

Issue 44

PS

1950 Series

THE
PREVENTIVE
MAINTENANCE
MONTHLY



BEAT THE HEAT with
**PREVENTIVE
MAINTENANCE**
SEE PAGE 21

*Dear Editor,
Boy, we've finally got it made!*

All these years of beating my brains out to make good things and working with the drivers, and now I find in a shop where the best vehicle work usually gets done, done right, and done on time.

Here's why: these drivers in the colored things are specifically designed for their vehicles.

It's wonderful, I tell you now. No arguments about who does what, or who didn't do what or what's to blame for the shape the machine is in. One truck, one driver. And, being let's suppose I'm driving the S.P. Guard, O.D., etc., he's happy, and makes like hell on any driving. Because we had a standard, we were done of him then. He took up by the day every and we got an extra figure to take his place.

Now, you'd have to see it to believe it, the way these guys stand and guide their cars, or manage their machines if every time it does reaches the ball going behind his work, he sees that he's got a good thing, or he beats his hands on him in by using his clear the team operation and maintenance of that truck.

Why in heck doesn't the rest of the Army get on in the same way?

*Sergeant R.C.B.
Camp Springfield, Wash.*

Our "You-Look-Like-a-passenger-driver-could-be-assigned-to-army-vehicle. Even though you're in a corner of your life, but you still work."

GOT IT MADE



PE MAGAZINE

Issue No. 10

1974 Series

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PE Magazine wants your ideas and contributions, and we will try to answer your questions. Send writing to: PE Magazine, Department of the Army, Service Agency, Detachment, and address maintenance in maintenance.

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Emergency Insurance Is Spelled—



Some people have been wondering about emergency for a long time. You will very few of them know the line and what it means for UAW's line.

It might be a big one in this process, which is that warranty which will cost much less to get to it when it falls off the assembly line. That warranty is UAW's Emergency Insurance, that if anything goes wrong with your new truck during a certain period of time for wear's there on from the bill-to-ill for the manufacturer's responsibility.

But it goes a little further than that. It was easy to see 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 away after you pay a fee in determining who is your best.

So, you see, these warranties are important things to know about. All the manufacturers that make your various emergency app insurance will be best a contract with the government which will cost something like this:

"... the contractor (including the manufacturer) will be required to provide each vehicle component, parts and parts thereof against defective material and workmanship for a period of one year from the date of acceptance or in case of time in excess of vehicle shipped or location outside the continental limits of the United States for 5,000 miles, whichever may occur first."

Putting it simply, all this means that your various selected vehicle and all its parts are guaranteed for one year or 5,000 miles, whichever hits first.

Now, this one year period means the amount the vehicle is delivered to the shop—it doesn't mean when the vehicle reaches you. In other words, isn't my a brand-new UAW truck is delivered to an authorized depot from the factory. For some reason or other this truck was in the depot for 40 days before it's handed over to you, the driver. This means that as far as you're concerned, you've got 12 months or 5,000 miles, whichever comes first, to make sure that

W-A-R-R-A-N-T-Y



truck is up and running on all six. You'll find the date of delivery of the truck to the shop on the truck's manufacturer's plate.

Now, let's say you take that UAW truck for a month, something goes wrong—the generator (or part) is yours, for example. The first thing you do is take them yourself a heavy UAW truck, suggesting that the any part you're not authorized to find (wink), check it up and put on a tag that has that date on it —



1. Item of your purchase order.
2. The vehicle must contain and all component parts.
3. Item the vehicle was delivered to a particular area within certain limits.
4. General number—the tag is attached to the manufacturer's plate.
5. No vehicle number which.
6. No warranty tags and the general tags a good record of what you may use the part in accordance with the manufacturer and the date you take the part off the vehicle in the case you have used the part are being on.
7. Make the tag "Warranted UAW Truck".

After you've done this, take the part back to supply and return it to. But here a new part comes as you see yours, you'll have no doubt the your truck. In other words, don't worry until the bad part is replaced—you're sure now. The longer you wait, the longer your truck will be fixed up.

Then, get yourself a UAW card and start making it out according to AEC 100-10 (11 Nov 15). Turn it in, and you've done your job. From that day on, the people concerned with seeing that the warranted part is replaced will take care.

MR 9-08-56-10-10 (which goes on these warranties. The one you received truck drivers will be included in it MR 9-08-54. More of the one is the article that with commercial app vehicles.

YOUR HYDRA-MATIC LUBE'S AN OPEN BOOK

Yep, it may not tell you a lot. For example, how clear you dip your stick into that 24" tall Hydra-Matic transmission to check the lube level and a "low or high level" profanity color stripe you across the month, however, October, however.

In case you never recalled this kind of agricultural word, here's one mixed with oil is when a soil far. There are check discs and bands in your transmission which are lined with carb-

onaceous small usually means the three discs or bands are burning.

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

If one or both of these conditions are leading your truck, double the lube and have Calsonic give it a modified. Repairs that'll normally cost \$5 or \$10 can multiply into hundreds if the condition continues.



While on the subject of checking your Hydra-Matic fluid level, LOTS-800's (14 from 50) key down low rules on how to do it. LOTS-800, which was the manual before LOTS-8004 (later held), and to check this transmission while it's in neutral, No-500—the transmission has to be in P-4 (high things with the handle) or right. Also, forget about what \$5.00, page 20 will show checking the oil level, same type gas mixed up.

Some day you'll get a reading that's higher than the actual level of the trans-

mission fluid with the transmission level or in P (neutral position) as your engine idles during the level check. The reason that the lower the check has a heavy habit of throwing oil up against the dipstick.

The LOTS-8004 has a lot of good tips in it—tips that you'll need to keep your Hydra-Matic truck in tip-top shape. Check it out if you've got your eyes. If not, ask for it and see the "readers know best" paragraph in AR 100-00. You can receive this copy in TM 5-8004 (Oct 73).

HERE'S THE WAY TO CHECK THAT LUBE LEVEL



The one that with a lot of old transmission, that the truck, at the handle's right transfer one to search and dip into 1-1 High Temp.



In the engine the bottom the bottom, while oil inside, pull out the dipstick, wipe it off with clean rag, stick it back in and pull it out again to get your reading.



