

Issue 48

PS

1956 Series

THE PREVENTIVE MAINTENANCE MONTHLY



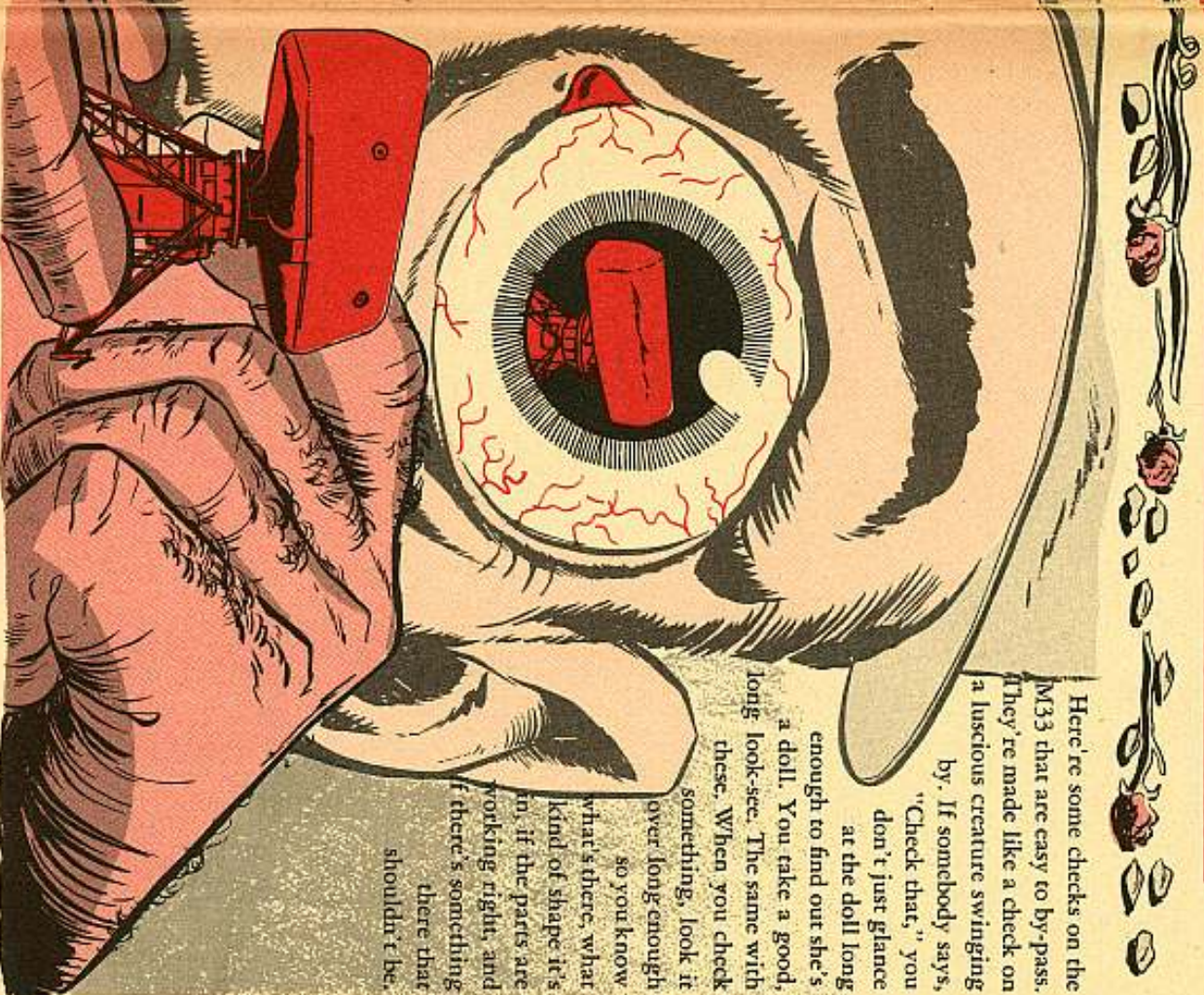
Will
EISNER

IS YOUR HONEYMOON OVER

WITH

THE M33 FIRE CONTROL SYSTEM?

Are you forgetting those little things that count? The boys are saying—and it's not a latent rumor—that some fire control mechanics on the M33 fire control systems are taking little maintenance procedures for granted. They've been at the business a long time, doing the same things over and over. Maybe it gets a little monotonous. After a while, somebody takes shortcuts or figures there's an easier way to do things, or just plain forgets.



Here're some checks on the M33 that are easy to by-pass. They're made like a check on a lascious creature swinging by. If somebody says, "Check that," you don't just glance at the doll long enough to find out she's a doll. You take a good, long look-see. The same with these. When you check something, look it over long enough so you know what's there, what kind of shape it's in, if the parts are working right, and if there's something there that shouldn't be.

BEFORE INSTALLATION

of the 5795 and 5780 magnetrons...



Use a clean, dry cloth to clean glass on mags.



Check all connections for cleanliness or corrosion.



Clean insulators in pulse chambers.



Look over air hoses and replace if kinked.



Replace filters if necessary.

INSTALLATION

Check all connections for snugness.



1 Make sure the magnetrons are aged. After (or during) aging, shoot the high voltage to her like this:



Push ON button.



3 Don't raise voltage for 30 seconds.



4 Slowly raise voltage to values according to your log book.

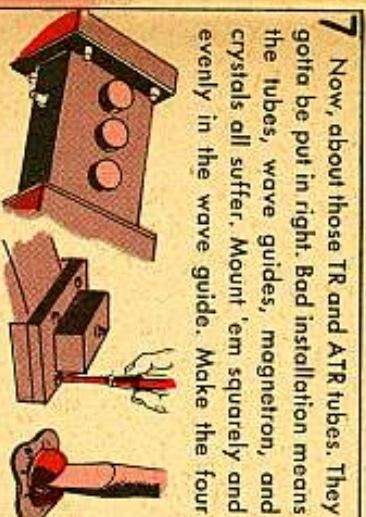
These steps should take at least one minute. Condition spare maggies on a scheduled basis.



5 On the 5795, check every week for deterioration of blower hose in pulse chamber, signs of arcing, dirty or loose connections, bad magheater adjustment. And clean the porcelain insulators.



6 In the 5780 hot box, look over the cathode and filament connections, condition of H. V. cable, and watch for corrosion of magnetron.



7 Now, about those TR and ATR tubes. They gotta be put in right. Bad installation means the tubes, wave guides, magnetron, and crystals all suffer. Mount 'em squarely and evenly in the wave guide. Make the four mounting screws even and snug, and then take a quarter turn more on each. Tightening 'em too much puts the squeeze on the gasket and could crunch it.



8 Another trouble spot is oil seepage from the acquisition antenna gear box to the motor drive, which conks out the motor. At least once a week, look for leaks and check the oil level.



9 See if the potentiometer and hydraulic oil are free of crud, and that containers and hose are clean.

And so on until your preventive maintenance rates superior.

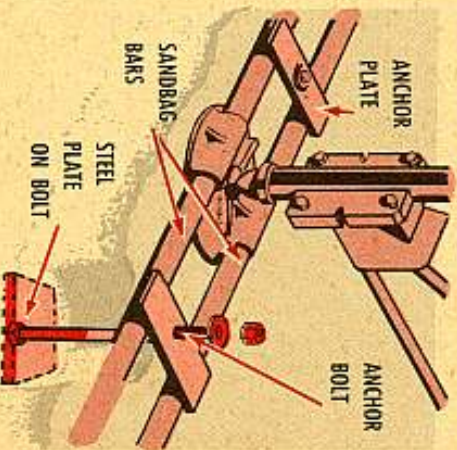
To get it that way and keep it that way, keep your honeymoon with the M33 FCS the way it was when you first got hitched up to her.

ANTENNA TIE-DOWNS

Dear Editor,

I thought you might like to see this sketch of the tie-down we are using to keep our acquisition antennas in place during the high winds that blow across the desert here.

We have concrete bases under all our units, and as you can see, there are anchor bolts cast into them. We used a



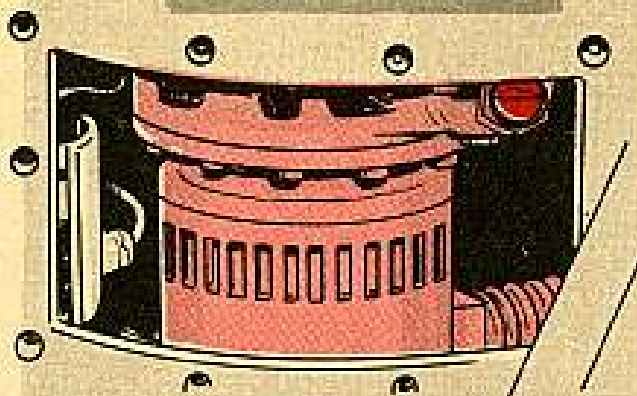
cross bar on these bolts to clamp the sandbag bars of our M33 system down, while on the Nike, we use a chain and turn-buckle.

This method has held our antennas in winds over 80-MPH, and still we can get into march order faster than we could if we used a big pile of sandbags.

Lt Jack Mosley
5th AAA Group

(Ed Note—Looks like a simple, neat and practical idea to us. Be sure your anchor bolts or hooks are securely cast into your concrete base.)

OIL ALERT



Take a fast look at the serial number of your M33 fire control system. If it's labeled with a serial number anywhere from 709 thru 735 it's in for some quick lubing attention by Ordnance.

The lube in the motor drive gear box of the acq antenna-drive of these system's has to be drained and replaced with GO 75 or GO 90, whichever the LO calls for in your particular locality.

These systems got out with P38 oil in the acq antenna-drive unit instead of GO. Only way you can tell if the situation's been corrected is to ask your Ordnance support outfit...they should have a record of the oil change...if there's been one.

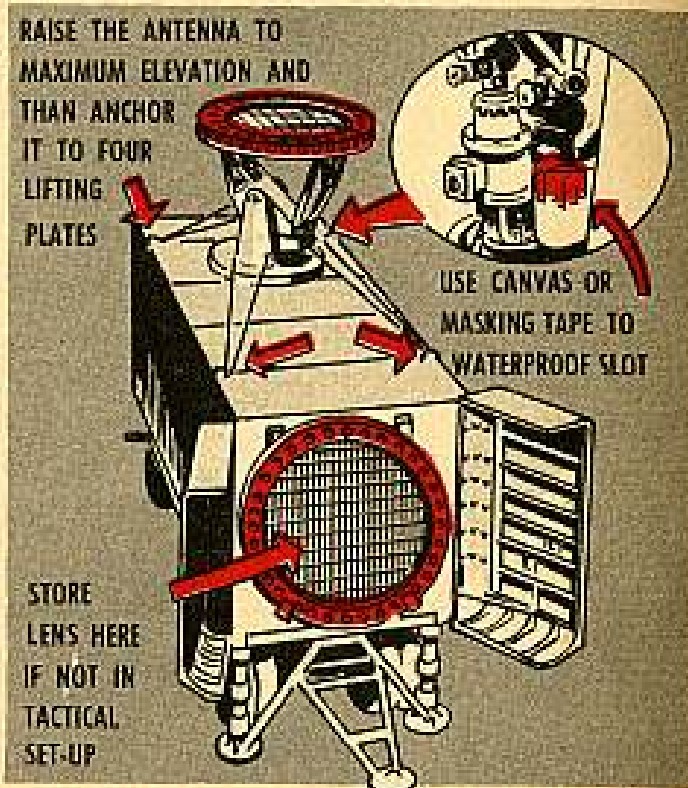
HURRICANE CAUTION

In the past you may've heard tell that the best way to protect the M33's tracking antenna in high winds (60- to 100-mph) was to lash 'er down at minimum elevation.

Well, friend, this is to tell you that those instructions no longer stand. Experience shows that at minimum elevation a hard wind whistlin' through

the lens will create vibrations violent enough to break off the fins.

The tie-down method recommended now is:



For M33 people who aren't involved in a tactical set-up, protecting the track antenna's lens in hurricane-like weather is a simple matter. They just remove the lens and store it inside the clamshell where it normally goes when the van's on the move.

And here's something else to keep in mind when the track's being readied for bad weather: If rain's expected along with the high winds, be sure to cover up the air-intake slot for the magnetron blower housing.

When the tracking antenna's all tied down and the blower motor's covered, put a tag reading like this on the radar power switch (located on the radar control panel):

"Do not operate—track antenna tied—track blower intake covered."

CAREFUL WITH YOUR "THIRD EYE"



Any Joe who works with electronic equipment has three eyes. That's right, friends—three.

Naturally, he's got the two standard ones in his skull. The third one is his electronic test instruments.

And that "third eye" can't "see" if it hasn't been treated right. Electronic test instruments must have proper use, care and handling.

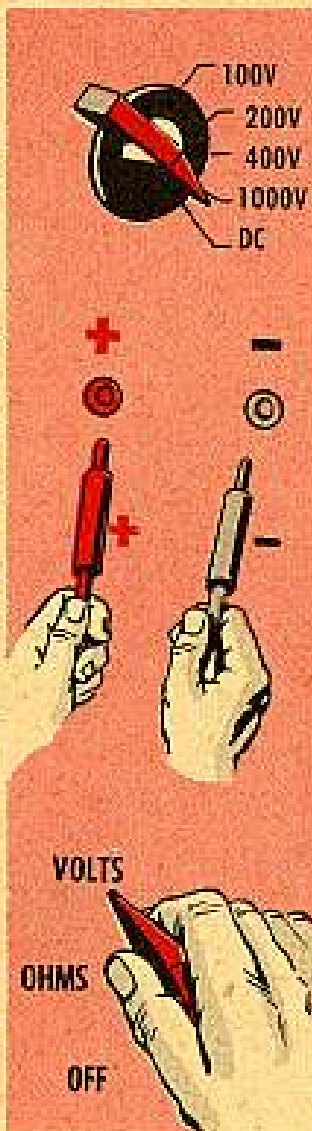
USE IT RIGHT

Hup Before using any instrument, get clued in on its operation, adjustment and characteristics.

Tip Check for correct voltage and frequency before applying power.

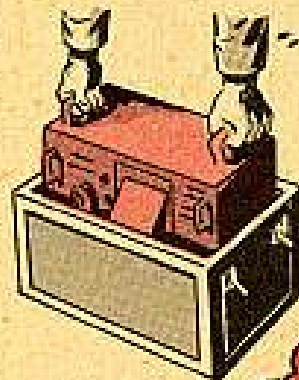
Threp With measuring instruments, get right scales and polarity before juicing her. Don't use a voltage or current that's greater than the range of the instrument. If doubtful on the approximate value to be measured, use highest scale first.

Forp After a multi-meter resistance measurement, turn the selector switch to voltage position.



TAKE CARE

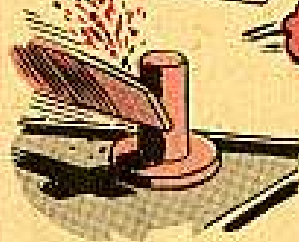
Hup Lube all moving parts per instruction. Watch for corrosion.



Tip Put instruments in their right storage container or area. If you've got no such thing, use a dry, cool, clean area for storage.



Threp Replace dry cell batteries if cases are bulged or corroded.



Forp Scrape any corrosion off terminals, and check battery under load conditions.

HANDLING

Think having a tender touch isn't important stuff? Take a look at the results of this survey on test equipment:

90 per cent of equipment was out of calibration.

25 per cent of the 90 required an overall alignment.

75 per cent of it called for minor adjustments.

30 per cent of the 90 was out of calibration because of rough handling. 'Nuff said, except this:

Use it right, take good care of it and handle it gentle-like.

YOUR M51 DUMP TRUCK

YOU CALL...
IT HAULS...
ANY OF TIME...!
OR PLACE!



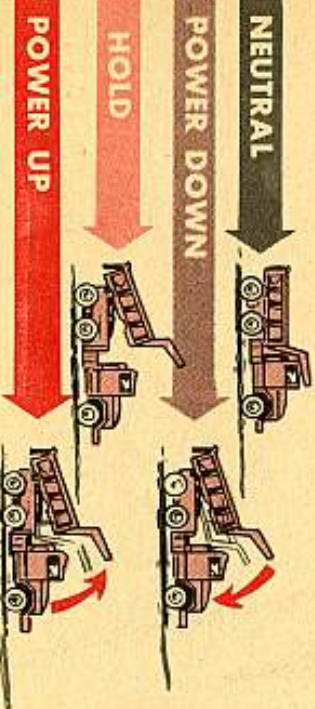
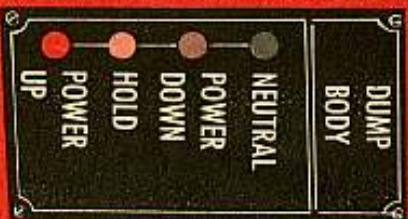
Yep—she's one powerful lot of truck, that M51 5-ton dump. She'll lug as much as 10 tons of anything for you and then plop that stuff down just where you want it.

