

Boy, we've finally got it made!

601

re's why: these brivers in the haad Thoup are permanently signed to their rehicles.

warring with the drivers, and now I land in a shop where the first echelon work actually gets done, done right, and done on time.

All these years of beating my brains out in motor pool shops and

It's wonderful, I kid you not. No arguments about who does what, or who didn't do what or who's to blame for the shape the machine is in. One truck, one driver. And, being he's exempt from details like KP, Guard, CQ, etc., he's happy; and works like hell to stay driving. Minute we find a meatball, we turn loose of him fast. He ends up on the duty roster and we get an eager beaver to take his place.

Honest, you'd have to see it to believe it, the way these guys clean and polish their cars, or massage their trucks. And every time a defect watches the bull gang unload his truck, he sees that he's got a good thing, so he busts his knobs to keep it by using his time for bertu operation and maintenance of that truck.

Why in heck doesn't the rest of the Army get on to this system

Camp Hanford, Clash.

(Ed Note—Looks like a permanent driver could be assigned to every vehicle. Everybody who tries it swears it gives the best possible results.)

# PS MAGAZINE

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riefs					

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 FS Magazine, the PREVENTIVE MAINTENAINCE MONTHLY, is approved by the Orrector, Burean of the Budget (a Ang. SI), and its distributed as follows: DISTRIBUTION: ACTIVE ARMY: Sen Staff, DA (1) except DUSPER (2); SS, DA (1); Tee Src, DA (3) except COFFNER (75), COFFORD (275); Admin & Tee Src Bd (5); Hq CONARC (10); OS Ma) Cend (5); OS Base Cend (3); Mrly (3), Armins (50); Carps (3); Div (2) except Armal Div (10), Ing Bov (50); Brig (3); Reg VSp (3); Bn (3); Co (18) except Cend (3); Mrly (5); Armins (50); Gre Be Sr Src Sch (5) except Engl Sch (100), Ord Sch (25); USMA (25); Mint Sch (5); Specialist Sch (5); PMST (3); except PMST Ord ROTC Units (25); Gen Deputs (5); Sup Sec, Gen Deputs (5); Day Sec, Gen Deputs (6); Day Sec, Ge

Economy Insurance is Spelled-



# 1-A-R-R-A-N-T-Y



Seems people have been screaming about economy for a long time, but still very few of them know the ins-and-outs of saving money for Uncle Sam.

A mighty big cog in this economy wheel is that warranty which each truck has tagged on it when it rolls off the assembly line. That warranty is UncleSam's insurance that if anything goes wrong with your new truck during a certain period of time he won't have to foot the bill—it'll be the manufacturer's responsibility.

But it goes a little further than that. A warranty is also your insurance that the equipment you get is the best possible ever built. If a certain part of your new truck goes bad within that warranty period, that part is given a going over after you turn it in to determine why it went bad.

So, you see, those warranties are important things to know about. All the manufacturers that make your tactical transport-type automotive vehicles have a contract with the government which reads something like this:

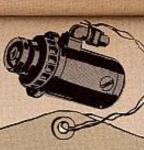
"...the contractor (meaning the manufacturer) will be required to guarantee each vehicle, component units and parts thereof against defective material and workmanship for a period of one year from the date of acceptance—exclusive of time in transit of vehicles shipped to locations outside the continental limits of the United States—or 4,000 miles, whichever may occur first."

Putting it simply, all this means that your tactical wheeled vehicle and all its parts are guaranteed for one year or 4,000 miles, whichever hits first.

Now, this one-year period starts the minute the vehicle is delivered to the Army—it doesn't start when the vehicle reaches you. In other words, let's say a brand-new 5-ton truck is delivered to an Ordnance depot from the factory. For some reason or other this truck stays at the depot for 60 days before it's handed over to you, the driver. This means that as far as you're concerned, you've got 10 months or 4,000 miles, whichever comes first, to make sure that

truck's tip-top and hitting on all six. You'll find the date of delivery of the truck to the Army on the truck's nomenclature plate.

Now, let's say you take that 5-ton out for a run and something goes wrong—the generator kaputs on you, for example. The first thing you do is take that part off (have Ordnance support do this for any part you're not authorized to fool with), clean it up and put on a tag that has this dope on it —



- Name of your post or installation
- 2. The vehicle serval number and USA registration number.
- Outo the vehicle was delivered—take a gunder at your vehicle names dature plate.
- 4. Centract number—this too is stamped on the reasonal ature plate.
- 5. The mileage on the vehicle.
- 6. The reason why you taok the part off—give a good account of what went wrong with the part, its namenclature, its part number and the date you took the part off the vehicle or the date you first noted the part was bugging out.
- 7. Mark the tag "Defective Warranty Part."

After you've done this, take the part back to supply and turn it in. But draw a new part as soon as you can so you won't have to deadline your truck. In other words, don't wait until the bad part is inspected—get a new one. The longer you wait, the longer your truck will be tied up.

Then, get yourself a UER and start making it out according to AR 700-38 (1 Nov 55). Turn it in, and you've done your job. From there on out, the people concerned with seeing that the warrantied part is replaced will take over.

SB 9-98 series gives the whole poop on these warranties. The one you tactical truck drivers will be interested in is SB 9-98-24. Most of the rest in the series deal with commercial-type vehicles.

# YOUR HYDRA-MATIC

slaps you across the nostrils, beware, "Eau de Hen-House" perfumey odor example, next time you dip your stick brother, beware. mission to check the lube level and a into that 21/2-ton Hydra-Matic trans-Yup, it sure can tell you a lot. For

clutch discs and bands in your transwith oil is what to sniff for. There are of agricultural smell, burnt cork mixed mission which are lined with cork-In case you never whifted this kind

> a barnyard smell usually means that these discs or bands are burning.

itself-it should be clear. If it's a dirtycondition. Take a long look at the fluid looking dark brown, you've got a case, There's another way to check this

dition continues. can multiply into hundreds if the con-Repairs that'll normally cost \$4 or \$5 and have Ordnance give it a medical fizzling your truck, deadline the baby If one or both of these conditions are

While on this subject of checking

the oil level. Some type got mixed up. has to be in F-1 High Range with the said to check this transmission while it's what PS 39, page 26 said about checking handbrake set tight. Also, forget about in neutral. No dice-the transmission the word before LO 9-8024 hit the field, how to do it. LO 9-819A, which was your Hydra-Matic fluid level, LO9-8024 (14 June 55) lays down new rules on

higher than the actual level of the trans- (Oct 55). Seems that you'll get a reading that's

LUBE

the dipstick. nasty habit of throwing oil up against front drum that houses the clutch has a set in N (neutral position) as your engine idles during the level check. The mission fluid with the transmission lever

not, ask for it and cite the "need-to-You can also see this dope in TM 9-8024 know basis" paragraph in AR 310-90. Check to see if you've got your copy. If Hydra-Matic truck in tip-top shape. in it-dope that you'll need to keep your That LO 9-8024 has a lot of good dope

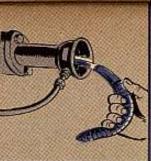
in neutral) and shift into F-1 High You can start with a hot or cold the handbrake tight (transfer case transmission. Start the truck, set



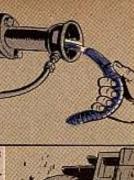
it out again to get your reading. clean rag, stick it back in and pull out the dipstick, wipe it off with a minutes and, while still at idle, pull Let the engine idle for three-to-five



show hot full. truck's been running more than five minutes, the oil mark should the idle warm-up time of three-toyour truck for a while. If your cold mark if you haven't run The oil level should be at the



pround in there. you don't want too much flowing that level as you put fluid inat idle and add it. Keep checking If you need thuid, keep the engine



cab of the vehicle and make sure the truck doesn't suddenly decide to go help you with your checks-while one makes them, the other can sit in the hand brake set and transfer case in neutral. It'd be best to have a buddy while you check around the truck can be a mite dangerous, even with the for a ride. See TB 9-8024-1 about this You know, having that Hydra-Matic in F-1 position and leaving it there



In the old days, all an Army needed to get where it was going and back was a horse mounted on four U-shaped metal whattzits called "horse shoes." Today, horse shoes are something you throw at two pegs sticking out of the ground.

Since the Army truck has replaced the horse, and tires have replaced the horse shoe, a lot of guys take that rubber on their wheels for granted. The real facts are—you can take it for granted if you give them a little understanding. They're the best made but with a "treat'em rough they can take it" attitude they're bound to bust a gut. Just give them their due and they'll keep your vehicle floating on air.

A tire is made up of the tread, breaker, cushion, plies of cord and bead wires. Each has its own job to do.

# THIS WILL HELP YOU GET ACQUAINTED WITH THEM

Most of your tire parts—the breakers, the cords and the cushion—are built to take up read shock. If any of these parts bust a gut, that road shock is going to knock that tire right to tire heaven. Here's why—a tire weighing about 20 pounds carries a load nearly 50 times its own weight. When this tire travels about 45-MPH, aforce of about a ton is built up trying to tear it apart. That tire has got to be on the beam to take that kind of treatment.

The best rule to follow is: if one of your tires looks suspicious, take it off and get a new one. You don't have to be ashamed of handing in a tire that has a small cut into the cords. Small cuts get bigger and deeper and soon it may be too late to save that tire. Cuts in the rubber only are not so serious.

Another rule—as soon as the tread design disappears in the center of the tire, or at most about 3/4 of the way across the tread, get a new one. If you wear the tread too much, the tire can't be recapped. It has to be junked. Then again a smooth tire picks up a lot of nails, sharp stones, etc.



ness these idjits. Here they are-These things and conditions are your tire's public enemies. It looks to you to har-Certain things and conditions will turn a tire into nothing more than a flapper

# AISUSED CHAINS PUBLIC ENEMY

Tire chains are needed when driving over snow and ice. Wanted for Snowing Tires to Death.

