

Issue 211

PS

INTE Series
January

THE PREVENTIVE MAINTENANCE MONTH

HEY BOSS —
WHAT'S THE SECRET
WE JUST GOT OUR
BASE, WHICH
YOU DO C-SHIT-F-U-HY?
FUCKED BATH IN
VIETNAM FOR
RETROGRADE!



CLOSED LOOP

You may know about the "Closed Loop" operation in Southeast Asia — shaper, before engines and small military standard engines got shipped back to overhaul shops where they were worked over, real fast and returned to your area.

This real successful operation gave the supply planners in the Ford area some good ideas for the future. Tied in with our statements to include by you at the using organization, they plan for the use of DL to stock many components and assemblies instead of piece parts. The use of direct exchanges (DX) will expand to all levels of maintenance.

When replacement of a component is required, the bad one is exchanged at direct support for a good one. DL will repair it or send it back to the outfit that can repair it. When repaired, it's sent back to be used as future exchange stock, completing the "Closed Loop."

To make sure you have the assemblies and components when you need them, a continuous operating flow of "bad-to-the-rear-for-repair" and "good-to-the-front" will be set up.

The original "Closed Loop" idea is outlined in AR 700-68.



/DX

YOUR GEAR UP TO BETTER SUPPORT FOR REAL BATTLE SITUATIONS!



The expanded DL will be coming out in 48 new reg units. To make it to the bigger closed-loop flow of DL items.

In addition, when DL can't give you the good item to repair your equipment, it may send you an alternate piece of equipment from "float stock" and take your old equipment to a depot and repair it for float use.

WE USE THE COMPONENT AND WE SEND TO AROUND FOR REPAIR — THEREBY CLOSING THE LOOP.



PS (Public Service) logo and associated text.

IN THE UNITED STATES: ...

IN THE UNITED STATES

Category	Price
...	...
...	...
...	...
...	...
...	...
...	...
...	...
...	...
...	...

IN THE UNITED STATES

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

IN THE UNITED STATES

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

IN THE UNITED STATES

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

IN THE UNITED STATES

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

IN THE UNITED STATES ...

IN THE UNITED STATES ...



IT'S NEAR THE WALL-BELOW
AND TEMPERATURES THAT
MIND ALL THE RECORDS - IT'S THE
CUTTING EDGE BETWEEN 121°
AND -87° THAT COULD BE 100°
A THIS POINT AN OUTLET
WALL WAS COVERED IN A
FREEZING THIN ONE-WAY
GLASS...



JUST FREEZING COLD

NEXT MORNING...



THAT'S IT, BOOP
IN ALL 'O' COMPANY'S
SHOULDER AND SEE
HOW THEY'RE DOIN'!

AND... AT 'O' COMPANY ...



HEY!
HAPPENING!

HERE COMES
THE COOL!



WHY'S JOE
SHOUTING?—
YOU GUYS
LOOK FRESH!
FREEZE—UP!

EVERYTHING WAS
FINE 'TIL THE STRO
BEGAN UP THE
TOP OF LAST NIGHT'S
FREEZE" SEAL!

ON THE... AN OLD THEORY... IT'S THE ICE BOND OF THE POLAR-PHASE AREA...



THE JUMP IN
JANUARY CUMBERLAND
THINGS TRAFFIC TRAP
WINTER - TRAP FROSTED
SOLID!

THE...



TREK -

There are rather so much as 1" deep in
with a 1000 lbs and have control cables,
etc. Being out for years - time that
will be 1000 lbs and have control cables,
etc.



Remember your skin and paper are very
wet and freeze right.

TRAP OF FROSTED THING
AND ICE BOND THE...

AND...



STRESSING
WALL

WINDING

STRESSING
WALL

STRESSING
WALL



DEER -

See use of natural slope between the
ground, water and other before you
arrive.



LEAVE WELL. KEEPING
TRAP OPEN ON IT
JOB BY TRAFFIC.

I TOLD YOU THESE PROBLEMS IN A TRUCK ARE NO. THEY LEAVE ME ANOTHER TRUCK AND THE TRUCK!

THE TACH-TEST



OK, let's talk about the tachometer—can it tell you no.

It's the signal bulb you need to put in sight in top operating condition. The one case is different sizes, shapes, and models, and their prices may differ a bit. But—you wish 'em all price match the same way.

A good tach-test device will save you time, work, and frustration going. Be sure that, reliable results you have to really know your particular set and exactly what you can expect from it.

The set's handy when you're—

- Troubleshooting or replacing the distributor.
- Checking or adjusting the points.
- Troubleshooting the engine (it's best for timing, timing, too working condition.)
- Putting a tune-up job.
- Timing the engine.



SET INSTRUCTIONS

Use one of the support brackets (left or right) by holding against the top of it, bring it up to and if the very best will not be with a compressed air or pump. Do not use the pump for a lot of work, because it does not like to work on a lot.

Take the set where it'll be protected from dust and fumes, and where it'll not be bumped by other work and careless people.



TACH-TEST WORKS GREAT ON ALL TYPES OF ENGINES AND MOTORS!

D'WELL SET



IT'S GREAT! ABOUT THE BEST! THE "D'WELL" SET!

It's a great set! You can't get any more! Buy it now!

SET INSTRUCTIONS

Simply use the set's manual carefully before you use the set. You may have only a manufacturer's pamphlet with some use, but you get TM 7-4014-10-12 (copy it for the TD-10000 tachometer) too.

The distributor and RPM readings for the timing and troubleshooting work for your vehicle's engine are printed on in the vehicle's TM. So you always keep that TM handy too. Check the set for damage. Use—



Time or limit tests a variation.

Graded glass on motor.

Timing or time taking device.

Make the D'Well set of 100% S.A.L. (S.A.L. STANDARDS) MOTOR ENGINE

Time, timing, or off-center tests the test set you use on the test.

The tachometer, timing device, timing, timing, timing, timing, timing, timing.

The meters, knobs, switches, and leads bring the ride.

1000 AMPERE—Have the distributor use their reading. It may be a single-lead meter (2 to 20 degrees), or a multi-lead meter. You have to calibrate the multi-lead meter built by Ford or General, or a qualification plate listing part for the type of engine (4, 4 or 6 cylinders motor-vehicles; 4 to 100 psi with diesel motor) is not used on 4, 4 or 6 cylinders.

The multi-lead meter has 2 leads for testing diesel engines, and a red ground (20-40 GND) leads for testing gas engines. The meter also carries an other ground (low resistance) between the battery and the distributor for better, more rapid, better wave or secondary, etc.

1000 AMPERE—It has an the dual meter with the engine meter dialing, but not it to read the meter for 2 cylinders—4, 4, or 6, on the meter.

If you can't find a multi-lead dual meter, fit the meter to 20, also use it to test a good secondary lead, see page 11.

1000 AMPERE—Have the distributor use their reading. It may be a single-lead meter (2 to 20 degrees), or a multi-lead meter. You have to calibrate the multi-lead meter built by Ford or General, or a qualification plate listing part for the type of engine (4, 4 or 6 cylinders motor-vehicles; 4 to 100 psi with diesel motor) is not used on 4, 4 or 6 cylinders.

1000 AMPERE—Have the distributor use their reading. It may be a single-lead meter (2 to 20 degrees), or a multi-lead meter. You have to calibrate the multi-lead meter built by Ford or General, or a qualification plate listing part for the type of engine (4, 4 or 6 cylinders motor-vehicles; 4 to 100 psi with diesel motor) is not used on 4, 4 or 6 cylinders.

1000 AMPERE—Have the distributor use their reading. It may be a single-lead meter (2 to 20 degrees), or a multi-lead meter. You have to calibrate the multi-lead meter built by Ford or General, or a qualification plate listing part for the type of engine (4, 4 or 6 cylinders motor-vehicles; 4 to 100 psi with diesel motor) is not used on 4, 4 or 6 cylinders.



1000 AMPERE—Have the distributor use their reading. It may be a single-lead meter (2 to 20 degrees), or a multi-lead meter. You have to calibrate the multi-lead meter built by Ford or General, or a qualification plate listing part for the type of engine (4, 4 or 6 cylinders motor-vehicles; 4 to 100 psi with diesel motor) is not used on 4, 4 or 6 cylinders.

1000 AMPERE—Have the distributor use their reading. It may be a single-lead meter (2 to 20 degrees), or a multi-lead meter. You have to calibrate the multi-lead meter built by Ford or General, or a qualification plate listing part for the type of engine (4, 4 or 6 cylinders motor-vehicles; 4 to 100 psi with diesel motor) is not used on 4, 4 or 6 cylinders.

1000 AMPERE—Have the distributor use their reading. It may be a single-lead meter (2 to 20 degrees), or a multi-lead meter. You have to calibrate the multi-lead meter built by Ford or General, or a qualification plate listing part for the type of engine (4, 4 or 6 cylinders motor-vehicles; 4 to 100 psi with diesel motor) is not used on 4, 4 or 6 cylinders.



