, M45, M46, M47, M48, M49, M50, M59, M108, M109, M275, XI7A (MPQ (Sig Corps), V18A/MPQ (Sig Corps) Nov 55

ORD 9 SNL G-749 Truck 2½-t M135, M211, M215, M217, M222, M221, M220 Oct 55

ORD 6 SNL J-7 Sec 2 C1 Tool set organiz maint (M wm) Set No. 1 supplemental (41-T-3536-80) Feb 56

ORD 6 SNL J-8 Sec 2, C1 Tool set fld maint Ord Elm pt ce (41-T-3537-40) Feb 56

ORD 6 SNL J-10 Sec 1, C2 Tool set, armorer's (41-T-3436-60) Feb 56

ORD 6 SNL J-10 Sec 9, C1 Tool set arty repairman (Ord) (41-T-3499-200) Feb 56

ORD 6 SNL J-10 Sec 11, C1 Tool set fire control, inspector (41-T-3542-80) Feb 56

ORD 6 SNL J-10 Sec 13, C1 Tool set, fire contr repairman (41-T-3534-2) Feb 56

ORD 6 SNL J-10 Sec 14, C1 Tool set, instru repairman (MOS 2922) (41-T-3530-25) Feb 56

ORD 3 SNL J-22 Spec tools for sighting, fire contr material used w/small arms, auto guns, mortars, FA (SNL Group F) Jan 56

ORD 7-8 SNL J-225 Grinding mach, valve facer 110-v, univ car, well type, ¼ to 9/16-in cap, w/equip (Albertson mod 557 L/N) (49-D-261-7949) Feb 56

SM 9-1-1210, 20, 30, 40, 50, 60, 90 Stock list all items, except rep parts—FSC Group 12—Fire contr equip, class 1220—Fire contr directors, 1230—Fire contr comput sights, devices, 1230—FCS complete; 1240—Optical sight, range equip 1250—Fire contr stabilizing mechanisms; 1260—Fire contr designate, indicate equip; 1290—Misc fire contr equip Dec 55

SM 9-1-1330 Stock list end items, alpha list FSC Group 13—Ammo, explos Class 1330—Guided miss warheads, explosive comps Jan 56

SM 9-1-5975 Stock list end items, alpha list FSC Group 59—Elec electron equip comps Class 5975—Elec hardw, supplies Jan 56

SM 9-3-1330 Stock list all items, price list FSC Group 13—Ammo, explos Class 1330 Guided miss warheads, explos comps Jan 56

SM 9-3-1410 Stock list all items, price list FSC Group 14—Guided miss Class 1410—Guided miss Jan 56

SM 9-3-5975 Stock list all items, price list FSC Group 59—Elec electron equip comps Class 5975—Elec hardw supplies Jan 56

SM 9-3-5977 Stock list all items, price list—FSC Group 59—Elec electron equip comps Class 5977—Elec contact brushes, electrodes Jan 56

SM 9-5-1330 Stock list curr issue items—Ammo guided miss warheads, explos comps FSC 1330 Jan 56

SM 9-5-1410 Stock list curr issue items—Ammo guided miss FSC 1410 Jan 56

SM 9-5-2300 Stock list curr issue items—FSC Group 23—Motor veh trlrs, cycles Dec 55

ORD 6 SNL A-75 (TB 9-2-23-4) Mt mach gun cal .30 or cal .50 (7068934), Feb 56

ORD 6 SNL B-52 Gun, 90-mm M36 (T119E1), Mar 56

ORD 7 SNL F-59 Instr obsv, A6, B2, M1, Feb 56

ORD 6 SNL F-382 Tele M7, Mar 56

ORD 8 SNL G-349 Vol 24 Winterization Equip kit for tactical, full track high spd 18-ton, M4 series (SNL G-150), Feb 56

ORD 9 SNL G-254, C1 M38 Sets, Jan 56

ORD 7-8 SNL G-802, C1 Semitrailer, low bed wrecker, 12-ton, 4-whl, M269, M270, M270A1, Feb 56

ORD 6 SNL J-8 Sec 4, C1 Tool Set, maint (fld), ammo renov plat (41-T-3493-95), Feb 56

ORD 6 SNL J-8 Sec 24, C1 Shop Set, fld maint, Ord ball, tech svce team (41-S-2930-301), Feb 56

ORD 6 SNL J-8 Sec 28, C2 Tool Set, fld, Ord Ammo Co. (Army or Comz) (41-T-3538-25), Feb 56

ORD 6 SNL J-8 Sec 29, C1 Tool Set, fld, Ord fld supply or depot Co. (army or Comz) (41-T-3538-75), Feb 56