Not needing much except your guiding paw, this hulk of bulk is equipped to handle the three kinds of dumping jobs—regular dumping, spread dumping and rocker dumping. With the help of your power-take-off, you can do these types of dumping right easily.

THE POWER-TAKE-OFF

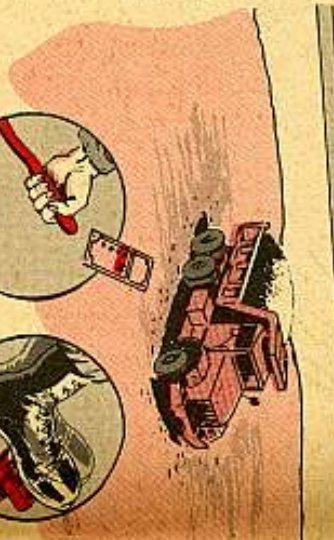
That power-take-off is the handy little gadget that's used to raise and drop your dump body. **NEUTRAL**, **POWER DOWN**, **HOLD** and **POWER UP** are the four positions that do the work. To work your PTO, just reach behind you to the left of the driver's seat—there you'll find the power-take-off control lever.

To get your body to rise and drop is easy. For example, if you want to get a rise, shove your power-take-off control lever into **POWER UP** position. Want to hold that body in place? Shift the PTO lever into **HOLD** position. And, to drop your body, all you have to do is push that lever into **POWER DOWN** position.



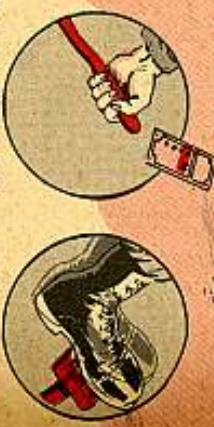


To get your PTO from NEUTRAL into any of the other three ranges, you first have to push in your clutch pedal and disengage your clutch. Then, when you have your PTO lever in the range you want it, let your foot off the clutch, engaging it, and away that body'll go. But, once you're in any of the ranges besides NEUTRAL you don't have to use your clutch to shift your PTO lever into any of the other ranges—just shove that shaft in. Just to make it a little easier to follow . . . Here's how



You start off with your PTO in NEUTRAL.

Step on your clutch pedal.



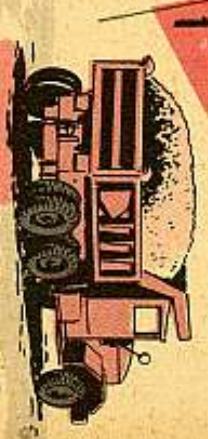
REGULAR

... is when you're dumping stuff that'll easily slide out of the truck's body into a fill or pile. This "easily-slide-out" stuff can be anything like gravel, sand, stone, rock—stuff that'll come pouring out from under that tail gate.

Let's say you have a load of stuff in that body and you have to dump it. Here's how it's done—



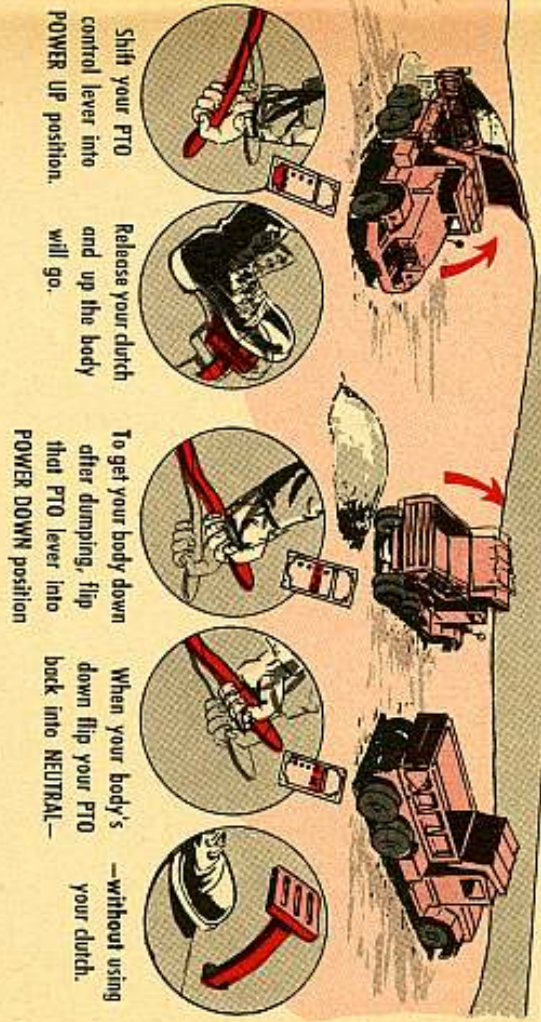
You'll probably have to get out on the running board to get at this tail gate lever— unless you have octopus-like arms.



Stop your truck with its tail gate right over the spot where you want to dump.



Pulling the lever forward and down opens the tail gate— pushing it back and up closes it.



Shift your PTO control lever into POWER UP position.

Release your clutch and up the body will go.

To get your body down after dumping, flip that PTO lever into POWER DOWN position.

When your body's down flip your PTO lever into NEUTRAL—



DUMPING ...



Throw your transmission into NEUTRAL and set your hand brake.



Now, open your tail gate by reaching over to the front of your dump body just to the rear of the cab on the driver's side— there you'll find a hand lever which you use to open and shut your tail gate.



RAISE NO MORE THAN 7 FEET

Always open your tail gate before you touch your PTO. If you don't, when you go to raise your dump body, all the weight of your body and load will be put on the rear of your truck, causing one heckuva strain. When you go to unhook your tail gate with the body up and if someone is standing in the rear of the truck, he could find that load pouring right on his poor, begotten head.

Now, with your tail gate open, your transmission in NEUTRAL and your foot off the accelerator, your engine will be idling at about 500-RPM. Still with your foot off the accelerator...



9



Lots of times your load will pile up to the height of the tail gate, keeping the rest of your load clogged up in the body. Move your truck forward a few inches, and the stuff'll flow out. You can do this with the body in its raised position, but take it easy if you don't want that stuff all over creation.

If you have to spread any material over a wide area, you'll spread dump.

Let's say you're helping to lay a road, and you have a load of gravel that has to be spread along the roadbed. By adjusting your tail gate, by raising your dump body to the right height (depending on what you're dumping and how fast the stuff flows) and by driving your truck forward, you'll get a neat spread job. This takes mucho practice and just as much experience.

Throw in your clutch pedal.



Pull your power-take-off control lever all the way down as far as she'll go—



this'll put your PTO in POWER UP position. Let your clutch out.

This will engage the power-take-off and start your body rising. Now, you may have to run up your RPM to get that body moving—it's all according to what kind of load you have and what kind of ground you're dumping—practice will give it to you. The way to do it is like this—

10



After you've dumped, bring that dump body down before moving by shoving your PTO lever into POWER DOWN position.

SPREAD

One of the most important parts of spreading is adjusting the tail gate. You do this

by using the tail gate chains. Thread these chains around the hooks at the lower corner of each end of the tail gate. Then, spread them through the holes at the lower end of each rear corner brace. Adjust the chain length to make the tail gate opening just the right width for the amount and kind of material you want to spread.

7

With your engine idling, step easy on your accelerator pedal. Keep giving her gas (raising the RPM) until your body starts to rise but go easy. Don't go so fast you'll lose control of that body, and let that body go too high. As soon as the stuff starts flowing out easy-like, throw your power-take-off lever into HOLD position. You can raise that body to a height of about 70 degrees (about 7 feet) before she'll stop on you. Usually it isn't necessary to get her up this high—so don't.

11



Don't give that truck any more than the idling RPM—about 500—to bring that body down. There are times when you may have to tap your accelerator to get that body to start down—for example, when you're on a hill with the front of your truck facing uphill. But, as soon as that body starts down, cut your RPM to the minimum of 500.

8



Never raise that body any higher than necessary, 7 feet should be tops. No sense in putting a strain on her when you don't have to. Follow the rule of raising the body to the height you need for dumping your load and no more. That way this body'll hold up for you.

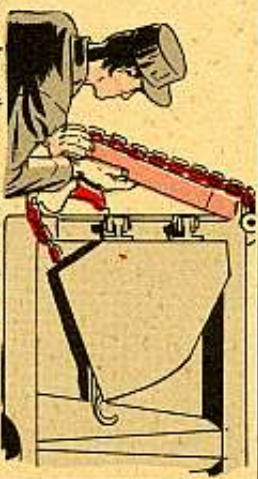
12



When your body locks down, put the PTO lever back into NEUTRAL and close your tail gate. Just reach over to the tail gate hand lever and shove it back up as far as she'll go.

DUMPING

1

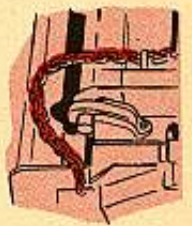


For most of your spread operations, you won't open that tail gate more'n six inches. But, of course, this figure could be more or less with the kind of stuff you want to spread. Time and experience will give it to you. If you have to open the tail gate to judge the opening, do so, but leave the body down.



2

When you get the right opening, close your tail gate—you'll open it again when your body is raised. In other words, the tail gate has to be closed when the body is first raised, or else you'll dump the stuff instead of spreading it.



3 SAND
ROCKS



Now comes another important part of spreading—raising that body. Again, experience will tell you what different heights will do with different kinds of material.

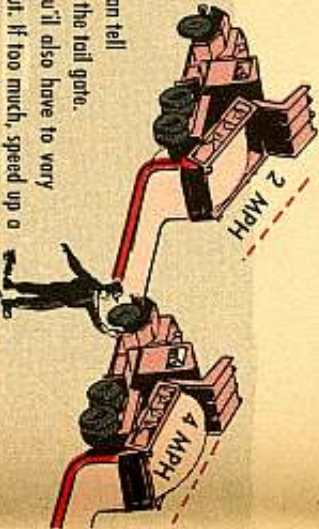
4



Raise your dump body. Careful now—when that body reaches the right height where your stuff will flow out evenly, push that PTO lever into HOLD position. Most times you shouldn't run your body up more than about 2 feet (20 degrees).

5

Ready to start rolling? OK—open your tail gate, shift your transfer into low range and your transmission into first. Now, start rolling—but take it easy. To get the hang of it use a guide the first couple of times. He can tell you how much material is coming out from underneath the tail gate. Too much? Lower your body. If too little, raise it. You'll also have to vary your driving speed with the amount of stuff flowing out. If too much, speed up a bit—too little, slow down. Keep your speed around four or five miles an hour when spreading.



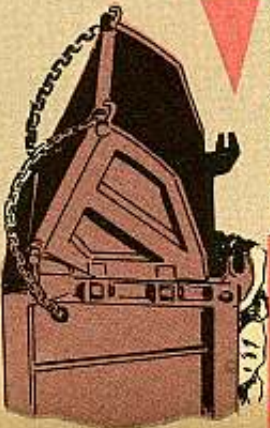
As your load begins to get smaller and smaller, you may have to keep raising your dump body. But watch it—you want to spread that stuff, not scatter it. Spreading a load on rough ground is no cinch; you have to make like a mugwump... keep one eye on your speed, another eye to the road and your third eye on your load. If you happen to bump or rut, you could find your truck on its side—or you could damage the truck's cross heads and hydraulic system. Here's a good time to put that buddy of yours to work—have him watch the load as you watch your speed and the road. Before bringing the body down bring your truck to a standstill and let it come down easy-like.



If you have a load that's too big to squeeze under your tail gate, you'll have to dump it over the tail gate. This rocker dumping is used when you have to dump a hulky load like large rocks and tree stumps.

On the rear of the body you'll find two tail gate wings. To drop the tail gate down from the top, first make sure your tail gate's locked on the bottom.

ROCKER



DUMPING



Now to dump—shove your PTO lever into POWER UP position, and just let the load roll out over the top of the tail gate. But watch how high you get that body.

3



If you get it too high, you may find your rear axles mating with the ground. Another thing about raising your body—take it easy, 'cause you don't want those boulders bouncing off the ground and hitting your truck.

You may find you have to raise your body a little higher as time goes on. This type of dumping takes a lot of finesse and experience. Nothing to it after you get the hang.



When you're finished, bring your body down and lock you tail gate.



To lock her, just reverse the process of opening—

Shove your tail gate up and lock her with the tail gate retaining pins.

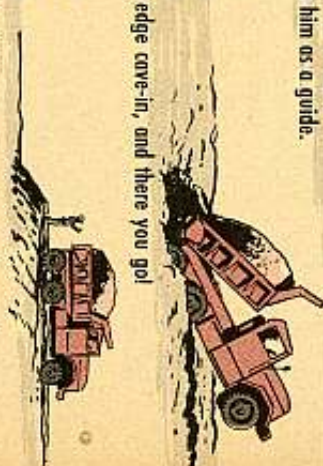
A FEW

That's just about all there is to it. Of course, there are certain knocks which'll come to you—knocks that'll make your job easier. Like, for one—

You have to make sure you drop your load in the right place. If you miss, someone's going to have to shovel that stuff over to where it should be. You won't miss if you place your truck's rear end as close as possible to the dumping spot. If you have a buddy with you, it'd be a good idea to use him as a guide.

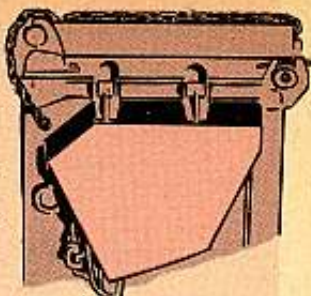


Watch yourself when you're working around fills. Can't afford to get too close—a heavy load is put on the rear wheels when your body's raised. If the edge of the fill is soft, that weight could make the edge cave-in, and there you go!

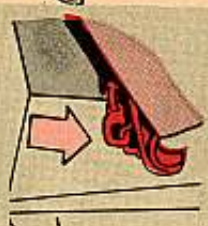


You can dodge these pitfalls by keeping your back wheels at least six feet from the fill's edge. You can come closer to a shallow fill if the ground is firm. Of course, if you're dumping on good, solid ground you can take that truck anywhere.

A lot of times you'll see guys on top of their dumps shoveling their loads out. Could happen to you, too—the load gets stuck and the only way to get it out is with a shovel. One way to try and get away from this is to have the guys who load your truck put the driest stuff in first. Another trick—a good one when you're going to dump sticky stuff like clay—is to pour some old engine oil into the dump body before loading. This'll act like Ex-Lax and make the stuff slide out smooth.



Then shove the tail gate wings back into place.



Lock 'em in with the harness hooks.

EXTRA TIPS

Never try to dump a dingling load in any way, particularly by banging your wheels against a curb or something like that. This'll only knock the p-iamas out of your truck. If you raise your dump much over a 30-degree height with a dingling load in her, you could tip the truck over—heavy on top. You could also bend the cross heads and rupture the cylinder. Best way to get a dingling load out is to keep your dump body down and put your shovels to use.



DON'T LET IT THROW YOU

Talking about that term "rocker dumping." It doesn't mean you're to rock your truck back and forth to throw off that load—this'll only help damage your dumper. It does mean that the load is "rocked" over the top of the tail gate just by lifting your dump body. So, when you see this term used—and it's used in TM 9-8028 (Jun 55)—you'll now know what to do.

Naturally, follow the laid-out maintenance rules. Grease and oil that truck and hoist assembly like it tells you in IO 9-8028 (14 Mar 55). Keep a copy of TM 9-8028 (Jun 55) handy for info on your dump body and hoist.

There are a few MWO's you'll be interested in seeing. These apply to your dump body—

MWO Ord G744-W5 (28 Apr 53) tells your Ordnance support outfit to fix up those thrust blocks on the dump body so there'll be little chance of damaging your hydraulic piston rod and channel-iron floor subframe. This MWO is marked urgent, so get it done if you haven't already.