The oil level should be at the world level if you haven't run your truck for a while. If your truck's been running properly then the oil temperature of the transmission, the oil level should also be at full.



If you need fluid, keep the engine at idle and add it. Keep checking that level as you put fluid in—you don't want too much flowing around it then.



The lower, having that hydraulic in 1-1 position and having it there while you check around the truck you in a extra step, one with the best results are and handle one is neutral, it'll be best to have a buddy help you with your check while one makes sure the other one is in the end of the vehicle and make sure the truck doesn't suddenly decide to go for a ride. See TM 5-8004 about this.

Call today for more information on the best quality lubrication.



In the old days, all we really needed to get where it was going and back was a horse mounted on four U-shaped metal wheels called "hoop wheels." Today, hoop wheels are something you throw or run past without getting out of the ground.

Now our heavy truck has replaced the horse, and tires have replaced the hoop wheel, a lot of guys take their rubber on their wheels for granted. The real hero here is you, you take it for granted if you give them a little maintenance. You're the hero 'cause that with a "teen" 'em rough they can make it" outside they're bound to have a get. But give them their due and they'll keep your vehicle floating on air.

A tire is made up of the tread, breaker, cushion, plus a steel and lead wire. Each has its own job to do.

THESE WILL HELP YOU GET ACQUAINTED WITH THEM

Most of your tire parts—the breaker, the tread and the cushion—are built to take a good shock. If any of these parts has a gas, that steel shock is going to knock that tire right to the heavens. Here's why—a tire weighing about 20 pounds carries a load nearly 50 times its own weight. When this tire weighs about 200 lbs., a blow of about a ton is built up, trying to tear it apart. That tire has got to be on the frame to take that kind of treatment.

The best rule to follow is if one of your tires looks suspicious, take it off and get it up over. You don't have to be ashamed of handling a tire that has a small run down the center. Small cuts get bigger and deeper and soon it may be too late to save your tire. Gas is the rubber only can run so far.

Rounder ribs—as seen on the tread design disappear in the center of the tire, or at times about 1/3 of the way across the tread, get a new one. If you wear the tread too much, the tire can't be resopped. It has to be junked. These again, a smooth tire picks up a lot of stuff, slings mud, etc.

EVERYTHING WEARS TO SOME DEGREE. BUT TIRES ARE MAINTAINED.

The **STEEL** is a layer of wire on the outside that rolls on the road—it's the wearing surface. It protects the steel from cuts, and provides traction.

The **BRICKERS** are layers of soft, low-resilient cords. They absorb road shock and help protect the STEEL.

The steel **BEAD WIRE** is made from a steel wire that is twisted around to the rim.

The **CUSHION** is made up of soft, low-resilient rubber. Its job is to act like its name says, its surface can absorb road shock. It also holds the steel and breaker together.

The **CORD PLYS** (see through to inside) absorb stresses. It supports loads and is attached to the steel.



BE ON THE LOOKOUT FOR THESE

Certain things and conditions will cause a fire-breathing more-than-happy. These things and conditions are your don't public enemies. It behooves you to know their signs. How they are—

PUBLIC ENEMY MISUSED CHAINS

Warning for Snowing Toys to Death.

The chains are misused when driving over snow and ice. Driving a truck with the chains slipping against the dry pavement will launch the driver out of both your ears and the chains.

Chains are made to grip on the dirt under the rubber, to grip into the rubber. Getting the first snow off the road, make your chains work to tonight—you'll have them ready. And, don't become an alternative solution to get the chains on the right. That's like cutting off your big toe in a right pair of shoes. Always get chains that are the right size.

PUBLIC ENEMY BAD DRIVING

Warning for More Schooling.

Bad driving, brought on by "don't give a darn" attitude is one of the chief causes of car wrecks. Many times the rubber remains can be stopped dead in their tracks if the driver is a good one.

Our subpublic enemies go into making up this body. If you're not good driving on the roads, be wiser, think of your car as their car only for the driver's sake, but also because these things can knock the wheels in the road.

There will be no one else, rubber wears, heavy braking at high speeds and no downgrades, high speed turns, sharp swerving, sharp turns at low speed, speeding unnecessarily and then, fast, fast-to-be-taken steps.

Any one of them that know your first right tells that the jack pin. A lot of rubber will be left on the good rubber, you'll wish you had that one right in the woods when your first decide that they're bad enough and quit.



PUBLIC ENEMY IMPACT

Warning for Tire Bouncing.

The classroom's enemy. It's the big rock in your road's path when you least expect it. It's the deep rut in the "good" hard-packed road.

Most don't impact can be stopped by taking it easy. For example, don't jump your load off a deep wash. Bumping a few again, a rock or hole that is your load will show faster in the playing it makes contact with a fully-loaded point. Just sit on the load a little and let gravity do the work.

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

PUBLIC ENEMY CUTS

Warning for Being a Clippy Character.

Sharp rocks and rough, deep ruts and sharp holes—they can all cut and slash tires—they can all cut and slash your vital essential rubber. You'll be a piece of them when they look like a piece of them when.

The solution can be after every half your tire's life. Keep your eyes peeled for those. If you spot a rut in your road, get it straightened or try your road and have it torn the ruts, make sure you know the depth is if it's not too shallow or deep is if it's not too deep from the road, you should be to and get a new one. Don't jump in the ruts.

The condition of the car isn't the primary—it's how deep is in the ruts. When your car falls up a rut, piece of glass or any other, stick in or how deep the rut is. A deep rut handles and water work in the road body. This makes the tire. Commonly finding the makes the break on the ruts and lugs, the tires in there don't and wear.

Always protecting a truck. Heavy-duty driving over deep ruts and sharp holes is not. After you've checked things a truck or if any object is wedged between the tread, get it out. Do your don't a loaded job, then cut any ruts or any other the tires that you had wedged in the wheels.

PUBLIC ENEMY GREASE



Wanted for Tire Eating.

Grease, oil or any petroleum product is hard on rubber—just don't use it. Try rubbing 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.

Proper maintenance of a vehicle is a sure-fire way of having your investment up to date at any time. For example, if a leader is out of wheel or if the brake drums are not correct, your steel will be scuffed away in one spot.

