

Issue 07

PS

1967 Special

THE
PREVENTIVE
MAINTENANCE
MOVIE



COULD IT BE THAT
YOUR TORQUES, WRENCHES,
GAGES AND TESTING
EQUIPMENT NEED
CALIBRATING?

CALL TODAY
1-800-754-2244

YOUR
ENGINE'S
BEST ...

Fuel is to your equipment's engine what food is to you.

KEEP IT

Can

Fuel makes you go, fuel makes the engine go.

You never want dirty or spoiled food, do you make you sick or even kill you.

It's the same with the engine. Dirty fuel can make an engine mighty sick, even kill it ... especially if it's doing an unskilled job. These tables have powerful muscles, but weak stomachs. They fuel is knocking a lot of us out.

Should the engine be dirty?

Should the engine be dirty?



CLEAN

That's why it's most important for you to use the only clean fuel gas in your engine.

There's one way to make sure your engine drinks only clean fuel, and it costs just minutes a day. It could pay off big for you ... like being that you go through a real tough situation.

It's this: Drain your engine's fuel filter every day. And, drain the fuel



and every week or so, depending on how wet your climate is. The warmer and wetter the climate, the more likely your fuel is to get all gunked up with bacteria and such stuff. Use your TM as how to do the draining.

Whenever the fuel at the Man looks like it's real dirty, call in your tech mechanic. He may have to get help from the direct support team.

Whenever you do, keep your fuel clean.

PS logo with text: **PS** POWER SYSTEMS

WE SERVICE MAJOR BRANDS
EQUIPMENT AND PARTS
IN THIS COUNTRY

FIREPOWER 200
 2000 HP 1000000
 2000 HP 1000000

GENERATOR 200
 2000 HP 1000000
 2000 HP 1000000

GENERATOR 200
 2000 HP 1000000
 2000 HP 1000000

GROUND MOBILITY 200
 2000 HP 1000000
 2000 HP 1000000

GROUND MOBILITY 200
 2000 HP 1000000
 2000 HP 1000000

AIR POWER 200
 2000 HP 1000000
 2000 HP 1000000

AIR POWER 200
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COMMERCIAL 200
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Call 1-800-368-3688
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SHIPPING & STORAGE CONTAINER

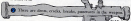
Always supports level, heated, missing cover can't be closed, catches broken, handles broken, missing markings can't be read, missing water bolts.



WELL, THERE YOU GO

WE SAID, MAKE YOU NEVER DOUBT THE BEHAVIOR ABOUT YOU HAVE ANY OF THESE & PROBLEMS.

1 The frame window is broken. One of the broken window can form a wedge between the outside and wall of the launcher—a wedge that might cause the missile and launcher to leave your shoulder if you try to fire the weapon. Believe it.



2 There are dents, cracks, breaks, punctures in the weapon.

3 You can hear a rattling sound in the optical sight assembly as you shake the launcher.



?

THAT'S NOT OF THE SAME KIND, IS IT?

NO, NO, NO!

4 The red eye, steel and what-ya-you-are loaded in the air seal. It shouldn't be any problem getting rid of the junk.



ARE YOU SURE THAT'S THE LAST OF IT?



That's all?

THAT'S ALL!

You don't have to treat your weapons as if it were a crate of eggs.



BUT... If you treat it up on the floor of a truck and knock the different interior components out of whack, the weapon will be safe. Trouble is, and here's the kicker, you'll wind up with just as much metal, plastic and other hardware in your hands.

And what good is a safe weapon that can't do its job? It's like digging yourself a hole 500 feet deep. You'd be safe, but you wouldn't be taking back in the enemy.



So . . . try to keep your minutes in their containers when you're on the road. But, come an emergency, if you and your M16s are trapped in a vehicle, wrap it on your legs to keep it out of harm's way. If you can't wrap it, put something between it and the floor of the truck—like sleeping bags or blankets.

Whatever you put it on the ground, make sure—double sure—that it's on its right side—with the bumper facing down. The bumper are the only things that should touch the ground.

Always carry it with the action and forward.



Let's say you require a target, the gyro spins up and then you get the word to "power down". Instead of unloading the rounds off your shoulder—a sudden movement that could damage the gyro—it will about 18 seconds for the spinning to stop, then lay it down.

RELEVANCE

One thing you have going for you is the publications for M16s—TM 9-1080-GN-12 (Aug. 66), and FM 21-11 (Dec. 66). They're unclassified with pages, so you won't get bogged down in reading. But the wrap is there is real important. Take the time to read them.

M107/M110 DRAIN HOLE FIX

Your M107 or M110 SP utility getting waterlogged from rain?

No problem. Drill two 1/2-in. holes, one on the left side of the vehicle and one on the right. Drill less or a point 1/2 inch from the floor of the opening 18 inch down of the wall count.

Add to the three drain valves you already have on the vehicle—in the driver's compartment, power plant compartment and in the cargo well—they'll let most of the water run out.



Fig. 1010-10



RING'S THE THING

An owner of particular worth it when it comes to applying MWO 9-2500-236-08-71 (See 68) to your M107 SP 171-MM gun or M110 SP 8.1-in howitzer.

The MWO has you check the two parking brake pins in the parking brake assembly for weariness. You don't get new pins, wearing rings with the new pins, though, and the chances of losing the rings when you go to remove the old pins are better than even.

So both ahead—three spare rings on hand before you take care of the MWO. They're on page 77 of TM 9-2500-236-08P (Jul 62)—under 0001 1546, 170-0001 and PSM 1546-112-1112.



Fig. 1010-11

A VIAL THOUGHT

An M107 allows settings level will that you can't read now does you as good.

Maybe you've already found this out—if you're with the crew of an M107 SP gun or M110 SP howitzer or an M107 SP gun or M110 SP howitzer.

It happens that sometimes and also can get down under the level vial. And enough of this movement will keep the light from coming through in the vial.

There's a way out, tho.

You support people can seal along the edges of the vial with locking compound—the kind that comes in a couple containers under PSM 9850-275-8118, 5-1 in Fuel Co 0200041-A 11 Jan 62.



PLAIN TO SEE

You're right... painting white paint on the mounting level of your M117 panoramic telescope does make it easier to spot the level when you're sighting on an aiming post at night—whether your device is the M107 SP 157-MM howitzer or the M107 SP 115-MM howitzer.

When you do, though, you're going against the rules. As it says on page 44 of TM 9-311 (Jul 62)—Painting Instructions for Field Use—"The part of the telescope or other line-sighted equipment that extends outside of the make will be painted olive-drab." That also goes for other marked vehicles, like your SP.

Painting the level white makes it easier for the other guy to see. And it means somebody will have to paint it again—with OI.



Fig. 1010-12

COOKING WITH GAS

Have you taken a gasder of heat in your Nike-Hercules launcher gas cylinder?

The cylinder is given a hydrostatic test by your supplier each every 2 years. You find out when the cylinder was last tested by checking the date on the cylinder.

Guess . . . if the cylinder looks best or maybe is somewhat older than 2 years or more is a DA Form 3407 or it can be tested. Do it now.



DA FORM 3407

PLATE TELLS ALL

Why guess at what you're supposed to do when it comes to filling and draining the hydraulic reservoir for your Nike-Hercules launcher?

If the instruction plate for the reservoir is missing (cause a number of launchers made it into the field minus the plate) . . . ask your support unit to make one for you. The stamp on putting the plate on the launcher base frame is in MWO Ord 775-7004 (Apr 60).

You might receive in your DSM that is making the plate, the drain instructions should tell you to remove and replace the cap, use plug. MWO Ord 775-7014 (Aug 60) changed the plug to a cap.

And instead of being stamped to 400 inches, or with the plug, the cap was stamped to 270 inches. This stamp also needs to be on the instruction plate.



STAMP 270 TO CAP

STAMP 400 TO PLUG



CABLE CLAMP CARE

There's some good news for you Nike-Hercules guys in TB 5-1408-200 (8/71) (Feb 68).