MWO Ord G744-W7 (26 May 54) and its Change 1 (12 Dec 55) tells Ordnance how to bander that hydraulic-

hoist pump and control relay so your pump won't fail you and cause damage to the transmission and power-take-off, so that the pin in the cam-actuating lever in the control relay will stay tight all the time and so you'll be able to lube your control relay that much easier.

MWO Ord G744-W13 (24 Aug 54) tells Ordnance how to make that dump body and hinge bracket stronger so your truck'll stand up better for you under those \$&&%"!-type of terrain conditions.

Dumping can be more fun than a barrel full of monkeys if you keep your truck in shape. It could be murder when that truck's petered out. Keep her in shape and she'll make your job easier.

SEE PAGE 46 FOR SOME LUBE TRICKS ON YOUR MSI

Connie Rodd's

"SHORT 'N SWEET DEPT"

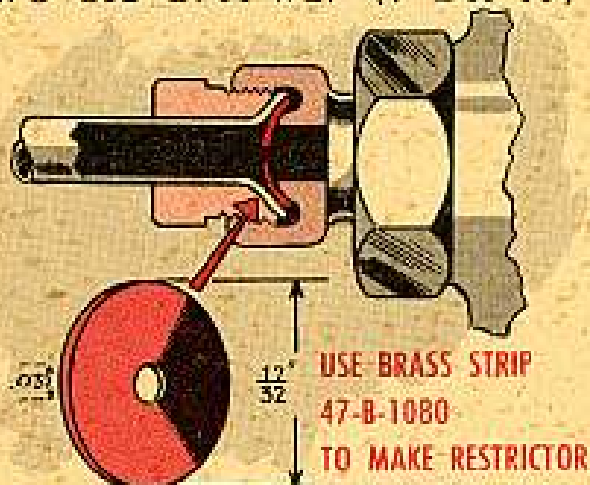
URGENT
MWO ORD
G744-W27

JUST
HANG
ON, I'LL
HAVE AN
ANSWER
IN A
MINUTE

Help's on the way!

All of you that have been running into governor trouble on your M62 best get your wrecker to Ordnance on the double.

There's been published an Urgent MWO Ord G744-W27 (7 Dec-55)



which tells field maintenance (or higher) how to install a restrictor in power-divider governor valve control, valve-to-power divider governor valve vacuum line. It'll govern engine speed when crane hydraulic pump is engaged and the power divider is disengaged. This MWO is a must.

Chevy change

Wondering why your 1951 model Chevrolet sedans are having generator and starter troubles? Well, they've just

spotted a missprint in TB Ord 382 (27 Aug 51), which gives you all the adjustment specs for your commercial vehicles.

From here on out better put a minimum of 24 ounces and a maximum of 28 ounces on that starter and generator brush tension instead of from 17 to 21 ounces. Why not make a note of this in your copy of the TB?

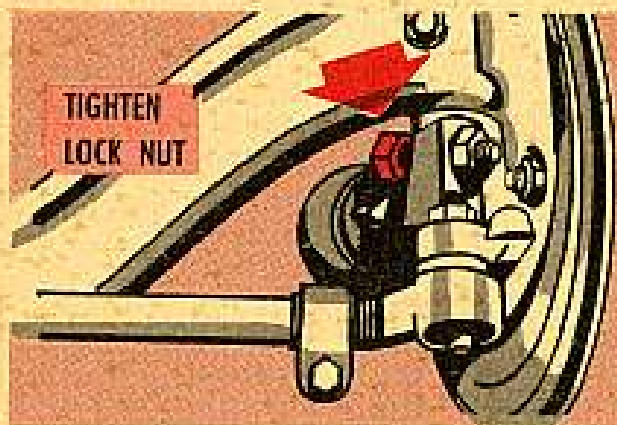
Spin

Some fellers have been going 'round in circles since they got their 1955 Ford 1/2-ton 4x2 F-100 pickups. And I really mean in circles. Seems every time they turn their wheels all the way over, the steering locks on them.

The trouble seems to be with the steering stops and the fact that the stop lock-nut isn't being kept tight. What to do is get a 12-in open-end wrench and just tighten up that lock nut all the way.

You'd best check that nut every once in a while to make sure it's staying tight. When it starts backing off, the adjustment on the steering stops goes out of whack and you're in a tail spin again.

This is a mighty dangerous situation caused by loose thread fit between stop, steering arm, and lock nut. The proper adjustment when your vehicle carries 6.50 x 16 tires is $2\frac{3}{16}$ inches measured between tire and front spring.



The right thing to do when you find this happening to your vehicle is return it to a Ford dealer (or to Ordnance if that's where you normally get your maintenance support) and get replacement of the loose fitting parts with better ones, under the vehicle warranty (SB 9-98-5). This oughta help 'till positive correction can be made.

For overseas situations, the right thing to do is return it to Ordnance and they'll get in touch with the nearest Ford representative in accordance with SB 9-98-1.

New spark gap

The specified spark plug gap for all tracked vehicles using 895 and 1790 engines has been changed: The reading was .011 to .014; now it's .017 to .020.

You'll see this in your TM's as the revisions come out. Meantime, when you pull those plugs for cleaning, etc., use the new setting.

And, please—don't forget to use a little anti-seize compound (FSN 8030-251-3983) on each plug you install, be it new or used. Then you won't have to grunt and strain next time they have to be pulled.

Apply the compound sparingly to the plug threads. But . . . take extra care that you don't get any on that center electrode—or on the ground strap. OK?



There are two plugs being used: The old plug, Ord Stock No. G244-7525550, and the new plug, Ord Stock No. G251-8689377. The new one has one ground strap (electrode); the old one has two.

Boo keys

Beau coos of roses to those guys who don't let things throw them. Like when TM 9-8014 (Apr 55) and TM 9-8028 (Jun 55) say, under the battery services portion of the C and D PM table, to test the voltage of each battery cell.

This would be OK if the G758 $\frac{1}{4}$ -ton Jeeps and the G744 5-ton trucks had commercial-type batteries in them.

But, when you're messing with Army waterproof batteries, trying to take individual cell voltages will lead only to batteryitis, better known as a crocked battery.

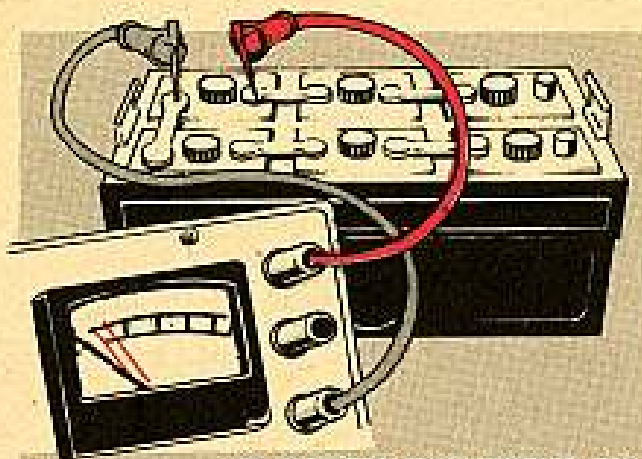
Those connectors which run from one cell to another are under layers of

"Here, Kitty"

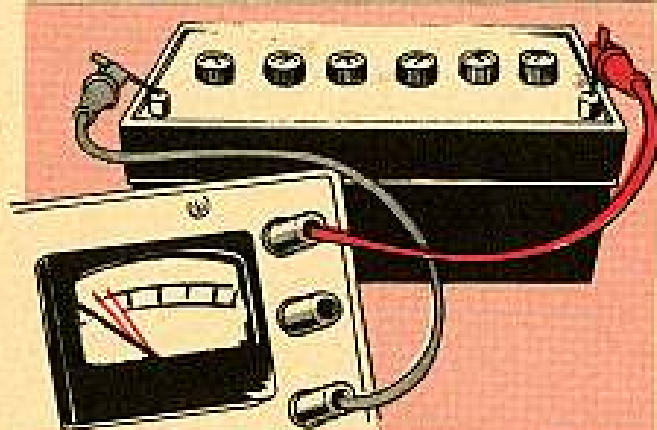
They're here to stay—those new 100-ampere rectified AC charging systems. Gives for happier radio talk now that you don't have to worry about batteries dying on you.

For you fellers who will soon be making the change-over from your 24-volt system to the new AC system, the stock numbers you'll be using to get your generator kits are—

VEHICLE	KIT ORD STOCK NO
G740	G740-5702023
G758	G758-5702025
G741	G741-5702024
G742	G742-5702047
G749	G749-5702048



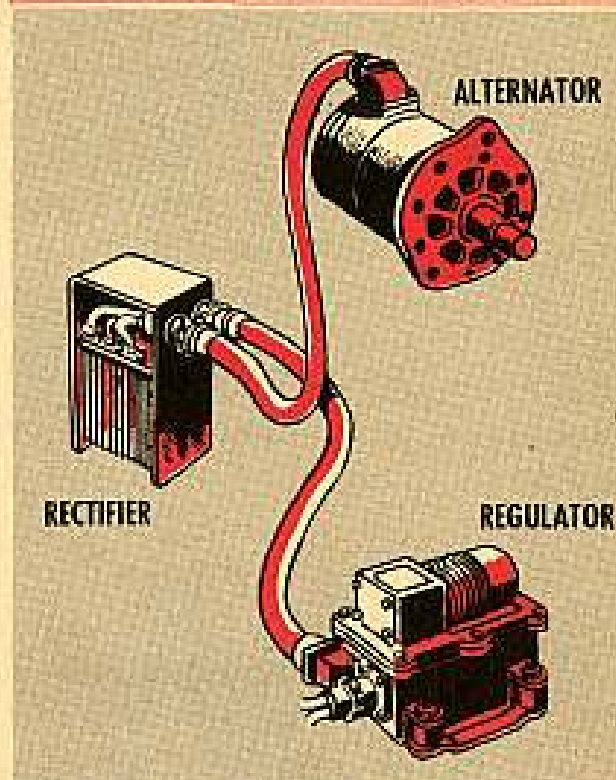
ON BATTERIES WITH EXPOSED CELL CONNECTORS, CHECK EACH CELL



ON ARMY WATERPROOF BATTERIES CHECK VOLTAGE OF WHOLE BATTERY

sealing compound and tough to get at. With commercial batteries, they're right on top, so all you have to do is touch the tester to them. In order to get at the connectors on your waterproof batteries, you have to drive a prong through the sealing compound—and there's no guarantee that this prong'll hit a connector and stop. On top of the possibility of driving a prong right through your battery and ripping up vital parts, once you plunge through the sealing compound, your waterproof qualities go down the drain.

So, if you want to check battery voltage on your military 24-volt battery, check the voltage of the whole battery and not separate cells—and be safe.



The kits for your G742 and G749-series 2½-ton trucks can be had if you can justify your requisition.

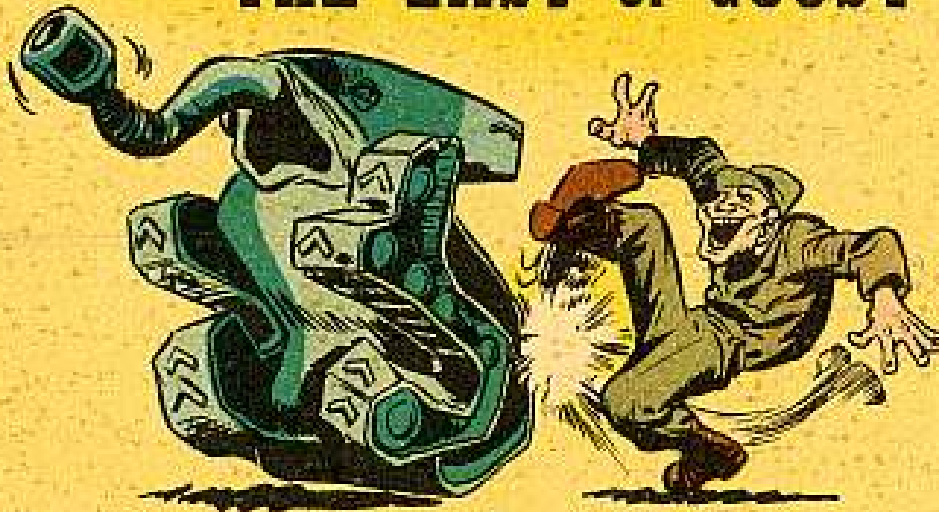
You'll find some instructions on how to install these right in the kit you get.

JOE'S DOPE

WHAT'S THE
SOLUTION
TO CRANKCASE
DILUTION?

I ONCE WAS A TANK
OF FRONT LINE RANK,
A NOBLE BEAST OF WAR,
TILL I DREW OL GUS—
THAT GOOSY CUSS—
ALAS WE ARE NO MORE.

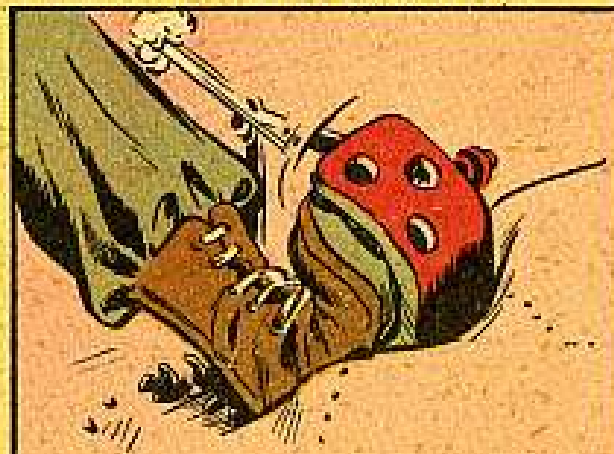
OR "THE LAST OF GOOSY GUS"



Come, heave a sigh for Goosy Gus, that tanker-with-a-twist
The things Gus twisted 'round a tank were more than just a wrist.



He liked his carburetors set
For mixtures rich and raw...
(At throwing smoke-screens Gus
could fight
Chem Warfare to a draw.)



He loved to goose a throttle—
(That's how Gus got his name.)
Engine cold? Misfiring?
He'd goose it just the same.



And gas would spurt out through
those jets
And flood the manifold
And wash right past the pistons
When the cylinders were cold



And end up in his crankcase. Right?
Where else was it to go?
But don't expect Ol' Gus to care—
He didn't even know...



On primer-pumps he'd play
a tune
And squirt in gas like mad
Without his engine cranking
—No matter to this lad.



He'd never close fuel
shut-off valves
Before he left his tank.
A leaky needle valve? So what?
On this his mind was blank.



He'd fill his fuel tanks to the brim,
 Leave no room to expand.
 What was this joker dreaming of—
 That's one thing lines won't stand.



These things that Gus thought
 nothing of
 Had one result, you see,
 They'd let fuel in his crankcase
 Where only oil should be.