Driving a truck with tire chains slapping against the dry pavement will knock the dickens out of both your tires and

PUBLIC ENEMY

creep on the tire so the

Chains are made to

BAD DRIVING

Wanted for More Schooling.

enemies can be stopped dead in their tracks if the driver is is one of the chief causes of tire wear. Most times the other Bad driving, brought on by "don't give a darn" drivers

aren'ttootight-you'll make sure these chains first snow of the year, the rubber. Comes the links won't gouge into

don't increase or delose that creep. And,

right. That's like cutget the chains to fit crease tire inflation to

ting off your big toe to he a tight pair of

shoes. Always get chains that are the

right size.

any of these-not only for his tire's sake, but also because these things can knock his truck in the head. guy's got good driving on the brain, he won't think of tryin Six sub-public enemies go into making up this baby. If

those fast slide-for-home stops. cowboy-style turns at low speed, speeding cross-country and high speeds and on downgrades, high speed turns, shar These evil six are fast jack rabbit starts, heavy braking

your tires decide that they've had enough and quit. you'll wish you had that one night in the boondocks whe junk pile. A lot of rubber will be left on the road-rubbe Any one of these can knock your tires right into that tir



# MPACT

Wanted for Tire Beating.

on that "good" hard-surfaced road, you least expect it. He's the deep rut big rock in your truck's path when This character's sneaky. He's the

a little and let gravity do the rest. fully-loaded pistol. Just tilt that load like playing Russian roulette with a rier so your load will flow faster is Banging a tire against a curb or barby taking it easy. For example, don't jump your load off a dump truck. Most times impact can be stopped

not heavy-duty steel. them. Your tires are made of rubber, around them, take it easy going over come to them and, if you can't swing road crossings. Slow down when you peeled for those rocks, ruts and rail-When driving, keep your eyes

# PUBLIC ENEN

a Gappy Character. Wanted for Being

gashes into your tire until that rubber and chuck holes-they can all cut looks like a piece of Swiss cheese. Sharp rocks and snags, deep ruts

it for a spare, tire in and get a new one. Don't keep the cut goes into the cord, turn that careful not to widen or deepen it. If probe and force it into the cut-be your tread, get a screwdriver or tire peeled for them. If you spot a cut in half your tire's life. Keep your eyes The smallest cuts may slice away

lets in more dirt and water. break or cut deeper and bigger; that tire. Constant flexing also makes the into the cord body. This weakens the is. A deep cut lets dirt and water work spike, piece of glass or any object, check to see how deep the cut counts. When your tire picks up a portant-it's how deep it is that The smallness of the cut isn't im-

clean out any stones or any other obobject is wedged between the tread; jects that you find wedged in the get it out. On your dual-wheeled jobs, through driving a truck see if any chuck holes is out. After you're essary driving over deep ruts and Avoid cowboying a truck, Unnec-

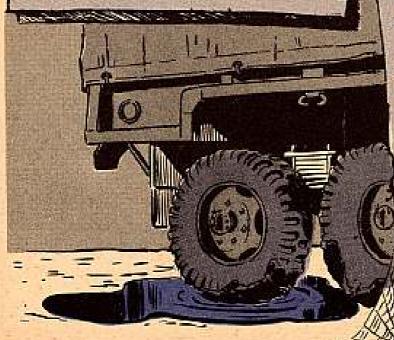
# PUBLIC ENEMY GREASE



Wanted for Tire Eating.

Grease, oil or any petroleum product is hard on rubber—just deteriorates it. Try soaking a piece of rubber in oil, gas or grease and see what happens. The rubber gets soft and goes to pot fast.

Avoid parking your vehicle in grease or oil-soaked areas. Keep oil and grease cleaned off your tires.



# PUBLIC ENEMY POOR VEHICLE MAINTENANCE

Wanted for Neglect, Resulting in Tire Expiration.

Poor maintenance of a vehicle is a sure-fire way of having your tires end up as door mats. For example, if a brake is out of whack or if the brake drums are not round, your tires will be scuffed away in one spot.

Parts that should be checked regularly for excessive play—causing rapid uneven tire wear—are wheel bearings, tie rods, drag links and spring shackles.

Make sure the adjustment on your clutch is right. Not only can it give you a stiff pain while driving, but a grabbing clutch starts your vehicle with a jolt, and you'll leave some of your rubber on the pavement.

Check for a leaky valve core by putting some spit on the valve and watching for bubbles. If you get bubbles, tighten the core. If it still leaks, replace it. Get the right one for the right assembly, and keep a cap on your valve cores. This cap keeps dirt out of the core—dirt that causes leaks.

If you get a slow leak in your tube, get it fixed right away. A slow leak can become a fast one in a matter of a few miles.





# Wanted for Tire Crushing.

When it comes to tires, unbalanced loading is taboo because unequal weight distribution tends to be harder on the tires on the side which has the heavier load.



# PUBLIC ENEMY WRONG INFLATION

Wanted for Lulling Tires into a False Sense of Security with a Lot of Hot Air.

Each tire has a specific amount of air pressure it's supposed to hold. Going below or above this air pressure can ruin a tire for good.

Here's what over-inflation of tires

Bouncing wears the center of the tread faster than normal.

A tire gets more impact-breaks; that air is as hard as a rock.

Too much air stretches the tread, causes cracking.

It increases tread separation.

With the rubber under tension, you can expect more snags and cuts.

Your vehicle will ride harder and your equipment will need more shop maintenance to keep going.

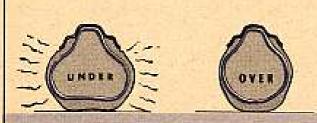
You'll have less traction and skid resistance.



# <del>aRnaRnaRnaRnaRnaRnaRnaRnaRnaRnaRn</del>

# ABOUT THAT TIRE INFLATION

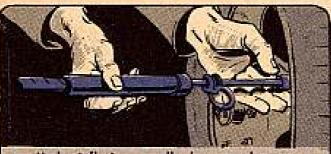




 Under-inflation is worse than over-inflation. When a tire's under-inflated, it flexes more than usual in all directions and gets hot and goes to pot in a hurry.



Under certain conditions (normal inflation on a hot day) a tire gets so hot its temperature goes above the boiling point of water.



3. Under-inflation usually happens because a guy isn't familiar with the right way to check the air pressure. Let's say you start on a run with 70 lbs of pressure keeping you afloat. You drive a hundred miles or so and stop.



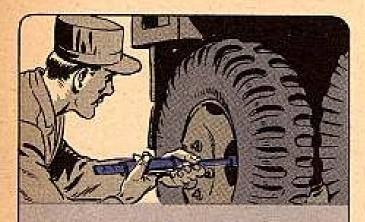
4. You check your tires and find that the pressure has increased—let's say about 10 lbs in each tire. Do you deflate your tires until the air gage again reads 70 lbs? NO. LEAVE 'EM BE.



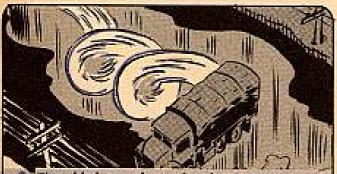
5. If a driver reduces the air pressure in his tires after driving a few hundred miles, that tire's going to flex and build up heat.



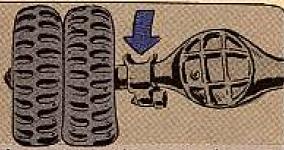
6. Heat destroys the elasticity of the rubber and is one of the chief causes of cord separation. As a tire keeps revolving, it picks up pressure. When you pull that pressure down, you're signing that tire's death warrant.



Air in tires should be checked only when the tires are cold—and at least once a day.



9. The old theory that reduced tire pressure on ice (if you haven't got tire chains) will prevent you from skidding is pure theory—don't try it. Lowering the tire pressure won't help you enough to compensate for the increased strain on the sidewalls and tread. The only answer for driving on ice without chains is to drive slowly and carefully.



11. There's another angle to it—the axle is supposed to be supported by two tires on dual-wheeled trucks. When only one is in working order, the axle starts bending. Keep it like this long enough and you'll never get that bend out. That's when you'll really have troubles.



B. The only times you reduce tire pressure are when you have to go cross-country or over snow or sand. This reduction gives for better flotation. You can't travel fast, which will keep that heat down. But when you get back on hard-surfaced roads, that tire pressure should be increased again to its normal reading.

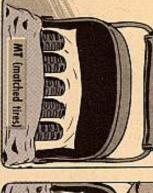


10. Another point about under-inflation: Wheel bearings are built to carry a certain load. For example, the outer bearings on a dual-wheeled job, let's say, carry a 40 per cent load and the inner bearings a 60 per cent load. If the inner tire is under-inflated or goes flat, then the outer bearing carries most of the load. It's tough enough on the tires, but how about those bearings? Pure murder.



# B GRAGRAGRAGRAGRAGR

12. Three things'll protect your tires from its public enemiesall three work together to get the langest life out of a tire.











ing evenly and are properly matched every 2,000 14. Inspect your tires to see that they're wear13. The purpose of rotating tires is to equalize

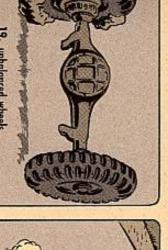


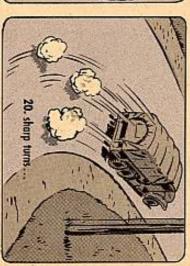
they're wearing evenly or not. 16. Rotate your tires every 6,000 miles-whether

# 

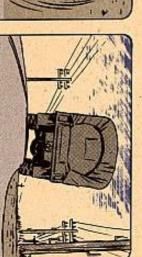
a Han Han Han Han Han Han H

CEPOSEDORE





than front ones. But because of bad front-ends. 18. Your rear or power-driven tires wear faster



more wear on tires on the right side of your 22. High crown roads and road shoulders cause vehicle than on the left.

5



21. pivots and all sorts of things the front tire

more than the rear ones. wear is uneven-cutting the life of those tires

14

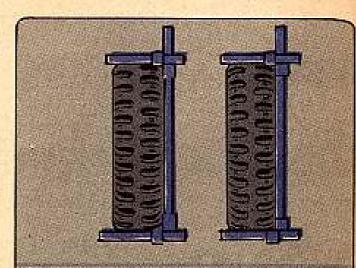
match them and rotate.

lires are wearing unevenly or don't match up, whether the tires have to be rotated. If your measured your fires, you can then determine

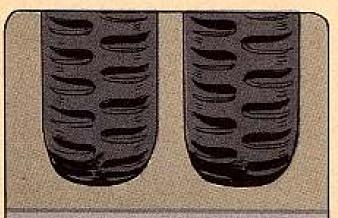
15. After you've made your inspection and



23. When it comes to matching tires, one thing's got to be remembered—no two tires are ever exactly alike, even when they're made by the same manufacturer. And a number of manufacturers make tires for the Army.



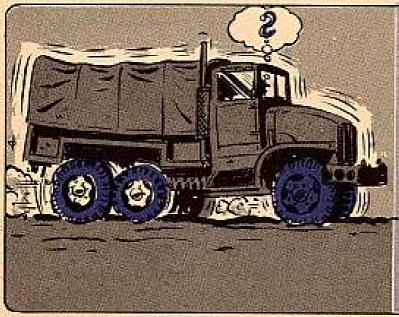
24. You've got to check your tires to see that they're the same or almost the same size...



25. have the same tread design and that the tread is wearing the same.