Finance . . . take a look at page 3-42—see W075-20CLB1 (1-R). This section of the TB gives you the word on welding both sides of the clamps that you use to hold the cables in place while you search under the covering beam.

Remove the welded end of the clamps and finishing away from the end of the clamp . . . and having both sides of the thing welded will be a big help.

It looks sure will always a long way, like when you go to take off the clamps.



THIS WELDING WILL BEAT!



LET STAMP IT



Make sure you mark the handle the strength with the clamp will lift straight up and off.



WOW! IF YOU-BUNG TAKE IT 200-20-100 . . . THEN ADD UP TO THE 200-20-100 . . . AND GETS COUNT ON THE UP OF THE BEAM—(TERRY) GOING TO WELD!

HOLEY DIPSTICK



NOW ABOUT THOSE TWO DIPS... YOU USE TO CHECK MOTOR OIL LEVEL. IN THE DEPRESSIONS FORMED BY YOUR HANDS. ETC. ...

For my three hole-4 hole float sticks, at the top and across and the bottom of the plug! Will you figure the hole belongs there. ...



THREE HOLES IN A 1997 HOLE ...

But kind of hole will be fit, water and oil into the motor. The next before the hole plugged, or get a new dipstick.



... BUT NOT THE ...

TAKE A LOOK

These quick oil-checker cable connectors for your Nite-Flite motor launcher ... do you take a close look at 'em now and again? They give you both the jacks and plugs.

It's a good idea. You might see mistakes, corrosion or bent or loose pins—things that could cause all sorts of trouble with the launcher or motor.

And for sure to get rid of any bugs that might've got hung up when the connectors were removed for a spell. Bugs! Right ... they can hold motors.



OPEN LETTER

NO GREAT!

To All Insurers:

When you're checking out the 1987, 40-cycle dual generator kit, Kawasaki model ME800C1-100-100 on a Nike-Hercules site, look the other way when it comes to what the 2-1987-100 TM 5-2714 says about the right reading for the fuel-air pressure gauge as well.

The TM says the gauge should read 100-15 PSI at 100. But it won't get much above "0" ... and that's OK. That reading reading won't hurt anything. Watch for the clause in TM 5-2714.

Half-Heart



NOT THE DATE

Dear Half-Heart,

Pages 18 and 19 of TM 9-4000-209-1021 (May 80) tell about automatic call charts for the 10000 site name, model ME 1171042 that are used on Nike-Hercules sites. The 18 says the number at the beginning of the chart, 1000, is supposed to be followed by the correct year. In other words, it's saying that for 1987 the number should read 100087.

But our call charts show that I have to get back the same number, 1000-04, after we read the site name out for collection.

Yours, N. W.



Dear Mr. N. W.,

You'll always find that 1000-04 number on the chart. The chart calls it a code number ... and that goes for all 4 digits.

Correct your charts up on the right side of the chart.

Half-Heart



LAY IT TO REST



You say you haven't heard the word?

When you do . . . fight the temptation to go to your Nike-Brevator launcher control interface with a barrel of tape or safety wire.



Some models have taped or wired the 4 switches that're not used—two load, battery charge and reversed-thrust. Guess there's a reason that if the switches are put on accidentally, a BA-412 battery might be activated.

Not so.

On the other hand . . . taped or wired switches could put an inspector in a bad mood.

SPLASH GUARD SAVER

Talk about unfair wear and tear of Nike-Brevator equipment.

The front splash guards on mine's one BA-412 ready-mount transporter have been ripped to shreds by getting caught in the wheels. And there's no reason for it to happen.

That's right . . . MWD 9-2156-115-3075 15 Dec 62 gives the word on re-finishing the splash guards and putting metal strips on them.

No MWD'dk was involved . . . merely a deal in which your support people look on to the few needed parts through supply or locally.



GENERAL
& SUPPORT

A BUILT-IN TRACTOR ...

YOUR
NEW

290M
TRACTOR

YOU'RE
GOING TO
HAVE TO
WAIT TO
GET IT
UNTIL A
REAR
DRIFT-
HINDS!

So you've got a new 4-wheeled Clark 290M Tractor—
all 14,000 shiny pounds of her. Pride in the wood.

This tractor has what it takes. Dig out the
TM 5-1228-208-15 (Gen. 88) and help
get it ready to buffer the boom-
sticks and level the lumber
with you in the saddle.

USE STRAPS—Items may have been left off, and every last one is necessary. Besides, a check-over with the LO and TM in your hand is a fine way to find out how this tractor is put together. Be sure you feel into the hardware-mount spots. Some things you can't see, but you can reach 'em, like the one on the bottom of the universal coupler.

If any things have been left off, be sure they're in and used before you make a move to get power up and work done.

WASH YOUR FACE & WASH YOURS JUNE ALL DAY.



BE THE MAN...
THAT'S
RIGHT!

SPRING TENDING—Special covers on filters are on 7 spots. Have the spring connections and guard them over openings.

HYDRAULIC RESERVE—Fuel, 4.25 gallons of it, should have been shipped in the tank. Make sure there's no water in the bottom, like by having support take samples. If you're where you can watch, be around to see that dipstick test is all right for the tank's full.

BRACKETS—There are 4 extra ones, and all have to fit in a row. Just clipping them to the bottom of the table is right — no one wanting over and slipping. Look at items 28 and 36, LO 1-2428-208-71 2, and pages 37 and 58 of TM 1-2428-208-71, for all-specs tube and hydraulic oil drops. If you have to use the tractor TM, you can still look the points and tubes up by name.

WATER—Filled with clean water to contain.

TIRE—Take 25 PSI, but for long trips on hard-top roads, make it 50 PSI. The work is deep sand, 30 PSI is best, but change back for highway runs.

CHARGER—Be sure all 5 gallons are in reserve.

OVERFLOW—Print and run after 50 gals. option.

PLANNING—All 4 take 20 gals each.

MAKING—100 — 1 quart will fill it.

SAFETY—They analyze has to cover the plans.

DRIVING—Both have to be off before you start a job. But no breaking them away, because they are permanent equipment.

TYRE—Heavy gear has to be all right. Hydraulic the lift, moving, and air cylinder containing oil. Clean hydraulic oil, just a touch on the plungers, you'll see as soon the rock.



RED-PENCIL STUFF

That's correct. Every 8 hours your 1988 is on the job, you give those hours a hard-wired inspection, in addition to your daily PM service.

UP FRONT—First check, tilt cylinder and lift cylinders, push hoses, and check cylinder ends for a leak check, and observe under adverse conditions. Then take a close gaze at engine oil supply.

HYDRAULIC—Hydraulic oil tanks supply you'll want on the mark. Then check glass things plus —take a make-over by themselves. Inspect cylinder ends next to see if plenty of oil is inside, and if the 4 things get their dose of MIL-G-10551B.

HEAD END—Crank pins in both places get lubed whether or not they look dry. Use some baby-looking cap bolts on the end and will probably check. There's no bigger ones, next to engine oil and hydraulics. Next check and lube the universal joints good. Then put transmission and converse oil on the go-to-work list, and your end. Big roll is complete.

Never forget to check for the final level too.



STARTING UP



No matter if support recalled your new honey and swore by all the Bulletin barrels worth of *Being Thing*, that the transmission fluid, its converter jolts, get full inspection, take nobody's word. There are two places to look, and the TM's LO and TM show you to No. 24 on the sheet. But to do it, you have to be running, and what's more, you got to be up to operating temperature.

To take the TM method and warm up until water shows about 180°F. Then check transmission fluid low, with engine idling. In Neutral.

But while the tranny warms up, which a couple minutes will do, sit there in the saddle before the chain spins. Check the controls, see that they're free and working right. And if you don't have to get off-road pronto, you can use colored paint or tape to make your own red-line indicators for gauges to mark danger places by the TM.

