

Issue 20

PS

1990 Series
October

THE
PREVENTIVE
MAINTENANCE
MONTHLY

THIS IS THE
FOURTH TIME
WE'VE HAD
PRACTICE THIS
MONTH!

JUST
THINK EVERY
TIME I GO IN A
COMBAT ZONE
THAT I WILL ALL
BE DEAD!



MAINTENANCE IS HEADED FOR MORE

MAINTENANCE SUPPORT - POSITIVE

PS has been told you about investing in Motor which is part of the Motor's Lifetime Offerings. The result of our maintenance plan is also part of our Lifetime Offerings. It's called Maintenance Support Positive or MS+ for short.

For what it's all about, read on: Coverage includes major repairs, tune-ups, manuals, PS's and all sorts of rate books to give you fighting over top of the maintenance work. There's help you can rely on for lighting ... like you ought to be so.

When this deal gets going, it will leave the going rate with Progressive Maintenance Service and other good deals. This will include cleaning, minor adjustments and replacement of some parts, components or modules.

The offering of these will be real easy sales ... those that don't require as many highly trained specialists. Service and easy to use feel you will be all that you'll use. The -20 for the type, in many cases.

The other complete good will go back to PS and MS units.

That'll leave you with less maintenance and fewer parts to stock.

So Circle 150-34 1 Aug '84 gives you more good on Maintenance Support Positive.

MS+

EFFICIENT METHODS

COST-EFFECTIVE MAINTENANCE



THE PS GROUP (PUBLISHED MONTHLY)
1000 W. 1000 W. 1000 W. 1000 W.
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COMBAT SUPPORT
COMBAT SUPPORT



PS is now the only one in the world
to offer a 24-hour
emergency service. Call us
today for more information.

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today for more information.



SCOPE PERM IS WHERE THE ACTION IS

Right vision equipment is where it's at. Compare it to the eyes of a gladiator. Take away your SureLight Scope or night and it's like swinging a club-blind. And, blind gladiators lose the most battles-like.

So, here's some reminders that'll help you stay vertical:

Stay out of the scope or the more you'll find 'em up. Just making 'em again and putting 'em back together can get 'em out of whack.

To get a qualified experience ... if you need him. Otherwise, say no!

COVER UP

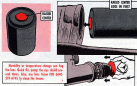
Easy with the power switch on the middle scope. Right pressure is all you need to flip it. Muscle does it up.

Don't like the eye shield of the scope are there to keep them out when you're not using them. The pressure of your hand against the shield opens the cover.

Don't use lenses. They belong there.



Small battery capacity. There's a red cover ... for the night work. The red and with the red cover is fine.



Keeping the straps dry is a must. If it's stored, open the non-clogging and non-squeezing. This might even have to do it daily to avoid fungal issues.

Some, however, expose the lens to bright light, like headlamps and worklamps. That can really do it in the gaps of the straps.

Some users can keep you out of focus . . . especially on elevation and azimuth adjust-ment heads.



If it they're loose, slip 'em a dab of sealing compound, like PFM 9910-001-202L, which you dab on the threads before tightening 'em up. Then, let 'em set for a couple' hours . . . and your hands should say firm.



PVS-1, PVS-2

Some tips on the AN/PVS-1 and PVS-2 equipment:

Release the locking lever on the PVS-1 before you turn the focusing knob. Otherwise, you strip the knob. Watch it when you focus.



Interchangeable tubes for the 2 scopes are not inter-changeable. The PVS-1 gets PFM 9915-011-3792, and the PVS-2 gets PFM 9915-007-2048. Changing 'em around can make you think your scope needs repair.

Use the lens cap to keep your front and rear end highlighted when the scope's not in use.



WHAT LENSES COVER TO YOUR SCOPE'S LIFE SAVERS?

Be sure your scope adapter is mounted on your rifle right. It's gotta be flat against the top of the receiver ... and stored all the way forward. It's on the scope and not the right procedure.



FIELD-SERVICE WEAPON SCOPES

External trigger wonder is the shield of the whole power cable over the 20-2 ... and you. 200, 200.

The shield is supposed to be glued to the stock, so let it stay. Might even save you a cable.



Use the right cover for the right hand so you don't damage the adjustment ... which is what a cable would do if it were a hair too long for the 200-200-200.

The cable adjustment knob needs the right knob ... which means you don't have it put in the shop. You can have it done or I have the shop.



FINAL REMINDERS

Your scopes are precision instruments, finely tuned and delicately adjusted. Rough handling, bouncy rides and carelessness are gonna put 'em down.

If you've gotta transport 'em, put 'em in its case. If you've gotta handle 'em, don't drop 'em on the ground, a vehicle, or whatever.

Protect the lens, always, from bright light, and keep your "clever" parts away from its gain.

When it comes to night-vision, a 100-footnight lens highlights all its places.

ignoring, forgetting or being careless with the needs of your Tippy-C2 is like asking to buy the farm.

So here's a real easy highlighting some of the items you're going to see.

That sure did everything.

If the F1000, 314-way bus in your MC-111 coordinator blows when you set up the panel, lights on the C-2105 are lit, don't touch the a connector box.



Instead, have your fingers check out the circuit for a short . . . which is probably what's wrong. Putting in a heavier fuse can do a lot more damage.

You gotta remove the blower covers of the RT-100 motor-transmitter before operation or in most's instance . . . because the blower covers inside won't rotate. And, uh, don't look down . . .



IT'S PM YOUR



Be sure the upper wires in the low bank of the interlock switches (transmitter, coordinator and air control) is engaged all the way up . . . or you won't get power to the components when you need it. The wires has to be tight.

TIME FOR TIPSY



Be sure the wheels are set on the cables and connectors. Remove cables or the connector. You can't lose the cable by pulling the cable.

Also, line up the keyway on the plate, or both before you tighten a connector.



And, in the double-throw type connector, position the forward ring to release the connector. Flaring at the rear ring can make wires off.



Like was said, you can't lose the system with shrouded like cable-pulling or having a connector into plate. The seal catches up to you, and the repair stops here the panel. And if you should see happen at need a set don't look up because of a fused cable. . . .

When the air control is set of the station, you must have the shrouding

connector the plate D and C in place on the (1000) jack.



Obviously, the **AUTO-MANUAL** switch won't work in the **SEARCH** position.



The round, serrated cover nut of the **ORIENTATION** knob (on the set control) must be tight in order for the subject **AZIMUTH** handwheel to turn.

If the handwheel doesn't turn, snug the nut down.



When you reset the **SEARCH-CENTER** switch on the set control, be sure the white line on the panel aligns with the line on the switch.



It's almost certainly when you can feel pressure just a short turn to right or left on the switch.

If the switch isn't aligned, you'll be 180 degrees out of phase when you set the **AUTO-MANUAL** switch to "SEARCH," which will give you an inaccurate reading on the **MILS** scale.

Keep loose with the **INTENSITY** knob on the set control. It will turning



it too high . . . which heats the scope. Keep the receiver's antenna antenna cable to the mast . . . or use a clamp . . . or wrap it around the mast to keep it from flapping in the breeze and breaking.



The main parts and components are secured properly in the shelter before you call off with it.

Final tip: Avoid sharp bends in those heavy cables. The wiring breaks.



And once you've got your Type-25 working, try not to move it unless absolutely necessary. Forgetting what a short movement is an otherwise happily operating set.



VRC

MISCELLANY

That ANYVRC-12 radio works top talk up, lines up, and hold up—as well as you'd expect—but facts gotta be faced. It's unadvised.



NO, MERRY-OLIVE, VRC-12 HASN'T BEEN BOTTLED.