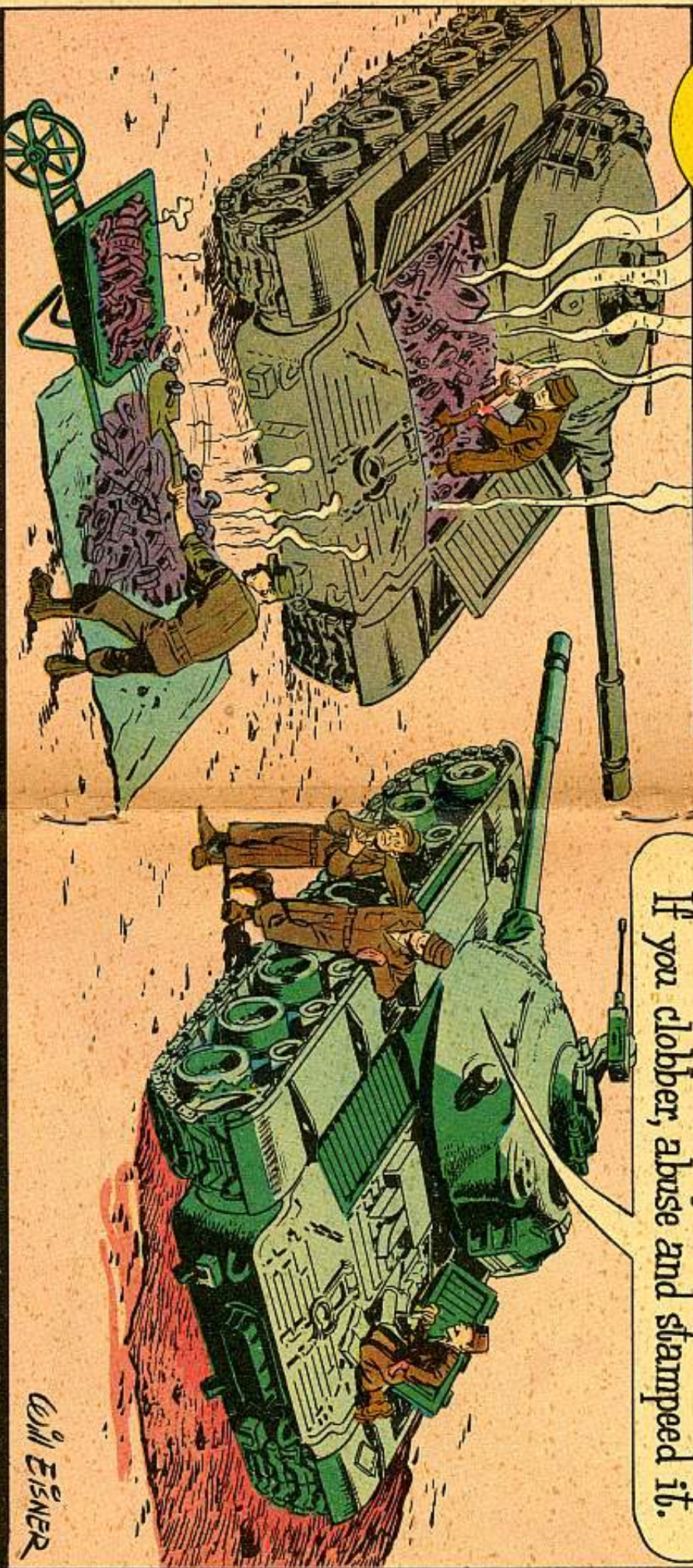
(Let fuel leak in with engine oil
 —DILUTION's what they call it—
 And though your lubricant's
 the best,
 This stuff is bound to spoil it;



Joe's

Dope Sheet

A tanks' a fine friend when you need it—
That is, if you care for and feed it;
But it won't get you back
In one piece to your shack
If you clobber, abuse and stamped it.



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



Your pan is quickly filled
with gook
From moisture
CONDENSATION;
Fuel acids breaking up the oil—
Gad! what
CONTAMINATION!)



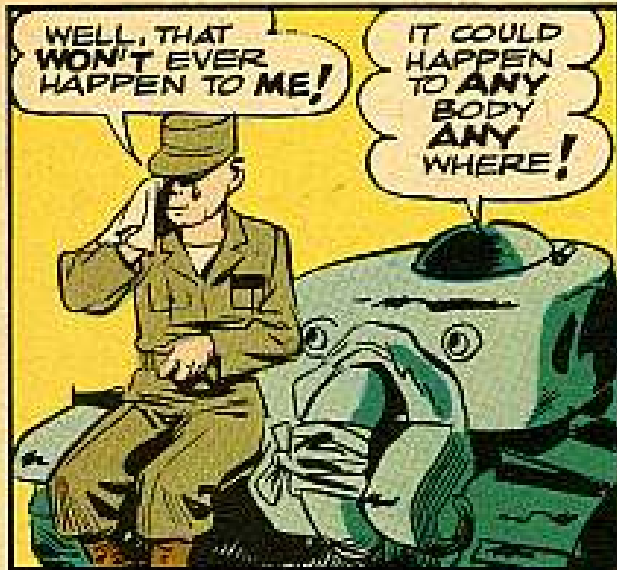
But Gus kept goosin' throttles
Neglecting, over-priming...
His oil got thin and thinner—
Fouled up? He's double-timing!



Until one day (it had to come)
A spark...from
who-knows-where—
That crankcase up and
blew its top;
And Gus flew through the air!



Too late to talk or fuss with Gus,
DisCUSS the pro and con;
Some guys go on to greater things,
But Gus—he's just gone on...!



WELL, THAT WON'T EVER HAPPEN TO ME!

IT COULD HAPPEN TO ANY BODY ANY WHERE!



...WHEN, F'RIINSTANCE, A FUEL PUMP DIAPHRAM GOES BUM AND LETS GAS ENTER THE ACCESSORY CASE AND ON INTO THE OIL PAN...



OR...WHEN PRIMER PUMP CHECK BALL GETS OUTTA WHACK AND LETS ENGINE VACUUM PULL GAS FROM THE TANK INTO THE CYLINDERS AS YOU DECELERATE..



JUST KEEP A SHARP EYE OUT FOR TROUBLE SIGNS... LIKE OIL GETTING TOO THIN...

..OR IF THE OIL LEVEL STARTS TO RISE ON THE DIPSTICK... WHEN IT SHOULD BE FALLING... OKAY, OKAY... SO WHAT DOES THAT TELL YOU?



UNLESS YOU'VE BEEN MAKIN' LIKE GOOSY GUS... IT'S PUMP TROUBLE... GET 'EM CHECKED!



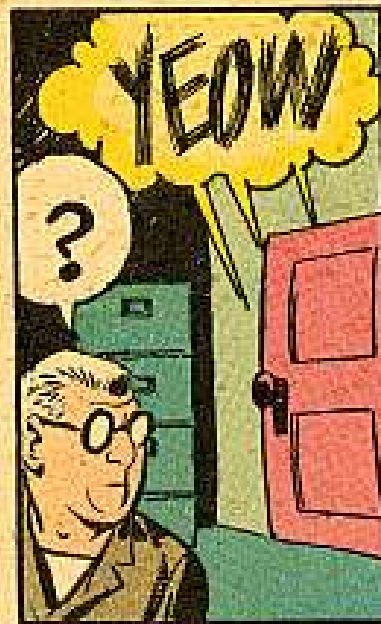
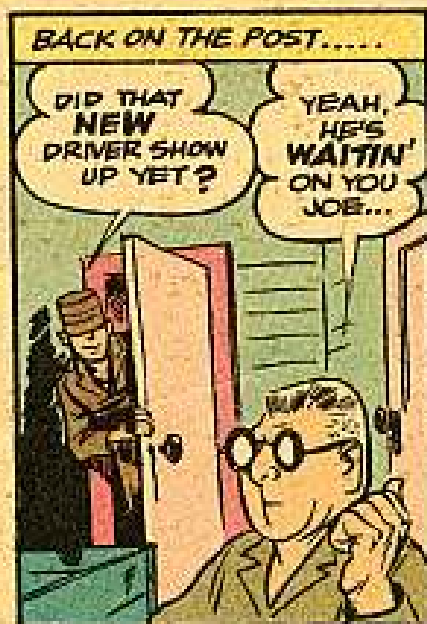
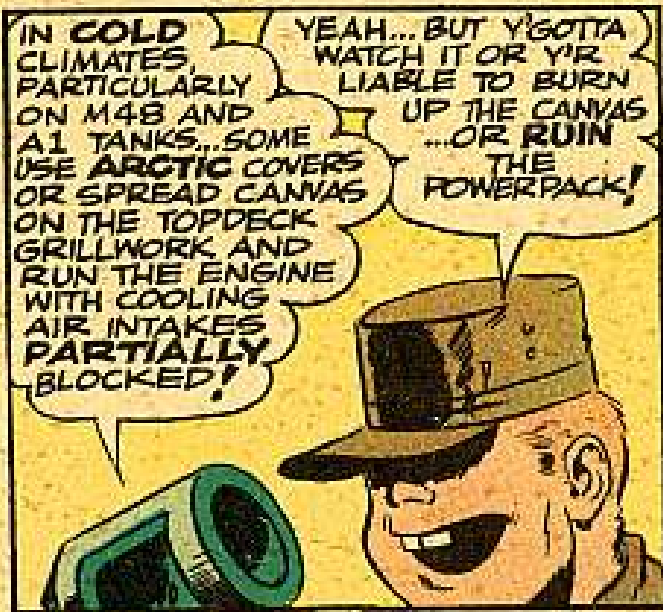
WELL, SO LONG, NOW...

ONE THING MORE ...IN SOME CASES THERE'S ANOTHER WAY YCAN GET A FOULED-UP FUEL MIXTURE AND DILUTED CRANCASE OIL....



HURRY UP!! I'M LATE.... GOTTA BREAK IN A NEW TANK DRIVER!

...AND THAT IS CARBURETOR ICING... DID YOU SEE P.5 40 PAGE 31??





SHOOT ME, PLEASE

Dear Half-Mast,

Please clear up what's now a small point, but one that could cause a lot of confusion when it gets around.

Note 6 of LO 9-8022 (Nov 55) says that when you go to lube the front-wheel universal-joint steering-knuckle-bearings of your G742 trucks, just shoot grease into the top grease fitting.

But—note 6 on page 207 of TM 9-8022 (Dec 54) says that grease is shot into both the top and bottom grease fittings.

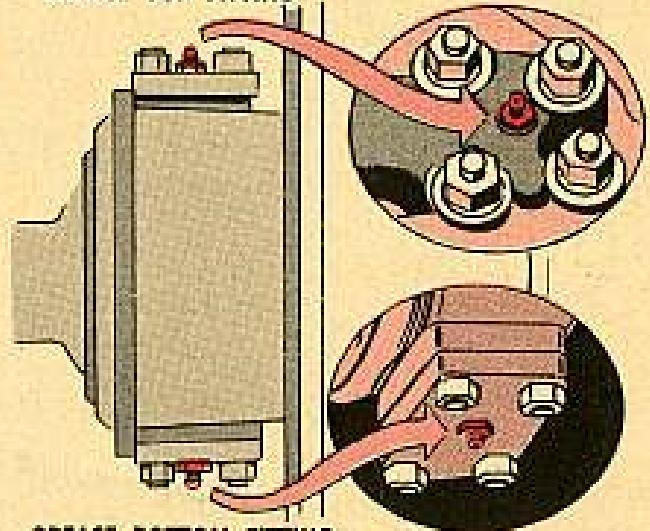
Which is right?

Mr. R. P. L.

Dear Mr. R. P. L.,

Good spotting there, Sir. TM 9-8022 is right—both the top and bottom

GREASE TOP FITTING



GREASE BOTTOM FITTING

fittings get grease. Might've been a slip-up when they printed the LO.

Half-Mast

SAVING THE DROPPINGS

Dear Half-Mast,

We've found that the generator frame on the M8E2 cargo tractor is too large to carry to Onan Model JT-1XE/55 or the John Reiner Model GGC-30AC generator sets. In fact, one of our Onan sets dropped right through the tractor generator frame the other day. Have you heard anything about this before or is there an MWO out on the problem?

Sgt W. K.

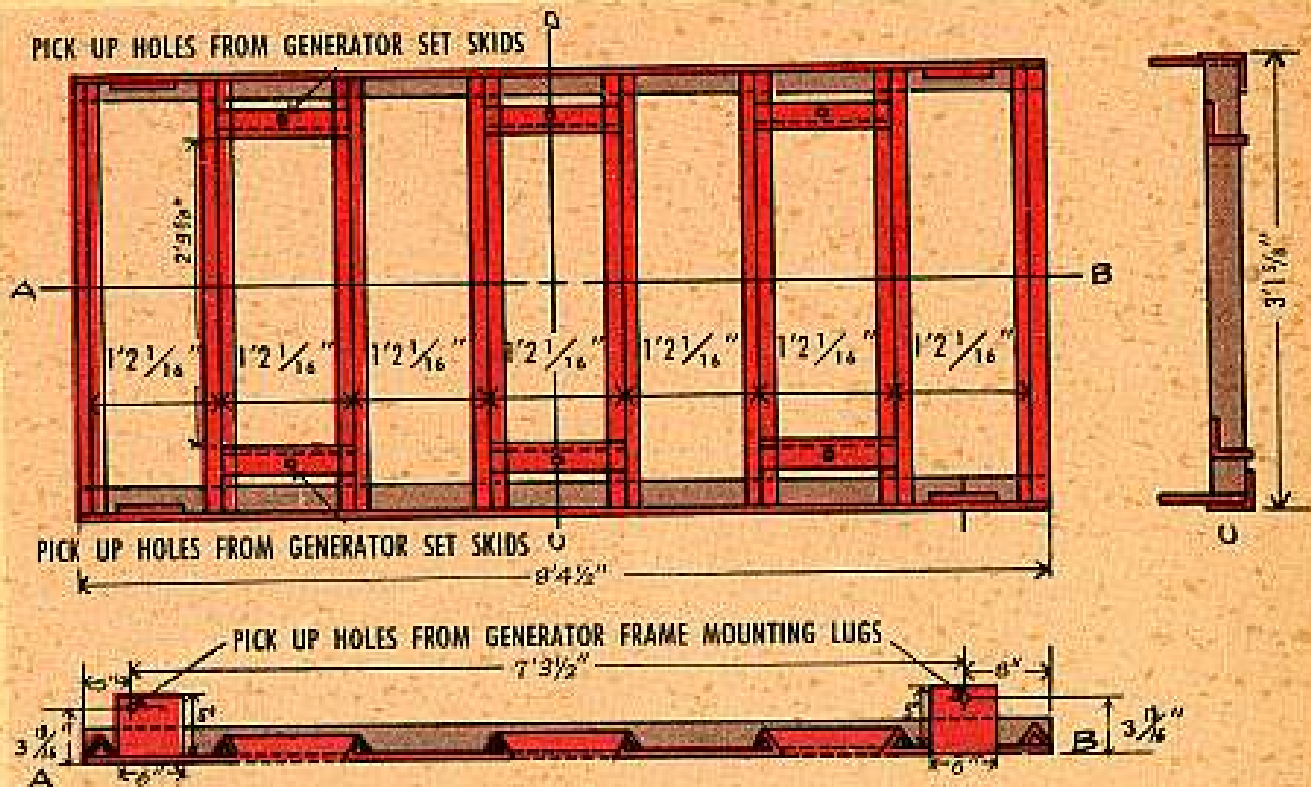
Dear Sgt. W. K.,

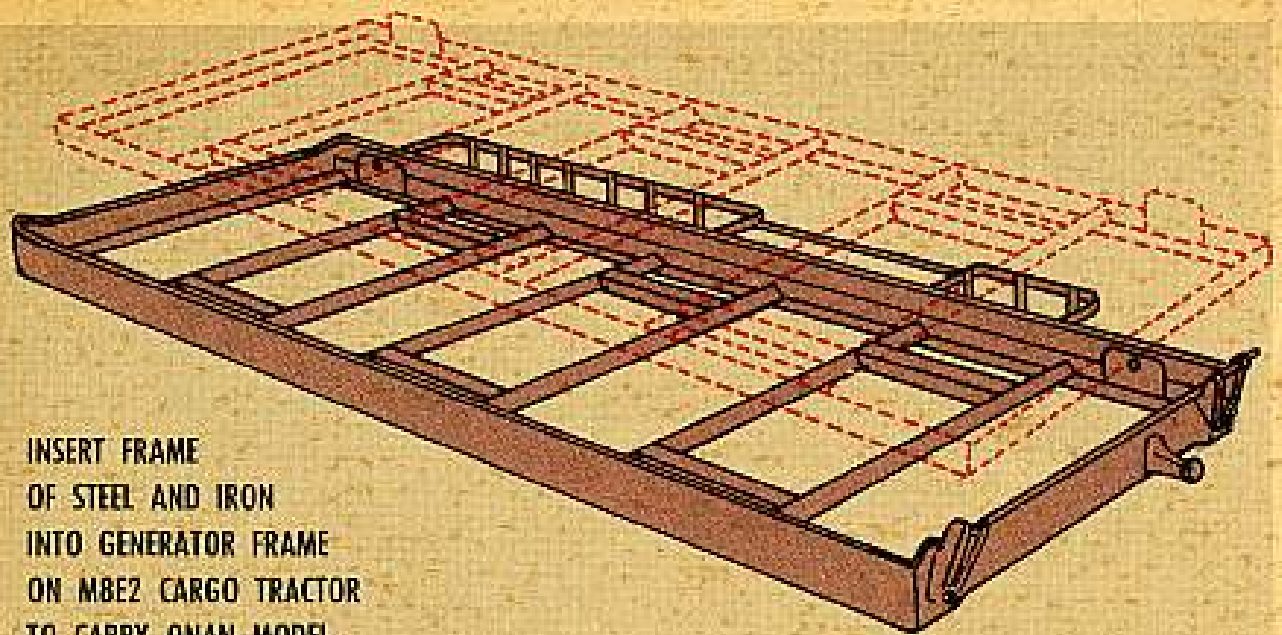
Yep, that's one I've heard about, all right. There's no MWO out on the problem yet, but the boys in the know tell me there's one in the mill and should be out before too long. In the meantime, an easy way to solve your problem temporarily would be to lay heavy timbers across the frame to support those generator sets.