NO SIMPLE JOB



Doing the wrong thing with this rig can be just plain dangerous. The main things you've got to be careful about are:

CLUTCH—This is a full-hydraulic system, and 5 gallons, give or take a few speedbumps, go from cylinder to cylinder in a turn. That is, the power-driven pump shoves that gallon in a few seconds—and if there's no shore, there's no steering.

Your car back home had a manual override on steering. With engine off, you could still turn to the side of the road and park. But Suzuki himself couldn't work this front end around with the engine dead.





Low gears, and you've got 21 more of them, plus whatever size of 18-gear scraper and dirt collection, that you can't find. Your only danger is that there'll be air enough in the 4 cylinders to keep you before you meet a minefield.

JUST THE ONE STRONG
FOR EXTRA POWER ON
ROAD AND IN MOUNTAIN

WARNING—In plain English, that means running the engine too fast. You're in danger when you hit 2000 RPM, you're on the brink if you go to 2700 RPM, and disaster will happen to you if you reach 3000 RPM.

BAD

WORSE

WORST



The thing is, about 100 horses up from gear to 20 more horses at the peak, and what's called a full-range transmission is the harness between that load of horses and the load—and more horses means more speed.

That's how a new set of main-rodging valve springs put in the 2000 since it first came out, with tension upped from 85 lbs to 145 lbs. That's to help pull the valves back from being hammered to death by the piston heads.

But here's the catch—it's not vehicle speed that counts. You can be doing 11 MPH, and still overgeared. The main danger is—

BRAKE BACK
BEFORE
POWER OFFING
P-L-E-A-S-E!



WARNING—And using too low a gear. If you're running with high RPM, and don't brake back before you downhill to tackle a hill, those 20 extra wild horses and all 180 of the brand/brand are going to kick up those RPM's still higher.

NEVER DOWNSHIFT TO SLOW DOWN!



There's a pair of helps on your instrument panel that could be your main incentive against upshifting with caution—your tachometer and your speedometer. Your tach will tell you when you're in any certain speed bracket at the moment. But your speedometer will tell you when you're going too fast to get down into a lower gear, because certain speeds in MPH are just too much for certain gear settings. If you're going faster than the next lower gear can allow, you don't dare downshift.

NEVE, HERE'S ANOTHER
TABOO—NO COASTING!

I'M GOING
TO TRY!



NEVER

This means one thing, which you'll wish like a hawk—*Never, but not ever, will you downshift for braking effect.* Instead of getting braking from the pavement, you'll get engine speedbrake from the slowness of your vehicle's weight. Your governor won't save you—all it does is chop the throttle at the top end.

Even if you're not braking hard from the accelerator, or at some chaotic juncture say, "off-gassing," you can get wrapped in a split second.

You do it by halves, or — Make up a table like this, and not only paste it on the dash, but in your mind!



THE MINDSET—Kicking the clutch out, or going to neutral can be bad in *most* any heavy equipment if it's followed by going back into gear at good speed, because it's made a mistake in clutch and gears. It's double points on this 2004. Thus, there's no clutch pedal here, but—

Even if you brake down to go back into gear from neutral on this rig, that torque converter doesn't necessarily match the drive shaft's speed. Hitting the accelerator a fraction of a second early, before the engine RPM and vehicle speed catches back, just leaves you lying.

Besides, the oil pressure drops when the engine idles. That little red light in the middle of the left dashboard panel comes on when less than 10 PSI pressure hits, and you can get all overruled fast when you rev up.

But let's say you get away with high RPM, brake lock, and don't blow the top off the engine. There's still another piece of damage that can come from using the wrong gear. That can't be big, can it?

SYMPTOM:—That torque converter can hold fast if you use too high a gear or lug along. About 100° or a shade over is normal, but if the fluid starts cracking for 150°, watch out!



Then check the temperature again, along with a quick look at the transmission oil pressure gage.

If it's not at least 150 PSI, stop and shut off the engine, with a 3-minute idle period first—don't just drop the switch.



Well, your main worry here is what's called torque converter stall. You can even get it yourself' stall, using too high a gear to move out. It's bad because it overboils the oil, which means ruined seals and other bearings.





3000 RPM, 4/10

REPLACE THE (POWER) BLADES
PERIODIC AND OIL (change) —
AND OIL (change) (change)
OUT-100, 1000.

PERFORMANCE—It's a fast performer, all right, because—leave your old— it runs up to maximum speeds, 10,000 RPM — and any blade above can move most useful.

The main way to keep the air-cooled from shedding it, so never gear the engine when you first start up, but let it idle away, not over 1000 RPM. You let that go on for 5 to 5 minutes, leaving the bearings get off.

And when you quit for the day, you let the works idle down. You'll know never to kick up the RPM's and cut the switch, because oil is fed to that water-charger system from main engine pump supply, and it takes as long as 10 minutes for the supercharger blades to quit running. Nothing that runs at such speeds for the same speeds can stand 5 minutes with no oil pressure.

WET— Air Compressor and water-pump Valves have to stay tight. Otherwise you lose generator charge and the compressor shaft will be too hot and breakdown. Check your generator belts also.

FUEL LINE — All support brackets have to be in tight, or the line will get very loose at the head. Check every day.



CARRY ME

That cable overhead out of the mechanism drive is vital. It hooks up to the over-speed governor on that fanbox over the intake manifold. Keep it waterproof tight, else it'll run loose. This step's not in your TM 1-3150-208-11, but it's in the manufacturer's TM supplement in your overpack kit.

SPECIAL CAUTIONS

Here's a list of special-attention items you should avoid!

UNIVERSAL COUPLER—This big 1999 ball joint on the back can get you into all kinds of predicaments.

First off, take a glimpse at the capped block, adjustment screw and coupling adjustment of the universal coupling.

They're meant to hold the coupler from banging around. Dropping with rope or cable on 'em could mess up the scraper eyes, so proper checks and maintenance is the answer.

There'll be an even better look for this coupler in the work zone, but for now the word is a sharp eye and regular attention.



UNIVERSAL BRAKES—That breather gets plugged, dirt and gunk seal the air hole, and pressure builds (over 120-130 psi) and your brake drums. The preventive is, check that breather every day at the same time, and replace if the going is slow. That baby is one of the worst problems you'll have.

But the cure for oil on the brakes can be only having your support replace the brake shoes, all 16 of 'em. It's a multi-disc split brake, and all the brakes have to be equally new or equally worn.

GOOD DRILLING—Tip your support off, but when you're in the shop, that drilling a hole over the frame holds down bolts, right through the lining, can make it less easier to get that hood off and on. Then a rodent wrench can get the bolt cap, instead of 14 nuts at a time.





THE HYDRAULIC LINE AND CRUMPLE

They go over like the cables of a suspension bridge behind you to the scraper assembly, but they can get cut by rocks and snapped in turns. If you get a break, the only thing to do is hold for the stop, slow 'n' creep, because you can't control that scraper without 'em. Besides, you'll lose fluid and pressure, or both.



AIR TANK—Every time you start or stop work, use your disabled controls chain lever to blow out the water. Otherwise you could have bladder valve leaks or brake failure on a bad hill. Besides, replacing bladder valves is tough: the bottom guard plate has to come off.

SCAPER VIEW—Looking to the side shows the 'em in "up" position used needed. You can prevent these gongers by always making sure your blade is up before you go to reverse gear.



ICE SHOES—If you're not going to work in snow, take 'em off. Otherwise they'll break off.



ICE AND HYDRAULIC TANK—There's no sure sign on either the DDM or the scraper. Whether the name is Baidid, LeTourneau Westinghouse, or something else, that scraper has no safety against turning too sharp. If you take a corner too sharp to the right (that's anything over 45 degrees), you lose hydraulic if too much angle left, your fuel tank gets cracked. And if anybody's riding there when you do it, it's safe for sure. The only place to ride this vehicle is in the cab.