ORD 6 SNL J-8 Sec 31, C1 Shop Set, fld maint, elec FCS (41-S-2990-376), Feb 56

ORD 6 SNL J-9 Sec 1, C1 Shop Sets, power train rebld co (auto) depot maint, Feb 56

ORD 6 SNL J-10 Sec 3, C1 Tool Set, arty mechanic, minor maint (41-T-3439-100), Mar 56

ORD 6 SNL J-10 Sec 22, C2 Tool Set, guided miss repairman (Corporal) (MOS 1261) (41-T-3534-420), Feb 56

ORD 6 SNL J-10 Sec 23, C1 Tool Set, guided miss, elec component repairman (Corporal) (MOS 1362, 1362) (41-T-3534-403), Feb 56

ORD 6 SNL J-21 Sec 1 Tool Set, spl, expl ord disp sqd (41-T-3542-285), Apr 55

ORD 7-8 SNL J-192 (TB 3452-3-16-14) Honing unit, cyl bore, port. 2-11/16 to 5-5/8 in dia cap range (for use w/elec drill) (Waterbury Tool Div, Mod to (4800-473-0235), Feb 56

ORD 7-8 SNL J-354 Hammer, pneu, body and fender straightening (Cornwell Quality Tools, Model B-080) (40-H-250), Mar 56

ORD 7-8 SNL J-381 Undercutter, armature mica, elec operated, 115 v, AC, DC, cap 9x24 in, w/equip (Longyear & Hess Mod X21) (4940-276-1594), Feb 56

ORD 7 SNL R-27 Tool-box ocalp, elec operated, Feb 56

ORD 7 SNL Y-70 Control Selector—C-2787/URM-G, Feb 55

TECHNICAL MANUALS

TM 9-252, C2 40-mm auto gun M1, M2A1, 40-mm AA gun carriages M2A1, M2A2, 40-mm gun mt M3 Jan 56

TM 9-575, C2 Aux sight, fire contr equip Jan 56

TM 9-1910 C1 (TB116-1-34) Mil explos Feb 56

TM 9-1990, C2 Small arms ammo Feb 56

TM 9-2034, C3 30-mm auto gun M24A1 Jan 56

TM 9-2113 Cal. .50 spotting rifle M8 (M8E2) Jan 56

TM 9-2800-1, C2 (TB 38-1-2) Mil vehs (Oil Corps Regs) Jan 56

TM 3-5008 Four whl unit group tlr XM326 (Corporal Type II guided miss sys) Dec 55

TM 9-6833 Scopes T159, T159E1 Dec 55

TM 9-6089 Local contr sys M33A1E1 Nov 55

TM 9-8012 (TB 3640-2-49) ¼-t 4x4 util trk M38 Jan 56

TM 9-8222 (TB 3690-2-6-1) 25-t 4-whl low-bed semitrlr M172 Dec 55

TM 9-8651 (TB 3977-1-170) Power brake sys (Bendix BK) Jan 55

TM 9-9906-3 (58 deg angle ¾-in cap any curr 110-v elec drill (Wall tool mod 141) (40-D-330) Jan 56

TM 9-9806-4 H-d 115-v ac-dc ¾-in cap port elec drill (Wall Tool mod 145FP) (40-D-341) Jan 56

TM 9-5070 Doppler station van XM024, computer station van XM025 (Corporal Type II Guided Miss Sys), Jan 56

TM 9-6093-3 AAA FCS M33C, M33D inspection, Jan 56

TM 9-6123, C1 Auto setter M25, Feb 56

TM 9-8000 (TB 365-1-70) Principles of auto veh, Jan 56

TM 9-8012, C1 (TB 3640-2-49) 1/4-t util truck M38, Mar 56

TM 9-9082-2 Horizontal hack sawing mach 6x6 in cap variab 60-cy 115/230-v 1ty-HP drycut (Greenlong-Eban Mod Marvel No. 2) (43-S-1320), Feb 56

TM 9-9838-4 Valve reseating outfit (air cooled engines) w/equip and eccentric type agle ph 60-cy 110-v (Waterbury Tool Division of Vickers Mod 4WD) (43-V-527), Feb 56

G749-W28 Trucks M135, M211, M217, M220, M222: install spare tire heat shield F, Feb 56

G749-W30 Trucks M135, M211, Truck Tract M221: install tempor tail pipe extension F, Mar 56

G784-W2 37-pass Bus (Integral Type) (ACF-Brill Model C-37H): install of tow air press alarm buzzer, O, Mar 56

G788-W8 36-pass (Integral Type) Bus (Twin Coach Model F-32 F): Provide drainage of water between body panels, O, Feb 56