I also heard about a real elaborate deal one unit came up with in the Far East. One of my buddies sent me some pictures and drawings of the temporary fix. It's an insert frame that, from all reports, works like a charm.

The insert's made so it can be mounted in the generator frame with the existing mounting lugs. Also, the insert's six small crossmembers have been positioned so the existing mounting holes in the generator set's skid can be used. The insert is made of 45 feet of 2-in angle iron, while the four mounting plates are of $\frac{3}{8}$ -in plate steel.

'Tis said that it takes five man hours to make the insert. The material—in Japan, of course—costs \$10 for each one. My Buddy tells me the cost of the labor for the Japanese welder was 500 yen. For the sake of you guys who haven't made the trek across the Pacific 500 yen





INSERT FRAME
OF STEEL AND IRON
INTO GENERATOR FRAME
ON MBE2 CARGO TRACTOR
TO CARRY ONAN MODEL

is equal to about \$1.80 in good old U.S. currency.

Of course, any fix depends on the model generator you have and what your Ordnance Officer thinks of your

ideas. He'll probably appreciate any temporary deal that'll save those drop-pings.

Half-Mast



RIGHT IGNITER?

Dear PFC H. S. F.,

Nope—they're not interchangeable.

The igniter for your M48A1 tank personnel heater (South Wind, Model 1030-D24) will be included in the next revision of Ord 7 SNL G254. Meantime, they can be had if you'll just specify: Ord Stock No. G254-8720779.

And in case you should need a flame detector switch for one of those South Wind heaters, it's: Ord Stock No. G254-8720782. (This'll show up in the new Ord 8 supply manuals.)

Dear Half-Mast,

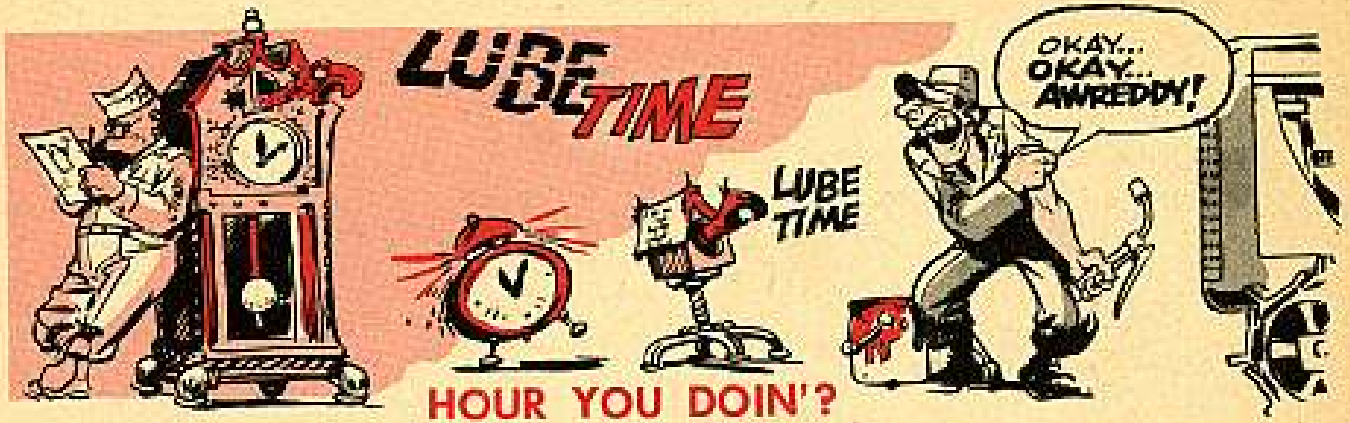
We have M48A1 tanks with South Wind personnel heaters, and some are needing igniters replaced.

The current supply manual (Ord 7 SNL G254, Jan 55) lists only the igniter for the Perfection heater used in the M48.

What do we do—try the Perfection igniter on our South Wind heaters?

PFC H. S. F.

Half-Mast



HOW YOU DOIN'?

Dear Half-Mast,

Hour meters have now been removed from high-speed tractors, such as the M5A4. But the lube orders (such as LO 9-786-1) still specify hourly intervals for lubrication services.

Obviously the services on these tractors will have to be handled on some other basis. How're we supposed to do it?

Mr. B. P.

Dear Mr. B. P.,

The LO's for vehicles that've been demetered are being revised to specify services on the basis of mileage and/or calendar days.

Meantime—to make sure your meterless buggies get the grease and oil they need—just convert the hour interval on the LO to the closest logical calendar or mileage reading.

Some outfits whose tractors are getting heavy use, have fit 'em into the reg-

ular A, B, C and D services for tracked vehicles. Like this:

- 8 hours—daily
- 50 hours—weekly
- 100 hours—monthly (or 250 miles)
- 200 hours—quarterly (or 750 miles)

But in other situations, where the tractor's work is light, a schedule like this one might be considered more realistic:

- 8 hours—weekly
- 50 hours—monthly or 250 miles
- 100 hours—quarterly or 750 miles
- 200 hours—semi-annually or 1500 miles (second D service)

So—depending on the kind of use your tractors are getting, your outfit should be able to work up a service schedule that'll fit your particular purposes. Just get your Ordnance officer's OK, and go ahead with it till the new LO's are ready.

Half-Mast

HOSE PINCHER

Dear Half-Mast,

We've been having trouble with the air hose on our 1½-ton, 2-wheel Cargo Trailer M105E3 and M107E1. When the trailer jackknifes on a sharp turn the hose often gets cut. Is there any way you

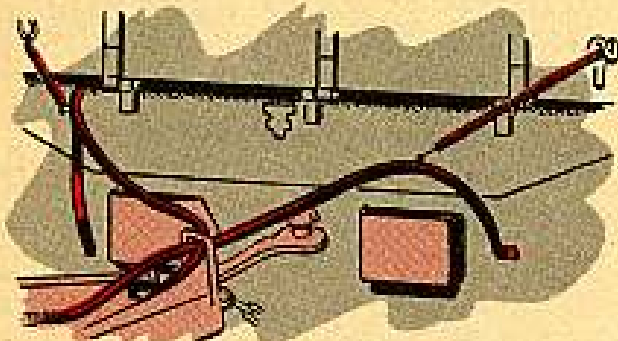
can reroute those hose so they won't get caught in the squeeze?

CWO J. C. R.

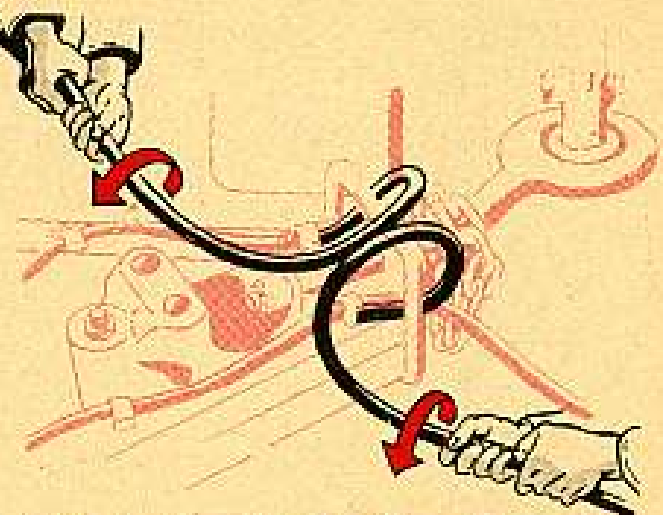
Dear Mr. J. C. R.,

Yep, there's a way—in fact two ways—that you can keep those hose in one

piece without rerouting them. One way is to attach a spring (Ord Stock No. G671-7001762) to each hose. Hook one end to the body of the truck and the other to the air hose.



The other method is to straighten the air hose out and then give it a twist before you connect it to the truck.



This twist method will only work if the bumperettes on your truck aren't bent.

Half-Mast

FOR YOU 59'ERS



Dear Sgt Half-Mast,

I'm in an outfit that has armored personnel carrier M59's but we don't have any "Mae West" life preservers to go with them. What is the stock number and how do I go about getting them?

SP2 R. M.

Dear SP2 R. M.,

The nomenclature of the life preserver is Life Preserver, vest, pneumatic, self-inflating, Type B-5. It's a Transportation Corps item that goes under

Stock No. 23-4876-150 (FSN4220-250-6287).

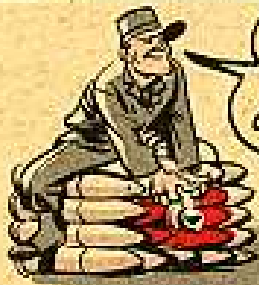
Your TOE would normally show life preservers as an item of issue if you're assigned to amphibious operations. Even tho it is listed on the TOE and T/A, the item has to be drawn separately—it's not a part of your OVM.

You could sorta put your life preservers in the same class as chains, special tools, etc. You can get them if you need them, but there's no need to have a lot of excess baggage with you when you don't need it.

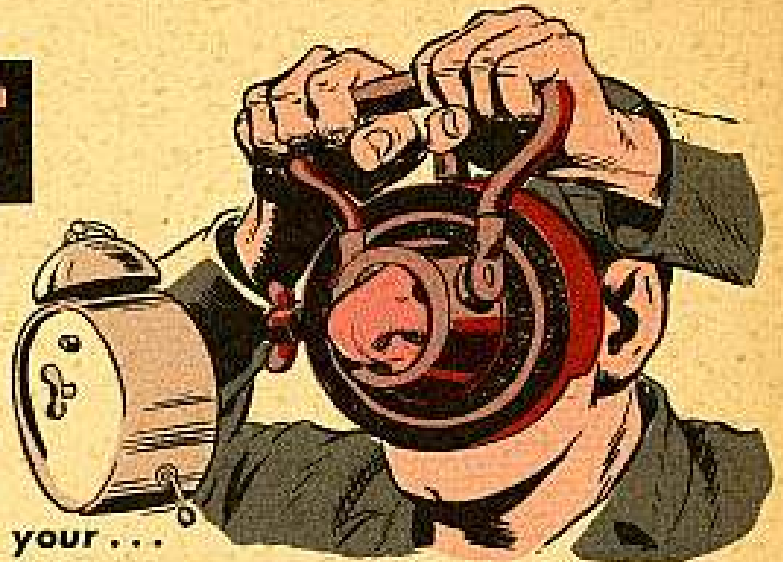
But if you're going on amphibious operations or if you need the life preservers for training, special maneuvers, etc., all you have to do is to put your reasons for wanting them down when you request them and have your CO's approval and you've practically got 'em.

Half-Mast

ARMAMENT



OKAY NOW...
TRY IT AGAIN
GO-U-N-T-E-R
C-L-O-C-K-W-I-S-E.



How to get better Fuzing with your ...

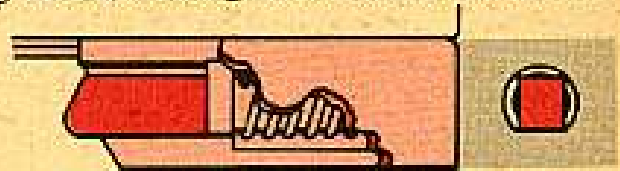
M22 AND M23 FUZE SETTERS

Troubles with fuze setters M22 and M23, or because of them, could mean three things: Using them with the wrong fuzes; setting fuzes backwards; no application of MWO Ord F293-W2.

The M22 is used with fuzes
TSQ M54 and TSQ M55 only.

The M23 is used with fuzes MT M67,
MTSQ M500, and MTSQ M401 only.

Set 'em all by rotating counterclockwise—the direction of increasing readings. Setting 'em clockwise could result in a build-up of backlash and as much as two-and-one-half seconds error in a mechanical time fuze. Some of the boys say counterclockwise rotation causes the fuze to be loosened on the projectile. But that's not so if the fuze is properly assembled and staked to the projectile.



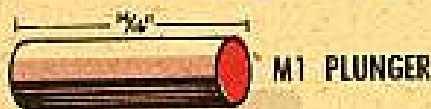
IF YOUR STOP PAWL IS ASSEMBLED
LIKE THIS... CALL ORDNANCE



IF IT'S LIKE, THIS YOU'RE OK!

Also look the M22 and M23 over to see that MWO Ord F293-W2, which corrects position of stop pawls, has been applied. If not, dial Ordnance.

YOU CAN SWITCH, BUT...



When you switch breechblocks on the 90-mm M1 and 90-mm M2 guns, you want to keep one thing in the old noggin. Here it is—

The automatic cocking lever plunger in the M2 breechblock isn't the same size as the plunger in the M1 breechblock. They look alike, but when you put 'em side-by-side, you can see that the M1 plunger is $\frac{1}{16}$ -in longer than its M2 counterpart.

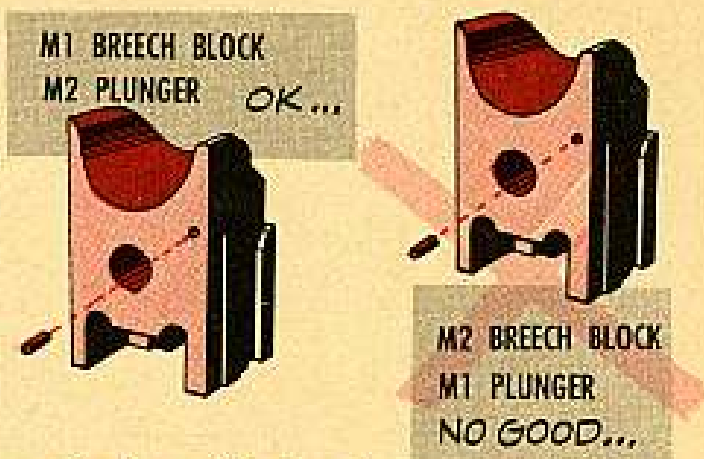
It's all right to use the M2 plunger in the M1 breechblock assembly as well as the M2 breechblock assembly.

But don't use the M1 plunger in the M2 breechblock. The longer plunger in the M2 breechblock could be the difference between firing and misfiring.

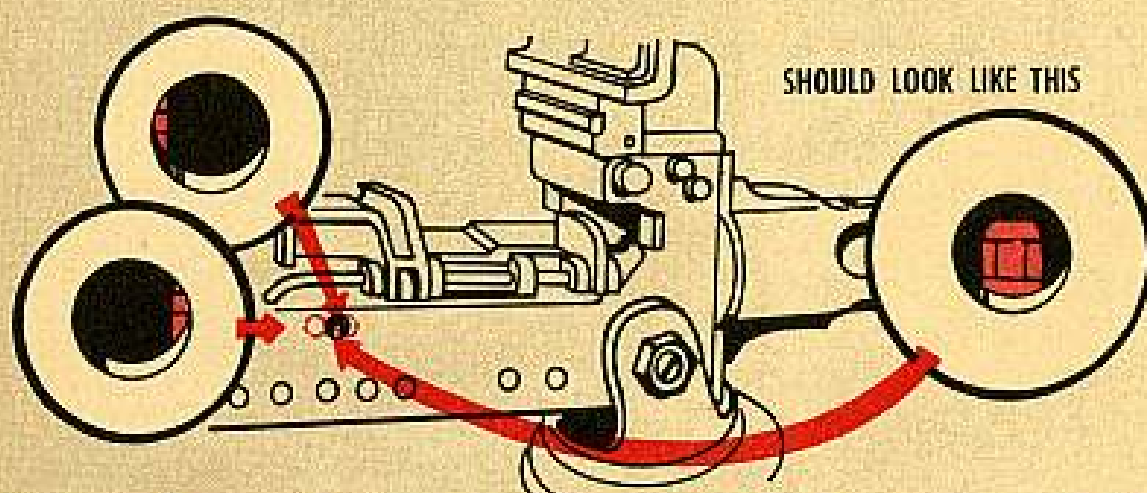
What you need to know when requisitioning the M2 plunger is to ask for Ord Stock No. DO38-7225198.

The latest supply manual leaves you out in the cold when it comes to ordering the M1 plunger. It isn't listed, but you can get it under Ord Stock No. DO28-0100270 (FSN 5315-502-5830.)

Remember: Use the M1 plunger with the M1 breechblock only.



MISPLACED HOLE



Don't fool around with your .50-cal machine gun if the outer lug on the barrel locking spring doesn't center in the hole on the receiver when you're headspacin' the weapon. Ask your Ordnance support for another gun and file a UER on the snafued weapon.