Go down with support and turn to the overpack pages that tell about welding and the tools you have to have, if such repairs gets necessary. Otherwise a whole new team and will have to come, and what better want to change clothes right in the middle of a shovel?

SACK UP CORROSION

USE THE PLASTIC
SHIPPING BAG!



Want to stop green corrosion in battery cases on your emergency light set, FSN 4158-143-0000 or similar?

You can fix the case with the plastic shipping bags the hardware store is. When they're faded up, replace with something like Big Plastic, Polyethylene FSN 8105-401-2010, in Fed Car CR105/19-E.A. (Jan 67). The bag can guard back for plenty corrosion, and change for clean recovery now/then.

Learned from that plastic like FSN 9148-198-2191 from Fed Car CR100-E.A. (Apr 67) will do the same job.

HEY
GONNA!

LOWER THAT BLADE



Backhoevets blades — like on graders, scrapers and dozers — can be raised by dropping. Even with power off, a push on the wrong lever can do the damage.

Blocking up in parking will stop such trouble. Just let the blade down say if you're in a gravel parking lot. On improved ground, use timbers or flat-wood with to support the blade. This also helps to make the blade stay put if it's not on level ground.

SAFETY
NOTE!

BLADE
MAYNOT ON
GROUND HAVE
NO CAB...
ACCIDENT DANGER!



LET THAT POUTY PET SET



If it's a full-tracked tractor and she's hooked on you, let nobody try to tow your small machine.... at least not before she's up the ramp to the druggist's wagon.

This breed of cat has a bad habit of leaving out transmissions if covered with any the engine running—same as a good many cats.

What happens is, the oil pump won't go without the engine to power it—and the transmission runs over whether there's oil in the bearings or not if you see the brain. In no way, no way.

PLUG CAN BE A DRUG

Your DTE tractor can get dewey from poor crankcase ventilation if the plastic shipping plug isn't taken out of the engine breather.

These plugs are put in at the factory, for sealing purposes. If the DTE is run with the breather blocked, the air circulation to the crankcase will be cut off and pressure will build up and make oil splash past the rings—which means eating and rams oil bearing. To take the plug out, reach up inside the breather pipe where it ends near the bottom of the engine block.





PUBS

It's almost time for 1987 publication of *Lighter*. The membership of the club has increased to 22,000 and the magazine is now published twice a year. The magazine is now published twice a year. The magazine is now published twice a year.

MEMBER SERVICE

MEMBER SERVICE: We are pleased to hear that you are enjoying the magazine. We will be happy to help you with any questions you may have. We will be happy to help you with any questions you may have. We will be happy to help you with any questions you may have.

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LAKE on Pin-Point

M17 Week Care

You can now order publications for your *Lighter* (LAKA) club on BA form 15-10 for pre-paid subscription. We authorize us to write-in fees to last 1-31 the 15-10. Don't forget your account number.

Change 5 (14 Feb 87) to 14 3-0240. 202 13 covers the latest crop of corn and clearing of the M17 field production. It also says the tubers are to be permanently treated and the tubers' plastic bag tossed out.

JOE'S DOPE

"C" is for CALIBRATION

CLUT THE
DEAR FEAR,
ROBERT!
I GOT A
"C" APPROACH
TO
FRESH!

GOOD EVENING, BOB, LET ME
INTRODUCE YOU TO ROBERT TONY,
THE WORLD'S BEST ORGANIZATIONAL
MINDING -- IN AN INFORMAL
DISCUSSION OF
"LEAN FORWARD, BENT-
AND-PRESENT"
BOOD FRESHING
BY, TONY!



HOW
DID YOU
DO IT?

A YEAR
AGO OR
EARLIER
A FEW
MONTHS!

WHAT DO YOU
THINK IS THE
SIGNIFICANT
DIFFERENCE
BETWEEN
ORGANIZATIONAL
MAINTENANCE
NOW -- AND THEN
YOU BOLTERED
CONCEPTS AWAY?

FEH!

NO,
I GOT
HEARTBURN

YOU MEAN
IT'S SO
DASH!

HOW?

THINKING
ABOUT THE
RISK OF THE
ALCOHOL POLICE!

TELL
US!





Joe's Dope Sheet

ELECTRONICS COMMAND

Radio Equipment —
 78 11 4623-229 1071 124 1st Ave 62

Test and Measuring Equipment —
 78 11 4623-229 1071 124 1st Ave 62

Tele. Kits and Supplies —
 78 11 4623-229 1071 124 1st Ave 62

MOBILITY EQUIPMENT COMMAND

Tools and Support Items —
 78 12-24-127 1 211 1st Ave 62

ARMY SECURITY AGENCY

78-22-11 1 2 14-419

MISSILE COMMAND

Kits — 78 1-447-22 1st Ave 62

Books — 78 1-447-22 1st Ave 62
 62 1st Ave 62 and 78 1-447 1st Ave 62

Support — 78 1-447-22 1st Ave 62

Building — 78 1-447-22 1st Ave 62

1977 System — 78 1-447-22 1st Ave 62

Books — 78 1-447-22 1st Ave 62

Light Target Models —
 78 1-447-22 1st Ave 62

Special Kits — 78 1-447-22 1st Ave 62

Radio Kits — 78 1-447-22 1st Ave 62

ARM Aircraft Information —
 78 1-447-22 1st Ave 62

MUNITIONS COMMAND

Special Weapons —
 78 1-447-22 1st Ave 62

Your support also
 may need —
 78 1-447-22 1st Ave 62

TAKE AUTOMOTIVE COMMAND

Tools and Support Items —
 78 12-24-127 1 211 1st Ave 62

AVIATION COMMAND

Aircraft Test Equipment —
 78 12-24-127 1 211 1st Ave 62

WEAPONS COMMAND

Tool Kits —
 78 12-24-127 1 211 1st Ave 62

Each Army Commanding General
 Now has One or More Lists on Hand.
 They Keep You Up-to-Date
 On What's Collocated
 Be It Torque Wrench or Aircraft
 Test Manual

Get copies that
 are **FREE**, **NO** money
 from the Government to
 be paid, and **NO** cost
 distributed by mail.

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

IF YOU WANT TO DISPLAY THIS ADVERTISING ON YOUR BULLETIN BOARD, OPEN STAMPS, LET IT OUT AND PIN IT UP.

NOW

HERE'S WHAT HAPPENS:
THEY GET AN ORDER AND
TURN UP AND READY
FOR CONTACT!



OKAY... BY-THE-WAY, LET'S GET ALL
THESE WIRE'S BOLTS TIGHT-RIGHTLY!
ALSO TEST OUT ALL THE ELECTRICAL STUFF
— WE WANT EVERYTHING SHAKING LIKE
A PE BANG!! THEY GOT A CLASH W/
CROSS OPERATION TOMORROW!



...OUT WITH SO **ONLY**
TO RETURN ALL BATTERY
LEFT — THE FOCK
WOULD BE AFTER CONTACT
KNOW WHAT WE DID
WROTE!

WARRIOR, WE'RE
RE-BUILDING
A LOUSE-LIE!
MY MEN USED GAMES
'N' WITNESS ON EVERY
COTTON PUNCH 'NUT,
BOLT CONNECTION AND
ELECTRICAL PARTS!



THE SHOCKS?
ANOTHER
BROCK LOCKER,
WHO
WROTE
THESE
INSTRUCTIONS!

YESTER, BUT
NOW WE'VE
GONE FROM THEM
GAMES ARE RIGHT!
— WITH THIS
THEY
CALIBRATED
LAST!



DEFINITELY NO TEST EQUIPMENT WAS ON-ORDERED... WHICH MEANS EVERYTHING ELSE WE GOT OUTTA THERE TODAY!



LIKELY AT THIS POINT SOMEONE ELSE COULD BE ASKED TO TAKE A FEW THINGS.

FIRST, LET'S LOOK AT THE LITTLE SERIAL OR LABEL NO... YOU FIND IT PASTED RIGHT ON THE EQUIPMENT!