SUPPLY BULLETINS

SB 9-105 Storage, issue spare comm, tubes of limited serv life, Feb 56

SB 9-129 Cross-ref list of AOC stock numbers to approd tech svce stock numbers, Feb 56

ORDNANCE MWO's

A95-W1 Cal. .30 machinegun M37: To prevent uncontrolled fire, O Feb 56

B0-W1 Convert bayonet-knife scabbard M8 to M8A1 B Feb 56

C250-W29 M75 (T18E1): Install exhaust air louver deflectors, exhaust exten pipe F Feb 56

C340-W5 ¼-t util trk M38: Waterproof steering gear, drain steering pocket O Feb 56

G742-W19 C1 2½-t trks M34, M35, M36, M44, M45, M108, M47, M59, V-18A/MPQ (Sig Corps), M48A, M50, V-17A/MPQ (Sig Corps), M46: Install spec muffler for exhaust noise cont E Feb 56

G744-W15 C2 5-t trks M40, M51, M52, M139, M41, M54, M55, M54, M51, M62, M246, M52: Install lock nuts to prev loosening of clutch-release lever adjusting nuts F Feb 56

G744-W16 C2 5-t trks (same as above): Provide means of prev blanket lube from enter clutch housing F Feb 56

G744-W20 5-t trks M39, M40, M52, M139, M41, M54, M55, M51, M62, M246, M52: Eliminate hand-brake cable slippage F Feb 56

more SCOOP

A71-M1 Cal. .30 powered linking machine M1 M/18: .30 dollies attached M7; permit use of stack, attached n/guard door in place of all items, F, Feb 56

D32-M21, C1 120-mm Gun M1 series, 120-mm AAA gun Mount M1 series; Mod cradle assy, prior accessory mapping for tube firing level interlock assy, F, Mar 56

D32-M28, C1 120-mm Guns M1A1, M1A2, M1A3 on 120-mm AAA gun mts M1A2, M1A3: Mod power rammer M1, prior loosening of firing interlock assy cable clamp, rating bracket breech to clutch lever interlock cable clamp F, Mar 56

D48-W39 75-mm Gun T83 series on 75-mm AA gun mt T69: Prov stronger breech interlock, F, Mar 56

F342-W1, C2 AAA FCS M33D, M33B, T33, T33D: Appl the changes to correct defic, F, Feb 56

F342-W4 & F4-W2 AAA FCS M33C, M33D, M33D(1), T33C, T33D; test stop sets M38C, M38D; guided miss sys like it; Appl the changes to spare parts or sys components to correct defic, F, Feb 56

G1-W59, C1 ¼-t Trucks M38, M38A1: Anchor-age front passenger seat, F, Mar 56

G208-W1 Tracked landing veh M84, LVT-C: Install of new gov, mod radio cabinet, F, Feb 56

G249-W1 Warfare equip: Seating combustion blower housing assy in gnd heater (Smith Blow mod 8765693), F, Mar 56

G252-W2 Self-prop twin 40-mm Gun M42: Install main eng exhaust deflectors, F, Feb 56

G254-W16 M48 tanks: Install of track tension idler assy, shock absorber brackets, heavy bumper discs, B, Mar 56

G300-W23 Armored personnel carrier M75: Mod hull to accommodate later mod final drive assys, D, Feb 56

G308-W25 Gun lifting ftr truck M249: Elim of winch restrict cable; replace winch cable eye assy; regrooving, lubri of winch cable sheaves, F, Feb 56

G509-W10 2½-ton truck CCKW-353: Mod of winch level cross brace, winch brake drum case, truck front bump, D, Feb 56

G741-W1 Truck M37: Relocat spare whl carr, F, Feb 56

G741-W9 Trucks M37, M43, M43, M201 (F-81): Improv bayonet-type oil level gage, F, Feb 56

G741-W9 Ambulance Truck (M43) and M37: Reinforcement of door check brack, F, Mar 56

G742-W9 Trucks M34, M35, M36, M47, M48, M50, M51, M109, and M59, and Truck Tract M48: Repl underlid-type fuel filler w/ bracket/paper-type fuel filter, F, Mar 56

G744-W11, C2 5 Trucks M40, M41, M52, M53, M54, M55, M62, M63, M64, M139, M246: Mod of clamping and distributor ventil sys on Cont R6602 engs, F, Mar 56

G749-W20, C1 Trucks M135, M211, M215, M217, M220, M222, and Truck Tract M221: Machining trans rear clutch hub, install new rear clutch hub washer, D, Mar 56

TECHNICAL BULLETINS

TB 9-0500-8 Cld Storage and Shipment Chart, Group 8 major items, major combos of Group 8 F, R, Feb 56