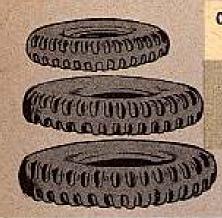


26. Improperly matched tires not only shorten the life of your tires, but can give you transfer case and differential headaches.



27. Most of your gear trains are designed to allow slippage of the rear wheels before the front drive engages. If you use larger tires on the front wheels and smaller tires on the rear, the larger front tire will reduce that slippage to almost nothing—IN SOME CASES. (There is a tolerance zone between sizes of tires.) This can cause the front drive to engage all the time which, in turn, can cause windup and damage to the gear train, loss of power and lots of tire wear. You particularly have to watch this on dual-wheeled jobs.

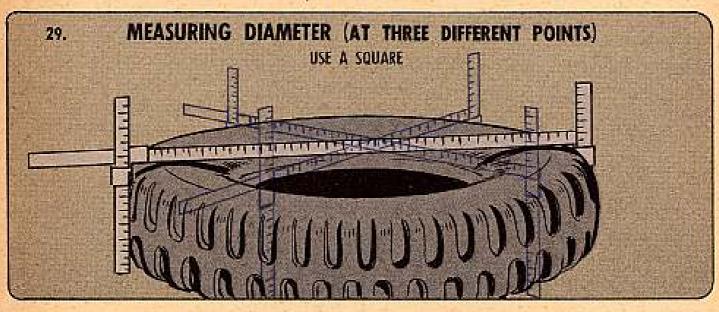
28. It's not possible to match all tires exactly, so the following tolerances are allowed-



DIFFERENCE ALLOWED			
IN DIAMETER	IN CIRCUMFERE		
1/4"	3/4"		
3/6"	11/4"		
1/2"	11/2"		
	IN DIAMETER 1/4" 3/8"		

Check your new tires too. Some brands may be a little different.

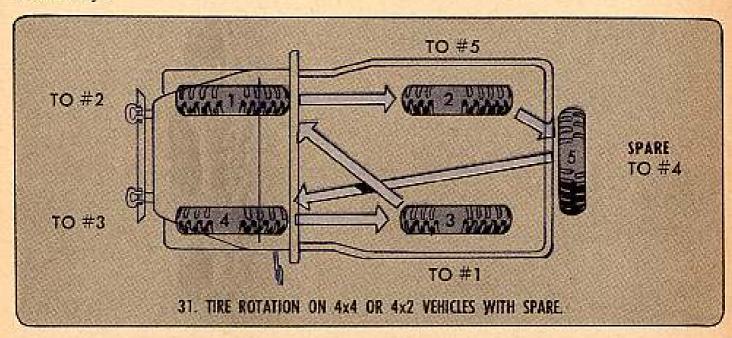
Here's how to measure your tires for diameter and circumference

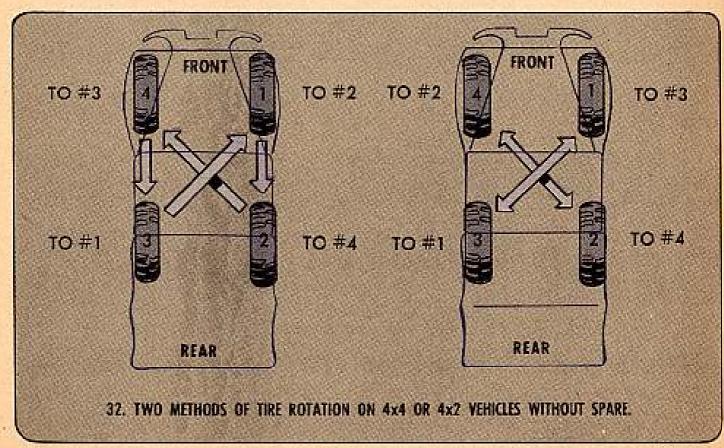


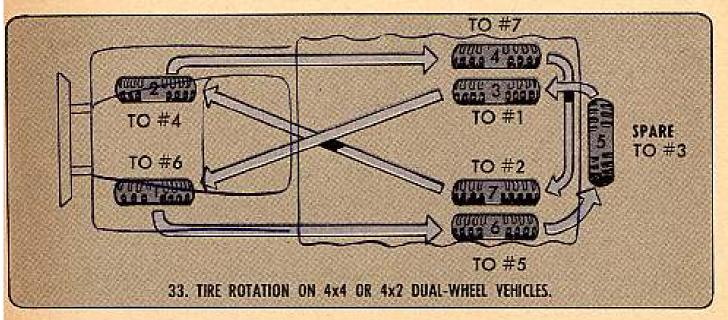


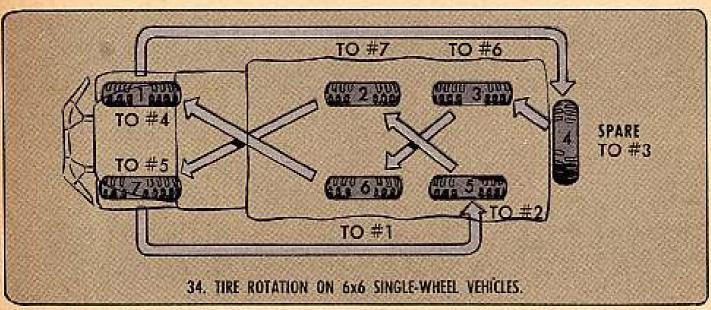


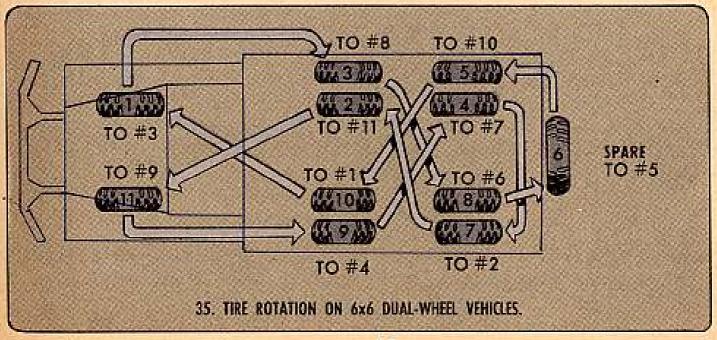
When you match your tires up on dual-wheel jobs and have them within the permissible difference, make sure you mount the larger tire on the outside. Do it this way.





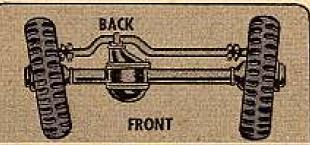




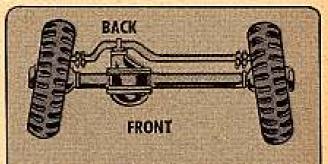


# WHEEL ALINEMENT and TIRES

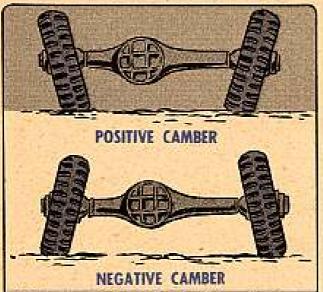
The wheel alinement of your truck directly affects the kind of wear you're going to get from your tires. There're four words used to describe conditions of wheel alinement—



36. TOE-IN. Wheels on the same axle are closer together in the front than they are in the rear. Your tire will show a feathered edge on the inside edge of the tread if you've got too much toe-in. It'll also show up more on the right wheel tire. In other words, your tires will be pigeon-toed.



37. TOE-OUT. Wheels on the same axle are closer together in the rear than they are in the front. You'll get feathered edges on the outside edges of the tread with most of it showing on the left tire. Your tires are duck-footed.



38. CAMBER. This is the tilt of the wheel. Positive camber (bow-leggedness)—the wheels are closer together at the point of road contact. Negative camber (knock-kneed) is when the wheels are closer together at the top. This'll cause uneven wear on one side of the tire.



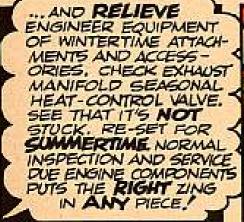
39. CASTER. This is the backward tilt of the axie or the tilt of the king pin at the top. Too little caster will cause the wheel to wander or wave—causes spotty tire wear. Unequal caster causes the wheel to pull to one side—excessive and uneven wear.

Good driving habits and loving care are the ounce of prevention for any tire sickness. Keep TM 9-1870-1 handy. It tells you all about care and maintenance of pneumatic tires.

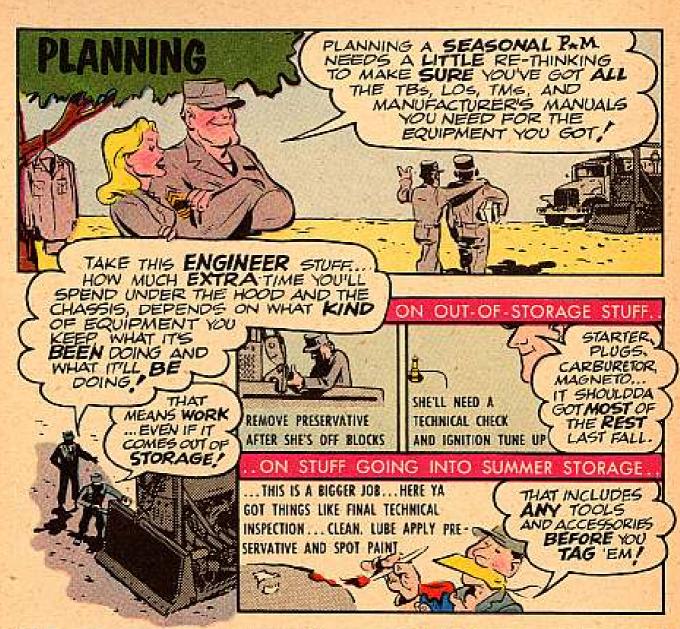




EXTRA CAREFUL ATTENTION
BEFORE HOT WEATHER HITS...
MOST EQUIPMENT WILL NEED
MORE THAN THE USUAL
LUBE CHANGE...THORO
GREASE JOB...TIRE OR.
TRACK CHECK...AND ADJUSTMENT... AS THE CASE
MAY BE...









PM GUIDES: MAKE SURE YOU'VE GOT ALL THE MANUALS THAT BELONG TO YOUR EQUIPMENT. IF YOU'RE SHORT, ORDER REPLACEMENTS.

BEFORE ANYTHING
CHECK EQUIPMENT'S
LATEST 461,462, 463
OR 464 "TECHNICAL
INSPECTION FORM"
TO KNOW WHAT'S
BEEN DONE AND
WHAT'S DUE, GIVE
YOURSELF TIME TO
GET DONE WHAT'S
NEEDED, ANYTHING
BEYOND WHAT YOUR
SOPALLOWS
SEND TO
THE SHOP!