IT SHOWS YOU THE DATE OF THE LAST CALIBRATION CHECK MADE BY A CERTAIN CALIBRATION TEAM...OR YOUR SUPPORT...AND THE DATE FOR THE NEXT CALIBRATION CHECK.



EVEN IF THERE'S NO OR LABEL NO YOU CAN TELL WHETHER IF A GOOD CALIBRATION BY CHECKING THE CALIBRATION COMMAND TB.



...AND IT'LL ALSO TELL YOU IF THE CALIBRATION IS A GOOD FOR YOU, YOUR SUPPORT, OR A CALIBRATION TEAM!





M48A2 TANK MANIFOLD LEAKS

Every time you pull a Q quarterly maintenance on your M48A2 or M48A2C tank, check both exhaust manifolds for leaks.

You'll have to take off the access plate, the fan guard and the fan. That is a little bit of trouble but worth it because one tank out of every 4 inspected recently had a leak in the holly part of the manifold.

A LEAK
IN THE
MANIFOLD
COULD
BE A
DISASTER!



A leak in the manifold is a down payment on disaster because the terrific heat of the power plant could start a fire that might burn up the whole vehicle.

Welding up a leak in an exhaust manifold is generally a waste of time . . . so if your manifolds are leaking, have your mechanics put in new ones. The left and right manifolds are the same, P/N 2809-155-0000.

WOTTER THEY
POINT TO, BUT
DON'T BRUSH!

TANK HEADLIGHT

HOE DOWN

WETTER IN THE
HEADLIGHT REPAIRS OF
YOUR 48-55 AMP-FLUO BESSER
TANKS, TAN SHOOT OUT
LIGHTS... ADD THIS 8-STEP
ROUTINE TO YOUR
REPAIRING  SERVICE!

1 Loosen the coupling nut and take off the light. If the nut is badly rusted, you might have to give the nut a couple of gentle taps with a hammer.

2 They call the holder and body a couple of hours in the fire and will do for work. If there's no hot sun handy, open up the light and soak it over with a hot, clean cloth.

3 Get off the dirt and corrosion and after that, the coupling nut and the base with corrosion. Working around the front, middle and rear corners, use a 1/2" (12.7mm) 17-180° 1 grit.



4 If your company SOP calls for them to be removed, remove them at the close, do this:

Break a light out of existing material, alcohol, or spray 100-200 PSI (6.8-13.8 MPa) 17 grit inside the holder and coupling nut and around the threads at the base and around the light before the outside dies.

5 After the coupling nut is in position, and the junction of the holder and coupling nut with the ground and do this: use for the area where the holder meets the lens, both front and back.

Make sure the screws on the light body are tight enough to make a good seal, but it's not necessary to break around in the junction. The light work every 8 corners will make your light work.

Once you have the headlight in good shape they'll stay that way if you keep 'em on the storage brackets inside the tank when not in use like it says in your 18-1728.



OIL COOLER LINE DOPE

Installing the oil cooler lines (the -GOP units you ordered on your CD-850-4 or CD-850-4A transmission takes a little more "know" than you would think from reading about it on page 2-239 of your -28 TM.

Here's the surest way to install lines ...

1. With the coupling nut-tighting lever, fit in a tube so it won't rub against anything and the tube ends are equally facing the transmission adapter at one end and the other at the other.



2. Tighten-tighten both coupling nuts.



3. Now screw-tighten both nuts, walk in lines, a little at a time. Be sure you see the tube slide and turn. Hold it by hand or with one glove or pliers. If either end of the tube is forced during installation, the hollow section is distorted and the life of the entire tube is shortened.

4. Now install the other tube on the same side in the same way, making sure that it will not rub against the first tube and that neither tube rubs against anything else, particularly in the bottom end.



NOW ... DO THE
TWO TUBES ON
THE OTHER SIDE
THE SAME WAY!



TANK STARTER INSURANCE

If you have an **BMW, MERCEDES or MAZDA** truck, a **CIVIC CRUISE** or an **AVYL** launcher, a good starter is a rugged piece of equipment, but it needs your help.

QUALITY
SUBSTITUTES
FOR A
GOOD
NIGHT



Tap the starter button too gently like you were trying to send a message on a telegraph and your starter will chatter and give off sparks that can weld the relay to the circuit. When this happens you have a closed circuit that you can't open and the starter motor overheats and spins itself to death.

On the other hand, you can get the same results by being too rough. Holding down on the starter for over 15 seconds or a click will overload the motor. So, if your engine hasn't started in 15 seconds, let your starter coil down for 5 minutes before you try again.

HERE'S THE RIGHT WAY

The right way to use the starter is with a firm, steady pressure like you were ringing a door bell for six or 12 seconds.

Another thing you can do to insure your motor is keep your batteries up to full charge. Well-charged batteries help prevent relay chatters.

A new, positive, ON-OFF contact starter switch, **BMW 2000-004-0003**, **OP/M 1050400** coming into the system by **MFO** action should give you more motor insurance.

The **MFO** will cover the **BMW, MERCEDES** and **MAZDA** trucks, **CIVIC CRUISE** and the **AVYL** launcher.

Until you have the new switch installed in your vehicle, you'll need a firm, steady thumb and fully-charged batteries.

LOW-COST PROTECTION



Don't follow.

They'll never help the vehicles into a heavy gully, but that's not the idea of the strips of winding tape and pieces of corrugated metal.

We use the pieces of metal to cover things like headlights and vision blocks on our M551 command post vehicles during sandstorms. The tape holds the things fast . . . and the whole works comes up quick on heated glass.

CWO Dwight Cook
Fort Carson, Colo.

Old Note — Cheap insurance that can be used on other vehicles. ↓



OUT TO LAUNCH

If it hasn't happened to your command vehicle, launched hedges . . . read on as you'll know what to do as it really happens.

Know that the safety pins that go through the quadrant lock pin can interfere — like when the extended hedge is lodged along the ground. The safety pins slip out of the lock pin. And the lock pin works its way out of the quadrant after the hedge has been killed.

Then comes the day that you go to rebuild the hedge again. With the lock pin missing, the hedges roll up — leaving you with a pile of board and mangled aluminum.

Don't pay to make a habit of checking the safety pins before you build the hedge . . . and put 'em out of sight.



A FLOAT PAD IS A BOARD



Dear Staff-Board,

We've looked high and low for an FSN or part number for the float pad on an **MT251** 12-ton stake trailer.

Yours, S. B. B.

Dear Sergeant C. H. B.,

It may be a float pad without a number in TM 9-2348-307-11 (Jan 61) ... but it's a Board, General Jack, FSN 2500-745-7585 is PSC 22104E-A (Dec 60).

Staff-Board



IF IT'S TONED...

NUMBER IT NEXT



The days of government on numbering serial vehicles came to an end with the pricing of Change 2 (Jul 60) to TM 756-95-1. Every serial vehicle must now take the number immediately following the number assigned to its price series. Thus 25 10 of the change puts it in black and white. No doubt about it.

TRAILER MARKING SWITCH

Dear Mr. Editor,

We just got some ARMY 1/2-ton water tank trailers with their "US Army" and National symbol side markings located just the opposite of our other trailers.

Which locations are right if the new markings, do we change the old ones to agree?

WILL M. B. S.



Dear Sergeant M. B. S.,

Both groups are OK. Ch. 2 (part 6) in TB 745-25-1 shows the new locations — star on left side and US ARMY identification and registration number on right side — for all trailer 1/2-ton class 17 1/2-ton.

But you don't change the markings on your other trailers except as spelled out in para 4a in TB 745-25-1, that is, when the trailer needs repainting or the old markings are in such bad shape they need replacing.

Army Staff

WHE WHE EUC ...

GET FRESH

The only new engine oil to clean and lubricate and ease riding.

Some motor vehicle LO's will say to use old crankcase oil. Those LO's are being changed because used engine oil is contaminated with stuff like acids or alkalis. This is bad for your eyes — ruins the case and weakens the metal.