Parts that should be checked regularly for excessive play—causing rapid wear—are your front 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 pedal while driving, but a slipping clutch wears your vehicle with a job, and you'll leave some of your rubber on the pavement.

Check for a leaky valve seat by putting some spit on the valve and watching for bubbles. If you get bubbles, replace the core. If it still leaks, replace it. Get the right one for the right assembly, and keep a cap on your valve cover. This cap keeps dirt out of the area—don't count 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.

PUBLIC ENEMY UNBALANCED LOADS



Warning for Tire Cracking

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

PUBLIC ENEMY WRONG INFLATION

Warning 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.

That's what over-inflation of tires can do—

Bouncing, wear-the-front of the tread faster than normal.

If tire gets more impacted, that air is as hard as a rock. Too much air restricts the tread, causes cracking.

It increases tread separation.

With the rubber under tension, you can expect more wear and tear.

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

You'll have less traction and fuel economy.

ABOUT THAT TIRE INFLATION



1. Under-inflation is worse than over-inflation. Although tires are self-sealing, if there's more than usual in all directions and you hit and squat, you get a flat.



2. Under-inflation conditions increase inflation on a hot day as the gas in the tire expands. Gas above the boiling point of water.



3. Under-inflation usually happens because a gas isn't behaving with the right way to check the air pressure. Let's say you start on a run with 70 lbs of pressure keeping you alert. 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, the gas deflates your tires until the air goes again reads 70 lbs! NO, SAME 'EM UP.



5. It's about halfway the air pressure is in the tire after driving a few hundred miles, that tire's going to the end held up best.



6. Heat destroys the elasticity of the rubber and is one of the chief causes of tread separation. As a tire begins to wear, it gets separation. When you pull that pressure down, you're exposing that tire's death warrant.



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



8. The old theory that reduced tire pressure will let air you haven't got the chance to pump out from skidding is pure theory—dead by it. Lowering the tire pressure won't help you enough to compensate for the increased strain on the vehicle and road. The only reason for deflating an tire without cause is to drive slowly and carefully.



11. There's another angle to better safe is supposed to be supported by two tires on dual-axle trucks. When only one is in working order, the safe starts leaning. Keep it like this too long enough and you'll never get that load out there's when you'll really have trouble.



12. The only time you reduce tire pressure are when you have to go cross-country or over snow or sand. The reduction gives for better flotation. You can't load up, which will keep the load down. But when you get back on level, normal roads, that the pressure should be increased again to its normal loading.



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



PROTECT YOUR TIRES

12. These things'll protect your tires from public enemies—
all these work together to get the longest life out of a tire.



THE CRACK-TIME WILL
REAR-UP—CRACK IS IT
DON'T LET IT TAKE HOLD—
CAN'T WAIT TO LEAVE
YOUR SEAT IN THE RACK
MORE THAN THREE MINUTES
AT ONE TIME.



11.

11. Fast run or power-blown tire wear faster than front ones. Get better of both before you...



13. The purpose of rotating tires is to equalize wear.



14. Inspect your tires to see that they're being properly maintained and properly maintained (100) mile.



15. After you've made your inspection and measured your tires, you can then determine whether the tires have to be rotated. If your tires are wearing unevenly or don't match up, switch them and rotate.



16. Rotate your tires every 4,000 miles—whether they're wearing evenly or not.



17. Inflated wheels... from actual road.



18. Sharp turns...



19. Drive and all sorts of things the front tire wear is uneven, cutting the life of those tires more than the rear ones.



20. High power roads and road shoulders have more wear on tires on the right side of your vehicle than on the left.



23. When it comes to matching tires, one thing's got to be considered—in two tires are used equally often, even when they're made by the same manufacturer. And a number of months later, make sure for the long.



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



25. Even the same tread design and that the tread's wearing the same.



26. Improperly matched tires can only shorten the life of your tires, but can give you trouble now and differential handling.



27. Most of your gear trains are designed to allow slippage of the rear wheels before the front drive engages. If you use longer tires on the front wheels and smaller tires on the rear, the longer front tires will reduce that slippage to almost nothing—in some cases, there is a distance gap between sizes of tires! This can cause the front drive to engage all the time while, in turn, you cause skidding and damage to the gear train, loss of power and loss of the rear. You particularly have to watch this on dual-axle jobs.

28. If it is not possible to install them exactly, refer to following tolerances as allowed:



OUTSIDE DIAMETER OF TIRE	TOLERANCE ALLOWED	
	IN DIAMETER	IN CIRCUMFERENCE
Under 20"	1/8"	1/4"
From 20" to 40"	1/4"	1/2"
Over 40"	1/2"	1 1/4"

Check your own tires too, some brands may be a little different.

Here's how to measure your tire for diameter and circumference:

29. **MEASURING DIAMETER (AT THREE ORIGHT POINTS,
USE 2 TOOLS)**



MEASURING CIRCUMFERENCE

USE 1 STRAP TAP MEASURE

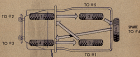




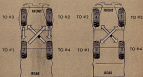
HERE'S HOW TO ROTATE



When you make your size up on dead-end jobs and have them within the permissible difference, make sure you mount the hanger set on the outside. Do it this way.



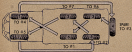
11. THE ROTATION ON A 4-WHEEL SET WITH STEEL.



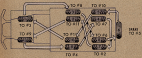
12. TWO METHODS OF THE ROTATION ON A 4-WHEEL SET WITHOUT STEEL.



22. THE SOLUTION ON 4x4 BUS WITH SPARE.



24. THE SOLUTION ON 4x4 BUS WITH SPARE.



25. THE SOLUTION ON 4x4 BUS WITH SPARE.

WHEEL ALIGNMENT and TIRES

The wheel alignment 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 alignments:



14. TOE-IN. Wheels on the same side are close together in the back than they are in the front. 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 splayed out.



15. TOE-OUT. Wheels on the same side are close together in the front than they are in the back. You'll get feathered edges on the outside edge of the tread with more of it showing on the left tire. Your tires are duck-footed.