If the radio set is on when you start your vehicle . . . well, then, you could pick up a little trouble' the hard way . . . like when a sudden power surge might cook out the transistor. So, turn that radio off, before you step on your car's engine of your vehicle. That might not slow the work-down. Use the Label 110 to stick in your vehicle and remember.

When you pull the driver side (DRIVER) from the RT-340 or RT-344 radio-transmitter of the ANYVRC-12 model, it's pretty easy to wiggle the tape.

This is not so good, 'cause the wiggling can make the pins bend and knock out the efficiency of the tape if it doesn't fit in right. So, stay clear of it.

WAVE THAT Safety OFF SIGNAGE 'TIL YOU SEE THE ENGINE!



DON'T WIGGLE THE TAPE WHEN YOU PULL IT!

A melted or squashed antenna connector won't do the job it's supposed to... like, say, the 1001 connector on the B-T.



Climate and other local conditions can give a real chiding to your antenna connector when the antenna's not handled. If you don't give that connector some kind of covering, you could end up with useless corrosion.

So-a-b-o, cover the connector area with tape. It'll help keep the connector-communication-line and sock up more efficiently for your radio set.

Make real sure the input voltage on the B-T is between 22 and 24 volts when there's lots of transmission coming up.

Cause if you do lots of transmitting at more than 24 volts, you run the chance of damaging your radio set. Below 22 volts, you don't have enough power.

Those VBC-12 B-T's were programmed for 21.5 volts and designed with a 3-to-1 receive-transmit ratio.

But too much extra transmitting can bring on the heat and damage the set.

Whenever your voltage, never keep the transmitter keyed for more than 15 minutes at any one time. That way, you oughta come up even.



Talking about heat, better keep the lubricator heads and exhaust ports unobscured with clothing, pads, or anything else that could stop 'em up.

If they do clog up, you'll have an overheated radio that can cook out on you.

You can also beat the heat by keeping the heat exchangers and blower motor vents clear of debris.

If you yearn for a smooth-sailing, sharp-landing set, make it a point to keep water away from the mount supports

on the MT-100 or MT-100B models. These compressors are vulnerable to explosion under many conditions, and when the receiver-transmitter's out, the need to shut you out is the greatest.

SEE PAGE
FOR (504-91-140)



When you've got out of these accidents that's not protected by its insulated B-U, cover the compressor with a piece of tape or gauze or an electrical tape cover with P/N 5515-811-3125. It's on page 94, Ch. 4 to TM 11-5820-401-20 (Dec 64).

If you need to square off against dust and moisture, you can look over some



radio receiver caps for your receiver-transmitter. The caps go by P/N 1001-173-1731. This'll also cover the cap on the AM/FM-21 radio set.

Any Joe—even if he's pretty wonderful—is liable to forget and use the sharp end of a nail-down antenna in his feet or eyeball. So what to do with that pointy point?

You can dull the sharpness with a rubber ball, some plastic, a tooth stopper, a cork, or several thicknesses of tape—or anything else similarly non-conductive and workable.



Just a thought: When you're all wrapped up in your vehicle and think what a fine radio set you've got, don't get careless and drive right up on a parked dropper to see what gives.

The antenna—whether it's the AG-1720 or the RT-303—can produce some real havoc if it gets playful with a whirling cone blade. Allow a little leeway and that antenna'll last longer, as will the cone.

1. These 4 nylon straps on the front of your RT-003 motorcycle-transmission cover'll just get there as long as you're — they're to hold the caps that lock out the dust and moisture that can knock out an AM/FM/SS radio set.

Take good care of those nylon straps, and watch out for those mighty important caps, too. If one of the caps gets torn off, or knocked off the RT, that means it's out gear with us.

Or you could strap your cap and lose it from its nylon cord.

But be careful, work — that's us in case one of those strap-riding caps does slip its nylon, you can get replacements.

They're all located (Page AM-7, CB1 TM 11-5830-506-01 (Rev. 85) covering the dummy cap (which, while you're gas so available really), the radio connector cap, the short antenna cap, and the long antenna cap.



RT-003 CASE



WATER

5 MINUTE SWITCH

For **5x5**

2. Power switches are controlled by the ON-OFF switch right before the volume switch. The ON-OFF is what you use for a channel.

You can't strap off the radio on with the volume-control switch of the RT-003. If you can't access anybody trying this, slip 'em the good work, huh?

Trying to have the volume-control knob beyond its stop point can strip it and point your RT toward the maintenance shop.

3. We wonder can dipole elements inside the RT-003 or other transmitter of your Pack 33, or the RT-041 receiver-transmitter of the AM/FM/SS.

So-o-o-o, if there's moisture and you have worn-out solder on your gaskets, replace 'em — or, if you don't have any gaskets at all — you can replace 'em using 100 1428-971-1000.

4. When you hold the RT-003 down while working, be sure you're not holding in the wrong direction.

Hold your RT-003 around the antenna side before placing it in a carrying bag. A wrong-way hold could easily pull up your antenna, like you're breaking or weakening the metal and affecting its efficiency.

5. It's never a good idea to use your RT-003 by its RT-003 antenna. Taking the way may like this can result in pulling the antenna loose and shortening your communication time.

Pick it up by the case, or by the antenna if it's in use.



6. And talking about batteries... if you're packing a PRC-31 battery in, be careful with the battery frame when you check it off.

The frame's made of aluminum alloy, which is 50% lighter than a steel version would be. Make for extra backpacking, and you strap the frame.

So even if heavy. Don't drop it, use it, store or hang it in any way. Lay it down... careful... and it'll be in good shape when you pick it up again.

IT'S YOUR LINE TO SUPPORT — AN AMERICAN HERE — NOW!



M551 TRACK ADJUSTMENT



Like the TV ads say, most people can't track their crazy need. Otherwise, it is not always possible to check the track tension on the M551 like it says in TM 5-2500-230-12 (page 60).

When you can't see the spring and axle the TM calls for, here's an alternate way:

If the 20-inch object goes to the top of your line of sight, the track is too tight. Loosen it with the procedure found [page 61](#) in [TM 5-2500-230-12](#) of page 61.

If the top of the 20-inch object is along the line of sight your track tension is OK.

Get more object 20" inches tall in common situations on 5-2500-230-12 (page 61) on the side will be, or a ruler for 20" the page fully contained and put it on the track checks when the M551 is loaded.

Now push the front road flap back and right along the track from the other end to the spring.

DO NOT HAVE A CHANGE WITH THESE TRACK ADJUSTMENT JUST BECAUSE YOU DON'T HAVE PERFECT PRODUCTS FROM BURNHAM & CRECK.

If the 20-inch object is below the line of sight, replace it with a 4 foot pipe like another case normally or a wooden one along upright. If the line of sight passes the top of the object your track is within acceptable limits. However, if the 4 footers below the line of sight are below the track by jumping pressure the input being used you get the track with the acceptable 2% to 4 foot range.



IF IT BRINGS THE LINE OF SIGHT TO THE TRACK'S FOOT POINT.

RIGHT ALONG THE TRACK—THE OBJECT SHOULD JUST TOUCH YOUR LINE OF SIGHT!

BE SURE YOU'RE STAYING ON LEVEL GROUND!

OH—AN OOPS! BITTER! DO-RECKY! OH, THE LINE IS BROKEN!

IF IT DOESN'T REACH THE LINE OF SIGHT, TIGHTEN THE TRACK!

TOO TIGHT? BLEED!
TOO LOOSE? PUMP IN GREASE!

That's all there is to it. The spring and pipe method is the best but when you can't see it that's better than nothing.

DON'T DISTURB THE SCOPE



Hang a **DON'T DISTURB** sign on this XM443 perhaps any time you feel the urge to make other men do your maintenance inside your M11 Sheridan.