Seems—in modifying some guns—the hole was drilled in the wrong place on the receivers.

That misplaced hole could mean trouble when you headspace the gun with the help of the small part of a .50-cal cartridge link. If the hole is off, and you use the link to hold the barrel and barrel extension to the rear, you can't screw the barrel all the way in when making your adjustment.

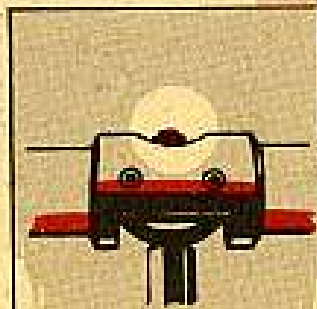
The reason? The outer lug on the spring can't pop out the hole so the inner lug holds up the barrel after a coupla twists.

So . . . you think the barrel is all the way in. You back off a coupla notches and fire away. It's goodbye gun. And you may not feel up to par yourself.

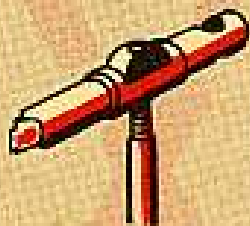
USE YOUR M10 ROD RIGHT

Your M10 cleaning rod is a handy little thing because it does the same job for the M1 rifle as two other tools—the M3 cleaning rod and combination tool.

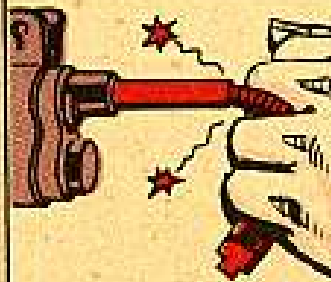
But you've got to be careful with the double-duty dandy—that rod's tender. Use it wrong, and it'll bend. On the other hand, bang it too hard, and you'll damage it.



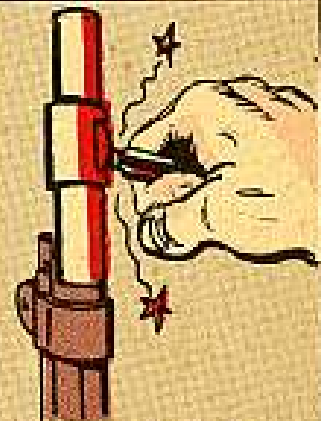
First, put rod together right. The stem is screwed through the beveled side until it comes out the other side of handle.



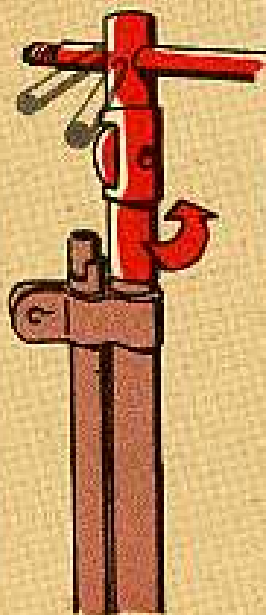
Try it the back way, and you can't get it clear in. There's only a small part of the threaded stem in the hole.



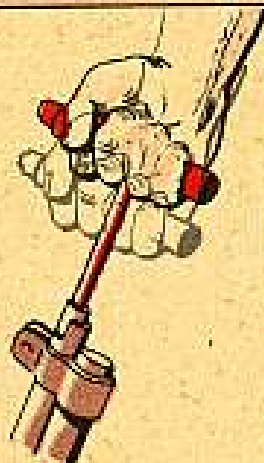
If you get it off-center when you're pushing hard or getting a tight patch through, those few threads won't hold and the rod'll bend.



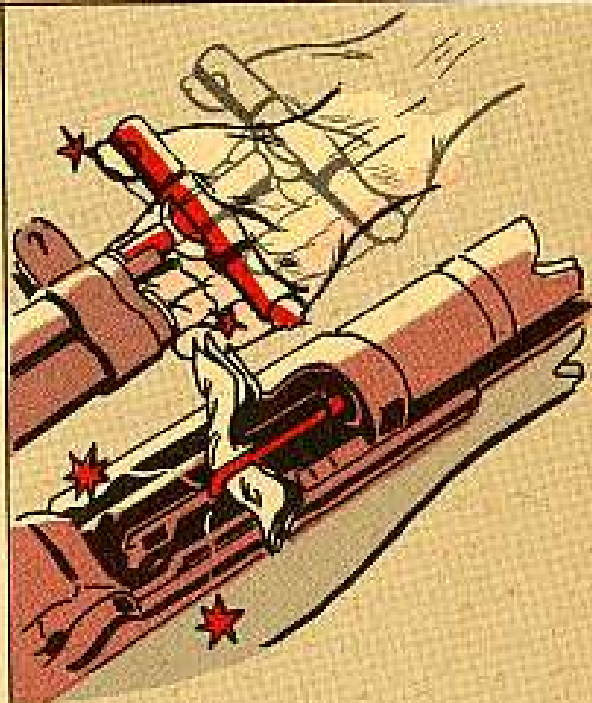
Never use a rod like this to take out a tight or frozen gas-cylinder lock-screw.



Assemble and use her like this.



Even with rod in right, get it stuck and there could be trouble. Hold the rod as shown. You've got a firm grasp, and you won't smack the rod handle against the muzzle because mashed fingers come first.



Bang the rod, and those shoulders on the handle will scrape the outside of the muzzle and scar it up and bang the rod end into the follower.

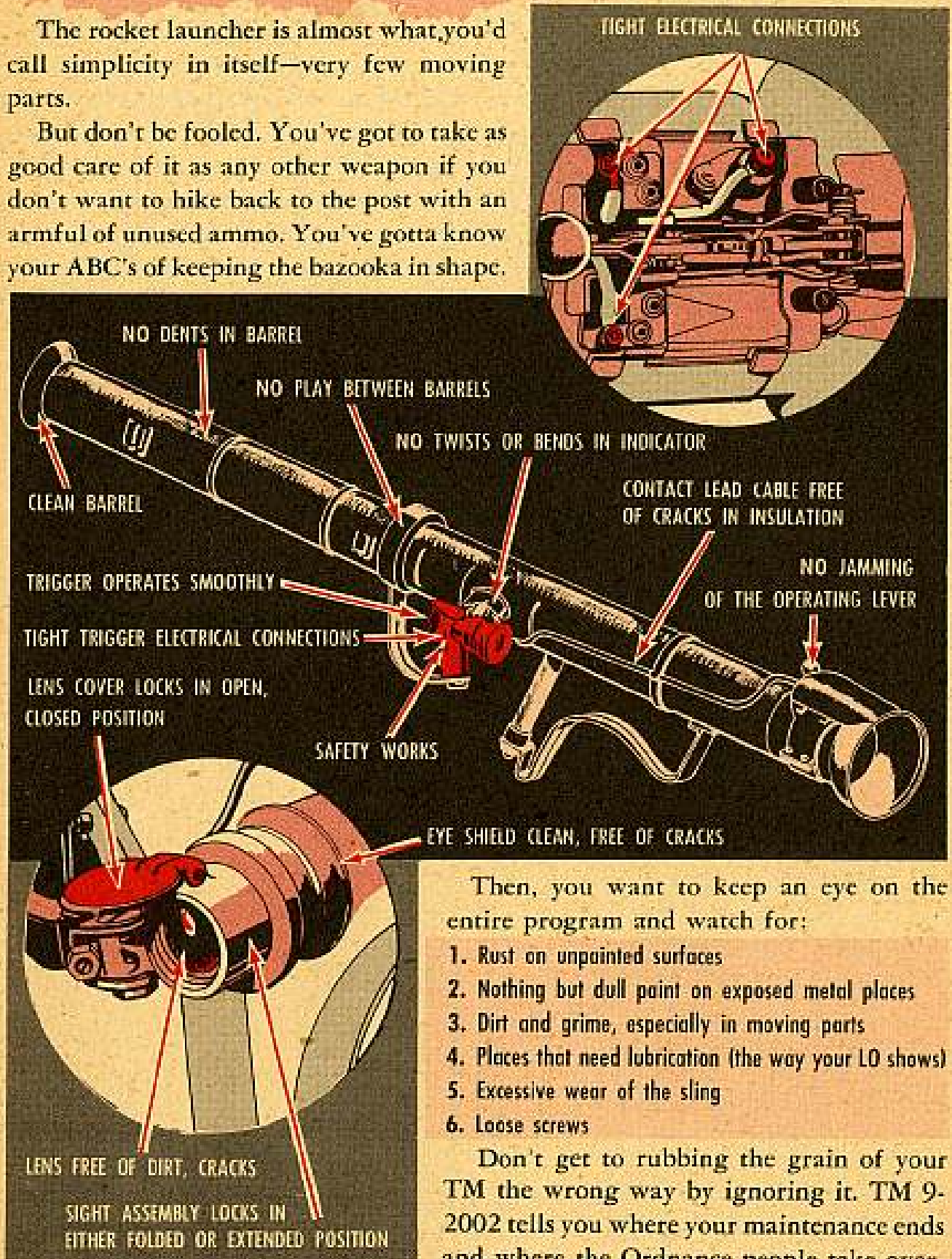
Your 3.5 Rocket Launcher:

TAKE TIME TO TREAT THE TUBE TENDERLY

Keep your eyeballs peeled for these—

The rocket launcher is almost what you'd call simplicity in itself—very few moving parts.

But don't be fooled. You've got to take as good care of it as any other weapon if you don't want to hike back to the post with an armful of unused ammo. You've gotta know your ABC's of keeping the bazooka in shape.

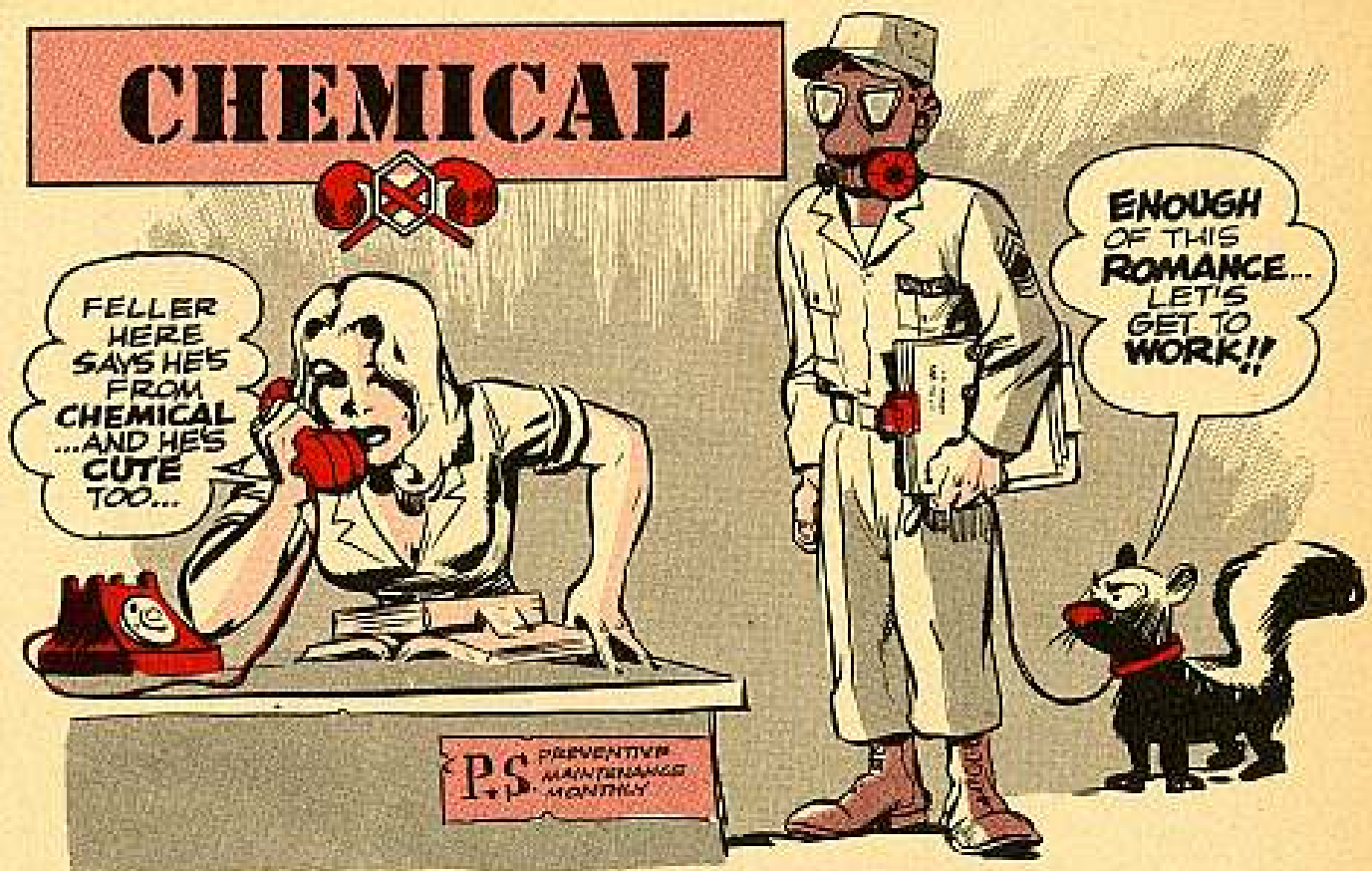


Then, you want to keep an eye on the entire program and watch for:

1. Rust on unpainted surfaces
2. Nothing but dull point on exposed metal places
3. Dirt and grime, especially in moving parts
4. Places that need lubrication (the way your LO shows)
5. Excessive wear of the sling
6. Loose screws

Don't get to rubbing the grain of your TM the wrong way by ignoring it. TM 9-2002 tells you where your maintenance ends and where the Ordnance people take over.

CHEMICAL



The Name's Not The Same... No Mo

Finding it tough lately to keep tabs on new publications for collective protectors? There's good reason . . . they've been re-named.

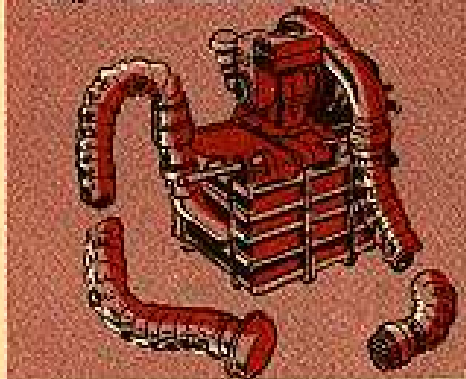
The item's new calling name is "Filter Unit, Gas-Particulate." So, when you're referring to 'em in connection with supply or maintenance, be sure and sing out with the new handle.

And speaking of new publications for

this equipment, there's a new manual coming your way for the M6. It's TM 3-420. If you've got an M6 around be sure to ask for the new manual and get yourself up to date.

The M7 collective protector, in addition to getting re-named, is in for some modifications. MWO Cml 29 will tell how the M7 is converted to the M7A1 Filter Unit, Gas-Particulate.

M6 GASOLINE-ENGINE-DRIVEN GAS-PARTICULATE FILTER UNIT.

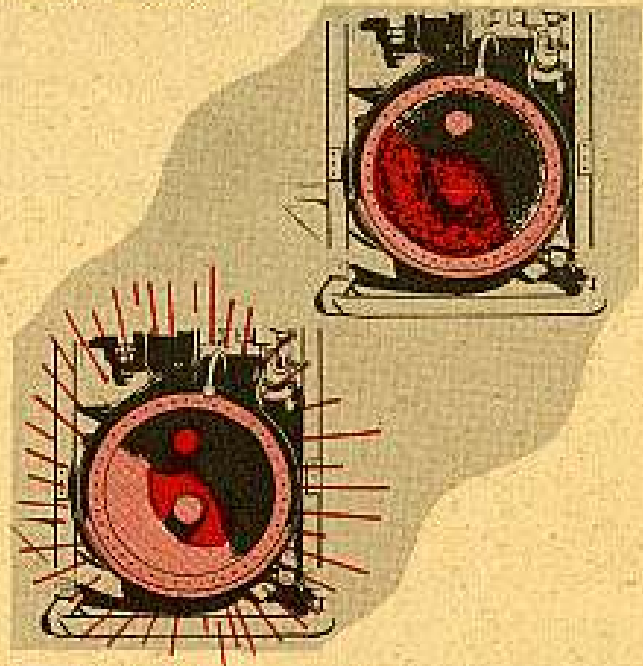


Choked Smoker

A carbon-plugged engine tube on your M3A2 mechanical smoke generator calls for fast treatment.