TB 9-2300 4 Small-arms Ammo: Lots, grades, Feb 56

TB 9-0909 3 Ammo: FSN and Dept of Defense ID code, Mar 56

TB 9-7168-15 90-mm gun Tank M47: Removal, install range finder and housing assy R, Mar 56

TB 9-730-3 75-mm gun Tank M41, M41A1: Install of driver's periscope M17, latches, D, Mar 56

TB 9-2800-805 2½-T Trucks GMC CCKW-353, CCKW-352, 353, AFKWX-353, CCW-353, M27, M27A1: Reclaim of front, intermediate, rear axle, differential drive gear pinion w/worn oil seal bearing surfaces, F, B, Feb 56

TB 9-7013-3 M48 Tank: Tk commander's override clutch solenoid, repl, adj, F, Mar 56

TB 9-7012-4 M48 tank: Removal and install rangefinder and housing assys, B, Feb 56

TB 9-8028-2 5-ton trucks M41, M54, M51, M52, M40, M61, M139, M62, M246: Oil cool clutch contrl rod, B, Feb 56

TB 9-8028-5 (TB ORD 1-WC) 5-ton Trucks M41, M51, M54, M55, M62, M64, M39, M40, M61, M63, M139, M139C, T M52, M246: Adapt quick sup valve regulator control assy to operate cab regulator when cont assy G201677 is install, F, Mar 56

TB ORD 562, C1 Track laying veh: Instr guy adjt, interchangeability, insp, class, maint, and dispos tracks, Stick suspension with bracket press, B, Mar 56

TB ORD 563-A8 Elect-in wht gun, 1-kg, 130-volt, DC bench type wet grinding mach (J F Mount Co Mod 501 and 502-1) (9-0-0344-11) Rebuild stands, D, Feb 56

TB ORD 629 (TB 9848-3-1-1) 12-ton 6-wd stake semitrailer M127 and 6-ton 2-wh stake semitrailer M118: Fabr and install rack for sel tarp, B, Feb 56

TB ORD 638 Cartridge, 81-mm, HE, M362 (T28 Series) for 81-mm Mortars M1, M29, Feb 56

TM 9-9-821 75-mm Gun T83E1 and 75-mm AA Gun mt T69: Description and ID of rts changes auth by MWO Ord F230-W1 and MWO Ord D38-W8 affecting IIT circuit components of FCS T38, B, Feb 56

TM ORD 822 Port Light T42: Special tools to prev steam prism movement, D, Mar 56

LUBE ORDERS

LO 9-66 Gun, machine, cal. .30, Browning M1919A1, M1919A4, M1919A6, etc, tripod, mach gun, cal. .30 M2, M1919A4, Jan 56

LO 9-2062 Launcher, rkt, 3.5-in M20, M20A1, M20B1 and M20A1B1, Jan 56

LO 9-5043 Miss test station, truck mtd AN/MSM-6, Miss test set, electron components, Jan 56

LO 9-5044 Computer group, guided miss, trailer mtd AN/MSQ-6, Computer group, electron components, Jan 56

LO 9-5050-1 Track, propellant sec, 5-ton, 6x6, XM388E1; Tank, w/ct, pressurized, E681, Jan 56

LO 9-5058 Servicing Platform, truck mtd, 5-ton, 6x6, XM390E1, Jan 56

LO 9-5066 Antenna Group, trailer mtd CA-651/MPQ-21; Trailer, ant group, w/whl XM326, Jan 56

LO 9-5070 Radio Set AN/MRQ-7, Computer station van trailer XN320; Trailer mtd guided miss computer group AN/MSA-6; Computer station van trailer XN325, Jan 56

LO 9-5062-10 Radar Set AN/MPQ-21; Radar set group, electron comp, Jan 56

LO 9-5062-2 Radar Set AN/MPS-25, Cutout tractor 39D, Jan 56

LO 9-5048 Radio Set AN/MRQ-7, Radio set, electron comp, Jan 56

LO 9-5068 Radar Set Group CA-653/MPQ-25, Tracking station van semitrailer XN323, Jan 56

LO 9-7019 M47 and M48A1 Tanks, Feb 56

LO 9-8040-1 Wrench, electric; Revers, impact type, ½ in sq dr, ¾ in bolt cap 115 v, univ current (Keller Tool Co Mod 3131) Jan 56

LO 9-8838-1 Boring Machine, engine cyl, ptbl, 115 v, 60 c, spin-sh, 2⅞ to 5⅛ in cap (Van Norman Mod 777, 777-S), Jan 56

FIRING TABLES

FT 75-AF-1, C2 Gun, 75-mm, M2, M6 (Tank) firing procedure, APC-T, M61, M61A1; Shell, HE, M48; Shell, smoke, WP, M64, Oct 55