NOW REMEMBER CLEANING CAN'T BE JUST SPIT AND SHINE! SHOW ME WHAT YOU MEAN ON THIS HERE MISS

... BY CLEANING I MEAN
ELBOW GREASE, A HOSE,
AND BRUSHES, MOPS, SOLVENT,
PRY BARS, SCRAPERS... YA'LL
NEED TIGET THE CAKED-UP
MUD, GRIME AND GOOK
OFFA'ER... THIS STUFF
HIDES CRACKS, BREAKS,
AND LOOSE NUTS!

IF Y'R AUTHORIZED STEAM I ... BE CAREFUL ON THOSE NON-WATERPROOFED VEHICLES. ... PROTECT THE CAB WITH CANVAS... BE SURE YOU REMOVE AND WIPE DRY THE DISTRIBUTOR CAP... SEEPING DAMPNESS WILL RUIN DELICATE ROTOR SPRINGS, ETC., SAME GOES FOR MAGNETOS...

SPRAY AWAY FROM
YOURSELF AND
OTHER PEOPLE
IT'S POTENT!

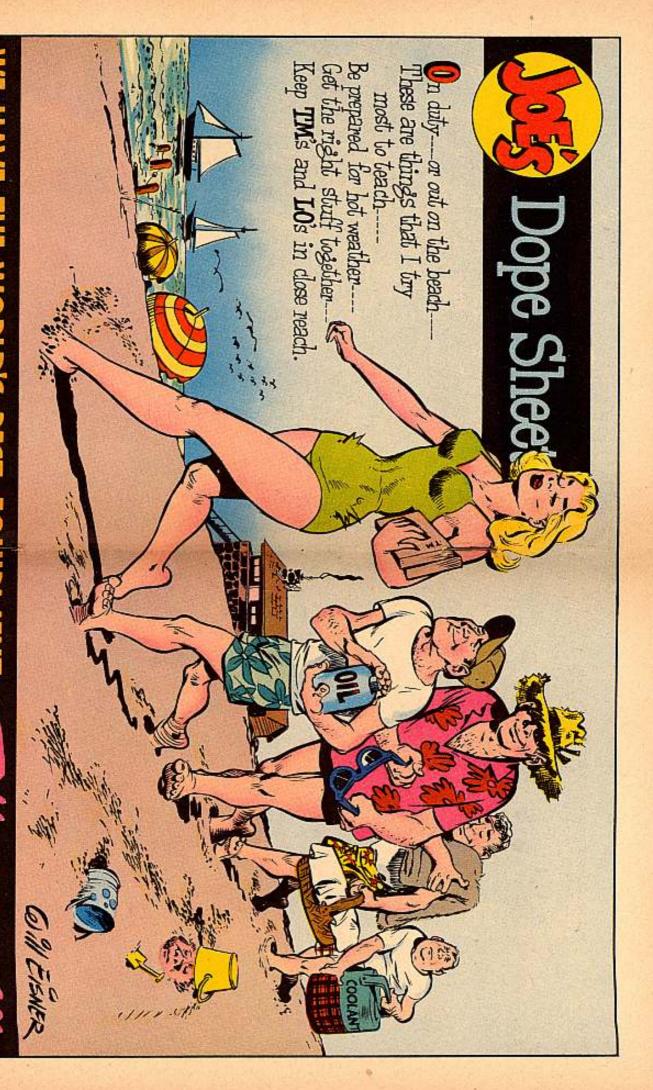
IF YOU'RE NOT AUTHOR-IZED TO USE STEAM, STICK TO WATER HOSE, SCRUB BRUSHES, MOPS, PRY BARS, SOLVENT AND ELBOW GREASE.

BLOCK 'ER UP
AND GO OVER THE
UNDERSIDE...HERE'S
WHERE YOU GOTTA LEAVE
NOTHIN' ESCAPE YOU....
BOLTS, CLAMPS, SCREWS
...THINGS THAT GET
SHOOK LOOSE. T

AFTER YOU
GOT ALL GRIME
AND MUD OFF,
LINE UP YOUR
WRENCHES AND
START TIGHTENING,
ADJUSTING AND
GREASING.

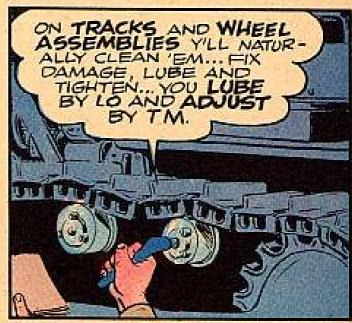


BEFORE YOU BOYS EMERGE, HERE'S WHAT TO LOOK FOR ... KEEP THIS PIN-UP AS A REMINDER!











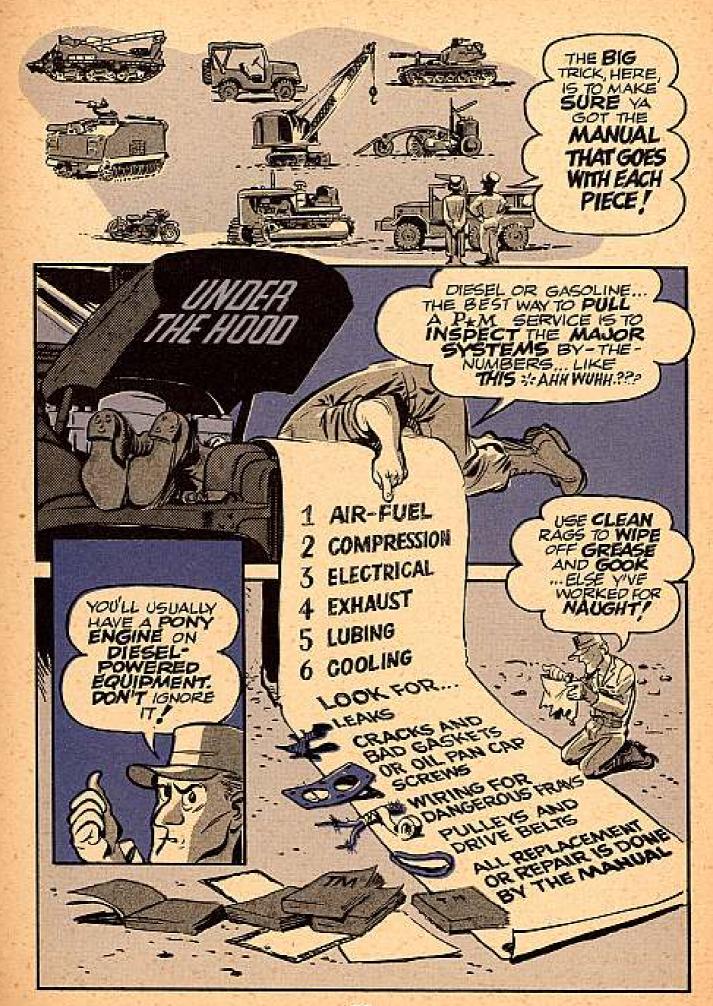


# ON WHEELED STUFF:











DRAIN, FLUG 8 WELL <

AND SERVICE, USING CLEANING

ACTUALLY NEEDED

SEE TB ORD 557

14 LB SODA +1 GALWATE

..............

CLEAN FILLER PLUG

NHIBITOR

FOR CRACKS AND LEAKS... PULL BATTERY AND CHECK

..........

CORROSION AND DIRT TERMINALS, CLAMPS OF CLEAN POSTS, BRACKETS

ADJUSTED?



HOW'S ELECTROLYTE HIL S.MOH

TIC RELIEF VALVE. THE BLACK ONES ARE NO GOOD, TB ORD 520

SHOULD HAVE CAPS BATTERIES YOU VENT HOLES, ON 6TH



READY FOR ACTION?

EXTINGUISHER

FIRE

TOOLS, TARPS, ETC.

CABLES

REPLACED

<

000000000000

THOSE WHITE ONES, TELLS HOW TO GET

TERY BOXES AND CARRIERS SCRAPE AND PAINT BAT-

INSPECTION

FILLED

STO SIHT

OR MAYBE PULL THE BATTERY OUT OF SHAPE MUSTN'T BE TOO TIGHT OR THEY'LL CRACK THE CASE, BATTERY HOLD-DOWNS HAVE TO BE FIRMLY SEATED BUT THE

> BACK TO WORK O.K. SEND HER

A ONE-TWO-THREE LET'S GIVE IT EVERYTHING CHECKED, REPAIRED 3

FLUIDS AT PROPER FUELS...AND LEVEL...?? COOLANT, LUBES

GAGES READ RIGHT??

ENGINE

BRAKES OK? SMOOTH

LIGHTS AIMED?

WIPERS

WORK?

<



BE SEEING





HORN

WORK?







Dear Half-Mast,

We're having quite a time getting ammeters for our M-series vehicles. The meter we've been getting has one connector on it while the trucks are equipped to take two connectors—can't make a round peg fit a square hole.

Could it be that we've missed an MWO telling us to rewire these oneconnector ammeters so they'll fit our two-connector trucks?

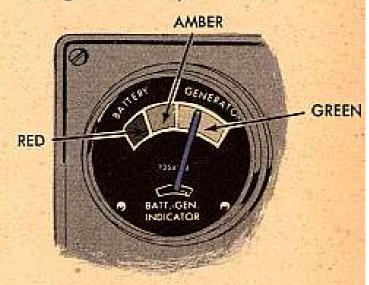
SP3 G. M. W.

Dear Specialist G. M. W.,

Better tell you right quick that those one-connector gadgets you're talking about are not ammeters—they're voltmeters.

All your new M-series vehicles are coming through with voltmeters (Ord Stock Nos. G742-8376377 or G749-7354232) instead of ammeters. The early-production model M-series vehicles have the ammeter (Ord Stock No. G742-7728854) — the two-connector jobs.

When you send in a requisition for new meters, the thing you'll have to do is specify whether your trucks take the voltmeter or the ammeter. This is the only way you'll be sure that you'll get the right meter for your truck.



Eventually, all trucks will wind up with the voltmeter. This will happen when the Army supply of ammeters is used up. Even now, there's an MWO in the mill which will tell you how to make the change-over from ammeter to voltmeter. This MWO won't take effect, tho, until the ammeter supply is exhausted.

The apparent reason for the change is that a voltmeter is easier to read and understand. A voltmeter measures voltage—natch. There are three colors on this meter — red, amber and green. When that needle's on red it means your electrical system isn't producing enough juice—usually when your voltage drops below 24 volts. When she's on amber, it means your system is turning out anywhere from 24 to 27.5 volts. You'll usually get this reading when your truck's idling. Green, of course, means your system's cooking with gas — she's producing at least 27.5 volts.