Trying to gradually use out of oil can cut your vehicle's life in half.



WANT TO BE BRAIN TIED ...

FIQUED FOR A PIPE?

3/4
TON

12.5

12.5

2 1/2
TON

12.5

12.5

2 1/2
TON

12.5

12.5

12.5

FOR APPROVED USE

USE ROUTING IDENTIFIER CODE 8MC

12.5

FOR APPROVED USE

NEED FUEL?
DRAIN SOME
FOR YOUR
MOTOR BATTERY
DON'T NO-START,
JIM. TAKE
YOUR PICK!



WANT TO BE COMMERCIAL MINDS ...

POST THOSE TIRE PRESSURES

Dear Mr. Chief,

Is there a definite location for marking tire pressures on commercial design vehicles?

All 198-1 says nothing and 19 244-21.1 only covers military design vehicles.

(49 2, A, 1)

1981 17 12 18
1982- 14 18
1983- 11 18

HOW'D
YOU DO,
BUNNY?



Dear CWS F. A. L.

It's no longer a requirement to post tire pressures on commercial design vehicles.

Just post all the necessary tire pressures for your fleet on or near your master panel's air meter—you don't have to mess with vehicle marking. So, I think you'll like it better, too.

Army Fleet

FIX FOR SCOUT

Save both time and money when your IWC Scout 4x4 won't crank'sufficeit from a broken door window frame. A simple fix makes it good as new.

GET A 1/2" BRASS
OR 1" X 1/2" BRASS
ROD AND TWO
(NO. 8) 1" NUTS
AND WASHERS

TT



Send the steps to fit the shape of the door and window frame — either front or back, whichever's broken. Drill 4 holes and mount it, using the top 2 screws on the door and the 2 machine screws for the frame.



SEE SOURCE...

"MODIFICATIONS" OR "IMPROVEMENTS"?



Dear Staff Here,

What about those TB Files, the ones in the Equipment Improvement Reports and Maintenance Reports?

Some of them involve drilling, cutting and welding (even) and almost to work that usually requires a modification and order?

WED L. B. G.

Dear Sergeant L. B. G.,

Those items in the IER Digest are just recommendations.

They're considered simple improvements and changes which don't require an MFRG. They're not controlled and not reported as MFRG's are, and are considered normal maintenance actions.

Whether these simple improvements are applied to your equipment is up to your CO. The TB is his authority.

A PLUG FOR TIGHT NUT



When you're replacing light switch, FSM 1008-107-0004, on tactical and combat vehicles, be sure to tighten the cable plug nut.

A final, good rule of thumb ought to be enough to keep it from vibrating loose and causing arcing between the plug and switch contacts.

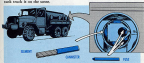
The spacer wrench in the Automotive Mechanic's Tool Kit also works on the plug, but you have to be careful behind the dash with it, what with all the wiring for the different switches.

It also pays to ensure the battery ground cable.

**FROM MIRAAC
LAW BOOK...**

FILTER BY THE NUMBERS

Refueling oil straight in grade? Better a better — but always water in other foreign stuff? Filter up the bird's nose — sure, but the MIRAAC 24-oz tank truck is on the case.



A new water separator-line system, with gaskets, hoses, is among features of the MIRAAC. You get all the dope in Ch 1 (May 84) in TM 9-2120-309-00 and Ch 1 (Jan 85) and Ch 2 (Dec 84) in TM 9-2120-309-00.

FSM's for the filter elements and gaskets, hoses will be in the newest TM 9-2120-309-00P.

They're already in Ch 2 (May 84) in TM 9-2000-211-20P in Element Fuel Filter, FSM 4508-040-0008, and Fuel Assembly, Fuel Filter, FSM 4508-040-0027.



HEY! (HEY!) BARRIS! HEY! (HEY!)

TRY THIS FOR SIZE!

A jammed inertia reel can ruin your whole day—and give you a real head ache to boot!

No, if your favorite inertia jockey says the reel won't lock the shoulder harness in either the manual or auto position, don't shake the whole life-and-limb away! Could be that a simple operation will put it back in condition.

Inside the inertia reel housing is a roller drum that the webbing coils around. A webbing shield—either plastic or aluminum—keeps the webbing on the drum and out of the locking mechanism.

Models P/N 000010-A, with serial numbers between 81,000 and 91,000, have a plastic webbing shield. This shield sometimes gets a wee bit out of shape. It can slide off the drum into the locking dog—jamming the reel for good as the harness won't lock.



When this happens, use a glass, gauge, or other nonmetallic or wood-tipped tool to pry the shield and pull it back out of the locking dog area. If the shield causes harness don't fumes—just push it back into position.

A No. 11 scratch hook makes an ideal tool for this job. You might even try a kitchen needle—hook end, pull two—hook end, pull two. . . .

Reels with aluminum shields don't have this trouble.



HUEY WHEEL LEAK-STOPPER



Dear Editor,

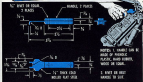
Every time when the Huey (PH-1) ground-handling vehicle leak hydraulic fluid and you can't get pressure up, here's a nifty little tool to have on hand.

We found that the fault was caused by a loose gland nut so we made up this tool to solve the problem.

To use the tool you just insert the two prongs into the nut and make with the handle. The prongs then become compressed to form a tight seal against the compressed shaft, stopping the leak . . . works like a charm.



Huey Wheel Clamp Assembly Diagram



- 1. HANDLE 1/4\"/>

Old Note—Good about Dave built using a Hammer and chisel to tighten the nut . . . never hear any more!

MAGNETIC CHIP...
REMOVE WITH

DUKES, NOT DUCKS!



Removing the magnetic chip detector insert plug on the May 1976 1-1 43" gear box is a head-busy job—and not for the faint.

First, it's a little hard to do—it was designed that way. But when you're pulling an intermediate inspection on the plug, you don't want to ground the bird because of broken lock pins on the plug.

So, when you lift the rubber cover to the plug, unlatch the electrical wiring. With your fingers, tap its path to the plug as far as it'll go.

Next, turn it counter-clockwise slowly to release the pins from the plug holder. If you push harder it's no-go.

PUB # 11...
E-4-571

DO ... 800, 700...
1-0-0-0



Hold it! Don't grab a pair of duckbill pliers—or any kind for that matter—to turn the plug. You'll break the pins for sure and have some explaining to do.

If you're the better-finger type, call your friend Cross the-Stripper to remove the plug by hand. Just don't use the pliers, you know!

PUB SNUB... OR FLUB?

T-21 engine ball control regulators have been left off some engines arriving at depot for overhaul, causing a shortage that holds up the works.

Change 1-11 May 80 to TR 43W 24-18 added the regulator to the list of accessories to be shipped with gas turbine engines.

REPLACEMENT FOR CRACKED HEADS



Dear Wendy,

We do quite a bit of repairing with Alstar, Mild Steel, FSW 41 00-007-0041, which is in our Alstar® Components' Maintenance Fuel Kit B.

But by, we have a few broken pulling heads we'd like to replace without retooling or new dies. Where can I find the individual heads listed?

Bob K. A. B.

Dear Seymour K. A. B.,

You'll find the stock numbers for these heads listed in Red Car CM-00-11-A of Jan 60, Vol 3, page 4-48.

FCB	DESCRIPTION	F/W
FCB-420-0016	1/2 Right Angle Pulling Head	8708-4
FCB-420-0017	1/2 Right Angle Pulling Head	8709-0
FCB-420-0018	1/4 Right Angle Pulling Head	8708-4
FCB-420-0019	1/4 Standard Pulling Head	8707-4
FCB-420-0020	1/2 Standard Pulling Head	8708-0
FCB-420-0021	1/4 Standard Pulling Head	8707-4

Alstar

LESS MUSCLE, PLEASE!

You think of a good thing like food, maybe water, that was enough.