1000 AMPERE—Have the distributor use their reading. It may be a single-lead meter (2 to 20 degrees), or a multi-lead meter. You have to calibrate the multi-lead meter built by Ford or General, or a qualification plate listing part for the type of engine (4, 4 or 6 cylinders motor-vehicles; 4 to 100 psi with diesel motor) is not used on 4, 4 or 6 cylinders.



HOOKUP

Along with the test set you need the primary circuit adapter and the high-resistance adapter from the adapter kit PSM 0918-148-7000. They're for testing a vehicle which has a disabled electrical system, usually. To install the adapters:



1. Remove the main plug from the distributor, to cover and secure it in the primary-circuit adapter. Then clamp the wire lead test lead to the lead lead to the adapter.



Caution: If your motor has a split-shaft design on its tail lead, always hook it up to the terminal of the spark plug adapter—if you do you'll blow the air. You can work a split-shaft clamp securely a magnetic holding. To use this type clamp you'll need a long piped-up spark plug adapter. Just clamp the split-shaft clamp over the adapter's insulation wire . . . And take care the clamp doesn't touch any other component on the engine.

You hook up to the terminal on the adapter only when your car has a heavy tail lead with a small alligator-type clamp.

2. Remove the cable from the spark plug, attach the high-resistance adapter to the cable, and secure the other end of the adapter to the spark plug. Clamp the air's test lead to the lead lead to the adapter.



1. Battery/Chassis—Clamp the air's test lead to the lead to the battery's positive terminal, and the alligator lead black lead to the battery's negative terminal.

Use cable color coding whenever you can, just before the hook-up work, says the manual.



GROUND LEAD TO NEGATIVE TERMINAL

POSITIVE LEAD TO BATTERY'S POSITIVE TERMINAL



1. Connect the primary circuit adapter to the battery's positive terminal.

- Get all the wires.
- Join the motor with the alligator wire.
- Calculate shell motor for multi-wire motor, and install on fan. Use the lead set with left or right as needed to attach the motor with the lead needed for your engine. Use your air's manual for exact wire for your engine.



WIRE TO THE BATTERY

NEGATIVE LEAD

POSITIVE CIRCUIT ADAPTER

SPARK PLUG LEAD

ADAPTER

IGNITION COIL

IGNITION SW

BATTERY LEAD

4. Start the engine as easy as you can and take your readings. The meters will give you the maximum distributor dwell and RPM.



5. If the readings don't fit with the setup in your EM, start troubleshooting by the vehicle's manual.



6. If the tachometer pointer fluctuates, watch for your battery or generator regulator voltage to be low to prevent the cut. Repair accordingly until it reads. If that doesn't settle the needle, return the vehicle to RPM, and start troubleshooting.

7. If the dwell meter gives you the right reading, the needle shouldn't vary more than a few degrees for specified by the vehicle's EM when you get the engine.



8. Take the dwell reading of the RPM specified for a your vehicle's EM.



POINT-BY-POINT CHECK



With the engine stopped, the breaker points closed, and the ignition switch on—flip the idle advance switch to RED and, read the points resistance on the GO-NO-GO meter on the dwell meter.

If the needle says NO-GO, turn off the ignition and the car on and check the points. Could be they're dirty, burned, pitted.

If the points are OK, the NO-GO reading means you have some other power shortage in the circuit from the battery to the distributor. So, start troubleshooting.

LAST, BUT NOT LEAST

Always take time to disconnect the car's leads carefully. Roll 'em up neatly and slip 'em away—the best their compartments in the car's case.

Reaming. Put 'em up back into their right compartments will ruin 'em.



IN A P-I-B BEE ...

PIVOT INTO ACTION



Grab the ball by the horns when your 1-ton truck's PIVOT axles start to creak. You can't do it safely in a salt-water region.

Put your own lubr fittings on the transfer shaft and universal joints—like it says in TB-150-088-1 (Jan 79), Article 3-8. Then you'll get the grease to the stubborn pivot shaft. Lube with GAA every 5,000 miles or so, as usual.

Here's how you do it:

1. Take off the 1-ton assembly and get the drilling—on the back side of each lubr fitting.



2. Use the 1 1/2" ball bit, then thread with the 1/2" pipe tap, GAA and top oil in the lubr connections (A).



3. Turn in the 90-degree lubr fitting, TB 474-024-002.



Those fittings will show up handy for your lubr gun.

With new production model trucks, there's no sweat. They now get a exclusive-patented pivot pin to fight the rust.

That keeps it up, except ...

Don't forget to see the oil-can-can-a-month-on-all-Chrysler-plus-in-the-power-raise-off-lubing-system, like it says in EO 9-1508-111-11 (Apr 80). More when it is ready.



Dear Mr. West:

The matter here arises as to how much I tighten the straps. I have trouble with shifting fuel tanks on our 2-ton (NET) dump-carts and 4000 tank trailers. The real trouble comes when the right tank moves forward and runs into the fuel transfer-pump bracket, through it, and the bracket punches a hole in the tank.

What's the answer to this problem?

W. D. B. B.



Dear Specialist E. B. B.:

You can stop these trouble-makers by applying a fix offered in TR 750-980-1 (Jan 68). Use your CCF's CR to fabricate and install retaining brackets — front and rear on tank tanks, if you need 'em.

The bracket's locked to the fuel tank hanger on one end and hooks just over the fuel tank lip at the other end.

Stopped — one fuel tank.

Easy - Adjust



ARMOR BUSTS MOUNT

Dear Mr. B. G.:

Armor plating that we slide into the doors of our 5-ton cargo trucks causes the cab to rock from side to side. This causes the cab-riser mounting brackets to crack and then give out completely.

Five years what seems to be an improved, stronger material on later production trucks. That looks like the solution to our problem.

Can we get the new material for our older trucks?

CHAS. B. G.



Dear Mr. B. G.:

There is a stronger cab-riser mounting bracket on late production G174-series 5-ton cargo trucks—M141C. And it should take the extra weight of that armor plate.

But good "prevention" offers a quicker, cheaper solution to your problem. Like getting those mounts reinforced before they give out—especially even before you put the armor plating in your trucks.

A good rubber, using TBI 9-227 (Item 67), should be able to do the job for you.

If this doesn't do the trick, you can get the improved armor with PN 111937H, using the inspection data repackaging procedure per AR 712-90. Or M 1000 699 para 9-20.1.

John J. ...

5-TON GOOK SPOOK

You have trouble by the gump collecting in the No. 2 crossmember of your 5-ton truck?

Could be you've got a vehicle with the 1/2-in. drain hole that should be at the bottom center of the crossmember. Some trucks, like M12A2's and M14A2's, were putted up during the manufacturer's assembly.

A simple fix will get rid of this gump.

You just clean out the crossmember gump, drill the needed 1/2-in. drain hole and say goodbye—forever—to the oil, water and dirt flow.



BODY PARTS

Dear Mr./Madam,

Some body parts for the gasoline-engine (G46) series (F-Series trucks (F250, etc.) aren't fit on the multifuel jobs (M35A1, M35A2 etc.). Are the hood, side panels and fenders available in the supply areas for the F-Series multifuel engine vehicles?

OWE B. G.

Dear Mr. O.C.,

Some of 'em are... under these FOM's

Hood, w/hood and hinge only, 2110-993-0917

Fender, front left side, 2110-993-0912

Fender, front right side, 2110-993-0913

(Make a hole for the vertical exhaust stack of your truck has in.) Your supplier can get 'em for you.

Some to be on the shelf too:

Panel, hood left side, 2110-993-0909 (PN 18872034)

Panel, hood right side, 2110-993-0905 (PN 18872035)

If ordering by FOM doesn't bring those 3 items and you're in a hurry, use the part numbers and try telephone data-type requisitioning—per page 7-26 L, Ch 14 (See 609, AR 729-48).

Half-off!



SHIFT TO MULTIFUEL



BEFORE SET TO GEAR AND CHECK THAT SHIFT PATTERNS (PSA PLACE)



Before check that shift pattern on your M35A1 truck's instrument panel does place, same gear for any other 1 1/2-ton truck with the L8-461-1 multifuel engine.

Some have got the wrong data plate—the one that's supposed to be on the gasoline-engine job. It shows the 5th gear in the lower right corner of the shift pattern.

The right one for your multifuel has 5th gear in the top right corner. Need it? Get it — FOM 2110-993-1081 in TM 9-2128-209-209 w/Ch 1 & 2 (Apr 69).



WITH 1 1/2 IN. HOLES...

THROTTLE WITH RADIO

THROTTLE
GOTTA BE
A BETTER
ONE, MA'AM!

from *Half-Hearted*.

There must be a better way than a bellows like you peddle to run our really equipped 400 cc. Japanese motor on high hills.

Will there be throttle available?

YES, S. E. W.

Dear Sergeant S. E. W.,

Yes, there is a better way. It was in TB TH-501-5 (Jul 52), Article 106.