FT 75-I-4, C8 Howitzer, 75-mm, M1A1, M8 firing shell, HE, M48; shell, HEAT-T, M66; shell, smoke, WP, M64; shell, smoke, FS, M64, Oct 55

NOTE—On TB's, SB's and MWO's:
O—Organizational Maintenance
F—Field Maintenance
D—Depot Maintenance

Here're some more pubs you can add to your pile

ENG 7, 8 & 9's

5275 Gen set, port; Buda mod DE5-165AE5-CE PD-384, 24 Feb 56

8692 Trailer, Bolster, all makes and mods, 7 Mar 56

8268 Organizational allowances, field and depot maint initial stock guide for repair parts, and list of all service parts, semitrlr, low-bed, all makes and mods 7 Mar 56

ENG MWO's

1149-1 Distributor, water, trk mtd, 1000 gal., gas eng driven, Municipal supply mod MS-1000, 2 Mar 56

1150-2 Distributor, water, trk mtd, 1000 gal, Rosco mod MMS mtd on WW II chassis, 14 Mar 56

3475-1 (Corrected Copy) Urgent, trk, Bolster, 2½-ton, 164" WB winch mtd on front, mtd on Std WW II chassis, 17 Feb 56

TB's

5-3223-1 Flewell: maint serv, eng, gas, air-cooled, Wis mods MN56D and MN64D, 15 Mar 56

5-6387-1 Gen set, elect, port, gas drvn, skid mtd, air cooled, 1½ kw, 28 v, DC, 2 wire, Homelite mod 24D28-24A, 21 Mar 56

TM's

5-278 Causeways and Tramways, 20 Feb 56

5-1084 Loader, aggregate, bucket, crawler mtd, gas drvn, 3 Cu yd, General Purpose, Nelson mod Q-1278P (less engine), 15 Dec 55

5-5890 Eng, gas, air cooled, Cont mod 807, 1 Mar 56

5-6397 Compressor, air, stationary, receiver mtd, gas drvn, 3 CFM, Harris mod 55-102, 5 Mar 56

5-6845 Welder, static, 1.0kw w/bed, w/r drvn, 110 V, 60 Cycle, 1 Phase, Vert mtd 40 in mem hub dia for 27in x 2845 in plate, London-Monotype mod, 5 Mar 56

5-6500-4 Alidade, microplane tele w/case and access, type B, Gurley mods 580 and 582F; Alidade, tele w/Stadia Arc, w/case and access, Type A, Gurley mods 582 and 582F, 2 Mar 56

5-6700-3 Transit, eng, 1 min reading, Brunson mod 20 and transit, Eng, Right Illum, 20 sec reading, Brunson, mod 50, 15 Mar 56

FORMS FUSS

Dear Sgt Dozer,

Maybe you can help us solve a problem. We've been trying to figure out whether it's legal to list Ordnance, Engineer and Quartermaster equipment on the same DA Form 460. Should there be three separate rosters or just one? What gives the authority for one or the other?

SFC T. H. C.

Dear SFC T. H. C.,

First off, you can rest assured that there's no regulation stating that one DA Form 460 can't be used for Ordnance, Engineer and Quartermaster equipment. At the same time, there's no SR stating that one can be used for all three. This is a situation that calls for good judgment.

Some outfits prefer to list the equipment they have on separate rosters. Inspectors I've talked to say they generally go along with separate rosters as long as it doesn't involve a lot of extra paper work.

However, the best plan seems to be for one DA Form 460 to cover equipment from all technical services. This is done by listing the equipment separately, by each service. Of course, the system and symbols used by each tech service are used for that service's section on the 460.

Frankly, I can't find any regulation that specifically answers your question. In most cases, local SOP's cover the situation. For the record, let's say that one DA Form 460 would be sufficient for all equipment in a unit, providing the unit is of average size. On the other hand, if a unit has an enormous amount of equipment and if the items used by the various tech services vary a great deal, separate 460's would probably be your best bet.

Before doing anything, be sure and check to make sure there aren't any local rules on the subject.

Sgt Dozer

Some Cool Dope For... DESERT PAINTING

Dear Sgt Dozer,

Our unit is having a tough time finding a suitable OD semi-gloss paint for general use in desert conditions like we have here in Arizona. Our average temperatures range from 50 degrees F. in winter to 108 degrees in summer. We have very low humidity.

We have only a temporary paint and preparation area that's far from dust-proof and we really need a rapid-drying paint. We've found two types of paint that meet most requirements. They are Enamel, OD No. 2430, FS TT-E-485, Eng SN 52-3433.700.050 and Enamel, OD, gloss No. 1405, FS TT-C-595, Eng SN 52-3473.500.050.