Talkin' about torque.

A Chevrolet (C30-C70) went down in torque seriously recently and had to be replaced because the forward transmission oil filter is so.

It seems somebody put in much muscle on the filter retaining cover that the retaining bolts weren't pulled out of the transmission housing.

Could the only way to tighten down most in with a torque wrench. Without one you never know how much muscle you're using.

The next time you take the filter out for inspection and cleaning, remember—these bolts get lubricated with M-L-2-7888 and the next torque is 15-20 inch-pounds . . . no more, no less.



SURVIVAL

When these survival kits in your work . . . you won't find maintenance and inspecting left packed with them. The 95-405-1 (21 Jan 88) on general survival practices should fill the bill, too.

Chapter 4 has work going in inspecting the AN/USC-10 radio, the radio assembly, and the BA-1100.1 battery in the life raft. . . . eye it!

THESE SURVIVAL BYTES ARE DELICIOUS! HOPE THEY KEEP YOU FROM GETTING REGULAR INSPECTION B.

ALAS—MAKE WITH THE GLASS!

When you pull your PM daily on the Chevrolet (C30-C70), you hit all the areas called out in the checklist, that's for sure.

But there's one area (Component 6-4) that needs more than a little looking into. Since the forward synchronizing shaft adapter and plate assemblies may develop cracks.

New assemblies are being tested up and shop-tested for added strength. Until they get into the supply system, etc., be sure you use a 4-point inspecting glass.

When you eye the assemblies, P/M 1142987-2, focus on the big area around the coupling attachment bolts, the top side area and the coupling plate area in the adapter legs. No cracks are allowed, none.



BEHOLD AREA IN CHECKLIST—ESPECIALLY . . .



GLASSER AND FOUR-POINT

A FOUR-POINT INSPECTING GLASS

CHECK FOR CRACKS!

KIT POOP



If you're the air-ops in charge of the general life, big follow kit or vice kit, better use this a copy of the brand-qualifying form. The 95-405-100-1-5 (21 Jan 88) on survival kits, Chapter 3 has the PM inspection check and these forms to be stocked by the flight surgeon and medical operations.

MAKE THE BOUNCE TEST

Dear Honda,

Is there another way to check for low pressure in our Cmos (R-14) roll wheel shock shaft without jacking up the whole motorcycle and checking in some way?

DAVID W. P. III

Dear Specialist W. P. W.,

You can make a visual check without jacking the motor as called for in para 1-99 of TM 99-1430, 285-28 (7 Jul 63).

Put a 10-lb bag down the lifting tube in the rear forkleg. With a man on each end of the bag, bounce the wheel vigorously. If the motor doesn't bottom, it's OK.

Always



IT'S DOWN WITH THE HOOK!

Have you been tuning your Honda's FS-540 R-1348 engine by the book, TM 15-114 R-209-20 (Jul 63), but can't quite make it putt like a kitten?

Don't worry.

When you put the Time-Rite indicator in the spark-plug hole for an incorrect timing check, para 1-218 says that the hook end of the indicator's pivot arm must be UP.



Not so, wench pullers. In order for the pivot arm to move the disk pointer to the exact timing position of 24° before top dead center, the hook end has to be DOWN.

When the plug is verified this goop — and updated figs 1-42 and 1-43 showing the hook down — will be included.

Meanwhile, have another go at timing your Cmos.

COMB TIRE ...

KEEP 'ER IN SHAPE



Hey, wanna buddy up?

While you're living that dedicated life atop the hood of a vehicle that's parked for a time to serve in a communications center, remember the truck can get joint abuse from lack of use.

Take, for instance, the AM/ABC-44(F) radio system on AM/ABC-40(F) radio mounted on an AM/ABC-26(C) radio set on the hood of a 2 1/2-ton truck or the AM/ABC-46(C) radio subappurtenance set mounted in back of a 1 1/2-ton.

The truck needs preventive maintenance, too. You say you know it, but you can't move the truck because of the constant cables, wires grounding real hard and need for continued equipment operation.

Don't sweat it.



Jack up the truck, put blocks under the axles to allow free turning of the wheels, start it up and get the drive train moving.

You can exercise your vehicle during the weekly PM period on the alternate equipment.

Criss parking in one place a long time will allow rust and corrosion to creep in as well as stiffening of the joints and bearings. The brakes will rust and freeze.

And remember, when you're hitchhiking up the vehicle make sure that it's stable and as level as possible.

TR ORD 1845 (Sep 62), Administrative Storage of Army Vehicles, fills you in with good stuff for a vehicle that stays put for a period of time.

As far as not on the chart, namely, the fractional use using the ET-67 and ET-68, you can use the PSC-9 data for the ET-67 and PSC-18 data for the ET-68.

Any of the rolls are in the chart, or those using the ET-67, -68, can communicate with each other with lock operation of . . . provided, naturally, that they have the same frequency range.

The new AN/PSC-9 receiver and AN/PSC-4 transmitters are compatible with the sets in the chart for anything in the 67 to 57 megahertz frequency range.

In communication, you've got to consider speech compatibility of each pair of rolls are in a radio link.

SB LENS SWITCHIN' TABOO



Never connect up a camera lens on the SB-66P sub-board's line signal with one from a SB-221/P20 sub-board.



Here, the SB-221 indicator light lens (P/N 6210-384-0000) mates with the SB-66 line signal lens (P/N 6210-386-0000), but they're as compatible as a cat . . . and a rat.



The extra distance or travel band around the SB-221 lens puts a strain on the magnetic attraction of the SB-66 recept or line signal. It'll goof up the camera so it won't roll around right or won't roll at all.

Besides the work number, a couple of ways to tell which lens is which is that the SB-221 lens holder has a dull metal finish and is thicker than the SB-66, one which has a paint finish.

CRIMPING TOOL NEEDS CARE, TOO



Are you handy when it comes to crimping the year 1980-1981 17G wire splicing kit? You know it doesn't hold a good splice?

Don't worry. Pull yourself together and loose your eyes on some simple numbers on the kit's WD-177E field wire TL-2021 17G crimping tool that'll help give you the splices of your life.

Right off, you have to put a drop of oil in the hand assembly crimping



chamber and in the handle joint to keep rust and corrosion away.

Next's time for the rest of the splice and magazine assembly. Using a little kerosene, a light alcohol like 90% needed, especially if you're going to put the kit into or near it. U.S. Navy.



would the wire being crimped with the oil or it'll group up the tool and make for a real die grinder.

One other tip. Make sure the wires are right... and pressed.

After crimping off the two conductors and releasing the remaining coils on the magazine, see that the splicing sleeve (P/N 1040-018-177-1) has dropped into the crimping chamber. You might have to jiggle the magazine in or out of the housing a few bits but don't force it or you'll damage the magazine.

And, unless you have an extra hand your best bet's to let a wire nut buddy-type hold the two ends of the wire magazine while you put the pressure on the handles.

Oh yes! Watch your fingers 'cause the alligator-like bite of those handles could make you give a yell that would shame a copper band in the likes of a dropping battery on a ball.



Incidentally, the crimped sleeve splice is self-waterproofing, but to give it dandy sets you a couple or three wraps of electrical insulating tape around the splice if you're in a humid region where the wire will wind up on the damp ground even at the site.

The kit, including sleeves, is in EC 1075-01-01-DQ1 (June 68).

17 C.B. TM 18-1081

18 TM 18-1080-200-207

ORDER BY ELECTRONIC MAIL, FAX, OR MAIL

Order & Reserve

GA 20177

ORDER SERVICE CENTER

It won't be surprising if you find the right source and grade of apparel after you buy.

Specify your item.

ORDER SERVICE

HOW? 18-20-207

BEHOLD, BEHOLD OF THAT FUR!

No need to repeat your DA Form 17 order for the same gait to the All Publications Center unless you get the word from them (on your Shipping Document, AG-AC Form 241) that they cannot identify (CI) the gait you want. They keep your order on file and will ship it to you when they get it. It's listed on your Shipping Document as EO for Don't Go.