You get Throttle-Way, PSM 2790-673-0013, and 1-Concourse Assy, PSM 2918-711-9014.

Fit the throttle assembly (having 12 inches long and the control wire to 12 inches long.

INSURE



CONTROL
WIRE 12"

Install the throttle assembly in the existing linkage on the bellows and to the choke control link.



Another set connects cable control wire to 12 inch on the throttle stop.



Remove the cable from the main control bellows pin and insert the control wire. Fasten the other connector on the end of the control wire so it's snug the bellows when the throttle is pulled.



Half-Hearted



Stick to your lanes with these pins for both the 1/4-ton and the 3/4-ton trucks. They're the only ones legal.

Sometimes, somebody else pins you up there, accusing somebody's behind the wheel or he's got the 3/4-ton and the 1-ton truck in mind. They got the aluminum, but that's a case of a different metal.

For 1/4-tonners, TM 9-2028-213, JOP (Feb 68) has PIN 1311-771-5768, while TM 9-2028-144-309 (Jan 68) shows PIN 1315-055-9084 for the 3/4-tonners. These are brass—sorry.



FORK INSERTS



You now can get the differ lock nylon inserts for your M17B1 1/4-ton truck's Model 426 transmission with PIN 2510-918-0004. By the way, the fork itself has a new PIN. It's 2510-904-0003.

1/2-TON HOOD HEX



Some say HOOD. The rest say HOODS. In some worlds, HOODS.



If it does the work of bumpers and fenders, it breaks and wears easily. Thus, you'll have a rattle and a rump on the road.

CRASH **CRASH**
BOOM **BASH**



The hood'll shiver and rattle the top of the air cleaner.



HOODS ARE FLEXIBLE

Hoods will get long, dark and the motor will get louder.

It could fly up in your face at anytime.

Oh, oh, no you're no headstrong, but if you're not one of those vehicles, get lost.

You need to strengthen the hood or maybe when the girl dies to stop the racket and rattle. Better to check it in.



HOOD

Thus, phewee, take it easy.

TAPE OFF GLARE



Are you blinded by your truck's new signal indicator light during night driving? On the M416 series 17.5-ton trailer, especially, the reflected glare in the windshield may hit you right in the eyes.

If it's a problem, tape it. Use masking tape or whatever tape's available. Leave a gap hole—just enough so you can see the light when it's flashing.

Take tape off for daylight driving.



TAPE IT OFF.
SHINE IT OFF.
SEE IT OFF.

M416 TRAILER TIP



EYE
GET
A TIP
FOR DR.
M416

Wipe in your M416 17.5-ton trailer trailer from round wheel bearings? If water's getting in there, just wipe a dustcoat of molybdenum compound (1504 8040-001-2330) around the outside of the bearing flange after lubing your bearings. Then pour the cap back into the hub. That's the word in Article 42, TS 750-981-1 (Cir 85).



KEEP THE BARS
WITH COMPOUND

ABOUT THAT 5-QUARTER



Steve Haddock,

What's the loading range and passenger capacity of our M733 Three wheel? The standard TM 9-2220-200-10, TM 9-2220 and TM 9-2220-200-100-10.

OFF & ON.

Dear Captain J. D. G.,

Carrying cargo for highway is 225 miles. Passenger capacity is 2 (excluding driver) in the cab and 8 in the cargo body.

John Galt

SUB FOR BOOT



If you need a new handbrake cable or hose for your GM42-series 2-1/2-ton truck, you have to get 'em together with PONY 2180-040-0000, or TM 9-2220-200-200-100-10 & 2 Lugs-500. But if the hose's all you need, get Bellows, rubber, IRM 2030-502-0007. It's in TM 9-2220-215-200 (Aug 68) and is normally used on the clutch pedal strap of the 1-1/2-ton utility platform truck (Male).

RECHECK WITH

SUPPORT



If you've ordered Unit, air hydraulic, PONY 2180-040-2180, for use on your 2-1/2-ton GM42-series truck . . . and ended up empty-handed at the MSCP level. What to do? Ask your support to assist by replacing the unit with Kit, Repair, hydraulic slave, PONY 2180-040-2180.

MTD, MTOM ANY...

TOWING SPEED & DISTANCE



Now, MTD Any...
There's nothing else floating around on towing or disabled MTD or MTOM personal series. The main point is maximum speed and distance the vehicle can be towed without disconnecting the suspension from the differential.
What's the best word?
MID & D. V.

Dear Stephen B. D. V.,

The better word—and the right word—is the M112A1 (and all others in the M112A1 family) is in para 2-12-6, TM 9-2300-317-10 w/Ch 1 (Para 70).
Maximum distance of 50 miles at maximum speed of 10 MPH.

For all vehicles in the M112 family, the new word is:
Maximum distance of 1 mile at maximum speed of 7 MPH.

Anything further or faster than these and you're got to disconnect the transmission from the differential.

For the M112, it'd be safer to refer to the page you see on page 41 of TM 9-2300-317-10 w/Ch 2, 3 & 10 (Aug 65).

M112A1
MAXIMUM SPEED — 10 MPH
MAXIMUM DIST — 50 MILES

M112
MAXIMUM SPEED — 7 MPH
MAXIMUM DIST — 1 MILE

Handwritten signature

TORSION BAR ADAPTER



PULLER



ADAPTER

For removing torsion bars on M112-series tractors, M112 and M112A1 tractors, the M112 TRV, and the M112 CVT, there's only one adapter that'll fit into the end of the torsion bar... that's Adapter, puller, P/N 9120-921-1001, Part No. 708170.

You'll find a few find-ups in the '30-TM's on this special tool that'll save you a real up with the wrong tool—or no tool. Its with on the above number and you'll get what you need.

HEY, HOW
DID THAT
PUMP
BROOK?

TANKERS' PUMP

WHEW!

WHEW!

Listen up, all you tankers . . . **WHEW!**, **WHEW!**—you can now get the best transfer/condensate removal pump that was taken out of your bill just a year ago.

Ask for Pump, Disposing, Head Driven Diaphragm, FD4-4000-TM-T140 as listed in SB 700-20 (Jan 70), Appendix B, page B-11. (It is due to be dropped from SB 700-20 and added to SB 700-50.) It's an expensively built, tested 1 per cent pump (and 1 per cent maintenance) worth its tank companion. Your supply can get it by using SAC 29C.

M88 VTR FUEL CAPACITY



How many gallons of gas does it take to fill the tanks on an M88 VTR? TM 9-2309-222-20 (Apr 66) says 212 gallons, TM 9-2320-222-20 (Aug 66) says 421 gallons, and TM 9-2400 (Sep 62) says 443 gallons.

Which is right?

The correct figure is 420 gallons and that's how much they would take if you ran out of gas.

The forward tank holds 200 gallons, the right rear tank 50 gallons, and the left rear tank 170 gallons—for a total of 420 gallons.

MAGNETO GEAR HOLDER



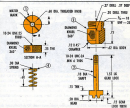
See Also:

Anybody who has been around prop engines knows what a pain it is to hold the gears in place when inserting a batch of new magnets in the head on top of the box. There's no good reason in the real world.

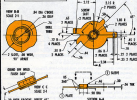
So, here's a couple of tools I made which will hold the types on any size in the shop inventory—for the 5801, 5802 and 5803 mags.

©1966 by *Stewart*
 15 Nov. 66

5801 & 5802 TYPE



5803 TYPE



Old Note—Check! Some holding tools used by the Air Force are still around for as hard to come by. They look like this!

ARMYBOUT

ARMEMEC

GROUND YOUR BIRDS!



You've seen Armybouts and Armemecs at work. Armybouts are the old pros who pull by-the-book P&L, take safety seriously. Armemecs are the newbies who just want to get by the easiest way. You're seen Armybouts who have their birds engorged after a mission...
 Or while taking on a load of fuel.
 Those birds are sitting ducks for the big "boom" if they're not grounded and hooded while setting/charging... looking/firthing... checking electrical circuits and electronic gear... snuffling/wirging systems... especially when the engine is not shut down.
 Why?
 Basic electricity... ready to go handier' and chindier'.



BEHOLD YOUR BIRD AND HOOD! HUP, ON THE GUY YOU'VE BYE-BYE, BUNNYBIRD!



You can't stop static electricity, but proper handling and grounding of sensitive equipment and aircraft can stop a charge building up and let currents to explode P&L flames or melt off the igniter on electricity fired gear/makes.

You've been shocked by static electricity... when you walked across a

wood or synthetic carpet and reached for the door knob. 2-4-4-0-1-1-7... -- -- --

That means... when you get up to a 1000 volt shock. You get some-some shock when you slide across a plastic-covered car seat and reach toward. Or when you grab a fuel nozzle to insert the loading plug into the nozzle.

SAKE BUNNYBIRD

When 2 cables rub against each other quietly they do so without too much trouble. It's when they're pulled apart—or rubbed against each other—that their electrons get excited.