A habit of regularly dropping the body from the package head can cost you. Unnecessary handling increases the chance of losing or wearing up the thin rubber gasket between the body and the head of the scope and allows moisture and dirt to collect on the inner optics.

Besides, only the number of flogged-up losses hints at how many organizational maintenance troops forget to always prep this instrument each time it's rechecked.



DON'T DROP PRODS! DRY ... IT'S ONE OF THE LACE

M551 TURRET SWITCH REMINDER



Save the turret control power switch on your M551 (command) and never vehicle is real pretty to look at, but that's not why they put it there.

It was put there—among other reasons—to be turned off every time before the engine is started.

Sometimes a crewman forgets to turn it off like the TM says before the engine is started during Silent Watch.

This draws a wall of generator juice through the system and some of the primed circuit lines can get burned out.

So, again, remember the turret power switch has to be off before the driver starts the engine.

SHIRAZI HANDS UP ...

WOULDN'T THAT FRACTURE YOUR LINK?

If you've got an M551 Sheridan, you've got a 50-50 chance of a hanger hanger on your M551 articulated telescopic.

Unless you already know that hanger can be installed backward ... with the short eye on the inside of the fork angled down — instead of up.

The wrong installation blocks this link if the gun's elevated more than a few degrees.

And wouldn't that fracture your link? You bet your eyes bigger it would!



M108/M109 HOWITZER FACTS

ANYONE WANT A TORCH WRENCH?

Couple of fun facts about your M108/M109 howitzers . . .

FACT ONE—You no longer need to break your back trying to put 180-lb-ft of torque on a weather-beaten mounting nut. **PN# 2148-0001808.**

The Road Block did some test figuring on this. Instead of raising the bridge, they lowered the wheel.

Instead of giving you an extra torque wrench mount around, they lowered the torque from a flat-out 180 to their best on 170-180 lbs-ft. Besides you can do the job with the torque wrench you already have in your No. 1 or No. 2 Common Tool box, the cheap **PN# 11 20-048-0544**—which goes up to 174 lb-ft.



FACT TWO—The 6 counter-nut holes in the right, front, side of the ball are getting beat up by the flat-headed screws that get put in by mistake instead of the flat cross-screw counter-nut screws that the holes were designed for.

This happens during removal/installation of ball from plate assembly **PN# 10133340**; screw shims, covers and gaskets, when both eyes of screws are taken out.

So be careful, huh? If you get the right screws in the right holes you are yourself the one in time and money of welding and then machining damaged holes. The counter-nut screws come under **PN# 9108-011-0112.**

A guy who damages counter-nut holes is just kidding.



M102 HOWITZER STAKE STORY



You can now get the extra-long (34-
in) stake in case the normal (24-
in) stake won't hold the platform on your
M102 covered howitzer—also in 30-in
and other places where the ground gets
pretty squishy.

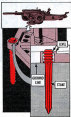


Ask for 'em at FSN 1813-058-0794.
You need 4.

Transfer the weapon to get access to
the stake holes and drive the stake with
the front of the weapon facing toward
you. (If you drive 'em with the rear of
the weapon facing you, there's a chance
you might chigger the live round in
between or the elevating handwheel.)

Drive in each stake to the top ring on

the stake (it level with the top of the
platform—the way it shows in Fig 28-2
on page 24 of Ch 5 (May 67) to your
TM 9-59 5-124-11 (May 65).



XM45E1 FT

SERVICE UNIT

Pre-Work

Never neglect the daily grease job on the power train assembly of the XM45E1 flame-tower service unit. If you do, the assembly'll heat up like crazy, and the pump-chamber and the compressor chamber will be subject to nothing but.

All the grease fittings located are called out in LO 3-1040-256-12 (May 05), So, take care the job's done before the operator's crank'd up for its daily chores.

All it takes to reach the back of T fittings on the right, lower side of the main pressure is a little screwing. Some guys fix the T fittings on the hydraulic motor and the fuel pump — just open the valves and reach under the rear end of the pallet with your grease gun.



"WELL, I GOT ALL THE GREASE DONE!"

"IF I WERE AN ENGINE AS YOU I'D BE GLAD TO GO TO WORK!"

But, reaching to the T grease fittings on the forward end of the power train assembly takes a little more than screwing. You have to use the buddy system on that part of the chain, because someone has to stand under the pallet to reach those late fittings. So, find yourself a jockey-steed buddy, and stand by to use his work help backing out through the valves. In a pinch, of course, he can use the hole under the riding seat as an escape track.

He'll also need an explosion-proof flashlight (EPM 4070-200-0001) and some clean rags to help with the doors. The doors make sure the gearbox anything that's likely to cause sparks (brakes, wash, ring, etc.), if he shouldn't show under the pallet. And, of course, he shouldn't keep any tools under there, either. Fuel lines, as you know, are collect under the pallet. And, remind him to use one of the rags when he's done being.

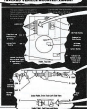
CAUTION LABELS

Also, always disengage the compressor clutch lever and the hydraulic pump clutch lever when you're done using the service unit. If you leave the clutches engaged when the vehicle is operating hard the work isn't, you'll have up the clutches.

LO 3-1040-256-12

REPAIR INSTRUCTIONS

SERVICE UNIT, FLAME TOWER, TRACKED VEHICLE MOUNTED, XM45E1



A GREASE GUN WILL GET THIS!

THESE LIGHT POINTS ARE THE BEST & SHARpest BODIES BUYER & BUYER MUST NOT TRY THIS!

GETTING THIS TO IS A MUST!

LOOKING FOR THE FLASHLIGHT, BODIES!



LOOK IT UP AGAIN AN INDEPENDENT JOB TRAINING THE A PERSON GETTING ON THE FORWARD END OF AN ENGINE!



STAND BY TO HOSE IT



Don't even open any door unless you're ready for what's inside it, back as when you're preparing to refuel your Forthing's AN7700-B gas turbine power station through the OPERATING REVERSING SYSTEM DOOR.



OPERATING REVERSING SYSTEM DOOR

Being ready here means having your fuel-filling kit loose at the ready position.



If you read carefully, that's actually what it says in TM 5-1454-500-12.

Taking too long to look up the outside vent hose while the power station's still operating drains the pressure from the fuel tank. Eventually, the fuel tank collapses.

This is because the operating reversing system does automatically close the attached fuel tank vent valve, cutting off the internal vent line to the fuel tank. And the outside vent line has to be removed to restore this venting.

It's just as bad if you start refueling too long a moment after the vent line. Then the incoming fuel traps the displaced air and forces it into the external tank. The fuel tank balloons until it ruptures and tears up the entire gas turbine unit.

And that's the reason for the caution in the TM.

So please remember your vent hose connection you get ready to open the door for during operation refueling. Pre-vent kit!

LOOK FOR "H"

WHAT'S THE PEN FOR A NEW BRUSH LOCK?



The way so many Mill and 20machines grow are chewing up their brush locks and bolts when they run, you'd think something's wrong.



There is! These brush locks are too soft. That's why they're made are being replaced around before they get to you. But the only way to tell the hard from soft replacement brush locks ... both carry the name PEN ... is to look for an "H" etched into the block right after PEN 7461821.



At the end of each day of firing or when you get done with a firing session, check the brush lock and brush lock even in the bolt (if you get a chance) for signs of chipping, burning or cracking.



There will be some evidence of wear and that's OK, but chipping, burning or cracking are not.

Slight burrs and rough surfaces may be removed by stroking, but be careful not to change the dimension on the surface.

If the brush Machine bolt is badly damaged they have to be replaced.