When you repeat your order for an item that was listed as CI, be sure to quote your source so that the Center can check it out. If you get it from the AG Bulletin, then add in parenthesis what your listing, the Bulletin Number and the date of it.

Be sure to keep a carbon copy of the DA Form 17 you send to the Center, because they refer to the number on your requisition slip(s). For instance, you asked for TM 8-2080-204-240 (Class 21) and CI, TM 18-1080-200-20 (Class 11) and your Shipping Document was marked CI for these two items. When you re-order, list the TM 8-2080-204-240 and CI, TM 18-1080-200-20 in their regular order on the 17. But after the TM 8-2158-204-240 104, 118-11, and after CI, TM 18-1080-200-20 (Pub No. 1, 2 Jan 67). That info in parenthesis will help the AG people identify the gait.

If you're serious, send your request ahead.

EIR & MD TB'S

You've seen these abbreviations every day so, you know they stand for Equipment Requirements Report and Maintenance Digest Technical Bulletin.

But did you know that TB's are now good for 1 year from date of issue? That's not all—they have a new numbering system.



...AND
THEY
COME OUT
ABOUT
EVERY
THREE
MONTHS!

NEW NUMBER

- 750-911-1 **DISCOUNT**
- 750-911-2 **DISCOUNT**
- 750-911-3 **DISCOUNT (No Stock)**
- 750-911-4 **DISCOUNT (upgrad)**
- 750-911-5 **DISCOUNT (upgrad)**
- 750-911-6 **DISCOUNT**
- 750-911-7 **DISCOUNT**
- 750-911-8 **DISCOUNT**
- 750-911-9 **DISCOUNT**
- 750-911-10 **DISCOUNT**
- 750-911-11 **DISCOUNT**
- 750-911-12 **DISCOUNT**
- 750-911-13 **DISCOUNT**
- 750-911-14 **DISCOUNT**
- 750-911-15 **DISCOUNT**
- 750-911-16 **DISCOUNT**
- 750-911-17 **DISCOUNT**
- 750-911-18 **DISCOUNT**
- 750-911-19 **DISCOUNT**
- 750-911-20 **DISCOUNT**
- 750-911-21 **DISCOUNT**
- 750-911-22 **DISCOUNT**
- 750-911-23 **DISCOUNT**
- 750-911-24 **DISCOUNT**
- 750-911-25 **DISCOUNT**
- 750-911-26 **DISCOUNT**
- 750-911-27 **DISCOUNT**
- 750-911-28 **DISCOUNT**
- 750-911-29 **DISCOUNT**
- 750-911-30 **DISCOUNT**

OLD NUMBER

- 750-911-1
- 750-911-2
- 750-911-3
- 750-911-4
- 750-911-5
- 750-911-6
- 750-911-7
- 750-911-8
- 750-911-9
- 750-911-10
- 750-911-11
- 750-911-12
- 750-911-13
- 750-911-14
- 750-911-15
- 750-911-16
- 750-911-17
- 750-911-18
- 750-911-19
- 750-911-20
- 750-911-21
- 750-911-22
- 750-911-23
- 750-911-24
- 750-911-25
- 750-911-26
- 750-911-27
- 750-911-28
- 750-911-29
- 750-911-30

The new numbering system gives you a clue as to which command is responsible for the TB. The numbering goes like this:

TB 750-991-1



- | | |
|---|--|
| 90 — U.S. Army Strategic Communications Command | 95 — U.S. Army Weapons Command |
| 91 — U.S. Army Electronic Command | 97 — U.S. Army Medical Equipment Command |
| 92 — U.S. Army Signal Command | 98 — U.S. Army Tank Automotive Command |
| 94 — U.S. Army Materiel Command | 99 — U.S. Army Training Material Command |

SOMETHING NEW ADDED

You'll find that some of these TB's have new added features such as a listing of the current EPRC's, as well as the forecasting cover. There's also a new section called "Simple Changes to Equipment".

WRITE TO THESE ADDRESSES

YOU CAN GET THE PUBLICATIONS YOU NEED ON BUSINESS OR QUARTERMASTER TYPE EQUIPMENT ANY OF THE TIME, even if you're NO HANDY MAN OR—P.S. ALWAYS PRINTED ON THE PARTICULAR PAPER YOU'VE GOT!

HOLD STILL WHILE I WRITE THE ADDRESS DOWN CORRECT!

If you don't see your item in DA Form 310-4, its changes, or the Bulletin from the AD Publications Center in St. Louis, then you need to ask for a manufacturer's manual.

Order it just like you order a non-mechanical repair part. Send the request to:

U.S. Army Military Equipment Command
ATTN: SERIAL 02-1
4801-100/1000 Building
St. Louis, Missouri 63104

Give make, model, serial number, POC, date of manufacture, and contract number of the item. Tell whether you need an operator's manual, parts list, repair and maintenance manual, or all three.

FOR CHANGE-OUT/PHONE

For parts on commercial-type electronic instruments by the Army but with no technical parts, write to:

Commanding General
U.S. Army Electronic Command
ATTN: SERIAL 02-1
Fort Rucker, AL 36360

Connie Radd's BRIEFS

WERE YOU
A MAN-THROWING
PROBLEM?



Puffed From Seats

Henry! Ask for 5th Circular 775-11 (3 May 57) Removal of Components from Motorcycles and Seats of Equipment. It explains DA Circular 722-3 (20 Jan 54) as amended by TFX 11-409 AMMOS-27-A (17 Mar 55). You'll need it for requesting, recording and reporting gasometers, compressors, pumps, chargers and other major components which will be known as "used with, but not part of" your sets.

Updated Records Rules

Records up to date on all your equipment? Check it out in revised TM 33-730 (12 May 57)—effective 1 July 1957. It's a major rewrite of rules on operational, maintenance and historical records—including those for access and for utilization actions. Two forms are combined, 4 are dropped, 7 (for clerks) added, others are re-designated. Implementation instructions are in SA Cir 738-28 (3 Jan 57).

Getting Lit Up

Has any one of you been looking for a handy-carry flashlight lamp (with) for that emergency marker light set, covered by SC 4120-21-01-904 (Jan 57)? Here's one more. FOR 5240-12-2081 will get a couple of 'em. You'll find the stock number in FED CAT C3200-5-A, Vol 2 (Jan 55), on Page 4-326.

Rot A Few Sprots

Exploiting the steering wheel of your tactical vehicle just because the jacket's cracked a little or the smooth slide is gone? Washburne TM-ATAC message 4-1182P (25 Apr 57) says such re-wheeling on all tactical vehicles up thru T3 has to not necessary unless the wheel is bent or it's cracked, or the inner steel case is cracked, broken, or corroded with rust.

MSV Movie

For tips on safe handling of the M111-series 15-ton trucks check TM 35-2707. It's in color!

No More Shade, Bettle

Your Barber (3-4) develop a case of the dimples because of the wrong size ball-wheel tire? Get yourself TM 55-3428, 300-12 (12 Mar 57) for the right one. Part 4, you'll find the proper tires and tubes listed for all trucks.

Keep Appendix II

Better make a notation on the front of your DA 700-28 List 57, Army Adopted Items of Material, to keep Appendix II when this DA is superseded. That Appendix II is your Cross-Reference of your old LITs to new DPs and it's not going to be republished.

Would You Stake Your Life ^{up to} on
the Condition of Your Equipment?

Whenever you're filling out a DA Form 2407 (or writing to Hall-Mosk, for that matter,) give all the info including: Nomenclature, FEN, Part No., Serial No., Manufacturer and TM Numbers.

You can also help to get your parts when your outfit changes its address (that includes a new APO number).

Let the AG People in St. Louis and Baltimore know about it. Be sure to include your Account Numbers.

YOU
CAN
HELP
WHEN
YOU
ASK
FOR