Paint No. 2430 is generally satisfactory, but excessive overspray film seems to accumulate when we use it. We also tried Paint, OD No. 3412, FS TT-C-595 Engineer SN 52-3415.650.700. This one prevents the overspray, but the finish is lusterless and very light in color. Paint No. 1405 is entirely satisfactory as far as application and drying qualities are concerned, but it is full gloss and not in accordance with Change 5 to AR 700-105. It's also a very dark green and not too desirable.

Can you give us some advice as to what kind of paint we ought to use for this operation?

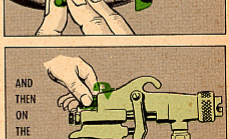
Lt D. D. R.

Dear Lt D. D. R.,

Yep, you do have a problem, but it's easily remedied. OD 2430, Type IV should do the job for you. For painting Engineer equipment, the Corps of Engineers recommend using Type II of FS TT-E-485 in lieu of Type IV. They say Type II will work as well if not better than Type IV and will give you better durability.

It's my opinion, though, that your trouble might be in the application of the paint rather than in the quality.

Have your painters try these steps and chances are your painting problems'll disappear:



YOU'LL PROBABLY HAVE TO REDUCE THE MATERIAL FOR SPRAY WITH A SLOW-DRYING THINNER. YOU CAN DO THIS BY USING THINNER, PAINT, VOLATILE MINERAL SPIRITS, FS TT-T-291A, GRADE 1, ENG STOCK NO 52-7879.700.705

Do this and you ought to get a good, all-round paint job and good drying qualities.

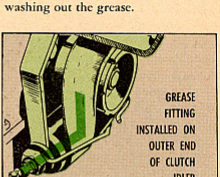
If this doesn't work, there's one other method you can try. Since semi-gloss and full gloss are compatible, mix one gallon of No. 1405 with about four gallons of No. 2430. Don't overthin this mixture. For every five gallons of paint, use no more than ¾ gallon of the Thinner, FS TT-T-291A, Grade I, Eng Stock No. 52-7879.700.705.

We know one outfit that had the same kind of trouble you're having. They tried the first method we've told you about and their painting's been smooth as silk ever since.

Sgt Dozer

GET YOUR BEARINGS

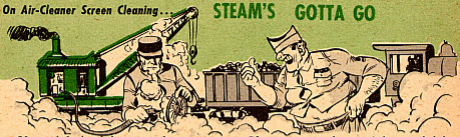
The Post Engineers at Yakima Firing Center in Washington were having lots of failures in the sealed ball bearings on the clutch idler shafts of their "Whirlwind" rotary lawn mowers. When the boys washed the mowers off at the end of the day, it seemed that the water was getting into the bearings and washing out the grease.



They solved the problem by drilling a grease passage in from each end of the shaft and bringing it out between the bearings like in the drawing. They installed a grease fitting on the outer end of each side of the shaft. A couple of shots from the grease gun relubricates the bearings. Since installing the grease fittings, the boys at Yakima haven't lost a bearing. You can take a look at the finished product above.

On Air-Cleaner Screen Cleaning...

STEAM'S GOTTA GO



You might be doing more harm than good if you're using steam to clean the air-cleaner screens on your Engineer equipment. Sure, a lot of people have been using steam on this job for a long time—but there're always new and better ways of doing things.

It's a fact that steam cleaning doesn't flush dirt out of air cleaner screens. What it really does is allow the dirt in the screens to form into little balls of dirt that're as hard as concrete. You see, there's a small amount of oil in this dirt. When the steam hits the dirt, they mix together and form a hard dirt ball. These dirt balls can't be washed out through the mesh of the screen, because they're too hard and large. The balls of dirt generally hide away in the crimps between the screens, and eventually they pick up more dirt and plug the cleaner.

If you want to do a real thorough job when you clean those screens, you can dissolve that small amount of oil in the dirt by soaking the screens in kerosene, diesel oil or cleaning solvents. Once the dirt's loosened up, just give the screens a good flushing, shake 'em off, and they're ready for trouble-free service.

NAME CALLING

Lack of good names and numbers are as disappointing to Sgt Dozer as they are to your little black book.

With all the various sizes, kinds and brands of Engineer equipment all over the world, he's gotta have the exact facts and figures to spot the right items and give you the straight dope.

You can help Sgt Dozer make like a radar navigator if you give him the true and complete callin' names of all the parts and pieces of the item you write him about. For these facts and figures, take a gander at your manuals, LO's and data plates.

Then jot 'em down and fire away at Ol' Dozer—he's waiting to hear from you.