TANK ROAD WHEEL SEAL TEST

EIFHOC
IT'S A DAM
SEAL, OK?
A "SOFT"
SEAL!



How do you tell when you've got a bad hub seal?



Well, for your M48A3, M48A2C or M48 series tanks, M75M-CEN or AFB, check the seal when you grease the hub.

If a lot of grease comes out past the seal this means the seal is bad — that is if the pressure relief fitting is OK. (If a small amount of grease gets past the

road wheel hub seal, this is normal, and the seal is OK.)



Check the LO for your particular tank and follow through on all the NOTES, with special attention to those dealing with the suspension system. Be sure you put in enough lube so you can either see or feel it.

To find out if the pressure relief fitting is doing its job, you can replace it with a known good one. Or, an easier way used by some tankers, you can gently pull out the relief valve with your fingers and then let it snap back. If you can do this, your relief fitting is working. If you can't, replace the fitting and repair the valve.

If the pressure relief fitting is OK and the hub seal is putting a lot of grease, the hub seal is bad, so replace it the way the vehicle — OR TM shows.





HERE'S THE LATEST
HAWK NEWS

NO SUBS FOR PAR

Substrate frequency meters for the Hawk's pulse acquisition radar have been working in the back door, side door and wherever... but they are playing hide and seek with top efficiency.

Your AN/MPQ-11 needs PFM 8011, 729-0118, Weston Model 1011 (Model 601). You'll find it on the power and coil and network and indicator panels.



REPAIR
VALUES
1011 8011
A1 01

The substrate meters have different scales and markings... and some can't even show a full 100 deflection... which makes them tough or impossible to work with. And that includes Weston Model 1011... an accurate, per-

formance meter has a needle which runs on "100" with power off. "0" is top center scale, and it measures on "100" on the right side of the scale. The needle should rest on "0" when you're zeroing.

SEE IT?

Another ask you wanna watch out for has disks in the display involved in your MTI check.

If your MTI (continuous detectable signal) is consistently weak on your MTI video check, have support check out the disks.

First choice on disks is the 20000, PFM 1061 803-0121.

The only temporary substitute you can work EM802, PFM 1061-008-1117. It has shortcomings, though, and shouldn't be in the equipment permanently.

TO THE REAR — MOVE

You know the minute-anchoring plates on your Hawk missile storage pallet?

Do you also know that the plates are supposed to be mounted in a certain way?

They sure are—with the rounded side to the rear of the pallet.

The idea is for the rollers to fit into the slots when the plates are reversed, the rollers ride out so far from the plates that the steel can't take a good bite on the missile. A hard hammer or knock could strip the threads on the rib-down hardware — and a missile would be on the loose.





Block AN17PQ-11 simulator sections can do a lot more simulation, and longer, with a little of the right kind of PM.

Oh, like the ones sold, preventive maintenance is a simulator simulation-like with fans.

These panel markings on the simulator will give you the message you need, but what it doesn't have is the blow-down characteristic. That, too, is important.

You wouldn't want your fan to be replaced or maintained fan is to replace it... because you'll pay more regularly. Likewise, you wouldn't put in a blow-down job to replace a fan using job... because by the time it blows you'd damage the equipment.

How to do it?

Identify the fan in TM 9-1480-113-11P (See 09). The TM gives you the fan you need by group (See Group 008) and "F" number like "F1." Also, you'll get the fan type number, which includes voltage, impedance... and blow time.

The blow-time characteristic is always the 4th character of the fan type number, like so:



FOURTH CHARACTER. The letter "F" tells you it's a blow-down fan. "A" would be normal, and "C" would be fan blow.



Naturally, "107Y" is the voltage, and "2A" is the impedance.

Save yourself and others some headache. Replace the right fan. You'll find the fan identified in page 4-1 through 4-7 of the 11P.

SAFE PLAN

Keep the simulator gear tight close. That, of course, can take a lot of space out of your hands... after 14 of the donkey have gear train.

SIMULATOR

TIME FOR A CHANGE



The hydraulic hose offers an extra cap for the great end of the extension splines for your Block 230V0101. Besides an exposure length for over 4 inches.

If the splines are sitting on, say 2 inches, you have more of the shock in the hose. So... with the super-structure at full extension, the hose gets being up to the main support pivot ball fitting as you move the extension splines. And the fitting has a cap play too with the hose.

Your support with can move the cap in or out.

A still better block will get the good off and prevent corrosion... which can be your work or help break 'em off.



Naturally, without work, the gear that, turn up more, and even other kinds of maintenance delights. Keep the out by keeping the splines closed.

CAUTION:

Sometimes maintenance need only be kept tight. Adding more will break 'em or cause 'em to wear.

And, like up the splines before you start turning it up. Then, snug it up evenly on each side.

You can't just, cracked treatment, damaged wiring—sprink.



RUBS



It's a no-brainer for all would-be owners of a successful business: Don't hire an employee until you've interviewed him thoroughly. You can't tell a job applicant's true ability by watching him work. You can only tell what he knows and what he can do. Interviewing is the only way to find out. Interviewing is the only way to find out what you're really getting.

Interviewing properly

RESEARCH THE POSITION Before you interview a potential employee for a job, you should know what you're looking for. You should know what the job entails, what the responsibilities are, and what the salary is.

BE PREPARED FOR THE INTERVIEW You should have a list of questions to ask the candidate, and you should have a list of topics to discuss with him.

BE FRIENDLY AND OPEN The interview is a conversation, not an interrogation. Be friendly and open, and you'll get better results.

ASK THE RIGHT QUESTIONS Ask questions that will help you learn more about the candidate. Ask questions that will help you learn more about the job.

BE OBSERVANT Pay attention to the candidate's answers. Pay attention to the candidate's body language. Pay attention to the candidate's tone of voice.

TAKE NOTES Take notes during the interview. This will help you remember the candidate's answers and the candidate's body language.

BE POLITE AND COURTEOUS Treat the candidate with respect. Be polite and courteous. This will help you attract the best candidates.

BE CLEAR AND CONCISE Be clear and concise in your questions and answers. This will help you communicate better.

BE FLEXIBLE Be flexible during the interview. This will help you adapt to the candidate's needs and the interview's needs.

BE HONEST Be honest during the interview. This will help you build trust with the candidate.

BE ENTHUSIASTIC Be enthusiastic during the interview. This will help you show your interest in the candidate.

BE POSITIVE Be positive during the interview. This will help you show your confidence in the candidate.

BE A GOOD LISTENER Be a good listener during the interview. This will help you understand the candidate's needs and the interview's needs.

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JOE'S DOPE

HOW AIR FILTERS COME CLEAN

Early in the century,
Robert A. Gaup . . . a
great inventor of those
times, came upon a
major mechanical truth . . .

... the
... truth
... is
... that



Air
can be
used
to
cool
things

. . . he said

... and
such air
must be
clean!

. . . he
added



LOOK
GUY, TODAY
I'LL SHOW YOU
TODAY

A long time ago,
at once!

So Robert Gasp promptly invented the AIR FILTER which cleaned the air coming into a body of machinery

THE GAS MASK

THE ENGINE AIR FILTER

THE AIR FILTER ELEMENT

WHEN MODERN ELECTRONIC EQUIPMENT CAME ALONG

BUT ...

despite his genius, he overlooked one thing . . . HUMAN FENELTY which leads to . . .

Neglect



TOUCH BRINGS US TO FREDERICK BROWN ... LIFECOURTESY SOMEWHERE





AIR FILTERS ARE THE SILENT MAJORITY

The filters that keep air clean
Are mostly unheard and unseen.
So when you do P.M.
Keep an eye out for them,
Change often and be sure
they're clean.