POSITIVE CAMBER



NEGATIVE CAMBER

16. CAMBER. This is the tilt of the wheel. Positive camber flows together and the wheels are close together at the point of road contact. Negative camber (sloot inward) is when the wheels are close together at the top. This causes uneven wear on one side of the tire.



18. CASTER. This is the backward tilt of the axle or the tilt of the king pin of the top. The left side will wear the wheel's tread at more places up by the rear. Caster angle causes the wheel to pull to one side - usually and on open road.

Good driving habits and being sure are the cause of prevention for any tire ailments. Keep TBI 5-1870-1 handy. It tells you all about care and maintenance of parametric tires.

JOE'S DOPE

CONNIE'S SUMMERTIME CHECK LIST

FAST TAILOR



What's the matter with you? You look like a ghost!

I'm fine, fine! I've had a little trouble, that's all.

Joe, you're not looking any better. You look like you've had a little trouble, that's all.

Connie, I'm not looking any better. You look like you've had a little trouble, that's all.



What's the matter with you? You look like a ghost!

I'm fine, fine! I've had a little trouble, that's all.



Joe, you're not looking any better. You look like you've had a little trouble, that's all.



What's the matter with you? You look like a ghost!



GREAT! You're looking like a ghost!



What's the matter with you? You look like a ghost!

PLANNING

PLANNING A REARWARD P.M. CHECKOUT IS THE MOST IMPORTANT THING YOU CAN DO TO MAKE SURE YOU'VE GOT ALL THE EQUIPMENT YOU NEED.

Take your **ENGINEER** along with you. **ENGINEER** will help you check out the equipment that makes sure that everything is working and ready to go.

Take your **ENGINEER** along with you. **ENGINEER** will help you check out the equipment that makes sure that everything is working and ready to go.

Take your **ENGINEER** along with you. **ENGINEER** will help you check out the equipment that makes sure that everything is working and ready to go.

GET OUT OF STORAGE STUFF



Check out the equipment that makes sure that everything is working and ready to go.



Check out the equipment that makes sure that everything is working and ready to go.

Check out the equipment that makes sure that everything is working and ready to go.

GET STUFF DONE AND MAKE SURE!

Check out the equipment that makes sure that everything is working and ready to go.

Check out the equipment that makes sure that everything is working and ready to go.

Check out the equipment that makes sure that everything is working and ready to go.



FOR EQUIPMENT STUFF THAT'S BEING CHECKED OUT, MAKE SURE YOU'VE GOT ALL THE EQUIPMENT YOU NEED.

FOR EQUIPMENT STUFF THAT'S BEING CHECKED OUT, MAKE SURE YOU'VE GOT ALL THE EQUIPMENT YOU NEED.



FOR EQUIPMENT STUFF THAT'S BEING CHECKED OUT, MAKE SURE YOU'VE GOT ALL THE EQUIPMENT YOU NEED.

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

CLEANING ADJUSTING LUBING...

WHAT'S THE BEST
WAY TO CLEAN THE
ENGINE AND BODY?

USE SOAP AND
WATER FOR THE
BODY AND
OIL FOR THE
ENGINE.



IN CLEANING I ALWAYS
SELECT SOAP AND WATER
FOR THE BODY AND OIL FOR
THE ENGINE. I ALWAYS
WASH THE BODY FIRST
AND THEN THE ENGINE.
I ALWAYS USE SOAP AND
WATER FOR THE BODY
AND OIL FOR THE ENGINE.



IN THE AFTERNOON I ALWAYS
USE SOAP AND WATER FOR
THE BODY AND OIL FOR
THE ENGINE. I ALWAYS
WASH THE BODY FIRST
AND THEN THE ENGINE.
I ALWAYS USE SOAP AND
WATER FOR THE BODY
AND OIL FOR THE ENGINE.
I ALWAYS USE SOAP AND
WATER FOR THE BODY
AND OIL FOR THE ENGINE.



IF YOU'RE NOT AUTHORIZED TO USE STEAM, USE TO WASH BODY, SOLE BRIDGES, HOOPS, AIR LINES, SCHEMATA AND BLOW DOWN.

BEFORE YOU
START WORKING
ON THE ENGINE,
WASH THE BODY
FIRST. ALWAYS
USE SOAP AND
WATER FOR THE
BODY AND OIL
FOR THE ENGINE.



ALWAYS USE
SOAP AND WATER
FOR THE BODY
AND OIL FOR
THE ENGINE.
I ALWAYS USE
SOAP AND WATER
FOR THE BODY
AND OIL FOR
THE ENGINE.



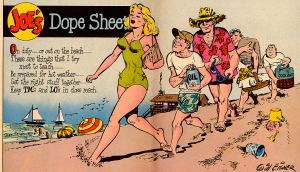
ALWAYS USE
SOAP AND WATER
FOR THE BODY
AND OIL FOR
THE ENGINE.
I ALWAYS USE
SOAP AND WATER
FOR THE BODY
AND OIL FOR
THE ENGINE.





Dope Sheet

On duty... or out on the beach...
 These are things that I try
 not to touch...
 Be prepared for hot weather...
 Get the right stuff together...
 Keep TMs and LO's in close reach.



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

Now, make
something about
those flat tires
—and by the
way, those
—and by the
way, those
—and by the
way, those



—AND BY THE
WAY, THOSE
—AND BY THE
WAY, THOSE
—AND BY THE
WAY, THOSE

Now, make
something about
those flat tires
—and by the
way, those
—and by the
way, those



LOOK FOR **BRINKS** **LOOSE** **10-** **LOTT ON** **CLASS**

CHECK THE
FOR
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AND
AND
AND



- PROPELLER SHAFTS
 - "C" AND "F" JOINTS
 - "CV" JOINT BOOTS
 - TORQUE ROD MOUNTING
 - SHOCK ABSORBERS
 - BRAKE LINES
 - BRAKE HOSE SPRINGS
 - MASTER CYLINDER
 - FUEL LINES AND FUEL TANK
 - AIR LINES AND AIR TANKS
 - HYDRAULIC LINES AND CYLINDERS
 - STEERING-TORQUE GEAR
 - STEERING SHACKLES AND SWAYE
 - PITMAN ARM AND BEND (AND STEERING WHEEL)
- TO THE BEST USE OF YOUR**

AND
AND
AND
AND

THE
AND
AND
AND



REMOVE STEERING-
CLUTCH HOUSING AND
LOOK FOR WEAR AND
ADJUSTMENT OF BAND,
CLUTCH BRAKE

NEXT, LOOK INTO LEAKING
OR BUBBLING PLACES IN
MOTOR OIL PLANT,
CHECK FOR AIR LEAKS
AND TAIL PIPE.