CONTRIBUTIONS

M74 OIL LEVEL GAGE

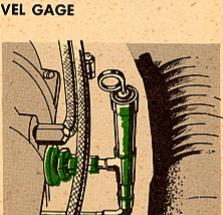
Dear Editor,

Our sharp M74 operators know all about that chain case between their main hydraulic pump and the winch-brake release pump . . . they keep an eye on it and don't let it run dry.

Unfortunately, I've seen some not-so-sharp operators or someone who has to take over in an emergency, overlook this case, and fail to check the oil in it. Which, of course, tears up the machine and costs much money. And even for the careful types, it is an awful job to get down in behind everything to attend to this oiling. The best men have to sorta check it by guess and by gosh.

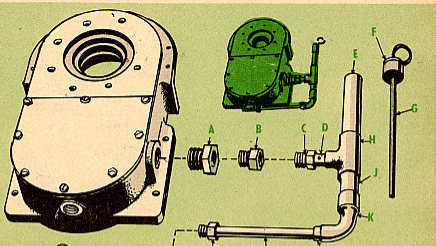
Soooo, they've put on a dip-stick and holder which will make checking this case just as easy as checking oil in an engine. The drawing in the next column shows how it looks installed in our M74. The drawing above the parts list on next page shows what the gage looks like and the parts used in assembly.

SFC William J. Ray
Ft Knox, Ky.



(Ed Note—You boys sure cured a sore spot. Looks like great minds work together . . . the design boys are working on an MWO along the same line as your field expedient.)

TURN PAGE



PARTS LIST

A. PIPE SHOULDER BUSHING (Brass)
Ord. No. 115226, 1" male taper pipe thd. x 3/8" female taper pipe thd.

B. MALE CONNECTOR (Brass) Ord. No. 137409, weatherhead No. 200X8, 3/8" male taper pipe thd. x 3/4"—18 st. thd. for 1/2" OD tube size.

C. NUT (Brass) Ord. No. 142435, weatherhead No. 100X8, 3/4"—18 st. thd. for 1/2" OD tube size.

D. COPPER TUBE (Type N), spec. WW-T-799, 1/2" nominal, .500 actual OD

E. COPPER TUBE (Type N), spec. WW-T-799, 7/8" nominal, .875 actual OD

F. COPPER TUBE CAP, 3/4" nominal.

G. STEEL STRIP STOCK, 3/32" x 3/16".

H. WROUGHT COPPER SOLDER JOINT REDUCING TEE, crane No. 611, nominal sizes 3/4" x 3/4" x 3/8"

J. COPPER TUBE (Type N), spec. WW-T-799, 7/8" nominal,, .875 actual OD

K. WROUGHT COPPER SOLDER JOINT REDUCING 90° ELBOW, crane No. 607-2 nominal sizes, 3/4" x 3/8"

L. REDUCING BUSHING (Copper) crane No. 618, nominal sizes 3/8" x 1/4"

M. COPPER TUBE (Type N), spec. WW-T-799, 1/2" nominal, .500 actual OD

N. NUT (Brass) Ord. No. 142433, weatherhead No. 100X6, 3/8"—18 st. thd. for 3/4" OD tube size

O. MALE TEE (Brass) Ord. No. 143484, weatherhead No. 600X6, 1/4" male taper pipe thd. with (2) 3/8"—18 st. female thds. for use with 3/8" OD tube

P. PLUG (Steel) weatherhead No. 131X6, 3/8"—18 st. thd. for 3/8" OD tube

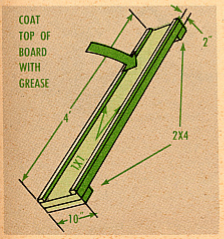
Dear Editor,

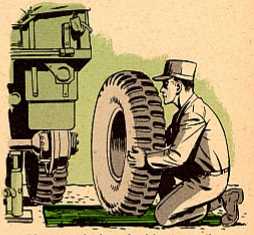
The thing that everyone's looking for in these modern days is "ease"—an easy way to do this, an easy way to do that.

OK, then, here's an easy way to pull the wheels off some of those big wheeled jobs that cause a lot of straining at the gut. Can also save a lot of those seals from being chewed up.

It's called the greasy-board method and it's kind of old—but a lot of guys have forgotten it.

Get a piece of 2x10 board about 4 feet long and mount it on some 2x4's for support. On each outer edge, put a piece of wood 1-inch x 1-inch x 4 feet to keep the tire on the board as you slide it along.





You coat the board with grease, then bring it up under the raised wheel. Lower the vehicle so the wheel is just touching the greased board.

Then, all you've got to do is loosen up the wheel and bring it straight out sliding it across the greased-up board. One man can handle the job that usually takes two.