Basic electricity charges the birds and flits between the materials—usually none of the time—because every positive charge means an equal negative discharge. Then by tiny lightning flashes can build up enough power to become deadly sparks... setting the stage for a minute of July fireworks display. During this static electricity process one of the materials usually becomes a poorer conductor, or insulator of current, than the other.

This is the case with fuel flowing thru the pipe to the aircraft. The high



quality PVC45 and JF-4 used in all U.S. bonded birds are negative charged, but surrounding conductors. The pipe is a positive charged, poor conductor.



You always have some explosively ready vapors or fumes in the space above the flowing fuel and the top of the tank, and in the space above the liquid in the receiving and dispensing tanks. Only an electrostatic spark—in a many other critical instances—is needed to set off an explosion. Unless . . .

Unless your bird and the service equipment—in either fixed bases or at wild ports—are grounded and bonded.



Bonding—which equalizes voltage—is a wiring between metallic containers. One line connects from coupling to coupling, or between hose nozzle or pipe and container.



Grounding—which reduces voltage—is an electrical connection between one or both of the bonded transfer units and the ground.

1 1/2 INCH STRIP
WEIGHT 10 LB



Grounding and bonding when electrostatic sparking—by providing the charge a safe-away path. Like when you pick up a fuel nozzle be sure you leave the bonding plug in the aircraft receptacle before you insert the fuel nozzle into the filler neck. This lets any charge leak away harmlessly. That's why it's important to use bonding and grounding when your bird is grounded bound.

When your aircraft is grounded, the electrical charge or current follows a path of least resistance . . . thru the airplane . . . ground wire . . . ground rod . . . and into Mother Earth — with its safety protocol.

Self-vented birds offer some advantage over rubber wheelbed eyes, but not enough to be safe. They still need a ground rod hookup for best electrostatic protection.



JP-4, used in turbine engines (F4Us, Mustangs, etc.) is more dangerous than AVGAS that's used in recip engines (Corsairs, Spitfires, etc.). It generates more electricity faster and quicker.

Without a safe ground rod and hookup (TM 10-104, Jul 47) when the sparks jump, the fumes can ignite and your tail's gonna look like it's engaging in a Chinese fire drill.

Old tail-gate hatchback stuck in the ground won't back it as ground rods cheap hooked to the movement supports won't help you fly, use will change hanging some painted bird skins. The TM says use a 4-ft solid copper or steel rod with a minimum of 1/4" going into the ground.

BOAT GAMES WITH YOU SCRAMBLE!

When Ops yell, "Scramble! Where man your planes!", or an Eight Eight leader bellow, "Get 'em going!", take a couple seconds to subvert the ground wire alligance clamps or pull the main plug out of its receptacle.

No sense having an unshunted wire snap its eye and wind up in a prop or cone. Or leaving loosed wire and clamps on the ramps for FOD fodder. Or having a bird groundbound with a scuffed wire.



WARNING, WARNING!

It only takes half a volt of electricity to get a 1.75-in. radio tube tube arched and on its way.

A momentary electric current in the circuit or electrical circuit could set off a misfire or a rocket. So could a high frequency radio signal or high powered radar beam. All circuits and electrical circuits should be OFF . . . and kept OFF . . . while you're handling tubes.



◆ SAFETY TIP ◆

Even if your bird's ground hookup is according to Boyle's law, a hot spark can mean a blast! . . . if electrical resistance thru the ground rod is too high. Heat is an electrical current or static discharge (caused by the amount of resistance) is more going from airframe to ground rod and by the amount of the current. So, keep your resistance handy and make frequent electrical resistance checks. You want resistance as low as possible—3000 ohms is the maximum. There's this and the rest goes the hardware.

Metal tags on your shoes are called Armpieces. Some give for metal ground tags, beams. Keep these metal items, cigarette lighters, nails, etc. out of this



position. If they drop out and hit a steel disk or POP you could be a permanent drop-out!

Ask your air job buddy (is that OFF-ED on your airfield and is sure on his airframe side) to wait you're finished handling or working.

Then ground radar operator get some more report.

Keep a weather eye open. A storm building within 3 miles of your landing zone calls for the shutdown of landing operations.

Want to get all your ground rod/hooding shortages in one bag? Get a copy of THE 11-1000-204-20/1 (Apr 78) and THE 11-1100 (Jul 85) and read 'em-on-eat-'em like. You want to be around to ask Godwin's team about your work.



MR. MC HANG COMPARTMENT BOOM...
STRIP RIPPED?

THEY SPUNGE
AND PORAGE,
ABOUT THOSE
NICKEL STRIPS
IN THE HANG
COMPARTMENT.

Nylon strips on the hoiker's mass storage door track take a beating from constant use and mass weights. When strips are gone, mass rack slides no longer...allowing the metal glide assembly to bite.

Clowed up strips jam the mass rack's smooth, easy in-out ride... slow down working morning to cold molasses speed.

These strips are expensive — \$8.51 each — so on your PMO keep a sharp eye on 'em. One used, it's going soft, moral on the track gets the bar-toe, pronto! And don't forget the mass rack track inside the hoiker.



If you find a strip sagging like a nylon bow without a girth, that's your trouble in direct support. It'll sag that you get one fast, and you won't be held up helping those grooves in the hoiker.

If your Supply-Cas doesn't have the strips on hand, tell him they're found on rubber strip assembly, item 20, 4g lbs, TM 91-1520-220-10 P-1 (May 79 under PMN 1588-119-1179). If rubber is the manufacturer stretches your imagination, don't stop it. It'll show up as rub strip in the next TM article.

HON'S YOUR FORM?

WOMEN AREN'T
READY TO TURN
IN THEIR DOGS
UNTIL THEY KNOW
HOW TO FILL OUT THE
ON-BEARS
ANNUALLY
AND
COMPLETELY!



BEITY GOOD

The more someone goes up in leaving bits-off the floor,

It makes a heap of difference if the dog's serial number is missing, or if the sample came from an OPA's No. 3 magazine, and you didn't say so. Here're a few of the gents that have fouled up magazine records.

Subscription number left out



Beats out all samples for one mailed with a single issue OPA



An empty set of sample for period of the lot



Lacking sample—and, for, and



It won't be OPA—single finger—sent down the drain between the time the sample was taken and when it was mailed



The OPA for the national and 28 in



A blank form OPA returned with a sample bottle



WITH
ALL THESE
BOOKS ARE
PART OF
ADOGS' GENT
LITERATURE



1967 1967

When you take the next sample start with a copy of your dog's logbook and TB 15-0000-000-15 (log) TB. Use 'em 'til you get our DA Form 5050 and you'll see how basic your job is.

You can use a stamp, price, or signature on all our dog forms. Knowledge.

Block 10. Identical to what you did you take the sample from. 4432 10-02 9714 19 03 10 name. Writing in 100 or 101 and 10-03.

A. BIPAL ON BUSINESS? name, address?

Block 11. This is the total sampling time on the trail when you take the all sample. Start from the Block 10. Based all time in the nearest whole number form.

Block 12. Put in sampling time from each of the 100 samples you entered in Block 11 on 10. This is the part you take the all sample from. Based all time in the nearest whole number form. **NOTE:** If the part has no number, you have one of these blocks.

1. Use 0 for sample.
2. Write in "No number".
3. 10% for systematic.
4. Leave the space blank.

Block 13. Enter the time you take all things, but the one from Block 12.

Block 14. Enter the amount of all your last two good ones. Serial number are taken. Check for the daily record for last 24 hours. If you don't add any of, enter 0.

Now check in the remarks block for the time about some of the pages found in Block 10 or 11. This table will be a big help on the ANCHP lab classes.

Remarks Block. If you have no time and make any notes in this block regarding any notes on any line already entered. Use the "0" for "0".

Note: In any information that you feel would be helpful to the person who checks the all sample. Add the phone number for your maintenance office, or use the lab for name for program a sample.

Block 15. This is the total sampling time on the trail when you take the all sample. Start from the Block 10. Based all time in the nearest whole number form.

Block 16. This is the total sampling time on the trail when you take the all sample. Start from the Block 10. Based all time in the nearest whole number form.

Block 17. Double check your work's top table.

Block 18. This is the total sampling time on the trail when you take the all sample. Start from the Block 10. Based all time in the nearest whole number form.

Block 19. This is the total sampling time on the trail when you take the all sample. Start from the Block 10. Based all time in the nearest whole number form.

Block 20. Enter the number from the Block 14.

Block 21. This is the total sampling time on the trail when you take the all sample. Start from the Block 10. Based all time in the nearest whole number form.

Block 22. This is the total sampling time on the trail when you take the all sample. Start from the Block 10. Based all time in the nearest whole number form.

Block 23. This is the total sampling time on the trail when you take the all sample. Start from the Block 10. Based all time in the nearest whole number form.