Half-Mast

# ON THE WARPATH



Dear Half-Mast,

It's gotta stop, 'cause if I find anyone messing around my trucks, I'll cook him alive.

Now that I've blown off some steam, I'll tell you what this is all about. Those service tail and stop light assemblies are at fault. They're listed in all Ord 9's for the M-series tactical wheeled vehicles but not in the Ord 7's. Which all means that the using units can't get them without going through a lot of red, green and purple tapes.

And, because of this, there's been a lot of underhanded dealings going on around here. All I know is that the other day I went around looking at a couple of M34 21/2-ton trucks and those blank-ety-blank lights were missing. In other words, Sarge, it looks like a lot of guys around here are becoming a bunch of cannibals.

Tell me what to do, Sarge, before I go beserk altogether. My nerves are just about shot and unless I find out how to get those lights fastest someone's going to spend a couple of weeks in a hospital.

SFC B. S.

Dear SFC B. S.,

Hold it now, boy. For your nerves I suggest you take a bromo, and then when you've calmed down, listen to what I have to tell you.

First off, the Army's recognized this problem and has come up with an excellent fix — from now on those lights will be in all the Ord 7's.

As you know, all your trucks except the G741 3/4-ton series use the H004-7760506 and the H004-7760507 assemblies. The H004-7760506 is the righthand light and the other goes on the left.

The G741 34-ton trucks use the G741-8328083 assembly for the lefthand side and the G741-8328082 assembly for the right side.

As each revision to the Ord 7's comes out, you'll find these stock numbers listed, which means you'll be able to get these assemblies with no sweat at all.

Fire off a letter to me any time you discover any other item that's fouled up like these light assemblies.

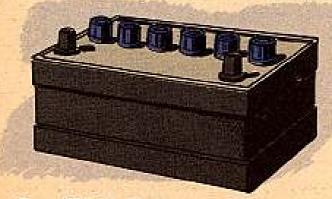
Half-Mast

# STORING DRY-CHARGED BATTERIES

Dear Half-Mast,

How long can a dry-charged battery be stored? And particularly, how long can it be stored in the battery box of a vehicle? What about rain getting on stored batteries?

SFC G. D. S.



Dear SFC G. D. S.,

For all practical purposes, a drycharged battery can be stored indefinitely. Some folks say "forever," but nobody has lived that long to see.

But, the joker is that it must be kept dry. Batteries in the battery boxes of vehicles will have a good chance of staying dry, inside the cells where it counts, as long as the caps are tight. The caps of the military batteries are designed to keep water out even if the battery is six feet deep, so it isn't too likely that rain on the tops will get in.

On the other hand, everything you can do to be sure those batteries stay dry, and out of the real hot sun, will help you be sure they are ready when you need 'em. Take a long look at TM 9-2857, (15 May 45) for the word.

Half-Mast

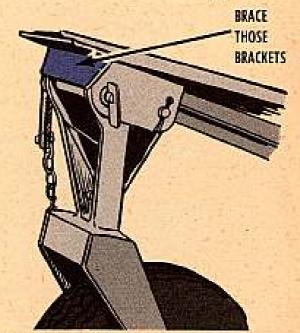
# BRACE UP

Dear Half-Mast,

What can I do to keep those third wheels on the M104 trailers from sagging on me?

Seems the slightest movement of the trailer breaks the bracket bracing the wheel, which in turn causes the wheel to mugwump all over the place. What's your fix, Sarge?

Sgt T. Y. M.



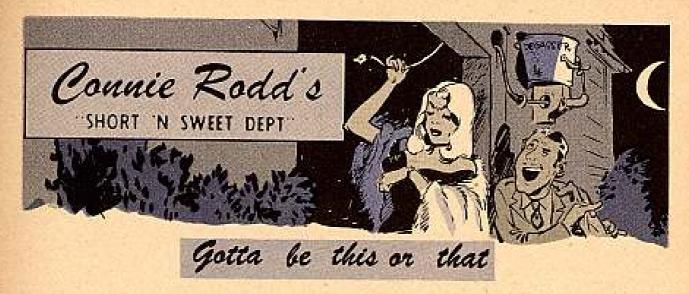
Dear Sgt T. Y. M.,

Not my fix, Sarge—the Army's. Take your trailers back to Ordnance and have them put MWO Ord G754-W4 (7 Jan 55) into operation.

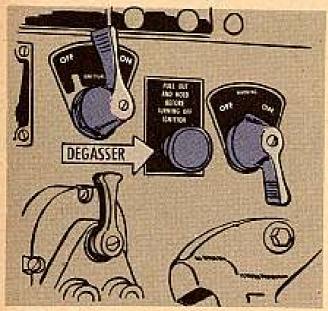
This'll fix your trailers up right well. The MWO tells Ordnance to brace those brackets so you'll never have sagging trouble again.

"Urgent" is the word printed atop this publication. And you know what that means—urgent.

Hall-Mast



Your 5-ton truck can have one of three types of carburetors on it—the 7375469, the 8327282 or the 8331877. That last one—the 8331877—has what's called a degasser built right into it.



This degasser stops your engine from dieseling—that's when your engine keeps running after you shut the ignition off.

What happens is this—the heat in the combustion chambers really builds up when your truck's running. When you turn off your ignition, believe it or not, your truck may keep running, because this heat ignites any fuel mixture still in the chambers or flowing into the

chambers from the carburctor. To stop this, you pull out the anti-dieseling control wire on your instrument panel. Then, when the engine dies, you turn off the ignition switch.

But those two other carburctors—the 7375469 and the 8327282—don't have built-in degassers. This is where MWO Ord G744-W23 (28 Sept 55) comes into the picture. This MWO says you're to take your truck back to Ordnance and have them put a quick-opening valve on your intake manifold to stop this dieseling. It's marked urgent.

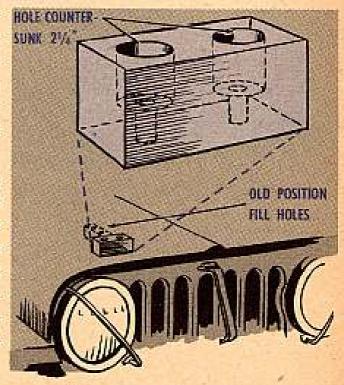


When you open the valve, you let a free flow of fresh air into the intake manifold which stops your engine from dieseling. O'course, you have to be sure you close that valve when you start your engine again.

# Block that bounce

When the M38's windshield is down, its tarpaulin channel rests on the hood-bumper-blocks. Unless you've tied it down real tight, and it stays that way, the blocks may wallop and flatten or crush the tarpaulin channel as it bounces along.

Some men are moving the blocks on the hood. They drill new holes and move 'em so that the windshield's frame —rather than the weaker tarp channels rest on them. Then they cover the blocks with rubber for a padding. The windshield is then supported in the manner to which it would like to become accustomed.

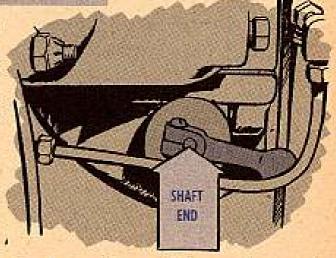


# Oil and tap

The hammer-and-tong method's no good when the manifold heat-control counterweight shaft's frozen on your M38 Jcep. The first thing some people do when they run into this kind of trouble is grab the counterweight with a wrench and twist it.

The best way to loosen up the shaft (
is use a little penetrating oil mixed with
graphite on the bearing end of the shaft.





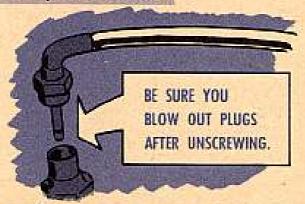
Let it stand for a while to soften up the carbon. Then tap the end of the shaft with a hammer or a block of wood. To keep the shaft from freezing, give it some oil and a tap at every C maintenance service.

If the freeze is still on the shaft after you do this, then you'll have to take the intake manifold off, free the shaft and oil it.

# Watch those plug threads

Next time you remove the spark plugs in your M-series tactical wheeled vehicles, it'd be a good idea to blow out the plugs and the wire harness caps.

You see, on these plugs (Ord Stock No. H004-8357724 or H004-7524258), a metal sliver can shear off the connector threads as you screw the cap to the plug. This is particularly true if you skip a thread—cross-thread. These threads are made of soft brass, and it's mighty easy to cross-thread if you're not careful.



When you unscrew the connector, and the sliver with it, the sliver can fall into the plug barrel. Using compressed air is one way to get it out.

# You takes y'er cherce

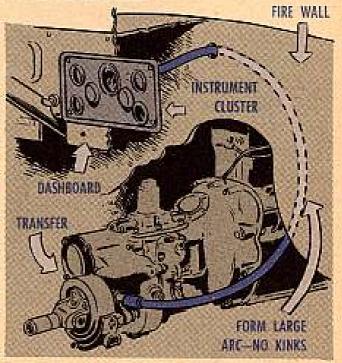
Let's get this problem of what speedometer flexible-shaft-assembly goes on your M38 Jeep knocked for all time.

There are two kinds. Assembly G740-7527480 goes on all M38's with serial numbers below 44033. The assembly includes the casing and core (Ord Stock No. G740-7527483).

Assembly G744-7389881, which is longer than assembly G740-7527480, goes on all M38's with serial numbers above 44032. This one also includes the casing and core (Ord Stock No. G744-7355830).

Although the assemblies themselves are interchangeable between any of the M38's, their parts are not because of the different lengths. So, coming right down to it, you've got to get the right assembly on the right Jeep or gives no mileage clicking off.

When installing these assemblies, you attach one end to the transfer case and pass the body of the assembly up



thru the firewall where you attach its free end to the speedometer. When fussing with the longer assembly (G744-7389881), make sure the extra length of the assembly forms a large arc on the engine side of the firewall—don't force it into a sharp kink or bend.

TB 9-804-14 (19 Oct 55) gives you the word.

# An ordnance job



For those G741 3/4-ton trucks that have serial numbers below T245-2291, you may have some trouble with fuel draining into the brake-master-cylinder and distributor. If so, take her back to Ordnance and have them replace the old air-cleaner elbow-assembly (Ord Stock No. G741-7705789) with the new (Ord Stock No. G741-7413241).

If you happen to come across MWO Ord G741-W2 (11 May 55) in connection with this problem, forget it. This MWO is now on the canceled list.

# You oughter jotter

If you're one of those that have been looking high and low for a Kit "A" Frame for your 2½-ton Cargo Truck, 6x6, LWB, w/w, grab your pencil and jot these numbers down so you'll have them handy. Ord Stock No. 41-K-87-300, Ord Dwg No. 7083122, Federal Stock No. 3830-708-3122. This "A" Frame can also be used on ¾-ton and 4-ton cargo trucks. (These are all WWII trucks).