Your sure-fire clue to a carbon-loaded tube is a heavy collection of carbon around the outlet nozzle, plus sluggish operation.

It's SOP to check for this ailment at least monthly, but any time at all you find signs of excess carbon in the trombone—don't horse around; take your smoker to your maintenance support outfit. They'll take her apart and clean her out for you.



Flame Thrower Upkeep

Just about anything you Marines need to know about the M7-6 flame thrower (main armament) comes carefully laid out for you in a Marine Corps manual called Ord-MM 7005, tank, flame, T67.

The manual contains detailed instructions for all echelons of maintenance. Ask for your unit's copy from your publications source.

And if it's up to you to know the maintenance and operation answers for the M5 (E3R4) mixing and transfer unit (incendiary oil), you can get yourself the proper education with Marine Corps Manual Ord-MM 9001, mixer, flame fuel, M5 (E3R4).



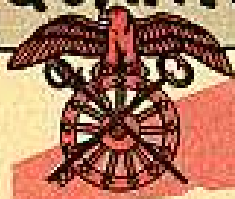
JOINS CHEMICAL AND QUARTERMASTER

This issue sees the first participation of the Chemical Corps and the Quartermaster Corps in PS. Articles on Chemical and Quartermaster equipment will appear in all future issues.

As with Ordnance and Engineer equipment in the past, PS readers are invited to pass along to PS any ideas, problems and difficulties they may have with preventive maintenance of Chemical and Quartermaster equipment.

Questions and problems presented will be answered directly to the readers, and suitable ideas on preventive maintenance may be published. Address: Sgt Half-Mast, PS, Raritan Arsenal, Metuchen, N. J.

QUARTERMASTER



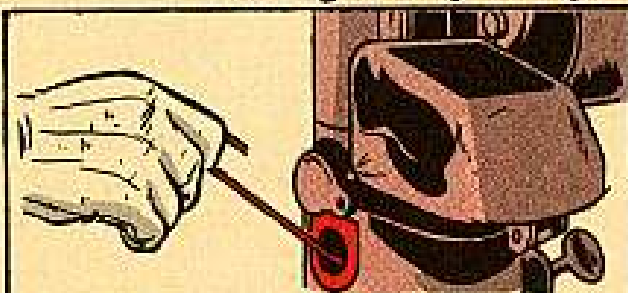
A Shot In The Dark

Before you get yourself a case of singed eyebrows, sooty nostrils and mebee even a scalped noggin . . . here's a tip:

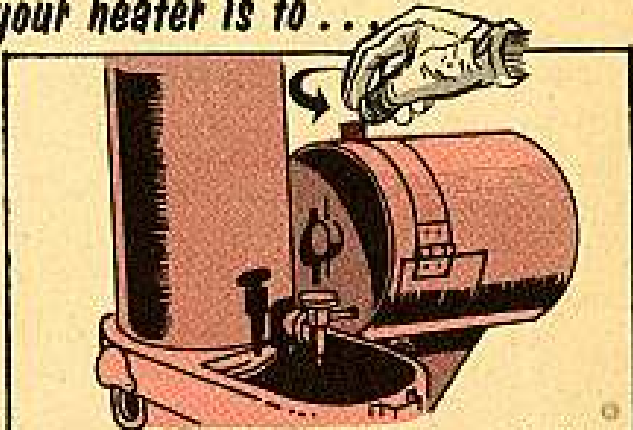
When you go to light your immersion heater (FSN 4540-266-6835), get your kisser away from that vaporizer—else your gal won't recognize you next time you go on pass.

Some guys have a habit of sticking their face down into that gasoline-filled vaporizer when they place their burning lighter-cylinder rod in there. Gasoline plus hot rod equals heap big flareup.

The right way to light your heater is to . . .



First stick your lighted rod into that li'l hole called the flue for a couple of minutes. This preheats the thing before you really give it the big charge.



Then, unscrew the vent plug as far as she'll go without forcing her.



Now, comes the shot in the dark. Take your hot rod out of the flue and put it in the vaporizer, but turn your head away so your face isn't over the hole. Even though your head's turned away, you shouldn't have any trouble hitting that canyon-like hole. Finally, adjust your gasoline-adjustment valve to the kind of flame you want. Get familiar with TM 10-702 for details on your heater.

Big Knobs and Short Stems

Let's face it, chum—touch the wrong knobs and you're liable to find yourself flat on your back.

We're talking about the knobs on your M1937 field range—three in number called AIR, FLAME and FUEL. When you go to clean out the guts of that range and have to take the knobs off, get 'em back on right, huh? From left to right, they go "air," "flame" and "fuel."

You can see what happens if you get 'em on wrong. Let's say, for example, you get your air and fuel knobs switched—you get the air knob where the fuel's supposed to go and the fuel knob where the air's supposed to go.

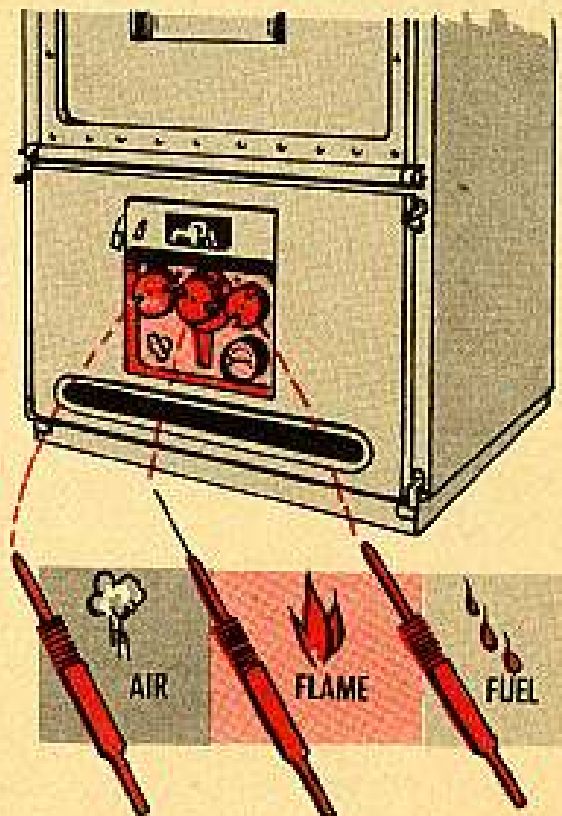
Next time you go to light your range, the instructions tell you to open the air valve first. So, you go ahead and twist your air knob. But the air knob's on the fuel valve. So, by the time you go to light your range, it's loaded with gasoline and—blooey.

Now, when you get into your range for a little cleaning job on your valve stems, it's also easy to get things fouled up.

Again, let's say, that by mistake you get the air stem in the fuel valve slot and the fuel stem in the air valve slot—you can do it, because their threads match up. The air stem's shorter and lets a steady drip of gasoline into your burner. In other words, your fuel isn't completely shut off because you have the shorter air stem there. So, when you go to light your burner, again you can get a mucho big bang.

Just to be sure, what you can do is disconnect the fuel line and screw in one of the stems. Blow through the end of the line. If you hear a hiss of air, you know your line's open and you probably have the wrong stem in the wrong slot.

Whenever you get yourself a new range, it'd be a good idea to check it out and make sure your stems and knobs are as they should be... possible for someone to make a mistake before you got it. You'll wanta look at TM 10-701, pages 16-18, for the full story on your stove.



Two of the stems—the air and fuel—look alike, except the air stem is a bit shorter. The middle stem—the flame—has a needle-pointed end, so you can't mistake it.



ENGINEERS



I KNOW
THERE'S NO
OFFICIAL WORD...
IT DEPENDS ON
THE CLIMATIC AND
GEOGRAPHICAL
CONDITIONS!

SLICK CABLE OR NOT?

Dear Sgt Dozer,

What's the poop on lubing the cables on our Nike elevators? Some say grease 'em, some say oil 'em and still others say just to keep 'em clean. What is the official word?

Sgt E. D. B.

Dear Sgt E. D. B.,

There isn't any official word as yet, so you gotta use common sense. The basic lubrication of this wire rope or cable is done at the factory. Oil is spun right into the rope when it's made and the hemp core is soaked with oil. This treatment'll hold up for the life of the cable as far as its internals needs are concerned.

Any lubricant you put on the outside isn't going to penetrate enough to make any difference. Oiling the outside of a cable does have one useful function, though. It keeps the cable from rusting.

So—your decision whether to lube or not to lube would depend on where your site's located. If you're in dry and sandy areas, you're better off to leave the

cables dry. Sand sticking to the oil would serve as an abrasive and do the cable and rollers a lot more harm than the little bit of rust you'd get.

On the other hand, if you're at a site that's in a wet and possibly salt seacoast area, you'd best keep a light coating of oil on the cables to keep 'em from rusting. Dust or sand, of course, wouldn't be a problem in a wet area.

Sgt Dozer



Dear Sgt Dozer,

We've got some steel helmets that need painting, but we don't know and can't find the nomenclature or the stock number of the kind we should use. Since paints are now being handled by the Engineers, we thought you might be able to give us the right dope.

Cpl D. K.

Dear Corporal D. K.,

Look no further, the complete nomenclature and stock number are as follows:

Enamel, synthetic, lustreless, textured, olive drab (for refinishing helmet, Steel M-1 and M-3), Specification MIL-E-002051A (QMC), dated 6 Nov 53, FSC 1973, Eng Stock No. 52-3476.600.010. This comes in the 1-gal can only.

HALF-ASKED

Sgt Dozer

Here's a bit of hoop-de-do for units having 60-cycle 5-KW Kohler Model 5MH81 generator sets.

Have you sent your generator to field maintenance yet to have the job done that's described in MWO Eng 5081-2? Before you do, best you check with the shop gang to make sure they have all the necessary materials to do the job. If they don't, your generator's likely to be on deadline a while—awaiting parts.

You see, somebody figured wrong when this particular MWO was first written. The purpose of the modification is to put carrying handles on each end of the generator set. In para 6 of the MWO, it only provides for enough parts to put the carrying handles on one end of the generator. That, of course, makes things a little lop-sided.

So, in order to have enough parts to go around, the field maintenance boys'll have to order two modification kits instead of one like it calls for in the MWO.

You'll probably be seeing a change to the MWO one of these days soon.



On Diesel Engine Head Gaskets...

LUBE LIMITS LEAKS



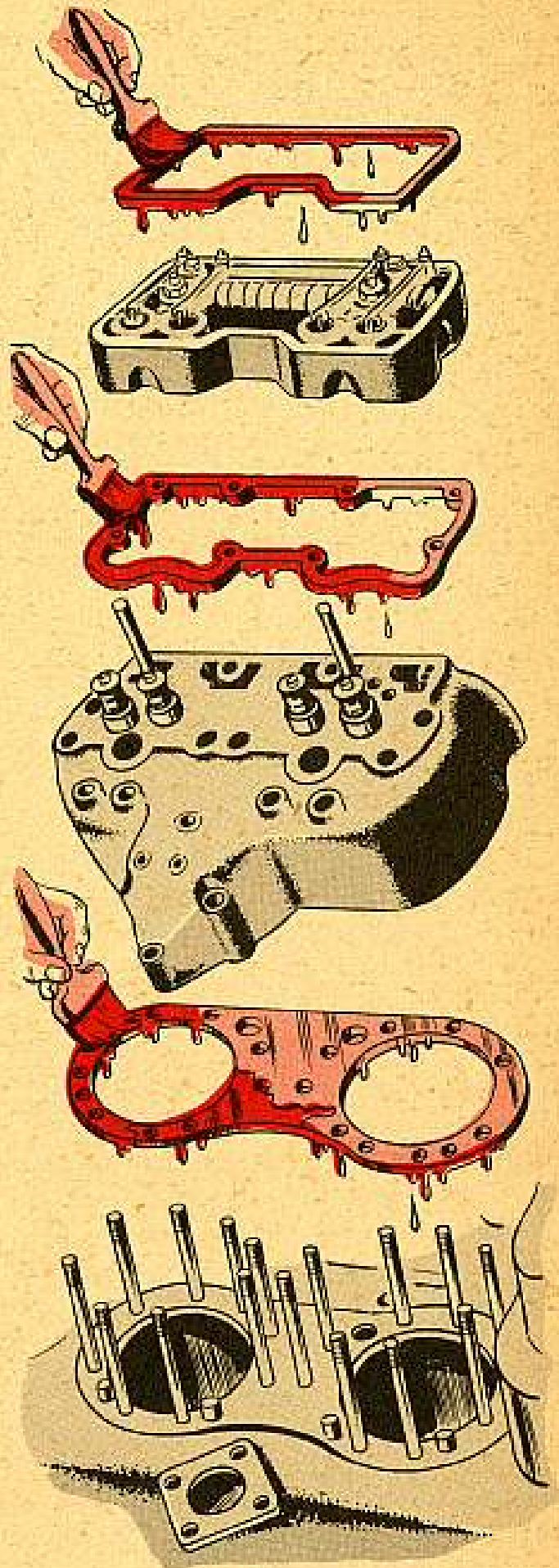
They say you can't teach an old dog new tricks, but there's nothing that says you can't teach old tricks to a new Joe who recently earned his spurs as an equipment operator or mechanic for Uncle Sam.

This'un concerns leaking head gaskets on diesel engines. If you're authorized to replace the head gasket on your diesel, you'll no doubt be interested in this gasket gassing.

In most cases, gaskets are installed dry. Then, after 500 hours of engine operation—when you can see compression and anti-freeze seepage—the head bolts are tightened while the engine's hot. But this still doesn't eliminate the seepage between the head and block.

To do away with this seepage, all you have to do is put a thin film of chassis lube on each side of the gasket and install it in the usual manner. The grease seals all the small tool marks and scratches on the head and block and prevents seepage of compression and anti-freeze. At the same time, the grease doesn't cause damage to any part of the engine, because the lube never gets hot enough to become fluid.

This is an old trick with equipment men, so you might as well add it to your storehouse of knowledge. By the way, it'll work on gasoline engines just as well as on diesel engines.



UP YOUR IDLE

When Caterpillar engines are used with electric generating sets, those low idle speeds have got to be set higher than when the engines're used to power other equipment. At low speeds, the flexible coupling between the engine and generator can easily be damaged from torsional vibrations.