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





WITH A STRONG SOAPY SOLUTION







FOR BATTERY BATT... USE RIGHT TOOL!

HEY, AGG... IT'S A BATTERY POLE LIFTER-SCRAPER!



You wouldn't use a hammer to cut a board, would you? Heck no... that's just plain dumb!

Well, even when locating a crooked wrench, screw driver or some other odd thing to pry the clamp off a battery post, you need a good chance of forcing a hole in the top of your battery. Then the battery is dead! Doot-doot! Junk!

There's a special tool for this job—Lifter-scraper, battery mounted, ESN 1128-295-1059—in your No. 1 Common Tool Kit.

Use it

And never use that big ol' crooked wrench for loosening the battery clamp bolt. It can slip off and knock a hole in your battery top quicker'n you can spit. Always use an open-end or hex wrench of just the right size.

No pounding when you're parked! The clamp back on the post. You'll drive the post right down into the battery—and really mess things up inside.

The clamp should drop right-down over the post with no sweat. If it won't, open it up as it will.

A handy clamp-spreader can be made from 1-in. dia bar stock. Your support can turn this spreader tool on a lathe in a couple minutes. You can make a holder for this tool yourself from a piece of pipe—clamped at one end and fastened to your tool board.



USE YOUR BATTERY CLAMP LIFTER-SCRAPER



USE A PIPE CLAMP TO SPREAD THE CLAMP



CHANGES TOOLS

WRENCH

WEATHER COVERS

FOR 2040-001-4210
FOR THE ARTIST COVER



Covers for your cargo body are listed in TM 5-2100-267-268 (May 65), but before you order one for your truck-wagon make certain you're placing a requirement for the right cover.

FOR 2040-001-4180 listed on page 5-175 is a cold-weather cover for units operating in temperature ranges from -25° F to -65° F. The indication to have one is outlined in AR 5-1.6.

FOR 2040-001-4190 listed on page 5-179 is a cover used in warm climates—over places like SEA.

If you've ordered a Tak from 2040 for a cover, was your "insurance requirement" and are it you're asking for the one you actually need.



LUG NUT RUT



Dear Volkswagen,

I want to ride for 'dude' with front wheel lug nuts of the M1034 PC 16 ton-truck. When I tighten up, the nuts slip into the wheel-assembly. Then I can't get a wrench on 'em to take 'em off. Have you got a tip here?

SP4 R. G.

Dear Specialist R. G.,

Looks like you need a couple of 'em.

Here, make sure you've got the right ones. You gotta have the rounded roller eyes. You get 'em with . . . PN 5110-015-7805 (317805) for the right wheel and . . . PN 5510-055-7804 (317804) for the left.

Then, give 'em only 300-500 (3-4) of torque. Instead of the 500-600 figure in TM 9-23.20-280-10 (Apr 66). This is one snafu. Word on this is in TM 9-23.20-2 (Apr 70), Article 5-11.

The new lug nut torque is for all wheels—front and rear.



REMEMBER:
IT'S ROUNDED—
RAGGED EYES,
AND TORQUE
300-500 LB-FT



WELCOME TO OUR TRUCK ...



What does it mean to "drip" when it comes to your machine? It means that the oil is leaking out of the machine. Here are some tips to help you avoid this problem.

FOR A GOOD STEER

CRASH

WE HOPED YOU'D BE ABLE TO FIND!

1. Look at "to operate" filter. To get more info call 1-800-338-4888, or visit us for more info. The filter on a 12-13000-1 has 24.4 in. dia. x 1.5 in. h.

2. For setting for 60 PSI in the pressure. The PSI is shown on the dial, as specified by the 1-3300-254. The dial will show you the PSI in the filter, and is highly useful to know the PSI in the machine while you're filling it.



A BITTY NOISE

When you get the piston—your steering pump creates air around it, which is why it's so noisy. Another reason is too much drive belt pressure, so make sure you take off the tension belt when installing the kit.

That new filter should help a lot, but you'll have to keep the filter in shape to do its job. Make sure there's enough oil in the reservoir, and use it if the oil in the reservoir is going to be there's always on the bottom. You'll have to check the oil if the oil's in bad shape.

Real important is a complete filter change after your new filter has been working for 30 days—it's going to pick up a lot of stuff in time. It's up to the operator to make up this work on the DA from 2400.

Your machine will drain the reservoir, take out the filter, then clean it, put it back in and add the reservoir with oil. If the filter is washed up so bad it won't come clean, it'll put in a new element. (800) 250-099-1195.

This filter change has to be repeated every 6 months or 4,000 miles or part of the regular service service like "12" interval in 1079-2330-099-11 for steering reservoir is being changed to "12").



I cleaned the filter this weekend.

is this just some new advice from the "12" interval?

Keep in mind, though, that your filter may need servicing more often, like when you're operating in real dusty country. You'll have trouble in the making when your power steering starts acting up—like you've got power of 'ol' 'em.

So you check your reservoir and filter for contamination—gritty particles or sludge—as a monthly check on the filter element. If a new filter element doesn't put you back on the road in good shape, get your operator to troubleshoot your steering system.

COMBO FOR A 3-QUARTER

YOU WANT SOME
SOUND IN THAT
3-QUARTER?
TUNE ME IN
WITH AN
INSTALLATION
KIT!

Dear Bill-Max,

Is there a combination installation kit I can use to connect my stereo equipment to the MF15 3-1/4" tone head?

BOB J. J.

Dear Stephen J. J.,

Yep. Here is, above're 2. What you do is get the installation kit for each radio set, or whatever, which you plug to connect to the 3-quarter.

Also, you need these additional combination kits:

If you are installing the 66,76,78 with other radio sets, you need installation kit #12, the 660-760-770, plus the kit for all the sets, including the 66-76.



If you are installing the 66,76,78 with-66. If radio sets with any other, you need both boxes of #12, the 660-760-770 . . . plus all other kits, naturally.



Your authority is BR 12-140 (Star 68), and examples of the above are spelled out on pages 2-88 thru 2-91 of that BR.

And just to ease you instead to look to PE 212, BSM 1408-007-0047 will get you an installation kit that'll give your AN/PWC-10 radio set in the MF15. The 660 didn't make the BR.

Play-All

3-WHEEL TRUCK?



It's no fun to have a wheel while making your way down the road in your MT15 3-wheel truck (or MT15 combination).

It has happened!

And it can happen to you if you don't check all 4 wheel-backing plans. You might find a loose cone. Take care of it quick, like it says in TR 750-001-4 (Oct 89), Article 3-13.

REPAIRING A TIRE?



Next time you fix, remember this when you go to put air in it:

If possible, put something between you and the tire.

While inflating rings, turn the rings toward the ground before you inflate. Also, wrap a few chains through the rim and wheel . . . just in case. Some outfits will use a tire cage to put tires in while they're being inflated. Make the cage big enough to fit the biggest tire you repair.

- Dave Irwin . . . and more.



ONE DOWN
AND CHAIN WRAPS REMAIN



TOO MUCH MUSCLE!

Hey, none of you guys are tall? You stretch muscles when you tighten that generator adjusting arm-to-cylinder block screw on your M11 1/2-deck stack.

You're straggler! The stretch right out of the block!

Maybe you're not using a torque wrench like you've reported it. Or maybe you're not keeping a close eye on the torque dial. Or maybe your torque wrench needs calibrating.

That 5/8-in. screw on early 1/2-deckers takes just 20-22 lb-ft torque — no more.

So when do you do it if you run across a stripped screw hole? You just retighten the hole and use a 7/16-in. screw, like it says in TR 750-000-4 (Dec 69), Article 40.

Then you'll have a healthy screw — like an auto production vehicle — 20-22 lb-ft, etc.