Now if it's "A" Frame Kits for your "M" series vehicles that you're interested in, here they are:

THE PERSON NAMED IN	ORDNANCE	
VEHICLE	DWG NO.	FSN
Truck, 1/4-ton, M38		
or M38A1	8337113	41-K-87-150
Truck, 3/4-ton, M37	8337114	41-K-87-210
Truck, 21/2, 5, 10-ton	8337178	41-K-87-335



# REDUCING DOPE

Before any clutterbugs in the area get scriled down at their mountains of paper, pull up a row of File 13's and lend an ear.

Could be you're cluttering your maintenance file cabinets with stuff that's not needed. And there's nothing worse than something you don't need-your. Saturday night date's kid brother, for instance.

Here's the scoop on how to chop those mountains down to molehills, and how to save yourself a heap o' hard work and good file-cabinet space besides.

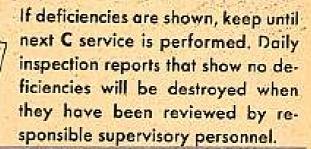
AR 345-292 (2 Aug 55) gives you the scoop on how long to keep your files, but just in case you don't have it handy, here's a rundown of what to do with which when:

A SERVICE WORK SHEET

DD FORM 110 (lower half

—preventive maintenance
or comparable service)

forms)



DD FORM 110 (upper half
—Dispatch portion)
and DA FORM 9-75
(Daily Dispatch Record)

Keep both for two months, then destroy. (Unless file pertains to vehicles involved in accidents and on which action has not been completed by a claims officer.)

B SERVICE WORK SHEET If no deficiencies are shown, it can be destroyed immediately after it's been reviewed by responsible supervisory personnel. If there are deficiencies, keep until completion of next C service.

C SERVICE WORK SHEET

Keep until completion of next D service.

DA FORM 460 (Preventive Maintenance Roster)

Destroy after 6 months.

DA FORM 478 (Organizational Equipment File) This form goes with the vehicle or equipment to which it belongs.

# ARMAMENT

parts and have the tools) or get help of the parts are like it says here, fix them up, (if you've got the spare got a few minutes to spare by comself a real break next time you've paring her with this chart. If any Browning machine gun and yourtrom Ordnance. Give your .30 cal. M1917A1

maybe serious damage. noticed in time prevents the gun from being goofed up later with Even one little dent or crack

when it's bumped. The barrel exrunaway gun or one that'll fire too rounded or worn, you've got a and firing pin notches. If they get many rounds, double-check the sear where. If the gun has fired a good necting steam tubes for cracks and Look over the water can and conusually crack before they break. break if timing is incorrect. They lock frame take a beating and will tension and front projection of the loose fittings. Look sharp for cracks every-

Check inside the flash hider for bind with the front barrel-bearing. or grit. See that the bipod doesn't look inside the bipod head for dirt If the M1919A6 is your baby,

two in the bush. preventive maintenance is worth because as you know, an ounce of Give your gun a good look-see,



NEEDS REPLACING. PACKING-LEAKING

NO TENSION. BARREL LOCKING SPRING-

PITTING, WORN LANDS. BARREL EXTENSION—CRACKS, BARREL-RUST, EXCESSIVE TRUNNION-CRACKED.

BARREL SERRATIONS— EXCESSIVE WEAR.

BENT, EXCESSIVE WEAR

COCKING LEVER-

BREECH LOCK-NOT

WORKING FREELY.

WATER JACKET-DENTS, LEAKS, NOT RIGID ON TRUNNION BLOCK.

BREECH LOCK RECESS-

WORN, MUTILATED.

SEAR AND FIRING PIN

NOTCH-ROUNDED, WORK

CARTRIDGE STOP ARM—BENT

WORN, MUTILATED. BREECH LOCK CAM WILL NOT SLIDE FREELY STEAM TUBE-CLOGGED, WELL-ROUNDED. END-NOT SMOOTH, FIRING PIN STRIKER

MUZZLE-BURRS, PITS, RUST

CHECK YOUR GUN

LOCKED SECURELY LEGS-NO!

NO TENSION, BINDING. PARTS BINDING BELT HOLDING PAWL- COVER ASSEMBLY- BROKEN AT FRONT.

COVER-NO DETENT ACTION,

BINDING, NOT WORKING SMOOTHLY. **ELEVATING AND TRAVERSING KNOBS** 

ROLLERS—BAD ADJUSTMENT. RECOIL MECHANISM

IMPROPERLY SET KINKED FREELY, LOCK SPRINGS

PINTLE-NOT ROTATING

NOT ROTATING FREELY. BUSHING-NOT SNUGLY FIT

FUNCTIONING PROPERLY CRADLE LOCK-NOT

BOLT CAM GROOVE—MUTILATED

BURRS, SERRATIONS WORN LEG CLAMPING PLATES—

BOLT-CRACKS ELEVATION AND WINDAGE CLICKS WORN. REAR SIGHT-BRACKET LOOSE SIGHT LEAF NOT PERPENDICULAR

COVER LATCH-LOOSE, NOT HOLDING COVER SECURELY. DRIVING SPRING ROD SLOT-NOT WELL-DEFINED, WORN LOCKING PINS

BACK PLATE-DIRTY, BINDING

AND PIN-BINDING TRIGGER SPRING

RECEIVER-DENTS, CRACKS, LOOSE RIVETS.

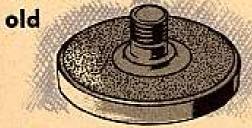
> SCREW-NOTCH ADJUSTING BACK PLATE

HORIZONTAL OR NOT IN EITHER **ERIICAL** 

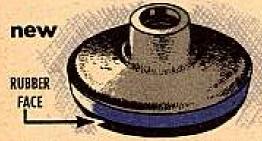
TRIGGER —BENT. POSITION

# CHECK YOUR RAMMER

Hold everything until you've checked the loader-rammer on your piece. If you're using Rammer D031-7307416 and it's got external threads, junk it and requisition a new one.



The old style rammer D031-7307416 has an external thread which is easy to damage. So you've got to requisition the new designed rammer, which has an internal thread and a rubber cushion on the face.



But here's the catch. The part number of the new rammer is also D031 7307416. So make sure supply has got the new one, and then make sure you specify on your requisition that the rammer you want has an internal thread and a rubber cushion on the face.

It's sorta like having two girl friends with the same name at the same number — one's a blonde, the other a red-head. First, make sure the one you want is there. Then when you ask for her, give a complete description so you'll get what you want.

In case that new rammer isn't available, use rammer D039-6108585 as a substitute until you can get the right one.

# YES-BUT!

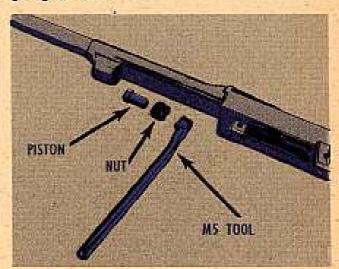
Dear Half-Mast,

What about the gas piston nut on the M1 carbine? Is the using unit supposed to clean 'em, and if so, how come we can't have the Ordnance tool for pulling 'em out? We have found the removing tool, M5, to be inadequate.

Lt H. V. Z.

Dear Lt H. V. Z.,

Cleaning the gas piston nut on the M1 carbine is one of those "Yes—But!" propositions. Yes, the user cleans it—but only under the supervision of the organizational artificer, and only when the carbine gets sluggish—failure to extract, for example. Cleaning this nut every time the piece is fired would wear it out entirely too soon. See FM 23-7, pages 92 and 93, para 48 c for the poop on this.



As for the M5 tool being inadequate, if you find a weapon in such bad shape that this tool won't easily remove the cylinder nut, you'd better send it to Ordnance for repair.

# A PEEP WILL DO IT

Dear Half-Mast,

Will you give me the authority to quote so I can either requisition boresighting equipment for my 76-mm gun on the M41A1 tank or else get Ordnance to do the job?

It tells how to boresight right in TM 9-730 for the tank and gun, so I must be supposed to do it. But my requisitions for bore-sighting equipment keep bouncing back, and they keep telling me that the stuff is not authorized on the organizational level. What do I do?

M Sgt F. S. K.

Dear MSgt F. S. K.,

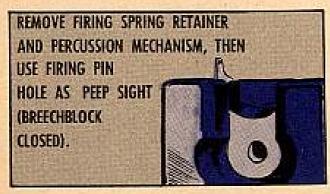
Breech and muzzle bore sights are no longer 1st and 2nd echelon issue for combat vehicle mounted, direct fire, primary weapons up to and including 90mm gun (except the 40mm guns).

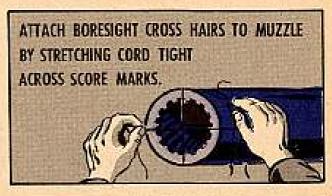
Take a look at TM 9-730, page 348, para 272. It tells you how to boresight by using the percussion mechanism firing pin hole and bulk cord fastened to tube muzzle for boresight lines.

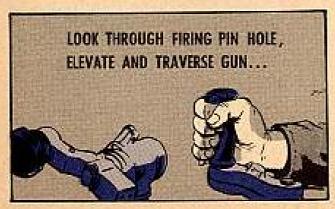
Half-Mast

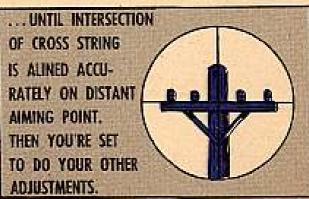














Dear Sgt Dozer,

Our commercial type dumps and International Harvester garbage collection trucks don't have towing pintles on the rear end and aren't to be used for towing.

We have had cases, however, of some meathead dropping a chain or cable over the rear cross-member of the frame and trying to tow with it.

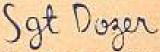
The result? Bent frames, because they're just not designed for towing.

To keep this from happening, we made up a 1-in stencil and painted NO

TOWING on the cross member. Since doing that, we haven't had a bent frame. MSgt R. M. H.

Dear MSgt R. M. H.,

Darn good idea—but only as a last resort. Anybody who'd try to tow with one of those vehicles evidently didn't get the right kind of training or he'd know better. Well-trained and competent operators shouldn't need signs to tell 'em what not to do.