ON HOODS, AND UNDER
BODYPANES, USE T.L. HOOD-
LAMP TO CHECK FOR
OIL LEAKS. LEAKS CAN
EASILY BE FOUND
BY THE OIL DROPS
BY T.M.



ON PAIR WIRE
APPROXIMATELY 1/2 INCH
FROM THE BATTERY,
CHECK FOR THE WIRE
BEING SHORTED TO THE
GROUND AND IF
NECESSARY, REPAIR.



CLEAN AND OIL AIRFLEX FITTING
NEARBY BATTERY AREA. IN COUNTRY
AND PARTIAL SET (A.I.C. FOR
BLOWER AND CLEANER, WASH
EVERYTHING CLEAN.



ON WHEELS, ETC.

REMOVE A WHEEL FIRST
TO INSPECT. THERE IS
A LITTLE OIL BEHIND
THE WHEEL AND BRIDGE
AND THIS MUST BE
CLEANED. USE OIL-BLUE
ON A CLEAN
WHEEL TO FIND
WELL OIL. TO
REMOVE OIL.

USE OIL
APPROXIMATELY
1/2 INCH
FROM THE
BATTERY



USE OIL DON'T DO A
WHEEL. THERE IS A
LITTLE OIL BEHIND
THE WHEEL AND
BRIDGE.





BE AHEAD OF THE
CLOUDS. WE CAN
SEE THE GROUND
AND WE CAN
SEE THE GROUND
AND WE CAN
SEE THE GROUND.



THAT'S IN YOUR
MIND'S EYE.

WE'RE GOING
TO GET TO THE
TOP OF THE
MOUNTAIN. WE
ARE GOING TO
GET TO THE
TOP OF THE
MOUNTAIN.



SCRAM OFF PAINT
AND BUILT SPOTS.
STRAIGHTEN GENTLE
AND PAINT BARE
SPOTS.

CRACK, CRACK AND
LASH. THE WIND
IS HOWLING. THE
WIND IS HOWLING.
THE WIND IS
HOWLING. THE
WIND IS HOWLING.



THEY'VE BEEN
HERE FOR
HOURS. THEY'VE
BEEN HERE FOR
HOURS. THEY'VE
BEEN HERE FOR
HOURS. THEY'VE
BEEN HERE FOR
HOURS.



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 - 6 COOLING
- LOCAL VENDOR

FOR GREAT
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 THE ENGINE
 AND YOUR
 LOCAL VENDOR
 VISIT THE
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 MORE INFO

WITH A RANGE OF
 FROM 100HP TO
 1000HP. THE
 ENGINE IS THE
 HEART OF THE
 EQUIPMENT. MAKE
 SURE YOU GET
 THE BEST VALUE
 FOR YOUR MONEY.

FOR GREAT DEALS IN BUYING THE ENGINE AND YOUR LOCAL VENDOR VISIT THE WEBSITE FOR MORE INFO

FOR GREAT DEALS IN BUYING THE ENGINE AND YOUR LOCAL VENDOR VISIT THE WEBSITE FOR MORE INFO

FOR GREAT DEALS IN BUYING THE ENGINE AND YOUR LOCAL VENDOR VISIT THE WEBSITE FOR MORE INFO

COOLING BATTERIES SYSTEM

WITH BATTERIES SYSTEMS, YOU CAN TAKE THE HOT OUT OF THE HOT SPOTS OF YOUR BUSINESS. IN THE HOT SPOTS OF YOUR BUSINESS, YOU CAN TAKE THE HOT OUT OF THE HOT SPOTS OF YOUR BUSINESS. IN THE HOT SPOTS OF YOUR BUSINESS, YOU CAN TAKE THE HOT OUT OF THE HOT SPOTS OF YOUR BUSINESS.



THE BATTERY AND THE HOT SPOTS OF YOUR BUSINESS.



THE BATTERY AND THE HOT SPOTS OF YOUR BUSINESS.



THE BATTERY AND THE HOT SPOTS OF YOUR BUSINESS.



THE BATTERY AND THE HOT SPOTS OF YOUR BUSINESS.



THE BATTERY AND THE HOT SPOTS OF YOUR BUSINESS.

THE BATTERY AND THE HOT SPOTS OF YOUR BUSINESS. THE BATTERY AND THE HOT SPOTS OF YOUR BUSINESS. THE BATTERY AND THE HOT SPOTS OF YOUR BUSINESS.



THE BATTERY AND THE HOT SPOTS OF YOUR BUSINESS.



THE BATTERY AND THE HOT SPOTS OF YOUR BUSINESS.

BATTERY HOLD-UPS HAVE TO BE FINELY PLACED BUT THEY MUSTN'T BE TOO NEAR OF THE PLUGS. ONCE THE CASE OR MAINS PULL THE BATTERY OUT OF CASE.

ALL DONE?

LET'S GIVE IT A ONE-TWO-THREE

EVERYTHING CHECKED, BEHAVED ASUSPECT OCCASION, EMBLE PILES... AND FLUID AT PEOPLE EYES...

GAGES READ BERTHY

ENGINE BROODS

BRAKES DRY

WHEELS WABBY

WHEELS WOBLY

HOOD WOBLY

FIRE EXTINGUISHER READY FOR ACTION

TROOP TAPPS, ETC.

PILES THE OUT



O.K. SEND HER BACK TO WORK.





WINE TOO MANY

Dear Half-Mast,

We've having quite a time getting antennas for our Marine 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 stand for it a square deal.

Could it be that we're instead an MFD telling us its meter show one connector antenna as they'd fit our two-connector trucks?

SPI G. M. W.

Dear Specialist G. M. W.,

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

All your new Marine vehicles are coming through with voltmeters (Ded Stock Nos. G142-4175X17 or G142-72412X1) instead of antennas. The early-production model M-series vehicles have the antenna (Ded Stock Nos. G2741-77148894) — the two-connector job.