Sgt William Brown
APO-54

(Ed Note—May be an old trick, but it's a mighty good one. A word of caution, tho, to save you tire troubles. Make sure all that grease is wiped off any tire that board comes in contact with. Nothing'll eat rubber faster than stuff with oil in it.)

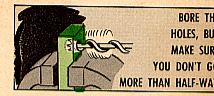
SAVE YOUR RECEPTACLES

Dear Editor,

When you pull the power plant on a tank with one of the later model AV-1790 Continental engines, sometimes it's pretty easy to bang up those receptacles on the engine wiring junction box. They're sitting high and dry there on the engine's front-side, with little protection from a careless swing of a wrench, a dangling hoist, etc.

We worked out a simple way to protect the receptacles. All you need is a piece of 2x4 and wood augur. (And maybe a piece of wire or string.)

HOLD THE 2X4 IN FRONT OF THE BOX AND MARK THE RECESS SPOTS



BORE THE HOLES, BUT MAKE SURE YOU DON'T GO MORE THAN HALF-WAY

THIS LETS THE BOARD FIT OVER THE RECEPTACLES PROTECTING THEM DURING POWER PLANT REMOVAL OR REPLACEMENT

If you bore the holes for a snug fit, the board will slip on and stay put as is. But if the fit's a little loose, better use a piece of wire or cord to secure it to the box.

782 Airborne Ord Bn
Fort Bragg, N. C.

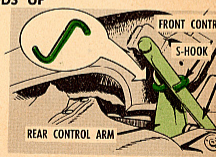
HOODS UP

Dear Editor,

On those Chevys...we used to have to squeeze under the hood and risk a bump on the noggin when working on the engine.

The reason: The hood springs get weaker with age and won't hold the hood all the way up.

The fix: We made a small S-shaped hook out of a 6-in piece of $\frac{5}{16}$-in cold rolled steel rod by bending each end $1\frac{1}{4}$ inches in a vise. We hook the S-shaped rod on the outside of the rear hood control arm and the inside of the front hood control arm to hold the hood in place.



This makes sure you get the normal working space around the engine 'cause the hood is held up high and stays up until you remove the hook.

Henry J. Behr
Raritan Arsenal, N. J.

Tank-towing talk

Always keep in mind how useful those tank radios can be when you're on a towing job—when the tactical situation permits, o'course. They let you keep in close touch, so's each guy'll know just what to do and when to do it—like applying brakes, etc. Radio's specially helpful when you've hooked a third tank on for snubbing. You've got the sets—so **use** 'em, hey?

Watch that bulge

You M48 tankers—when you're stowing stuff in your turret bulge—keep it off that radio terminal box at the rear of the bulge. Bang this box around too much and first thing y'know it's snapped off the wall. And—you won't find it simple to get welded back on. So—watch it, hey?

Flow no more

Some G749-series trucks that are just lying around without being used are having their batteries run down by a current drain through their voltmeters. If you have a case, get your truck back to Ordnance and have them rewire the voltmeter like it says in MWO Ord G749-W33 (16 Jan 56).

Going soft

"Soft" is the key-word when it comes to getting the right type rubber radiator hose for your 2½-ton M-series trucks. Hard ones don't absorb the shock and vibration—soft ones do. Separate the hard ones from the soft by flexing 'em then turn the hard ones in.

Good info there

There's a new TM out which you guys will be interested in seeing. It's TM 9-8000 (Jan 56)—"Principles of Automotive Vehicles"—and it supersedes TM 9-2700 (18 Nov 47). The distribution formula says battalions are supposed to get one copy each. But if you fellers in the companies need it, put through your requisition and call on the "Need-to-Know" para 3 of AR 310-90 (1 Sept 55).

Don't jam it

When adjusting your carburetors, be extra-special careful not to jam that idle-adjusting-screw all the way up the carburetor seat—flaboozles the needle valve you know. If the screw's damaged, get a new one before making any adjustment.


PREVENTIVE MAINTENANCE
CURES RUST, DEADLINEITIS... YOUR EXCESSIVE REPAIR... ENGINE FAILURE... LARGE DAILY DOSE
SPELL IT BACKWARDS...
PREVENTIVE MAINTENANCE
BUY IT, SOLDIER, BUT...
REMEMBER THAT PREVENTIVE MAINTENANCE, NO MATTER HOW YOU SPELL IT, NEEDS YOU TO MAKE IT WORK...YES PREVENTIVE MAINTENANCE PLUS ELBOW GREASE AND YOUR FULL ATTENTION IS A SURE-CURE FOR WHAT AILS YOUR EQUIPMENT