And watch it when you tighten that 7/16-in. screw — it takes 25-31 lb-ft torque — no more.



CHECK WRT TO TELL WHICH SIZE TORQUE USE

5/8-IN. SCREW TAKE 20-22 LB-FT TORQUE



SIZE OF
25-31 LB-FT
TORQUE

7/16-IN. SCREW TAKE 25-31 LB-FT TORQUE



SIZE OF
20-22 LB-FT
TORQUE

BETWIXT AND BETWEEN

Ever-Half-Ready:

There's a problem that's all too familiar to Organizational Maintenance:



Dear Mr. M. J. M.,

True, unless you have some special command authorization, you are not authorized to order repair parts from the support-level parts manual (LSP). And if you call even though the part is coded for Organizational Maintenance.

It's up to your support to give the part to you to do the job, or do the repair job themselves.

In the meantime, send a T&E Form 5028 every time this comes up so the work responsible for the -200 T&E will add the part to the T&E.

Handwritten signature: M. J. M.

READIC 215-TON TRAIL...

WARNING!

BUM BANG!

You'd better check your M127A2C 2-1/2-ton cargo truck—the job with the dogpiles.

Some didn't get the safety mode that keep the T-bar locking handles from coming. Without the mode, the T-bar can turn and line up with the locking pin.

Your trailer or drop sides can flop down suddenly!

Needs missing? Then get a hold of TB 750-981-3 (Jul 04) and symbol Article 3-6 for instructions on putting those safety mode in all 4 corners of the cargo-body.

Need a new lock? It's handle, lock-ly, RMN 2510-110-0111.

**NO BAR MODE
NO SAFETY MODE**

M127A2C TRAILER TIPS

If you've got trouble with the landing legs on your M127A2C 12-ton semi-trailer, you may find the cure in the TB 750-981- series.

Check Article 33, TB 750-981-4 (Dec 03), for what to do about landing legs that collapse.

Article 37, TB 750-981-5 (Jan 04), offers a fix if the landing leg base rolls against your trailer side while standing on rough ground.

WITH FRIENDS LIKE THIS...

WHO NEEDS ENEMIES?

WANTED: For Distribution of Army Vehicles



WANTED MAN, alias FRIENDS MAN, THE COMPANY, THE OFFICER, THE LONG MAN,

WANTS CUSTOM — fails to let up on pedal easy to engage clutch smoothly. This leads to short clutch-life, storage re-transmission and out of power tests.

WANTS ENGINE while shifting gears — fails to let up on the gas while disengaging and shifting gears. This causes more damage on clutch-plate.

WANTS GEAR — shifts out to 2nd gear and slips after gear when shifting up and down. This causes heavy clutch load on whole drive train.

WANTS CUSTOM PEDAL — uses clutch pedal for footrest. This takes up clutch "free travel" and leads to clutch chatter. Then — clutch failure.

Other worn uniform of US Army soldier. Usually assigned to equipment operator duty. Physical appearance varies — may be tall, short, fat, thin, unshaved, well-shaved, etc.

Carries good of operator qualification, although his performance will make you wonder how he got it.

APPROACH WITH CAUTION — he may be armed with deadly equipment.

NOTE — clutch-to-pedal height is 41 inches longer than his clutch foot.



A new or overhauled flywheel or pin changes the starting line-up of the oil PM ball game. You don't follow both teams play like kick-starts, light-bulbs, and putt push. Overall it's by-the-rule ball PM start win.

Practicing, the engine oil filter gets a PM check after the first ground run-up . . . page 1-108. I loved TM rule book.

HECK ONE

Remove the oil filter assembly. If any part is cracked, bent, warped, corroded, distorted, or has damaged threads—repair or replace it.

An over-torque of metal clips on the water filter and you'll have a fine leaky mess. Find and eliminate the cause of the metal buildup.



I'VE GOT YOU WHERE YOU WANT TO BE!

HECK NUMBER TWO

If you had nothing extra, reassemble the filter. Hold one, bigger one. How much power did you use to tighten the through hole. Are both the assembly in its housing?

Good! Great! Best! Best THAT much! Until it was good!

Oh, my cutting back! This task gets 20-30 in-lbs of torque and NO more,



OIL FILTER FOUL!

THIS CRACKED WATER FILTER. CHANGE TO OTHER OR BUY NEW!

according to the TM rule book. Use a torque wrench, please. No really sticky, loose run or loose dead gear.

Use the right size torque wrench and stop retreating when you see 20 in-lbs on the scale—a drop here, or so small. Stopping on the low side won't make them bleed, and they'll give you All-Star performance. Finally, you do the safety wire but to keep the filter hole door' no job.

The work power, and the water filter get expanded—all by-pass filter . . . the engine runs a high temperature and gets a bad case of oil pressure sagging.

The little torque and the packing doesn't seal tight . . . the engine'll die of oil starvation.

Pulling major torque by-the-rule-book PM will put you and your bird on a present where, stay close.



PM-ING UNIBALL BEARING

WANT TO GET A JOB DONE RIGHT? THEN UNIBALL! THEY GOT YOU IN THE PICTURE!



It's professional know-how that makes the successful ASE or crash flight. An OMI Pro mechanic who gets his hand PM ready gives OMI Pro pilot a lift that can hang in for a mile longer . . . and get some rest.

When a less-than-professional theory man doesn't follow TM PM policies he gets Power Pilot in a pickle. Like maybe he does a poor pump job during 3rd PM on the Hazy's cyclic hydraulic cylinder uniball bearing.



No matter how skilled the pilot is, he'll need more muscle than a jolly green giant to fly and control his hand. And the faster feedback from those 3 windmilling metal-rod blade blades will leave him aching and shaking for sure!

An OMI Pro mechanic knows that uniball bearing is A-1 shape by controlling —not just loosening—the pipe plug

while he pumps the bearing. He shoots in OMI until new grease spits out the pipe hole.

Follow the pump in para 6-74, TM 11-1020-200-20 (May 67) carefully after pulling the grease job. The man



assembly and bearing rotating are more to us the TM man's work to give the pilot smooth cyclic control. Not too tight, not too loose.

Any extra hydraulic fluid on the power cylinder calls for an all-parts check for damage, corrosion, pitting, distorted threads. Fluid and OMI do the split bit every time, so if hydraulic fluid gets into the uniball area, a bearing purge might be all the PM required. But do it right.

Yep, professional pilot-mechanic PM know-how will bring the birds back in vroom.

BATTERY TESTING DEAL



BE SURE YOU
MAKE AN ENTRY
ON THE FORM—
WHEN YOU THINK
THAT IS!



Dear Woody,

Double back, FM 11-41-01-2 on maintenance of aircraft systems called for a battery inspection about every 120 days.

That along comes G1 2 to the rescue which covers the info.

What's the latest on battery testing, Woody?

BOB A. C.

Dear Sergeant B. P. C.,

Turn the battery over to the shop for testing.

The latest group on lead-acid batteries is in TM 11-41-01-215-117 (Doc 65) on shop maintenance of lead-acid aircraft batteries.

Para 4 says the battery is taken out of the field and sent to the battery shop for specific gravity, leakage and voltage tests every 120 days or 100 flight-hours, whichever comes first.

The test, which can be done during the Periodic Inspection, determines battery internal condition and capacity.

When you have the battery serviced make suitable entries on the field's DA Form 2428-15.

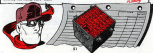
For example, in the reference column of the form put—TM 11-41-01-215-117. In the frequency column put—120 days/100 hrs. In the inspection column put the date/PMF number.

If you have a nickel-cadmium battery in your hand you'll find all the gump you need to maintain that baby in TM 11-41-01-205-01-2 (Doc 69) on aircraft nickel-cadmium batteries.