Block 24. This is the total sampling time on the trail when you take the all sample. Start from the Block 10. Based all time in the nearest whole number form.

Block 25. This is the total sampling time on the trail when you take the all sample. Start from the Block 10. Based all time in the nearest whole number form.



NOT SAMPLED ANY MORE? I know! I know! I'll be in a minute! I'll be in a minute!



- DOY 004 0000 00 00**
- This have the all sample. Double up on right.
 - From 1000 in 1000 our fully and completely.
 - You have one from 1115 for each all sample.
 - It's addressed and in the bag.

Send your 97-A-F all sample to the lab assigned to you.



It's a volume of 100,000 of the best of American literature in one of the most beautiful covers ever. It's a volume of 100,000 of the best of American literature in one of the most beautiful covers ever. It's a volume of 100,000 of the best of American literature in one of the most beautiful covers ever.



POPS

POPS is a volume of 100,000 of the best of American literature in one of the most beautiful covers ever. It's a volume of 100,000 of the best of American literature in one of the most beautiful covers ever. It's a volume of 100,000 of the best of American literature in one of the most beautiful covers ever.

POPS is a volume of 100,000 of the best of American literature in one of the most beautiful covers ever. It's a volume of 100,000 of the best of American literature in one of the most beautiful covers ever. It's a volume of 100,000 of the best of American literature in one of the most beautiful covers ever.

POPS is a volume of 100,000 of the best of American literature in one of the most beautiful covers ever. It's a volume of 100,000 of the best of American literature in one of the most beautiful covers ever. It's a volume of 100,000 of the best of American literature in one of the most beautiful covers ever.



Be sure to notify the AD publications centers in St. Louis and Baltimore of your new address when your month comes. Fill out a letter, giving us your zip code, account number and both the old and new addresses of your wife. Also tell us the latest date you can receive jobs at your old address. That way, zip code will keep the jobs rolling to you.

1971 COMPTON'S CALENDAR

COMPTON'S
CALENDAR
FOR
1971



HIGH REFINER
GET BURN
750-00

JANUARY 31

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31									

FEBRUARY 28

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31									

COMPTON'S
CALENDAR
FOR
1971



**TM'S
A DO IT
YOURSELF
JOB**

MARCH 71

L	W	T	W	T	F	S
	1	2	3	4	5	6
	60	61	62	63	64	65
7	8	9	10	11	12	13
66	67	68	69	70	71	72
14	15	16	17	18	19	20
73	74	75	76	77	78	79
21	22	23	24	25	26	27
80	81	82	83	84	85	86
28	29	30	31			
87	88	89	90			

BE HONEST ON ESC
...IT'S FOR REAL

APRIL 71

S	M	T	W	T	F	S
				1	2	3
				91	92	93
4	5	6	7	8	9	10
94	95	96	97	98	99	100
11	12	13	14	15	16	17
101	102	103	104	105	106	107
18	19	20	21	22	23	24
108	109	110	111	112	113	114
25	26	27	28	29	30	
115	116	117	118	119	120	

**ORDER
TM'S
BUSTING
AND
CRACK-
ING
PUT
IN
ORDER**

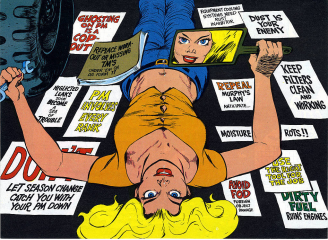


MAY 71						
1	2	3	4	5	6	7
						1
						231
2	3	4	5	6	7	8
232	233	234	235	236	237	238
9	10	11	12	13	14	15
239	240	241	242	243	244	245
16	17	18	19	20	21	22
246	247	248	249	250	251	252
23	24	25	26	27	28	29
253	254	255	256	257	258	259
30	31					
260	261					

JUNE 71						
1	2	3	4	5	6	7
	1	2	3	4	5	
	262	263	264	265	266	
6	7	8	9	10	11	12
267	268	269	270	271	272	273
13	14	15	16	17	18	19
274	275	276	277	278	279	280
20	21	22	23	24	25	26
281	282	283	284	285	286	287
27	28	29	30			
288	289	290	291			

DON'T MUSCLE RADIO KNOBS.





GHOSTING ON PM IS A COP-OUT

EQUIPMENT COOLING SYSTEMS NEED REGULAR

DUST IS YOUR ENEMY

REPEAL MURPHY'S LAW
WHEN YOU'RE IN A TIGHT SPOT



KEEP FILTERS CLEAN AND WORKING

AVOID LEAKS AND MESSAGE A LOT OF TROUBLE

REPEAL MURPHY'S LAW

PM STUCK EVERY BANK

MOISTURE

ROTTS !!

LET SEASON CHANGE CATCH YOU WITH YOUR PM DOWN

USE THE RIGHT TOOL FOR THE JOB

AVOID FOD
FOOD AND OIL DEBRIS

DIRTY FUEL RUINS ENGINES



JULY 71

S	M	T	W	T	F	S
				1	2	3
				182	183	184
4	5	6	7	8	9	10
185	186	187	188	189	190	191
11	12	13	14	15	16	17
192	193	194	195	196	197	198
18	19	20	21	22	23	24
199	200	201	202	203	204	205
25	26	27	28	29	30	31
206	207	208	209	210	211	212

AUGUST 71

S	M	T	W	T	F	S
1	2	3	4	5	6	7
213	214	215	216	217	218	219
8	9	10	11	12	13	14
220	221	222	223	224	225	226
15	16	17	18	19	20	21
227	228	229	230	231	232	233
22	23	24	25	26	27	28
234	235	236	237	238	239	240
29	30	31				
241	242	243				

OPERATING
DOCTORS
OF DREAMS
AT HEAR.
SWING
KIDS
SWINGING

SWING AND DO
YOUR **PM** THING

SEPTEMBER 71						
S	M	T	W	T	F	S
			1	2	3	4
			244	245	246	247
5	6	7	8	9	10	11
248	249	250	251	252	253	254
12	13	14	15	16	17	18
255	256	257	258	259	260	261
19	20	21	22	23	24	25
262	263	264	265	266	267	268
26	27	28	29	30		
269	270	271	272	273		

OCTOBER 71						
S	M	T	W	T	F	S
				1	2	
				274	275	
3	4	5	6	7	8	9
276	277	278	279	280	281	282
10	11	12	13	14	15	16
283	284	285	286	287	288	289
17	18	19	20	21	22	23
290	291	292	293	294	295	296
24	25	26	27	28	29	30
297	298	299	300	301	302	303
31						
304						



SEE US TODAY AT THE EXHIBIT

SEP 78 750-451
FOR
ENGINE COOLING
SYSTEM PM

COOL-
CLOGGED
BREAKERS
BLM STMS

COOL
COOL
COOL
COOL

ON
FORM

2408

TIME TO GET
READY FOR
SEASONAL
CHANGE O/P



PM IS BEAUTIFUL

NOVEMBER 71

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

DECEMBER 71

1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

SUPPLY TYPES YOU NEED SR 750-150

PM IS LIKE BREATHING

KEEP SUPPLIES PACKAGED FULL READY FOR USE

BEAUTIFUL PM IS MORE THAN JUST A POUCH



A SWITCH IN TIME



If you're a yachtie, piloting your motorboat, and you're following the good word . . . well, good.

If you haven't heard the good word before, well, then . . .

Our three memory cells to remind you how snapping off your aboard radio sets (or other electronic equipment) before you run the engine. Then you'll not be so likely to start the engine with the electronic items on.

This means you separately turn off any radio sets or related electronic equipment that happens to be on as you prepare to raise your anchor or headway.



You know . . . such as the YOB or LDF (radio-transmission), the FM receiver-transmitter, the YOB receiver (to hook the FM and the YOB with the same switch when they're linked together), and the transceiver, water-manic direction finder, or heading beam (not collimated).

By making sure of these switch-offs, you'll be protecting your equipment from power-supply surges.



RING IT IN RIGHT!



"Where's the other one? I can't find it!"

"It's under the desk!"

HERE'S A FEW TIPS TO HELP YOU MANAGE YOUR COMPUTER'S HEALTH AND YOUR REPAIR SHOP'S PROFITS.

If you get a hot monitor at the control board end of your **3270/4321** battery cable ... or if you get burnt monitor pins ... always use a lead wire ring to direct one end of the control pins to the connector ... remove the cable.

Some cables get away from the monitor base with lead wire control wires unless you install it around them. With these lead wires, whenever you replace the connector wires it guides the lead wire base. Which starts it. Which means you trouble.



No monitor pins at the upper end of the board is not a storage pin. Special tool if you check pins, pins or anything else in there without edge sharp enough to puncture the base of the cable, you get the board base.



For the 3270/4321 control panel position is not in your hands with it. If you have the control engaged, you get in most cases that it's hard to work.



All the keys to play' back with the 3270/4321 control. Otherwise, you can damage the base. Be 'on' only when you're in ... and have the keyboard wires on when you're working on. That'll be a good completion.