When you need in a requisition for new meters, the thing you'll have to do is specify whether your trucks take the

voltmeter or the antenna. 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 antennas is used up. Even now, there's an MFD in the field which will tell you how to make the change-over from antenna to radio meter. This MFD won't take effect, tho, until the antenna supply is exhausted.

The apparent reason for the change is that a voltmeter is easier to read and understand. A voltmeter measures radio age—march. There are three colors on

this meter — red, amber and green. When that needle's moved 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 running out anywhere from 24 to 27.5 volts. You'll see it'll get that reading when your truck's idling. Green, of course, means your system's chugging with gas — she's producing at least 27.5 volts.

Half-Short

ON THE WAGPATH



Dear Half-Short,

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

Now that I've blown off some steam, I'll tell you what ails it all about. These service tail and stop light assemblies are a pain. They're used in all Oad 7's for the Marine tactical vehicle vehicles that run in the Oad 7's. What all means that the wiring can't get them with out going through a lot of red, green and purple tape.

And, because of this, there's been a lot of underhanded dealings going on around here. It's known that the other

day I come around looking at a couple of M34 7½-ton trucks and these blind-spot-light wires missing. In other words, Sarge, it looks like a lot of guys around here are decreasing a bunch of casualties.

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

MPC B. J.

Dear MPC B. J.,

Hold it now, boy. For your nerves I suggest you take a breather, 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 Oad 7's.

As you know, all your trucks except the G741 ½-ton series use the H004-7760106 and the H004-0760087 assemblies. The H004-7760106 is the right-hand light and the other goes on the left.

The G741 ½-ton trucks use the G741-8029083 assembly for the left-hand side and the G741-8029080 assembly for the right side.

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

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

Half-Short

STORING DRY-CHARGED BATTERIES

Dear *Half-Blood*,

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 in stored batteries?

SFC G. D. S.



Dear SFC G. D. S.,

For all practical purposes, a dry-charged battery can be stored indefinitely. Some folks say "forever," but nobody has lived that long so far.

Now, the trick 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 top will get in.

On the other hand, everything you can do to insure those batteries stay dry, and out of the road for you, will help you be sure they are ready when you need 'em. Take a long look at TM 9-3817, (15 May 41) for the word.

Half-Blood

BRACE UP

Dear *Half-Blood*,

What can I do to keep those third wheels on the M3H trailers from sagging so bad?

Even the slightest movement of the trailer breaks the bracket holding the wheel, which in turn causes the wheel to swing up all over the place. What's your fix, *Large*?

1st T. V. M.



Dear 1st T. V. M.,

Not my fix, *Large*—the Army's. Take your trailer back to Ordnance and have them put MWD Ord. G714-204 (7 Jun 41) into operation.

That'll fix your trailers up-right with. The MWD tells Ordnance to brack those brackets so you'll never have sagging trouble again.

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

Half-Blood

Connie Rodd's SHORT & SWEET DEPT.



Go for this or that

Your front truck can have one of three types of carburetors on it—the 7171485, the 8527182 or the 8182777. That last one—the 8182777—has what's called a degasser built right into it.



This degasser keeps your engine from stalling—what's what your engine keeps wanting about you shut the ignition off.

What happens is this—the fuel 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 hot ignition mix fuel mixture still in the chambers is blowing into the

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

But there are other carburetors—the 7171485 and the 8182777—don't have built-in degassers. This is where 8993 One-Gallon-Water-Charge-11 comes into the picture. This 8993 says you're to take your truck back on Columbus and have them put a quick-opening valve on your intake manifold to stop this stalling. It's marked urgent.



When you open the valve, you let a fast flow of fresh air into the intake manifold which keeps your engine from stalling. Of course, you have to be sure you close that valve when you start your engine again.

Block that frame

When the M1's windshield is down, its supports channel rain on the hood-bumper-blocks. Unless you've tied it down real tight, and it stays that way, the blocks may warp and flake or crack the tarpaulin channel as it bounces along.

Some men are moving the blocks on the hood. They drill new holes and screw 'em under the windshield's frame—rather than the weaker top-channels set on them. Then they cover the blocks with rubber for a padding. The windshield is then supported in the manner in which it would like to become re-cessed.



Oil and soap

The hammer and soap method's no good when the manifold has-escaped counterweight shaft's frozen on your M1's jeep. The best thing some people do when they run into this kind of trouble is grab the counterweights 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 freezing 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 bending, give it some oil and a tap at every 6 inches—never more.

If the frozen 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 vehicle, it'd be a good idea to take out the plugs and the wire harness caps.

You see, on these plugs (Oed Stock No. 8804-45571104 or 8804-7524250), a metal sleeve goes down all the way into the threads as you screw the cap on the plug. This is particularly true if you skip a thread—normal. These sleeves 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 sleeve with it, the sleeve can fall into the plug head. Using compressed air is one way to get it out.

Your ladies give advice

Let's get this problem of what speedometer bezel/shaft assembly goes on your M35 Jeep loaded for all time.

There are two kinds. Assembly GT40-7117-880 goes on all M35's with serial numbers below 44055. The assembly includes the casing and case (Oed Stock No. 6740-7117-881).

Assembly GT44-7189-881, which is longer than assembly GT40-7117-880, goes on all M35's with serial numbers above 44055. This one also includes the casing and case (Oed Stock No. 6744-7117-881).

Although the assemblies themselves are interchangeable between any of the M35'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 give no mileage clicking off.

When installing these assemblies, you attach one end to the bezel over and past the body of the assembly up



down the bezel where you attach its free end to the speedometer. When buying with the longer assembly (GT44-7189-881), make sure the exact length of the assembly from a large arc on the right side of the bezel doesn't hang in from a sharp hook or bend.

TS 5-884-04 (18 Oct 71) gives you the word.

An Ordinance job



For those GM 1/2-ton trucks that have serial numbers below T241-2291, you may have some trouble with fuel draining into the brake-master-cylinder and cylinders. If so, take her back to Ordinance and have them replace the old air-chamber return-assembly (Part Stock No. 6741-7741789) with the new GM Part Stock No. 6741-7411901.