You have weekly or 25 flight-hour FM checks and services and also 120-day or 100 flight-hour checks and services, whichever comes first.

So, make suitable entries on the field's DA Form 2428-15 when you have the battery serviced, war 'nuff.

BOB A. C.





Dear Mindy,

We got gipped during a recent inspection because we weren't up to snuff on our stretch overhead grounding cables.

Some cables were missing, damaged, and there was no record of an other lot. What are the ground rules on these cables, Mindy?

SP4 J. B. G.

Dear Sparkles J. B. G.,

I'm glad you asked. Lately more a focus and air a split because the answer comes from both military and civilian jobs.

Army and civilian jobs don't necessarily overlaid grounding systems, as such, although they are in common use in many hangars.

Course, para 10-6611 of EM 1-20 (Apr 65) says that stretch stored in hangars will have the proper grounding devices and will be grounded at all times.

All levels should be effectively grounded by means of a cable stretched

to a stretched member of the stretch and to a low resistance ground.



The cables can be on the ground or overhead. The cables should be free of holes, stretch, and slip have to be secure at stretching points.

DOWN-TO-EARTH PM



stretch and cloth warning flags to the ground cables when they are a safety hazard to make working around aircraft. These words of wisdom are in para 1-12 of TR 10-1108-206-25/1 (Apr 56).

Chap 1, para 1-16 of AR 428-90 (Apr 55) says in an extremely comprehensive list processes conducted when there's no specific Army reg. directive, manual or standard.

Second, the National Fire Codes, Vol 18 (1968) cover hangar grounding facilities for each electricity—in Chap 15, para 1361, 1362, 1363 and 1364. Vol 9, Chap 1, para 1110 thru 1111, give more pump up handling to process already from main drawings.

Course, much electricity can ignite fuel fumes that collect in a closed hangar. Mindy wants to experience the big BOOM!

These civilian rules establish 10,000 ohms as the desirable maximum allowable resistance. This agrees with the maximum resistance for parking and fueling poles ground code in para 158 of TR 10-1108 (Jul 61).

The grounding device should be steel non-combustible, branch the feet of the line one within a red cloth painted around the ground rod.



Put PM on your cables and get the wiring done on the grounding device with a work order at your expense. They have the equipment and specialists to make the test.

One more point applies to Stencils jobs. COMARC has a new marking plan for permanent ground rods or electrodes at each parking and refueling point. Each grounding device is marked with an 1 1/2-in diameter yellow circle having a 2-in black border. STATE-GROUND CONNECTION and COMARC TEST, plus the lot date serial, appear on the face of the marking.

Mindy



Expect to see a lot of this on TV.

SKY CRANE

The CH-53A Sky Crane will get you like enough as long as you put it away at 11 PM. It's busy because a little 'toon' makes it go a long way.

In addition to 11 PM, here's an indication point to view:

Roll the hydraulic system through the filter cap. 'Wendy's' believes some joints lead the field in through the air-ward. That, naturally, sets the ship up for all kinds of fun and games.



Also, hydraulic lines should, always check and observe gas content up... in daily inspections are a must. Regular fun before they make trouble.



Always use the correct oil.

TOPICS

Learn how to use the 11 PM.

Using the only water pump in the world... the only pump in your kitchen. Specially valuable are the roll bearings... which need jacking every 11 hours of operation.

There's a hard-wired system which goes: "Green light, pump fully."



Roll the hydraulic system through the filter cap.

Also, in 11 hours of operation the... the only pump in your kitchen. Specially valuable are the roll bearings... which need jacking every 11 hours of operation.



Roll the hydraulic system through the filter cap.

Using the only water pump in the world... the only pump in your kitchen. Specially valuable are the roll bearings... which need jacking every 11 hours of operation.

There's a hard-wired system which goes: "Green light, pump fully."



Always use the correct oil.



THE TRAVEL PARTY WANTS TO JOIN THE BUS AND ENJOY THE BEACH. CAN YOU HELP?



GREAT! BUT FIRST LET'S GET THE BEACH STATIONERY. THE HOME-MADE EAPS IS THE BEST BEACH STATIONERY EVER!

If there's a problem in your store, an EAPS sign can save you minutes, steps and trouble. You can make a home-made sign to remove both EAPS signs.

Final point on the EAPS, use their protective covers. Saves time, dust and sun damage.



Another good coverup for signs and dust is an aluminum jacket for the most basic package. TB 750-983-211 Age 68 shows how the cover is made. Page 63, page 53 has the story.



ALUMINUM JACKET



TOW BAR BLUES?



Save, Pilatus, you pull maintenance on your birds. No sweat. But how 'bout your ground handling equipment? No FM! Oh, my aches! notes.

First-time, take a good look at the ground handling gear bar, P/N 1758-907-0004. Every shop on ground handling, including aircraft maintenance, have 'em for moving off-and flap-wing birds around the tarmac.

That tow bar does pretty deep, but it's neglected something awful, especially those 6-in metal rubber tires, P/N 2810-280-2406, P/N 2704004.

You won't find a gear breakdown or warning pump on the tow bar, but those shock-mounted TLG. Watch 'em for irregular wear, rapping, for spots, un-coupled wear.



Keep 'em clean. Wipe off water, grease, oil immediately.

Always pull an empty tow bar with the connecting coupler in place.



Try a bit, or slow down the bar, with the coupler secured in 2 places. Try an



wide enough surface, like P/N.... wear the rubber wheels smoothly' from.

Never pull the tow bar around an area big that you'll give it that run-



down-on-the-locks look. Tow on an even-force level so that both wheels get the same amount of wear 'n' roll.



And when the tow bar is standing "in line" never push it with the rubber wheels on surfaces coated with grease or oil. Ruben 'em P/N.

HEAT RESISTANT CLOTHING

HOW DO YOU KNOW IT'S BETTER THAN THE OTHERS?

BEFORE YOU BUY, ASK FOR THE NAME OF THE MANUFACTURER.

PROTECTORS ARE BEING TAKEN DOWN!

COVER UP BEFORE IT'S TOO LATE!

Heat resistant polyamide fiber — that name may not mean much to you unless you're an aviation crew member. If you are, then you know that's the material in your hot weather aviation crewmember uniform.

With all these problems, your flight suit may be a great place for storing the different items you have to carry with you, but its main purpose is to protect you against fire.

To get the most fire protection from your suit, you have to wear it like it's designed to be worn . . . and you have to take care of it.

Keep your flight sleeves down whether you're in the aircraft or down to it.

Keep all of the closures securely fastened on all times—shirt front, neck, and the neck-and-cuff fasteners on the sleeve cuffs.

Shove the bottom of the trousers leg by one or two and a half inches.

Always wear your shoe-cuff fastenings properly, and never wear synthetic underwear.

HOW TO CARE

You've got to keep these uniforms clean because that's how they'll protect you in any hazard. You can wash your uniforms by hand, but be sure and clean it thoroughly. If you don't, you'll see get no such protection from your flight suit.

You don't have to give it a flame resistant treatment after you wash it. Never starch your uniforms because starch will make it less flame resistant.

Your uniform's covered with a special thread that has the same fire flameability characteristics that the material has in — if you need to repair a rip or a tear, use GDS cloth 5-1 (MIL-STD) with most flame-retardant nylon thread. 1 ply, size 8, FSN 83 10-101-8897.

COVER — BEFORE YOU GO

Some gunners try to save time by cleaning their weapons while wearing their flame-resistant flight suits. If you do this, your flight suit may get saturated with grease and cleaning solvent solution. When that happens you lose the fire protection qualities that your suit has. In MEV68 wear your flight uniforms when you clean your weapons. Wipe your weapons or other work clothes.