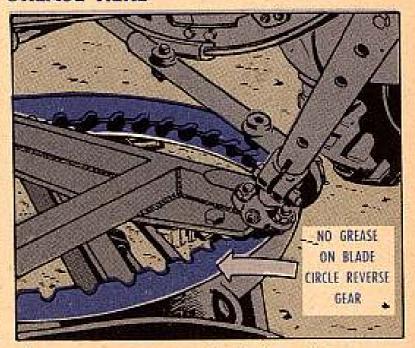




# NO GREASE HERE

A lot of fellers have the oldfashioned idea that you ought to grease the blade circle reverse gear on those Engineer motor graders. Whether you're driving a Caterpillar, Warco, Rome Adams or Austin-Western grader, remember not to grease this gear. Here's why:

The blade circle reverse gear used to be greased, but the indentions of those gear teeth became handy resting places for dirt and sand. This material



acted as an abrasive and caused extreme wear to the drive- pinion gear. That's why the gear isn't greased nowadays, so keep this one in mind.

# ENGINEERS

Here are some more pubs you can add to your pile:

# TECHNICAL MANUALS

5-5128 Welder, electaro-mindryn, 3-hp, 60-cy, Hebart med ML-304-P, 10 Nov 55

5-9507-1 Crane-Shvi, PU, rev. trk-mtd, Bay City Med 1903-166, 6 Oct 55

5-0517 Crane-Shvi, PU, rev, Ira-mtd, Car Wood Buckeye mod M-20-A, 4 Oct 55

5-9586 Conveyor, drag Type, piler, Barber-Greene med 681, 26 Oct 55

5-2079 Pump, deep well, 200-GPM 200-ft hd, Johnston Pump Co mod 6EC, 21 Oct 55

5-9597 Conveyor, erag type, Baiss mod 484 PM, 26 Oct 55

5-9599 Conveyor, drag type, Haiss mod 486 PM (Ser Nos. K12438 up), 25 Oct 55 5-5315 Gen Set, elec, part, dst, dran, Buda mod BASD-A3-CE, 20 Det 55

5-2123 Pump, horiz, stm-dryn, 25-GPM, Ameri-can Marsh mod, 9 Dec 55

5-8095 ice plant, 1-ton, equipment only, Reco mod, 17 Nov 55

5-5240 Gen. stm. cil-fired, part, Cyclotherm Corp mod C-12, Dec 55

5:9128-1 Shop, trobile, GPR, Set #1, hvy, 12-ten, semi-mid, Cause mod MED, 7 Nov 55

## TECHNICAL BULLETINS

5-5218-1 PMS, eng. gasoline. Hercules mod IRBER, 29 Nov 55

5-1071-1 Paver, concrete, Foote mod 34-E, 5-Dec 55

5-5001-1 PMS, gen sel, elec, stat, del-dres, Consolidated Osl Elec mod 1617, 29 Nov 55 5-6045-1 Whirler, plate, litho offset, mir-drys, tansion Monotype mod, 9 Dec 55 5-5050-1 Gen set, port, dal divo, Cummics mod HG, 7 Dec 55

5-5386-1 PMS, gen, elec, part, Mobiler mod 800-M-21, 5 Dec 55

5-5225-1 Trailer, full, loited, 8-ton, Fentaine and Ts-105, 9 Dec 55

5-9232-1 PMS, sawmill, frir-mbt, ésil-dryn Jackson Esmber Harvester mod RM-6 and RM-1, 13 Dec 55

5-5027-1 PMS, gen set, port, gas-drvn, Home-lite mod C-8, 13 Dec 55

5-8584-1 PMS, conveyor, drag type, Godfrey mod SP-8-2, 29 Nov 55

## LUBRICATION ORDERS

5-1015 Sweeper, rotary, 3-whi, Mcili-Blumberg mod 53M, 14 New 55

5-9244 (ce plant, 1-ton, skid-mtd, Victor mod, 14 Nov 55

5-5247 Engine, gasoline, Allis-Chalmers mod 8-15, 10 Nov 55

5-5342 Compressor, air, skid-mid, for diving outlit LeRoi mod 6004-At, 30 Nov 55

5-5153 Gen set, del dryn, Chicago Pneumatic med 612 CPS, 28 Nov 55

5-4033 Sharpener, detach rock drill bit, electoric dryn, ingersoll-Rand mod (IID-60, 29 Nov 55 5-5023 Gen set, wiec, port, Buda mod 800S-1125, 1 Dec 55

5-5238 Engine, gasoline, Ford mods 7HNN, 8MNN, 1 Dec 55

9-5267 Gen set, elec, port, Onan mod 2017-

5-9225 Trailer, full, loided, 8-fon, Fontaine mod T8-105, 29 Nov 55

5-9317 Hoist, pneumatic, sgle drum, 1-ton pull, Ingersoli-Rand mod HU, 6 Dec 55

5-9255 Flow, snow, rolary, gas-dryn, Snow Master mod Bil-10, 28 Roy 55

5-1316 Pamp, recharg, C-0-Two Fire Equipment mod SC-1, 6 Dec 55

5-1129 Distributor, wtr. 1000-gal cap, Vic mod 73, 29 Nov 55

5-9179 Ditcher, plow type, East Texas Eng mod 563, 7 Dec 55

5-9523 Conveyor, drag type, Barber-Greene mod 92, 28 Nov 55

5-1052 Stabilizer, soil, dat dryn, Harnischlager med LA-88, 7 Dec 55

## MODIFICATION WORK ORDERS

\$012-2 Gen set, elec, part, Hallingsworth mod JH3, 7 Dec 55

3515-1 Truck, fire, all Seagrave mods using KB Series pump, 12 Dec 35

5312-1 Gen set, elec. port, Hercules med HG-30W-400, 5 Jan 56

6121-1, C2 Duplicator, spirit process, map repro, Ditto mod 0-22, 7 Dec 55

9448 Trir, 2-whi, utili, pole type, 23/s-ton, Ken-tucky mod, 28 Oct 53

1960 Distributor, wtr. trk-mtd. 1000-gal cap, Littleford mod M-75, 14 Nov 55

9885 Sweeper, rot. 3-whl. brir-mid, Meili-Blumberg mod 53 M, 14 Nov 55

1055 Subgrader, form riding, Carwood mod FG-24, 8 Nov 55 1154 Kettle, asph repair, bir-mid, Littleford mod 64-HB-3, 18 New 55

2031 Pemp, cent, 60-GPM 125-It hd, Raigh B. Carler Co mod 4 MHW, 14 Hov 55

2087 Pump, cent, 316-GPM 25-ft hd, Marlow mod 17-W, 14 Nov 55

5081 Gen set, elec, port. Kohler mod SMH51. 3 Nov 55

# ENG 7. 8 & 9's

6600-3 Transit, Kerffel and Esser mod P5136, 3 Nov 55

2070, C1 Distillation unit, gas-drys, bir-mid, 85 GPM, Cleaver-Brooks mod DVC-8M, 16 85 GPV Dec 55

9207 Trir, full, lo-bed, 60-ton, Dorsey mod MT-60W, 14 Nov 55

9301 Winch, towing. Hyster mod DEL, 1 Dec 55 5117 Gen set, elec, port, Bogue Elec med 2388A, 15 Dec 55

5390 Compressor, air, skid-mtd, 60-clm, Worth-ington mod 256-E, 17 Nov 55

\$655 Gen set, port, gas-dive, Onen med 10 HQ-3R/5528, 15 Nov 55

6030 Press, proving, Rutherford Machine Co mod 2, 15 Nov 55

9207, C1 Trir, full, lo-bed, 60-ton, Dersey mod MT-60W, 5 Jan 56

# Good common sense CRANE OPERATION Is a must in . . .

You'd be surprised how careful operation can add to a crane's life. It makes no difference what kind of a rig you're running, the operator and signal man are the guys who determine what kind of service your crane'll put out as the hours pile up.

Yep, careful operation's got just as much to do with good preventive maintenance as making adjustments, tightening nuts and bolts and doing the before, during and after operation services.

When you use a crane, it's just like using a hand tool. You get the right one for the right job. Your machine's got to be able to make the lift or do the job you ask. And don't forget to make good use of your outriggers. Extend 'em for safety's sake if you're approaching the equipment's operating limits.

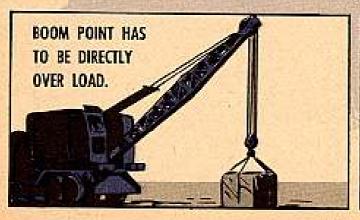
After you've selected the right crane, here are a few things you've got to do before making a lift:





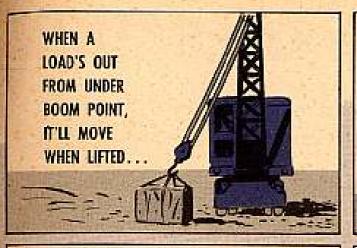


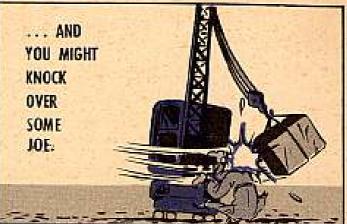






REMEMBER—CRANES ARE DESIGNED TO WITHSTAND STRESS DIRECTLY BENEATH BOOM POINT. BOOM FAIL-URES CAN RESULT FROM A SIDE STRESS—OR WHEN A LOAD'S OFF TO ONE SIDE.





WHEN POSITIONING THE CRANE, BE SURE SWING CLUTCH DRIVE IS ENGAGED—AND SWING BRAKE OR LOCK IS NOT ENGAGED. ALSO SEE TO IT THAT TRUCK LOCK OR BRAKE IS ENGAGED.

AFTER THE OPERATOR TIGHTENS
UP A LITTLE ON THE LOAD, THE
HOIST LINES SHOULD BE VERTICAL.
MAKE ALLOWANCE FOR HEAVY
LOADS THAT CAUSE BOOM
POINT TO SWING OUT.

# REMEMBER

NEVER LIFT HEAVY LOAD
WITH SWING-BRAKE OR LOCK
ENGAGED, BUT DO ENGAGE
SWING-CLUTCH-DRIVE. THIS
GIVES OPERATOR COMPLETE
CONTROL OF HIS MACHINE.



# In a nutshell, a crane's effectiveness and length of service depend mostly on the careful planning and work by the operator and the ground guide. A couple of sharp cookies in these jobs can eliminate lots of accidents, unnecessary equipment failures and high repair costs.

# HANDY REFERENCES

A couple of standbys for crane riggers are TM's 5-725 and 5-727. They'll give you the real scoop on rigging plus details on approved methods of lifting with rope, wire and chains and the use of block and tackle.

Yep, these manuals are real dandles, so best you latch on to copies of 'em pronto. You'll never be hurtin' for crane riggin' info if you have TM's 5-725 and 5-727 handy.