If you happen to come across 1970 GM 1/2-ton-W2 (11 May 70) in connection with this problem, forget it. The 1970 is now on the wanted list.

Your daughter's father

If you're one of those that have been looking high and low for a Kit "A" Frame for your 2 1/2-ton Cargo Truck, Cab, 1970, w/e, grab your pencil and jot down numbers down so you'll have them handy. Part Stock No. 41-K-87-308, Part Drug No. 708411, Bolster Stock No. 3058-708-1121. This "A" Frame can also be used on 3/2-ton and 4-ton cargo trucks. (These are all 1970 models).

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

VEHICLE	ORDINANCE	PN
Truck, 1/2-ton, 1970 w/option	602112	41-K-87-308
Truck, 1/2-ton, 1971	602114	41-K-87-308
Truck, 3/2-ton, 1970	602116	41-K-87-308



REDUCING DOPE

Reduce the paperwork in the area of vehicle maintenance at both corporate and local job by a review of the following list of tips.

Could be your company's maintenance file clogged with stuff that's not needed. And there's nothing worse than expending your own money only to have it disappear into a filing cabinet, for starters.

Here's the scoop on how to chop those maintenance files to size and how to stay organized: a heap o' hard work and good floor-covering quiet time.

All 345-200 (2-8-79) flagging you the steps to 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

DO FORM 170 (Owner file)
 — preventive maintenance
 or comparable service forms



If deficiencies are shown, keep until test C service is performed. Only inspection reports that show no deficiencies will be destroyed when they have been reviewed by responsible supervisory personnel.

DO FORM 172 (Owner file)
 — Dispatch permits
 and **DA FORM 8-75**
 (Duty Deposit Record)



Keep both for two months, then destroy. Unless the permits or vehicles involved in accidents and so which action has not been completed by a commanding 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 test C service.

C SERVICE WORK SHEET
D SERVICE WORK SHEET



Keep until completion of test B service.

DA FORM 402 (Preventive Maintenance Book)



Destroy after 6 months.

DA FORM 478 (Original or
 Serial Equipment File)



This form goes with the vehicle or equipment to which it belongs.

ARMAMENT

Give your M1 Garand automatic machine gun and yourself a real break next time you've got a few minutes to spare by comparing her with this check. If any of the parts are like it says here, fix 'em up. If you've got the spare parts and know-how, you'll get help from Ordnance.

Even one little dent or crack noticed in close passes the gun from being ground up later with much worse damage.

Look sharp for cracks everywhere. If the gun has had a good many rounds, double check the war and firing pin mouths. If they get too rounded or worn, you've got a runaway gun or one that'll fire when it's lumpy. The barrel expansion and heat projection of the lock frame take a beating and will break if timing is incorrect. They usually crack before they break. Look over the water can and connecting screw tubes for cracks and loose fittings.

If the M1 Garand is your baby, look inside the liped head the often or gets. See that the liped doesn't bend with the base frame flexing. Check inside the flash holder for cracks.

Give your gun a good bath too. Because as you know, an ounce of preventive maintenance is worth two in the bush.



Be Ready To

CHECK YOUR GUN

REPAIRING AND TRAVELING PACKS
EVEN, NOT RUBBING GROSSLY



USE HOOPER PAPER—COVER JACOBS
OR BRASS BRASS

COVER-UP
BENT STROKE
ON BAR

WELL-KEPT
WORE GROSSLY

DO NOT CLEAN GUN—WASH
BENT IN WASH

REAM LIGHT-BLUE* LOCK
DO NOT USE HOT PERMANENT
SOLVENT AND WASHING SOAK WASH

CRACK LOCK-LOCK, HOT
WASHING LINES STABLE

SAVING SPRING AND COIL—
HOT WASHING-WASH LOCKING PIN

BACK PAUL
WASH WASH

WASHING EYE—
DO NOT CLEAN WASH

BRICK DOOR-NE
WASHING WASH

BRICK DOOR-NE
WASH, WASHING

DO NOT WASH DO
WASHING-WASH, WASH

CARTRIDGE CHIP BAR-DO

BRICK DOOR-NE
WASH, WASHING

BRICK DOOR
AND DOOR-NE

REPAIRING-WASH, BLACK
DOOR WASH

FRAGILE-ARM

BACK FEET
WASHING
DOOR-NE
DO NOT WASH
WASHING IN
WASHING
FRAGILE

FRAGILE-ARM
AND BRASS

BRICK DOOR-NE
WASH, WASH

FRAGILE-ARM

BRICK DOOR-NE
WASH, WASH

BRICK DOOR-NE
WASH, WASH

BRICK DOOR-NE
WASH, WASH



FRAGILE-ARM, WASH, WASH

CHECK YOUR HAMMER

Holiday shopping usually you've substituted the loader-hammer on your piece. If you're using Hammer D081-7307430 and it's got internal threads, junk it and requisition a new one.

old



The old guy's hammer D081-7307415 has an internal thread, which is easy to damage. So you've got to requisition the new designed hammer, which has an internal thread and a rubber cushion on the face.

new

new
old



But here's the catch. The part number of the new hammer is also D081-7307415. So make sure supply has got the new one, and then make sure you specify no just requisition that the hammer you want has an internal thread and a rubber cushion on the face.

It's more like having two girl friends with the same name as 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 hammer isn't available, use hammer D081-8108081 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? It's been found the removing tool, M1, is the inadequate.

Lo H. F. Z.

Dear Lo H. F. Z.,

Cleaning the gas piston nut on the M1 carbine is one of those "You-Just" propositions. Yes, the unit cleans it — but only under the supervision of the organizational authority, and only when the carbine gets sluggish — believe me, exact, for example. Cleaning this nut every time the piece is fired would wear it out rapidly — see para. for FM 21-7, pages 51 and 93, para 48 c for the poop on this.



As for the M1 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.

Half-Mast

A PREP WILL DO IT

Dear Half-Wast,

Will you give me the authority to quote as I can either requisition demerolighting equipment for my 74-man gun on the M41 tank or the performance to do the job?

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

Ally P. S. R.