You'll find the FSC on the different sizes of heat resistant polyamide fiber shirts and trousers in SAC 8813 of the Vol. Cat 8408/21-41-A (Jan 78).

DON'T FORGET IT...

HEAVY EQUIPMENT MAN'S PLEDGE

NEVER

Depend on other operators to watch out for you while working.

NEVER

Ignore equipment to be unsafe or your teammate's accident.

NEVER

Risk lives, limb limbs, or equipment you believe.

NEVER

Get paid if your personal violations did not a violation or fine.

NEVER

Work on top of rails or structures in motion.

NEVER

Take shortcuts around guards that will a guard down.

NEVER

Use fuel tanks or hose equipment with engine running.

NEVER

Get a load that's loadings loaded, or have one unhooked.

NEVER

Work loose clothing that could catch in gears or cables.

NEVER

Get distracted when work could affect loads or affect other people.

"YOU MIGHT THINK THAT'S ENOUGH TO GET YOU A REP AS A CAREFUL CHARACTER—A CONSTRUCTION CREW'S DELIGHT, BUT NOT... ENOUGH TO MOVE."



"YOU MIGHT THINK THAT'S ENOUGH TO GET YOU A REP AS A CAREFUL CHARACTER—A CONSTRUCTION CREW'S DELIGHT, BUT NOT... ENOUGH TO MOVE."

ALWAYS

1. Be in a position to guide you when you look up -- or see in a tight place.



4. Get back quickly and safely before you start it again.



2. Use standard hand signals.



3. Be sure the job's done before moving or dumping a load.



3. Stop close of load beam or wind cables.



4. Close and lock your equipment's safety locks.



4. Keep hands off working drums, cables, and chains.



7. Get outside a control, tracks or, when you have out.



1. Stop any other machinery for work on it.



10. Work off a solid base... and keep your feet in place on your feet.



Good operation is good PPE.

LEVEL ON OIL LEVEL



Dear Ask-A-Mech:

Please verify which is right on oil level: the **TOP** or **BOTTOM** hole. Do you fill to the plug hole just off full-on, or the recessed plug hole that's about **3/4** full?

BOB W. M.

Dear BPC B. M.,

The **upper** hole is your level check point. Leave the **lower** plug alone. Check and fill with the arrow on the hole rim pointing straight down. Add oil thru the plug 'way up inside the rim eye until tube just barely runs out the lower of the 2 holes. If you fill to the **lower** hole, your tube will foam when you work hard, and might lose a seal.

Ask-A-Mech



NO OIL FILL

**UPPER HOLE THE FILL
ARROW POINTS DOWN —
OIL FILLING THIS HOLE**

UP LINE LOWER FILL

**POINT ARROW
UPWARD DOWN
WITH FILLING OF
EXCESS OIL**

FIELD RANGE BAKING RACKS



HERE'S SOMETHING THAT'LL HELP YOU BAKE SOME MORE BUCKEYES!

You can be more baking in your M107 field range if you get baking racks on. Item 7500-100-19508. It's sure a part of the accessory made that goes with your range. Change 1 (Feb 78) on TM 10-1100-106-11 shows how to use it.

You can use the same baking rack on on your M107 Field Range. Order the Rack but just like you order any part for your stove.



WEAPONS AND MASKS

Dear Staff Sergeant,

What AF says I can't get an individual's weapon and mask on his clothing form, DA Form 1527?

Dear Sergeant E. M. E.,

Now, along with the supply room's weapon cover and the individual's weapon and mask cards, Form 11 on DA Form 1527 is the handling place you have for recording the items.

Also, pass 5-L, Ch 1, AR 110-11, says all clothing and equipment which is normally carried in when an individual departs, goes on DA Form 1527.

WRO E. M. E.



IT'S ON MY PARTIAL ON THE WEAPON CARD!

Staff Sergeant 44

PM

MEANS PAINT, TOO

Preventive maintenance includes keeping your equipment painted. But that doesn't mean you can get by just any old paint.

You'll find the paint codes in all PM-5 (Apr 68), Cl, Marking and Marking of Supplies and Equipment, Color and Marking of Army Material. It tells you what colors will be used for painting, and it gives you a uniform system for marking your equipment.



HERE'S THE PAINT WITH RULES ON PAINTING AND MARKING SPECIFIC EQUIPMENT:

PM 54-14 (Jan 68), Electronic command equipment.



PM 74-10-1 (Dec 68), Vehicle marks and colors.



PM 74-10-2 (Aug 68), Road-painted marks, signs, ground support equipment.



PM 54-15-1 (Jan 68), Cl, Cl, Marking, vehicle.



PM 74-10-1 (Dec 68), Cl, Military vehicles, maintenance equipment, and materials handling equipment.



PM 54-15-2 (Jan 67), Cl, Army aircraft.



PM 54-12-1 (Dec 71), Truck.



PM 74-10-1 (Aug 68), Cl, General military.



PM 74-10-2 (Aug 68), Cl, Tanker, hauler, vehicle.



Here's some paint that'll make it easier for you to do that painting job:
TM 5-418 (Jan 68), Paints and Protective Coatings.
TM 5-417 (Jul 67) Ch L, Painting Instructions for Field use.
DM 11-174 (Feb 68), Painting and preservation supplies available for field use for Electronics Command equipment.
Red Cox 6808-B-4 (Dec 68, w/ changes) Paints, signs, materials.
 You'll find 1-, 2-, 3-, and 4-in. cans for marking your equipment in your No. 1 and No. 2 Common Tool Kits.

Connie's
Mini Mini's

That, my
Connie, I just
A maintenance
problem!



Address The Tool E&E's

OK, as you've got a tool that's not manufacturer's stock that don't fit them, fill out a DA Form 2487 and send it to CG, E.S. Mobility Equipment Command, ATTN: AMMOT-AMC, 2300 Classification Blvd., St. Louis, Mo. 63120. That's the address for complaints on all individual tools in the 2487 group and class.

Quarter Accounting

You'll find the latest info on licensing of operators of powered or self-propelled U.S. Army Mobility Equipment Command equipment in AR 600-28 (May 70), and TR 600.1 (May 70) if you didn't get your jobs. Better have your jobs now under them as DA Form 17.

Auto Mirrors

Now you can get West Coast-type outside rearview mirrors designed especially for your 2-ton truck. Complete assembly (mirror with mounting bracket) comes under PNH 2440-242-2417 for the right side, PNH 2440-242-2418 for the left side.

Get My Logs

That's right! Turn your O.I. over to support for an engine change every 1800 hours. The TBO for all Q-430 engines was increased per average AMMAY-808 05 1008-05 for 70.

Get E. Up!

If the info sheet for your commercial-type wheeled vehicle says you can use 15-40-20, engine oil, look for 901-1-0184 engine oil, in Fuel Cost CO180-4 (Jan 70), FM 91-20-208-9404 will get you 1-gal. FM 91-20-208-7910 is good for a 3-gal. can, while FM 91-20-208-8709 will get you a 22-gal. drum. The Army does not use multi-viscosity 15-40-20 in tactical vehicles.

Sample Return

Eye On 3 (12 Jan 70) to TR 35-1508-228-20, Class (OH-88A), Committee, Para 5-61 now tells you how to take the fuel sample called for in the Daily Inspection. The "JMF" used to check for contamination is in Detector Kit, water, automotive and aviation fuels, PNH 2440-870-2264.

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



DRIVE AND LOAD TO FIT YOUR ROAD

DON'T OVERLOAD.
BE SURE TO
SECURE CARGO.
PROTECT DELICATE
ITEMS . . .
AND DRIVE
CAREFULLY.