Your control board's **3270/4321** control wires are engaged enough to do their job well with a long time, but ... otherwise, when a two-wire cable on get 'on' down. Right person's all you need to be fixed.

Not only you control this cable at a time in 3270 position, but in case in 3270 you can maintain with right temp you bring the board off the cable.

WHEN YOU REPLACE A BULK OF WIRE, THE LEAD WIRE HOLDER, DON'T FORGET TO USE LEAD WIRE HOLDER. IN IT CASE, YOU CAN'T FIND AND REPLACE THE BOLT.



If you get a full indication in the "Tent Panic" panel (4 and 1M buttons), you a deep breath and a quick recovery situation before you pass.

There are two electrical control buttons with no line connected to it if the line is tied to the button you pushed. Then go to the TM (transformer) that is tied out when the problem is.

If there is line tied to the button you pushed, you the button to the ground . . . and the 1M light should go out.



Another "Tent Panic" situation. If you suddenly lose all voltage the board, always are you pushed the DC control off. Flip the control back on. You want to get your cells back, but you want to make sure you're safe.



NEVER PUSH THE EXTREME START BUTTON WITH THE RED SWITCH IS ON. OR YOU WILL DAMAGE THE SYSTEM!

THE MAN GOT OFF!

READ THE BOOK!



Even FM good pulls never are free when it comes to the inevitable dust when ceiling breaking. In fact, the guys with steady, even pressure will be out there a bit.



FORGETTING

Backlogs you may have for the board and the TFC-FI include:

TM 11-5805-475-12 (May 78) 5B-5682/17GT

TM 11-5805-403-15 (May 78) AN/TFC-FI 11

TM 11-6180-788-15 (Apr 67) 8B-451/70

TM 1-6120-275-11 (R6-69) Air Conditioner

CARE FOR CORDS

Sometimes, man, the horse is power-cord.

Whether you use 'em-on a TR-5/TFC catalog or on ANY GEC-100 cable set, it's smart to inspect 'em at regular intervals for preventive-maintenance possibilities.

Then you can use a damp cloth to knock out any beginning dirt-out, and follow up with a dry cloth to remove the moisture.

If these cords tend that mean on all equipment aren't checked, dirt-out can slip your equipment a case of the shuddering starts.

This spells downtime that could be avoided with PM checks of the power cord for such ailments as fungus and breaks.

MODULE SPRING SAVER



A flip of the switch can save a snap of the spring next time you're about to remove an AIG module from your RT-100 receiver-transmitter.

By setting the RC timing switch to "OFF" you allow the loading spring to clear the AIG module case when you remove the module—thereby preventing a snapped spring.

Before you replace the AIG, set the RC switch to "OFF", which clears the way for installation.

Warning: In case the module's snap is too weak before you turn the RC or MC timing switches, force the spring.



HELPFUL HARDWARE

Lacking some nuts and screws for the RT-100/RT-100C and RT-100A/RT-100C mounts in the 4M/7HC-12 radio series?

You don't lack case these miniature bolts with PMs. They're not in supply. What you do is fit the crucial nuts with common hardware to fit the job.

If you can't make it with the hardware available to you, then you'll need to get a hand from your supplier.

That way, you might be able to replace lost wingnuts, check locknut screws and the like without any hard lines.



These small-size hardware items originally came with the mount, as a matter of fact.

INSTALLATION CONSTERNATION



Dear Wolfman,

Why is my unit getting bad feeds and breaks in the top of the 4B-15 mast section installation on the 4C-20 antenna equipment? These feeds and breaks come off the section-CAUTION pins. Any ideas?

WPA B. A.

Dear Specialist R.A.,

The trouble is in the placement of the CAUTION plane drive holes. Go by 4B 11-614 (Jan 47), where it says to attach the plane to the base member of antenna base, tower, and other structures. Make sure the plane is visible from the ground.



Horizontally-aligned drive or screw holes near the top of an 4B-15 mast section can weaken the section and cause a bend or break when the 4C-20 antenna equipment is hoisted by the guy rope.

But with the right kind of installation, you'll get the benefits of the CAUTION reminder and your antenna components won't be weakened.

Wolfman

LOW LEVEL TT ERROR?



HOW'S COME THESE
TT MESSAGES LISTED ALL
READ LOW "BAD" CONTACT
AND/ OR TTG?



NO (dup) or
ITS JUST DIRT
CONTACTS!

You say you've got a TT-511/50C or TT-511/50C low level signaling device tied into your teleprinter set and your local copy off-line error rate is soaring!



TT-511/50C

Ughs. Your problem almost certainly is with dirt and/or wear of adjustment and contacts on your teleprinter.

It's a common problem (high error rate/dup) contacted when you do in the TT-102 and -514, because the line loop-up voltage and current levels aren't up there enough to help the read contacts with their self-cleaning function.

So here support check out the read contacts for you.

PAS-4 NIGHT SIGHT CHARGER



SEE YOUR F-480
BATTERY CHARGER

Been looking for a charger for your 6-volt 8B-625/1U battery?

You just found it.

Its name is Charger, Battery, PP-625/1U, FSN 6138-179-8155. And stick with that FSN, because it's for a modified charging rack that also goes out (unmodified) under another brand name.

The charger is guaranteed to insure you plenty of power for your AN/PAS-4 night vision sight.

There are certain cautions specified out

in the manual for the PP-625, TM 11-4138-205-11 (Jan 78) but underlines the one that the CN-15A/1U transformer must be used with the charger. The TM gives you the dope on its use, and the CN-15A is shipped with the charger.

The third line from the bottom on page D-5, TM 11-4138-205-11-5 (2nd Ed) (on the 8B-625), gives you your authority for requesting the PP-625. However, don't use the FSN listed on page D-5. It's no longer valid. Use FSN 6138-179-8115.

Q-4A SCANNER OIL CHECK



'Wouldja' believe that some crews are putting down their AN/MPQ-4A radar sets by using the wrong tube, or forgetting to check the tube level in the scanner gear motor?

The fact: Without the right tube, or the right amount, the motor fails.

So, remember, after each 1000-hour operation the oil is changed with tube's cooling oil, grade: FOM 5412-013-0008 (1 pint). Also, the level should be checked weekly. Bring it up to the bottom lip of the brass plug when necessary.

If you've gotta add a bit of oil between changes, you've got a defective seal. Get it replaced.

The story on scanner gear motor lubing is in CI or TM 11-1800-208-30.



Q-4 INTERFERENCE



Steering CRT heads with your AN/MPQ-4A radar set!

Next time your vehicle rj tube comes up blank, consider this before you call in your support:

Radio frequency interference (RFI) from nearby combat equipment may be wiping out your CRT picture.

Even RFI can wipe out any kind of target (although radar lines will show), and half of any strength can cover up weak targets.

When you find the RFI source (maybe in a nearby combat location), try to get the source operated on a different frequency . . . or moved . . . or move the Q-4A.

If that doesn't cure your troubles, call support.



HOW TO FIRE: M14A1E1

YOUR SPIT FIRE

LET'S TAKE A LOOK AT THE M14A1E1

IT'S A GREAT GUN THAT'S BEEN THE BEST OF BOTH WORLDS



YOU LSA A FIGHT?

Yep! They took the M14A1 carbine and made a new one, fixed it with an XM807 magazine and an M140 20-RND cartridge gas and named it the M14A1E1 — a gas thing — gas thing.

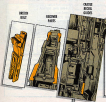
The M140 cartridge gas allows quarter-round magazine loading through tightly sealed valves, low-firing aircraft and personnel carriers.

It's a sweet-firing gas, but to get the best out of it you have to know how to work.

The biggest thing to remember about the M140 is this:

Give this gas plenty of helpings of LSA, and you take care of most of the trouble so they don't even happen.

Every time after cleaning your plenty of LSA on the barrel, bolt, receiver rails and magazine guides before you put the gas together again.



GAS-FIRE FEELS

The gas-fire feels are the first thing you'll notice when you fire your M140 because the life of your gas depends on it.



There are 3 kinds, 1.4-MM, 1.5-MM and 1.9-MM. Only the 1.4-MM kind are safe for normal use. (They will do the job also by the way figures stamped in the groove of the plug.)



If the plugs are the 1.5-MM size, **DO NOT FIRE THE WEAPON.** The 1.5-MM plug is obsolete because it lets the gas fly too fast—which causes broken parts. If you were issued 1.5-MM plugs, turn 'em in and get 1.4-MM plugs.

The 1.9-MM plugs are for Arctic use only. The large diameter holes in the 1.9-MM plug let so much gas pressure pass through to the unlatching piston that, in normal temperatures, the weapon would rack so fast it might break. In Arctic temperatures the extra push is needed because the weapon parts move more slowly in the cold and powder loses some of its punch because it won't burn completely.

You'll find a pair of 1.9-MM plugs in the spare parts roll but they're not spare parts in the usual sense. They're for use only in pairs and only in temperatures of 0° or below.