# Here's a list of additional Official Publications on Ordnance Equipment which are of interest to a lot of you.

### SUPPLY MANUALS

ORD 5-3-4 List all Hems, price guide-with parts

ORD 7 SNL A-70, C2 Morter, 4.2-in M2; cart, 4.2-in morter, ammo MIA1 Dec 55

ORD 7 SHL A-85, 63 Morter, 4.2-in M30 (T104), oit, morter, 4.2-in M24 (T61) Jan 56

ORD 7 SNC 8-50 Rifle, cal. 30-66, Winchester, mod 70, spec match grade Jan 56 DRD 7 SML C-20, C1 Howitzer, pack, 75-mm, MLAI; crigo, howitzer (pack), 75-mm, NB Dec 55

DRD 7 SML C-74, C1 (TO 11W2-5-5-4) Rifle, 75-mm, M20, T21E12 Dec 55

68D 7 \$ML C-77, C1 Rifle, 105-mm, M27, M27A1; mt, rifle, 105-mm, M75, M75A1 Dec 55 08D 7 \$ML C-84, C1 Gan, 76-mm, M48 (T124E2); Grige, gun, 76-mm, M29 (168) Dec 55

ORD 7 SML C-90, C2 Launcher, rkt, multi 4.5-in M21 (T123) Jan 56

080 9 SHL C-93 Rille, 106-mm, M40; mt, 105-mm cifle, M79 Dec 55

ORD 7 SML D-24, C1 Gan, 155-mm, M2, N2AL; crige, gun. 155-mm, M1; platform, firing, 155-mm gun, M1 Dec 55

ORD 7 SHL B-31, C3 Hawitzer, 240-mm, Mil errge, howitzer, 240-mm, Mil; wagon, cannon transp M2A1; wagon, errge transp M3A1 Jan 56 DRD 7 SHL 0-85, C1 Lauscher, 762-mm rkt, trk mid, XM289 Dec 55

ORD 7 SML F-36 Watches, pocket, stop, wrist

DRD 8 SHL F-204, CI Quadrant, elev MJ, M1A1

ORD 8 SHL F-216 Mt, 'scope, M25, M95 Dec 55 ORD 9 SNL F-235, Vol 5 Peris, MI3, MI381, MI4, MI4A1, MI7 Dec 55

ORD 7 SML F-238, C1 (TO 49A1-2-24) Bince, M7, M15A1, M16, M17A1, M1 21, Mk 21A1 Dec 55 089 8 SHL F-238 (TO 49A1-2-3-4) Binoc M7, MISAL, M16, M17AL, M821, M821A1 Nov 55

## TECHNICAL MANUALS

TM 9-761A, C2 SP twin 40-mm gun M42 (F141)

TM 9-1590, C1 Fuze Setters M14, M22, M23, M25, M27 Jan 56

TM 8-175588, C1 6-cyl, horiz oppos alresol gase eng (Contin Med AD-835-4) Dec 55

TM 9-1946 Demolition materials Hov 55

TM 9-1955-2 Jato M4 (T9E2) Jan 56

TM 9-1981, C2 (TO 11A10-1-1) Mil pyrotechnics Dec 55

TM 9-3026-1 improved AA FCS T38-operation Dec 55

TM 9-5068 Tracking station van semitrir XM323 (Corporal Type II guided miss sys) Nov 55

TM 9-5074 Missile test set van body (Corporal Type II guided miss sys) Nov 55

TM 9-3026-3 improved AA FCS T38-schem disprams Dec 55

TM 9-6081-7 FCS T38, rep rebid computer T27E2, peris T33, wind resolver unit 7630042 Oct 55

TM 9-7220 SP 8-in howitzer T108 May 55 TM 9-9202 6-ton 2-whi brir converter deliy M197, 8-ton 2-whi brir converter deliy M198 Dec 55

TM 9-8627, C1 (TO 36X-1-221) Elec equip (Delco-Remy) Nov 55

### ORDNANCE MODIFICATION

### WORK ORDERS

082-W6 Combo gun mt M76 (11381); Replace gun elevat cyl assy 79833250 w/improved gun elevat cyl assy 7982525 F Dec 55

C82-W5 Combo gun mts M76 (T138E1), M76At (T138E2); Provide improved type cleval screw 8338953 in machinegun cleval, travers mech 8339 7834505 of coaxial machinegun mt F Dec

038-W34 90-mm AA gun mts MIAI, MIAZ: Pro-vide batteries to insure op of breakaway aps-tem at all temps # Dec 55

832-W21 120-mm gus MI, 120-mm AA gus mt MIA1: Nodify cradic assy to provide acceptable means for lubrical firing lever interlack assy # Dec 55

038-W17 90-mm AA gan mounts M2, M2A1: Pro-vide means of prevent mount from jack-knilling when backing up F Jan 56

048-W18 75-mm gun 183 series: Provide metal improved breechblock F Jan 56

6250-W7, C1 M75 (TIBE1): Replace final drive components, attaching parts F Jan 56

## SUPPLY BULLETINS

SB 9-127 Recoverable, salvageable items of RCAT materiel 9 Dec 55

S8 9-128 Maint-in-storage of CD-500 Series, CD-850 series transm B Jan 56

SB 9-126 35-pass 4x2 integ bus (Twin Coach mod F-32-F). Revised servicing instru for oil filler breather assy 9 Dec 55

### TECHNICAL BULLETINS

TO 9-217A-1 SP 105-mm howitzer 19851: Ideatifics of 12- and 13-tooth final drives 0 Dec 55 TB 9-1869-2, C4 (val erosion, damage in can-non bores B Jan 56

TB 9-2630-104 Halft-track veh: Reclaim bagie roller (road whi) assy B Dec 55

TB 9-7012-2 M48 Tank: Provide instru for maint, rep compen idler spindle and bore 9 Jan 56 TB 9-8024-1 245-ton trias Mil35, M211, M215, M217, M225, M227, M220, M221, M222- Precautions—accident self-engage auto transm 0 Jan 56
TB 0RB 444-11, C1 245-ton trik-mid Sig rep shops MIR5, M238: Instal load D Nov 55

TO GRO 597-34 (TO 34Y2-15-13) Press-jet steam cleaner (Clayton mod BKRO-600) (4640-473-6218): Rebuild standards D Dec 55

TB 08D 597-35 Vapor-type stationary Degreaser (Randall Mig Co mod U-42-E) (4940-244-4897); Rabuild standards D Dec 55

TB ORD 605, C1 (TO 11W2-1-2) Hydropseu recoil mechs of fld, combat veh, A4 arty, inspect proced to determine serviceability of mech containing emulsif oil 0 Dec 55

TB ORD 620 Hyd all pump M3 (4930-449-7166): Cleaning all reservoir © Dec 55

TB 0R9 621 (T0 3645-1-504) Tandem hitch, 2540, 735-8343 (B-H-1826): Instal on 34-ton Irks MB, GPW, M38, M38A1 0 Dec 35

TB GRD 624 AA FCS M33/T33, cable systems MIA1, MIA2, MIA1—cable assy rep proced D Jan 56

TB ORD 625 All tact whi vehs: Cleaning power train case ventil valves F Jan 56

TB 080 626 Vehs with press fuel syst Elimi-cale excessive fuel tank press buildup 0 Jan 56

### LUBE ORDERS

LO 9-U3 Mortar 60-mm M19; mt, mortar 60-mm M5 Nov 55

LO 9-9702 Buffer Tire, tube, filer shalt, ptbl. Vz-bp, 110-v, 60-c, spie-ph, 1725-/pm (Mail) Tool Co med 19390) Oct 55

LO 3-U203 Buffer: Tire, tabe, flex shalt, pible, 45-hp. 110-v. 60-c. sgle-ph. 1725-rpm (Albertson & Co Inc. mod 1020); buffer: Tire, tabe, flex shaft, pible, 34-hp. 110-v. 60-c. sgle-ph. (Albertson & Co Inc. mod 1080) Oct 35

LO 5-U104 Lathe, armature, undercutter: 60-c, single-ph (Frank N. Wood reod 0-10) Oct 55

LO 3-U705 Drill mach, upril Fir type, 34-hp, 110-w, 60-c, 1gle-ph, 1-in cap, 18-in swing, morse taper No. 3 spdl, std tilling table (Buffalo Forge Co mod 188) Dec 55

LG 3-U706 Grinder, flex shaft, pible, 110-v, 60-c, agle-sh, 3-speed (w/equip) (Wyzenbeck & Staff Inc mods 27A, 27AC) Oct 55

Le 9-0707 Shears, metal cut, elec: 115-v, oniv cur, 18-gage cap (Stanley Works med NIM) Oct 55

LO 9-U708 Hosing mach, horiz, Berch type, 115-v, 60-c, single-phase, cap 9,720 to 2,000-in (mis) (Ammoo Tools Inc. mod 2600) Nov 55 Lo 9-9709 Drill mach, sprt, bench type, \$5-bp, 115-v, 60-c, single-phase, %-in cap (Delta mods 17-305, 17-306) Nov 55

LO 9-U711 Shears, metal cut, elec. 135-w, univ cut, 10-page cap (Stanley Works med U 218) Nov 35

LO 9-0712 Hammer, pneu, chipping: 136-in bore, 4-in stroke (Chicago Paeu Tool Co No. 4-RV) Nov 55

10 9-325 Howitzer, 105-mm, M2A1; carrge, howitzer, 105-mm, M2A1, M2A2 Nov 55

LO 9-7420 Trer, cargo, MREZ Nov 55

LO 9-8002 Truck, Irlr, 10-lon, 6x5, M123 Dec 55 LD 9-9047-1 Grinder, tool, cutter, beach type, to-hp, 110-v, 50-c, sgle-sh, w/accys (Roan Mig Co, Devere Co ened 20) Oct 55

LO 9-9072-2 Brill mach, work Bench type, Va-hp, 115-v, 60-c, sgle-ph, Ne-in cap (Famos Mach Co mod 80) Oct 55

# FIRING TABLES

PT 81-2-2 (Abridged) Mortar, 81-mm, M29 M1 on m1s, mortar, 81-mm, M23A1, M23A1, M23A1, M23, M4, M1; firing shell, HE, M352 (T28E6) w/fuse, pd. M519 (T319), fuse, VT, M517 (T378E3) fis, M141 (T22) cartridge, ignition, M65 (177E1) primer, percussion, M71 (T68E1) increment, propellant, M5 (T7) Oct 55

FT 105-AP-2 (Abridged) Rifle, receil N27A1 Fir-ing cart HEP-T, M345 Oct 55

FT 108-8-2 (Abridged) Rille, 106-mm, M40 fir-ing cart HEP-T, M346 Oct 55

FT 248-C-1, C7 Howitter, 240-mm, M1 firing shall, HE, M114 Oct 55

MOTE-On TB's, SB's and MWO's: 0-Organizational Maintenance F-Field Maintenance D-Depot Maintenance