Dear Ally P. S. R.,

Break and mount bore sighter on longer 1st and 2nd reticles than for combat vehicle mounted, direct fire, primary weapons up to and including 50mm gun (except the 40mm gun).

Take a look at TM 9-730, page 548, para 271. It tells you how to bore-sight by using the precision mechanism firing pin hole and bulk cord for used to tube-mount for bore-sight line.

Half-Wast



ENGINEERS



NOT FOR TOWING

Dear Sgt. Oyer,

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

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

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

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

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

Mtjg R. M. M.

Dear Mtjg R. M. M.,

That's good idea—but only to a last extent. 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.

Sgt. Oyer



NO GREASE HERE

A lot of folks have the old-fashioned idea that you ought to grease the blade circle or vice gear on those Englebert motor graders. Whether you're driving a Caterpillar, White, Massey Adams or Austin-Warren grader, remember not to grease this gear. Here's why:

The blade circle reverse gear need to be greased, but the inclusion of these gear teeth become handy working places for dirt and sand. This material acts as an abrasive and causes extreme wear to the drive pinion gear. That's why the gear isn't greased nowadays, so keep this one in mind.



ENGINEERS' ROUND-UP

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

BRIDGEWORK

1958—The Pennsylvania Dept. of Transportation has awarded a contract to the Pennsylvania Bridge & Structural Steel Co., Harrisburg, for the design and construction of a 2,000-ft-long, 20-ft-wide steel girder bridge over the Susquehanna River at Conowingo, Md.

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CONCRETE WORK

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CONCRETE WORK

1954—The Pennsylvania Dept. of Transportation has awarded a contract to the Pennsylvania Bridge & Structural Steel Co., Harrisburg, for the design and construction of a 2,000-ft-long, 20-ft-wide steel girder bridge over the Susquehanna River at Conowingo, Md.

Good crane work
is a matter of . . .

CRANE OPERATION

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 get out of the hours job up.

Top, 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 manriggers. Planned use 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:

CRANE.

BE THE
QUARTZ-GIT
MAN POINTING
AND WANT
UP IN THE!



**CRANE TO BE
THEY TEND
AND FURNISH
THE BOOM AND
IN GOOD CONDITION.**



**CRANE POSITIONING
OF BOOM TO BE
THE LEAST
IMPAIRED. AFTER
HANGING HEAVY LOAD
DOWN ON A LONG
BOOM BEHIND DAYS.**



**CRANE CRANE
BE CLEAR
ENOUGH TO
LOAD TO ALLOW
LIFT BOOM
WAVE.**



**BOOM POINTING
TO BE CLEARLY
BEHIND LOAD.**



**LOADING - CRANE
BEHIND TO WITHSTAND
STRESS DIRECT BEHIND
BOOM POINT. BOOM POINT
CAN HOLD WITH A
ONE STEEL - OR WITH A
LOADS UP TO ONE SIDE.**



WHEN A
LOAD'S HOIST
FROM UNDER
HOOK POINT,
IT'S MORE
SAFE THAN
ANY OTHER



... AND
'FOR HOOK'
HOOK
OVER
LOAD
DOES



WHEN POSITIONING THE LOAD, BE CAREFUL
CATCHING IT IN PLACE—AND SPRINGING
ON JOCK IT INTO POSITION. ALSO DO IT
THAT TRUCK LOAD OR BRAN IS IN PLACE.

WITH THE OPERATOR STANDING
UP A FEET ON THE LOAD, THE
HOOK MUST BE UNDER THE
LOAD—ALWAYS! NOT NEAR
LOADS THAT LAY ON
POINT TO TRUCK OR



REMEMBER

NEVER GET NEAR LOADS
WITH SWING-ARM OR LOCK
ENGLAGE, BUT DO ENAGE
SWING-CLIP-ON. THE
SAFE OPERATOR SHOULD
CONSIDER IF HE RACES.



OPERATOR SHOULD
STAY ON GROUND, NOT
DURING OPERATION.

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

HANDY REFERENCES

A couple of checklists for crane rigging are OSHA 1-125 and 1-127. They'll give you the real scoop on rigging plus details on approved methods of lifting with ropes, wire and chains and the use of blocks and tackle.

For more research use real standards, or find your local or in copies of 'em books. You'll never be shorter for more rigging info if you have OSHA 1-125 and 1-127 handy.



Cornie Rodd's BRIEFS

First step, cooler

Cooling system cleaning compound (Ford Stock No. 6830-273-9327) gets into metal and helps get rust when used too much. Use this stuff only when your radiator's clogged or when there's lots of rust floating around. So, top off the fill and spring out—please.

For good measure

For the right amount of reserve read all in the 120-man 881 gun, don't be fooled by page 8 of TM 8-388, where it says the reserve is the regulator in one post. The correct amount of reserve oil is 12 inches. See 8 caps on page 126 of the same TM.

Keep it straight

You don't want it bent, do you? Oh, then, next time you're down visiting your Ordnance support outfit, have them lubricate overhauls for your G-40 J force truck's accelerator pedal to keep the thing straight. ANVO-Cad 0167-931 (24 Oct 55) gives them the word to go ahead with the job.

Patches

Comes an emergency—that's the only time to use a cold patch on a flat-tread tube. As soon as you can, change that cold patch for a hot one like 8 caps in TM 8-1070-1 (February 1952).

A dirty trick

Oh dear, have more than one type of flame—it's a dirty trick on the bones of your lighting equipment to use anything but lamp flames-on them. Candles, paper or any old rag won't do. They'll curdle the coating of your lenses. Here's what you use to get the right flame—Get Stock No. 53-R-14154, Paper, 100-Tons, (Main form, 7 1/2" x 11", 100 sheets to a book.

Fuel that moisture

To prevent condensation inside the cover of the E. F. couplers on M31 systems, use non-hygroscopic tape to get bags of silica gel inside the cover. But remember that the crystals need replacing when they're saturated.



WAIT IT MAY STILL
HAVE

mfw

SCRAPAGE

mfw

YOUR NEW VEHICLE HAS A
MANUFACTURER'S WARRANTY
THAT'S GOOD FOR ONE YEAR
OR 4000 MILES... WHICHEVER
COMES FIRST... CHECK IT!

SEE PAGE 2 FOR DETAILS