A 1.5-MM plug teamed up with a 1.4-MM plug would give you serious unlatching and other troubles.

After every firing mission, check the plug recess in the barrel to the gas-part plug—you move fairly as far as the gas-plug recess will allow.

These plugs are designed to move freely so the gas from your fire control can drive 'em back to make a hydro-pool seal with the gas transfer plugs. Unless the plugs can move, this seal won't be tight and there won't be enough gas pressure to drive the piston back as hard as they need to be driven. Also, make sure you drive the gas-plug after Counter holds after completing each mission.



GAS PART REBARREL—The recess for the gas-part plugs can be put in with its counter bulge facing either toward the barrel or toward the weapon. Either way will hold the gas-part plugs—but only the bulge-facing-toward-the-barrel position is correct. If the bulge faces the other way, it's hard (sometimes even impossible) to lock the barrel.

READ THE PAGES

HERE'S AN EXPLANATION OF WHAT ALL THESE MARKS AND SYMBOLS THAT COVER THE M16 MEAN.

I WILL UNZIPPOO-REDOO THIS.

① part made by
Kaiser Aluminum Company of
Germany.

② part made by
Kaiser Steel of California.

R.R. (on the handle) =
right hand load.
F.V. (on handle) =
left hand.

I and marks (on handle
like diamond and circle
load) = witness marks
before it's shipped perma-
nent to firing and adjust-
ing tests.

The FOP's on each major assembly of the M16 should give you an trouble free the other 2 sets of numbers might confuse you. The one across the manufacturer's mark (M) or (K) is the assembly serial number and the smaller assembly serial number is used as records where they ask for the serial number of the entire weapon.

THE OTHER MARKS



The other number on each assembly is the manufacturer's batch number, and you need pay it no mind. On some M16's the batch numbers of all the assemblies will be the same but there is no requirement that you shift assemblies from one weapon to another to make this happen.

The barrel, white, made on the barrel is used as a reference mark if the gun is mounted in a German Benz Car. When the gun is on the M1141E1, use only the narrow white mark to line up the barrel.



RIGHT! (LEFT!)

The M158 has more parts than most other weapons, but they fit together in a logical way. However, there's a couple of places you might get mixed up.



EXTENSIVE SPRING—You could put the extensor spring into the extensor receiver flat and fire instead of loaded (cranked) and fire, but you couldn't maintain your extensor to the left.

CRANKED SPRING—On both the left and right extensor slides you could:

Put the plug in first and then the spring. (The spring would bend and you'd have trouble.)



NEAR BUFFER GROUP—The near buffer group has to be put together with both near buffer blocks ground-side-up. The near nut must be positioned so that with the pin through it the head of the near does not fall below the level of the near buffer blocks. (NOTE: The nut and the near buffer group are upside down for this procedure.)



LOCK ASSEMBLY—Both the lock bolt and the lock nut must be assembled with their chamfered surfaces facing down. The perforated (check) face of these parts must line up when they're assembled. If the chamfer surface of the lock bolt is facing in the wrong direction, it won't lock when the lock body is put into the nut.



LOCKING BLOCK—With the nutbar resting in the assembly position (with down), the locking block can be slipped into the nutbar with the cut edge facing either up or down. However, there's only one correct way to do it. Unless the cut is facing UP the bolt assembly won't lock in the fire (hammer) position.

Even when you have the locking block in the nutbar with the cut (chamfered) edge facing up, the block has to be centered so the remaining plate teeth won't fit.



(Note: When the gun is over the locking block will be a tight fit and need not be centered. However, after a few thousand rounds it may become loose, but this is OK and nothing to worry about.)

THING TO CHECK



SMALL ADAPTER—Your small adapter is filled with hydraulic oil but it should never make you aware of this fact. Check after firing and if it's leaking oil return it to support maintenance for repair.



The small adapter hook tangs must be positioned in the grooves in the forward slide while you mount the small adapter to the credential secure it with the 2 hex pins.



SMALL ADAPTER PIN—When you take the gun out of the crate, make sure you put the 2 small adapter pins into the holes inside the crate. A note that pins have been getting lost because they were left on the small adapter after the gun was disconnected.



SPRING AND SPRING—The 2 spring assemblies won't work right unless they're positioned in the holes of the spring with their smooth ends facing out and their steel ends sticking through the holes provided. The spring ball end spring must be in the outer hole.



BEARD WARE CARE — Keep the plug part of the beard wear gauge wrapped in a soft cloth when not in use. If it gets bearded from bumping around with the other tools it won't be accurate.



Your beard wear gauge reads in per cent and shows how much life is left in the beard. For example, a reading of 70 means 70 per cent of the beard life remains.

TOOTH BRUSHES — The 2 dips on the back depressor that you use to install the new liner spring loading can go broken off if used too roughly. If this happens, it's OK, to file new notches on the back depressor.



SHARP SHARPENING TOOL — The threads on the end of the tool are not according to metric system measurements which means you might have some trouble getting new threads cut, so protect them from getting marked.



CHANGE SIZE — Make a fast change on page 112 of Ch 8 to TR8-1129-114-01. Where it says in the left-hand margin, "Step 27" make it read "Step 17A" and show that you do it just before Step 18 instead of where it is now.



TRAP FORD — When you close the receiver make sure the gas escape holes are open. Use a needlefile as a cheap road wig. Raising the weapon with the gas escape holes closed could cause breech bolt damage.

TRAP
TRAP



TRAP BIRD — The full moon is "recoiling bolt aligner safety lock lever." It keeps the bolt aligner cover back from rotating back. The safety lock lever can get broken if you let the safety fall down over it, so make sure the lever is in the correct position (parallel) with the full before you let the full fall.

TRAP
TRAP



TRAP BIRD — The spring in the anti-machine lubrication handle will break real easy if you pull the handle straight up, so keep your pull horizontal.

TRAP BIRD



DISSECTION — The lubricator holds enough LSA to take 1,000 rounds but you'll lose it all in a few seconds if a round stops directly under the other bearings. So, when loading the weapon make sure you don't have a round under the other bearings.



NO BIRD UNDER THE
CHICK BEARINGS.
NO BIRD UNDER
THE CHICK BEARINGS.
IT TOLD YA.

TRAP BIRD

REPLACEMENT LAMPS—For your control box lights, under lamp, instrument, FSM 6249-125-1804. These are the same lamps used on your panel lights.



DIY HOSE CHANGE—The replacement clear hose for the direction cylinder is not the same as the original equipment clear hose. The new one has the same stock number, FSM 1805-131-1984, but you also need a clamp with it, FSM 4750-000-4705.

Clamp



ADD ITEMS—Add these 3 parts to your Basic Tools Items List on page B-18 of Ch 8 or TM 9-3120-110-01:

Item

FSM 1805-101-171



Scissors-Side

FSM 1805-101-187



NO DRY CLEANING

Some things you just don't dry-clean. Like, Filanoxan, a paper towel. Other things you don't dry clean are: 1. The road adapter assembly; 2. Base buffer assembly; 3. Fueler assembly.



DOES MATTER



OLD STYLE



NEW



REPLACEMENT OF THESE PARTS IS FOR YOU

You wipe these parts off with a lightly oiled rag but you never, never, throw them in the trash can. This would waste one the bits inside the manifolds and you couldn't put it back because these parts are disassembled only by DA.



HIT (ON AIR)

LEARN AND HANDLE—All types of HIT use same set tools only and design are but handle them gently and keep them away from extreme heat as much as possible. When handling, be careful not to hit people or fans. Don't use rounds that are bent, dented or coated.

DO NOT HIT
THE HEAD
OR FEET



CHECK FOR
DAMAGE
AND RUST

EVERY PRECISION—The HIT uses has so much precision they built a self-destruction device into it so it blows up if it gets 'way down range without hitting anything solid. This makes it more costly than some others, so treat it with the gentle respect it deserves.



DOES MATTER

HIT ON THE GROUND—Be careful about over-tightening gas ports and gas piston plugs. They both tend to tighten up, and too much later would only make this worse. They do need some lubrication, to keep the plugs as close as possible, and be snug when you apply it. . . just a little that will do it!

FOR THE
RECORDING!



CLIP GUIDE—The clip guide is supposed to keep the rear guide tube from becoming unsewered and vibrating out, but it won't work right unless the straight end of the driving spring clip guide is anchored to the tube in the bottom of the rear buffer assembly. In-o-va, if the straight end of the clip guide has been broken off, get a new one, P/N 1007-024-7702.



RAMMER—The CR41 rammer won't jig you for a loose distributor — (usual movement) — because that is the way it was designed.



LEAK INFO—The latest (May 89) edition of LC 9-2120-224-12 has a lot of good info on leaking the M100 as well as other parts of your Opt. Fle.