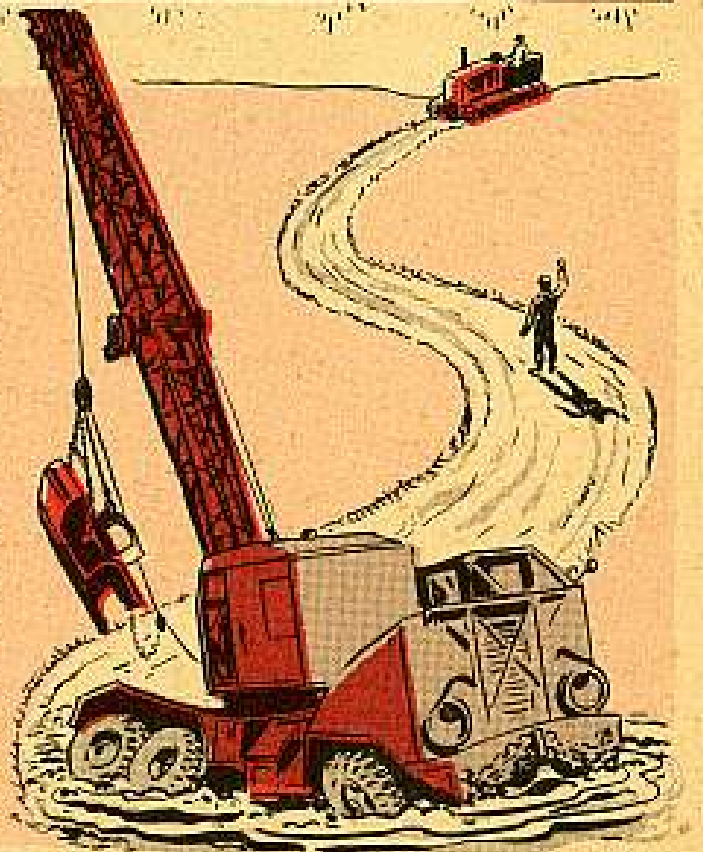
Remember that the low idle speeds vary slightly with the operating (synchronous) speed. Here's a chart that shows the KW rating, the specified speed setting in revolutions per minute (RPM's) of various Caterpillar generators and the recommended low idle speed. Take care to see that the low idle speed setting on Caterpillar generator units are not below the ones listed in this chart:

ELEC SET	KW RATING	OPTG SPEED	LOW IDLE SPEED	OPTG SPEED	LOW IDLE SPEED	OPTG SPEED	LOW IDLE SPEED	OPTG SPEED	LOW IDLE SPEED
D397	300	1200	850	1000	850				
D386	250	1200	850	1000	850				
D375	200	1200	850	1000	850				
D364	150	1200	850	1000	850				
D318	40	1800	1300	1500	1100	1200	900	1000	800
D315	30	1800	1300	1500	1100	1200	900	1000	800
D311	20	1800	1300	1500	1100	1200	900	1000	800
D17000	100	1000	750	900	750	700	550		
D13000	75	1200	850	1000	750	900	750	750	550
D8800	50	1000	750	900	750	750	625		

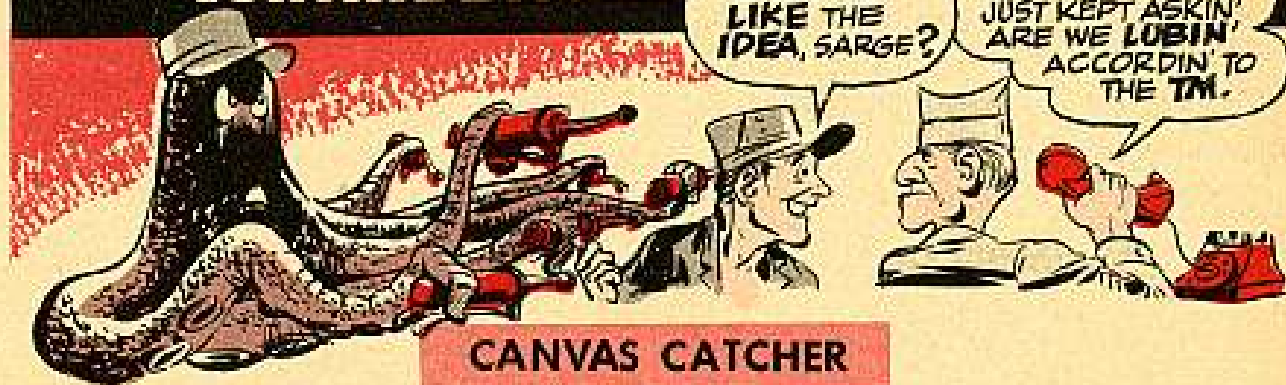
HEAVE HO!

The FWD chassis under the 20-ton cranes sure looks like a powerful hunk of machinery—and it is. But one thing it can't take is a constant grinding and growling when it's stuck in the mud. One good jump on the buggy and you've got a broken axle or a stripped differential.

This is a good fact to keep in mind. And the next time you're stuck in the mud with the FWD chassis, get a tractor or truck to help pull you out. This might not sound important, but you'll be heading your carrier in the direction of the deadline when you try and run 'er out of a mud hole or when you're deep in sand.



CONTRIBUTIONS

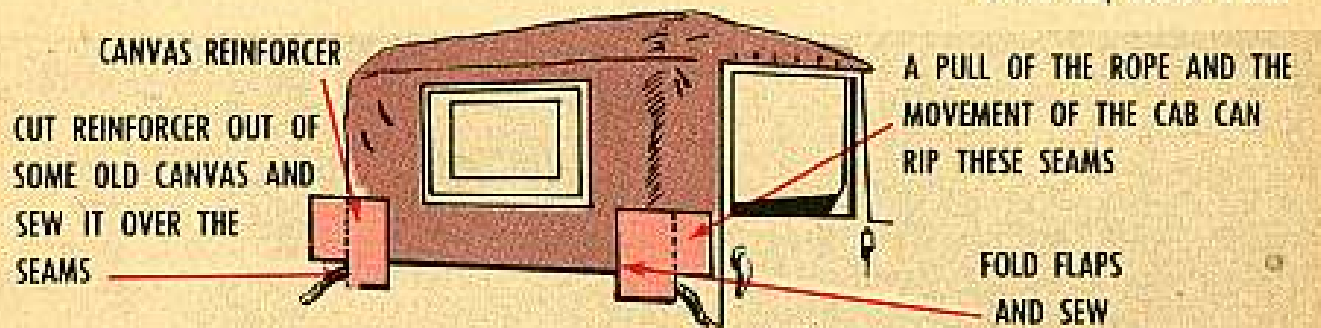


Dear Editor,

After bucking the wind and rough use for many miles, that canvas on top of the M-series truck cabs can start ripping up along the back seams. As a canvas repairman, I've seen lots of good canvas go down the drain because of minor seam rips caused by wear and also by guys pulling on the ropes to batten down the rear of the canvas.

I've come up with an idea that'll reinforce those seams and keep that canvas in shape for many more moons. Instead of trying to explain it, the drawing will tell you all you need to know.

PFC Vincent Molina
APO 42, New York



(Ed Note—Excellent suggestion that can be applied to any cab that takes a soft top.)

ZERK ZAG

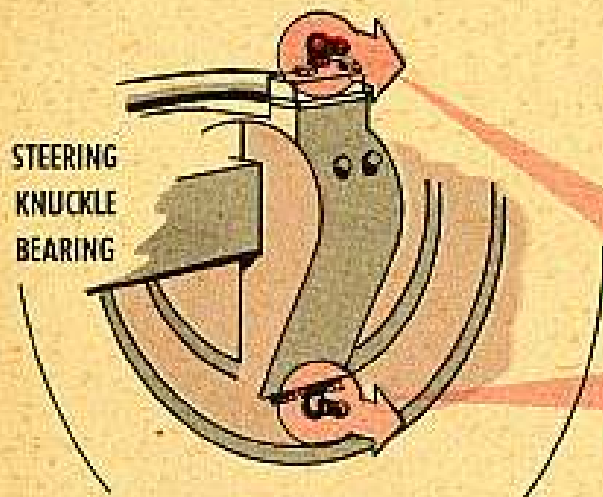
Dear Editor,

When you're operating out in the field with no grease pit around, lubing some parts on that M51 5-ton dump truck can be one heckuva pain. I've found that these parts aren't getting greased, because the guys are finding them too tough to get at.

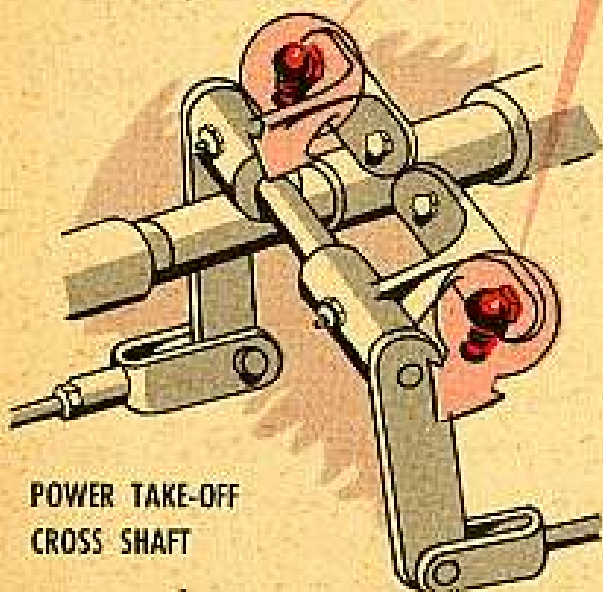
Because of this, I have an idea for changing the straight zerk fittings now in these parts to 90-degree fittings, which'll make 'em easier to get at, especially if a guy doesn't have a flexible extension hose for his grease gun.

The first of these fittings is stuck into the steering knuckle bearings on both

sides of your front end. The straight fittings in there now face down and it's hard to get at them unless your truck's over a grease pit. If they're replaced with 90-degree zerks, which would face out toward the front of the truck, a guy would have it knocked.

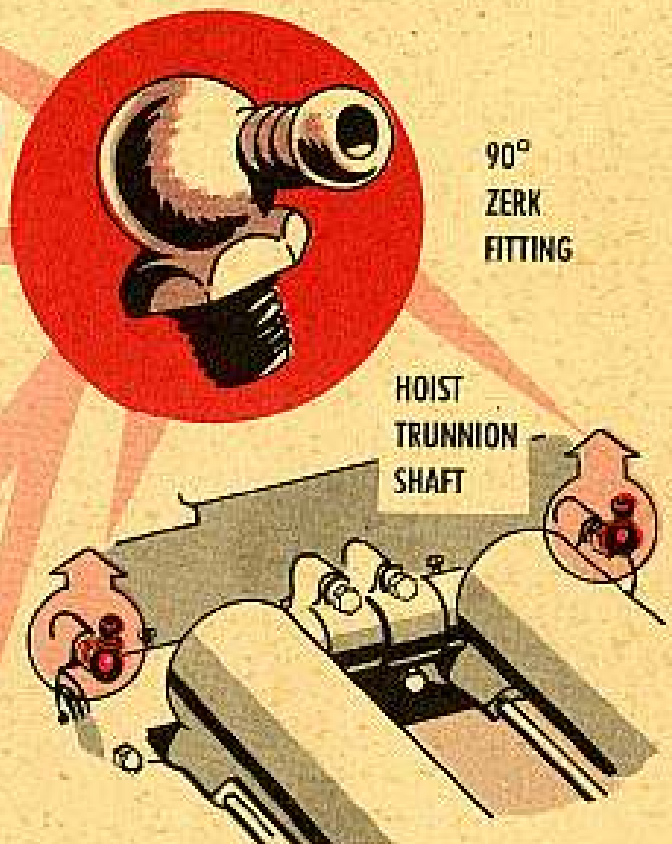


The next two fittings are on your power-take-off cross shaft. These straight zerks are facing toward the front of the truck and are mighty tough to get at—even with a flex hose. Now, if a guy puts in two 90-degree zerks, facing them down, all he'd have to do is get under the truck and start squirting without any sweat.



The last two fittings are on your dump's hoist trunnion shaft. To get at the fittings now in there you need an added extension to your grease gun. I don't know about other guys, but these flex extensions are mighty tough to come by here.

What I'd do is replace the straight zerks with 90-degree fittings, facing 'em up. When a guy has to lube, all he has to do is raise the bed of the truck.



And that's it.

SP2 B. Keenan
Loring AFB, Maine

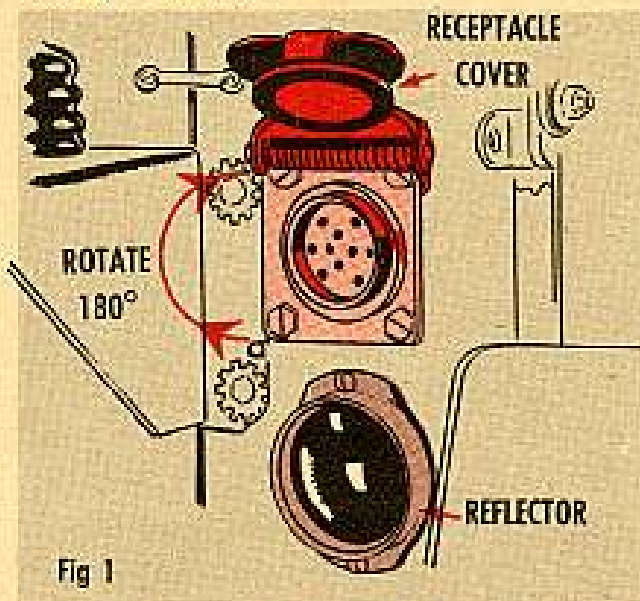
(Ed Note—Your idea makes it easy to get at those fittings, whether you have a flex hose or not—no matter what kind of grease gun you have, you can bump 'em. And the easier any fitting is to get at, the better the odds it'll get the grease.)

NEED MORE ROTATION?



Dear Editor,

On the Jeep M38 and M38A1 the trailer light cable receptacle is located just above the left rear reflector. Some are issued with the receptacle mounted so that its cover hinges at the top, which lets the cover cap open out and upward as Fig 1 shows.



This means that when the cable is installed the cable end cover has to open back and downward—toward the reflector. In that position it bangs against the reflector, scratches and cracks it.

TB 9-804-9 (20 May 53) is supposed to take care of the situation by rotating the receptacle 90 degrees clockwise—

so the cable cover swings to the side. But—we hit a bit of a snag there. If the vehicle happens to have an antenna mount on the side, it's impossible to install the trailer cable with the receptacle rotated just 90 degrees. The cable cover cap hits the antenna mount—and she won't go.

THIS WORKS **BETTER**

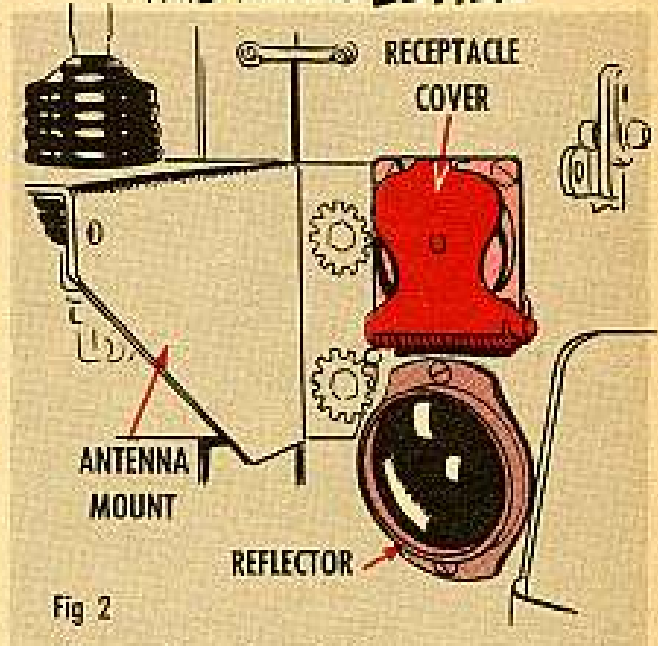


Fig 2

But we've found that rotating the receptacle 180 degrees (Fig 2) instead of 90 degrees clears everything up. Lets the cable end cover open out and upward—where it won't bump into anything.

SP3 Lewis L. Crellin
APO 36, New York

(Ed Note—That'll do it, OK. Or, you can accomplish the same thing by rotating the receptacle a quarter-turn (90°) counter-clockwise, which'd put the receptacle cover hinge next to the antenna mount and let the cable end cover swing to the right—horizontally. Don't be surprised if you see the set-up changed this way.)

Connie Rodd's BRIEFS

Request tire chains

No sense in thinking you were cheated out of a set of tire chains. They're not provided as OVM or in initial issue. But, if you need 'em because of local conditions, SB 9-99 says you can have the chains. The same supply bulletin tells you how to get 'em.

Your gun OK?

Not enough pressure in your recoil oil filler gun (41-G-1348-190) means a faulty check valve. Don't fret, 'cause there's an MWO out to make things right.

Send your filler gun to Ordnance for application of MWO Ord J17-W1 (31 May 55) which is **Urgent**. It provides for a more positive check valve assembly, which'll give your gun full pressure.

Close...then push

Never—no—never push the trigger on the 106-mm M40 series recoilless rifles unless the breechblock is fully closed. If you push the trigger before the breechblock is locked in place, and **then** close the breechblock, the weapon'll fire—without touching the trigger again. And if you happen to be standing behind the rifle, with that flaming gas . . .



Time for a change?

The modified flash suppressors on the 40-mm M2A1 dual automatic guns are good for only 1500 rounds. That goes for suppressors modified by Ordnance or the manufacturer. And, if the suppressor develops cracks in the welds or prongs before its time, get rid of it. You get a new one by mentioning Ord Stock No. A050-7308575.

Stay put

You finding your G744 5-ton truck rear torque rods saggin' at the ends? If so, quite likely they haven't been torqued up to the right spec. From 350 to 400 foot-pounds has been the torque range up to now, but this'll soon get changed. So, next time you have your truck at Ordnance, have them use a 450 to 475 foot-pound figure. This'll keep those nuts in place.

Urgent dope

You guys pushing a G742 2½-ton Reo truck, please check your serial numbers. If you have a truck with a number of 95046 or less, get that Reo back to your Ordnance support unit on the double. That sintered-bronze fuel filter you now have has to be replaced with a treated-paper-type filter like it says in MWO Ord G742-W9 (2 Mar 56)—immediately.



to do its job...a
MODERN ARMY
needs
ALL EQUIPMENT
in top condition