NOT SUPPLIED PARTS:

LONG BARREL—The barrel on your M100 is 75 inches long to the end of the flash hider and that's a lot of barrel. Take things slow and easy when you correct an oil you get used to the elevation you need to avoid hitting the barrel on the open from those on parts of your own vehicle. No-accidents is the universal thumb rule when screwing in the barrel, line up the dots white marks on barrel and receiver before you lower the barrel.



CRACK PARTS—Fig. 264, page 268, 100 of Ch. 5 (Jat 65) to your T80 9-2330-114-21P (Doc 44) shows a handle, Item 66 (P554 1009-250-1588), and a bolt-clip lock, Item 29, P5M 1009-420-7005. The first production studies have shown parts which are not yet needed for requisitioning. You will get them in a product improvement kit which should be ready soon.



WARNING LABEL—The label will be available later, but you can do what it says even before you get it posted in place.

WARNING:

DO NOT OPERATE WITH GUARD UP IN THE POSITION FOR WARNING ONLY WITH GUARD DOWN IN THE POSITION FOR NORMAL WORK IN (MAG) OR (MAG) FORMS USE

POWER PACE NEWS—The LD says to change the hydraulic filter, P5M 4508-342-2008, on your K&M7 power pack either every 75 hours, 75 miles of vehicle operation or quarterly, whichever occurs first, but it doesn't tell you how to do it. Here's how —

HERE'S A LITTLE OL' 1-2-3-4 FOR FILTER CHANGING —

First turn off the engine on the vehicle.



Then get out all of the hydraulic pressure by lowering slowly right a full yard the engine will no longer start.



Now loosen the drain plug under the hydraulic filter and catch the fluid in a can. Insert the 2 standard barbed screens on the filter top with a barbed/wirehead from the filter from the filter housing.



To a mechanic to get the blue completely out. Replace with a new filter.



RELEASE BRAKE PUMP—Remember, the power control handles have to be in position for movement before you start working on the manual pump handle, and you have to keep 'em in the active position all the time you're pumping. Otherwise, you build up pressure in the hydraulic system without giving it any place to go, that could damage the pump, the check valve inside the pump body, or break the pump handle.



HYDRAULIC PRESSURE—Leaving your vehicle unattended with the hydraulic pressure built up in it is like leaving a gun cocked and ready to fire — dangerous! So take the pressure off before working on the gun or capsule or before leaving the vehicle without anybody in it. It just takes a few seconds and it could save somebody from getting clubbed by a gun barrel accidentally just left cocked.

You take the pressure out of the hydraulic system before putting the cylinder into stored lock. That way you make it impossible for somebody to get hit by the barrel which can lock out the release the stored lock pin is pulled.



To get the pressure out of the hydraulic system, turn the master valve OFF.



We remove hydraulic brake handle in the following position.



Then you set the pressure to elevated before we remove left or right slowly until the cross-arm stops. (The reason for the slowly is if you do it too fast hydraulic fluid might squirt out the breather cap on the rear axle.)



Once you have all the pressure out of the system, put the capsula into travel lock by using the manual pump. For safety, put the handle handle back into the PARKED position.



MANUAL PUMP HANDLE



CRUISE IN 10 METERS

SPIN TENSION ADJUSTMENT — There has been a change in the way you adjust the traverse mechanism gear tension with the spin pinion.

Fig. 185-4 of Ch. 4 (Jan 89) in your TM 9-2128-114-20 (Jan 88) is still good, but the preliminary step should read, "Remove 2 screws."



Change the adjustment procedure to read "Tighten nut (1) until washers (2) are compressed to 1 inch (1 1/8) inch between washers (1) and (3).



After you make this adjustment traverse the capsula slowly 300° in manual mode. If the capsula operates smoothly without binding it shows the tension is not too tight.



THE A&S

BARREL PAUSE—You can break your charger guard if you try to fire the weapon with the guard in the extended position. Instead, with the gun secured in the cradle you can't look and see if the guard is extended or retracted. So wait until the charger warning light goes out before firing. This tells you the guard is in the retracted (out-of-the-way) position and it's safe to fire.



PHOTO COURTESY



COOLING CHANNEL—Your KIMB? magazine is rugged for heavy use, but cleaning the inside of the magazine with steam or high-pressure hose can melt lubricants and stressed components.



ARMS CARE—You normally carry your rifle rounds of 20-AMM ammo with you in the vehicle, and you should clean and lube the weapon after firing that many rounds. If you're in a training situation, you take time out to clean and lube the gun every 500 rounds even if you're going to continue firing.

SAFETY-CHARGE SWITCH—The adjustable safety activator in the handle, right, end of the trails must reach the fixed contact point when the safety is in the FIRE position. Unless this is done the weapon can not be charged. To keep these parts functioning adjust the contacts as necessary instead of loosening the screws. You do this by loosening the screws that hold the submounts, sliding it until it makes good contact with the contact and then screwing it down tight in that position.



SAFETY

WEAPON PRESSURE—The accumulators always pressure should be 1300 to 140 PSI. Your mechanic will check it and, if necessary, charge in the way Ch 4 (page 116.7) of TM 9-1109-114-20 (Jan 64) says.

ARMY TRIP MIN—When you load the mines load box be careful to lay the mines in even rows, completing each row before starting on the next. If you make the rows so some mines are in a higher row than the rest they are directly behind you, the links will get kicked and you can have a stoppage.



HEY, BOSS, HAVE YOU GOT INSURANCE?



YEAH, THE INSURANCE IS! WHY ARE YOU ASKING?



CLEANING ROD



CLEANING ROD—Attach the 4 sections of your cleaning rod to the section with the white ring is closest to the cleaning rod handle. If you do it that way you can tell when the far end of your cleaning rod is all the way through the barrel because the white ring will be even with the base of the flashhole.

EXTRACTOR BEARING PIN—This pin P/N 3115-211-9410 is tricky because you can't put it back the same way you got it out. To get it out you tap a brass hammer on a drift pin. To put it back you have to first drive in the drift pin after which you tap in the bearing pin until it engages and pushes out the drift pin. The reason you do it this way is that the holes in the extractor and in the bench block don't line up right at first. The tapered part of the drift pin goes through all the holes at once and as the drift pin is hammered in it lines up the holes so when it is gradually replaced by the bearing pin the holes in the extractor and bench block are lined up.



BEARING ALIGNMENT

Adjusting the firing mechanism and retards in the toughest part of M109 maintenance. It takes 2 exercises, one in the capsule (call him Capula) and one on the ground (call him Ground). The firing mechanism must be adjusted first and then the retards.



Before the retards start Capula elevates the gun to 45° and moves it to the left side of the vehicle. Ground is waiting there with tools. Here's how the turret goes . . .



FROM MACHINA ADVENTURE!

Capito — After making sure the gear is connected to the gear.



Ernest — In order to get out on the line from adjusting gear, with a 1/2 in. screw and this, with a 1/2 in. hex head screw from the line from adjusting gear of the way into the main bracket.



Capito — Bring the screw and bring down to the gear and hold it there with a line, screw, screw.



Ernest — As Capito continues holding back on the screw and bring down, Ernest uses the screw to hold up the adjusting gear. In order to get out on the line from adjusting gear, with a 1/2 in. screw and this, with a 1/2 in. hex head screw from the line from adjusting gear of the way into the main bracket.



Capito — Let up of the screw and bring down.

That's all there is to adjusting the gear mechanism.

FROM MACHINA ADVENTURE!

Ernest — After a gear and bearing to get out the straight gear that line together the wheel and bring down gear. He then brings the 1/2 in. screw and the screw and bring down.



Capito — After a gear and bearing to get out the straight gear that line together the wheel and bring down gear. He then brings the 1/2 in. screw and the screw and bring down.



Ground— With the end of a screw bar, push the aluminum plunger and linkage all the way in and back, a few inches by using through the hole in the living frame yoke where the gas used to be. Be sure the gas light through half of the hole and the gas itself should be blocked by the cold water end of the infrared link.

If the link is blocking more than half of the hole then be sure to make the link longer until you get the right picture through the yoke from hole of ball-cold part of the link. And ball-temperature through the long end in the link. Be sure this by turning the link counter-clockwise while pressing down firmly on the infrared plunger with the end of the $\frac{1}{2}$ screw.

If, on further load, the right picture through the yoke from hole is less than half-cold part of the link, the link is not new for and this is to make shorter. This is done by turning the link clockwise while firmly pressing down on the aluminum plunger with the end of the $\frac{1}{2}$ screw.



Engine— Get up off the living frame.



Ground— Slide a pencil through the hole in the yoke and the air intake hole. (This is an outside then putting the straight gas back and then maybe having to take it out again.)



Circle— Run the link thing again, pulling the new and living frame back and testing it there.

WELL, GUYS! I'VE GOTTEN THE PICTURE RIGHT OVER A POINT-TO-POINT YOU GUYS! BUTTER!

WELL, GUYS! I'VE GOTTEN THE PICTURE RIGHT OVER A POINT-TO-POINT YOU GUYS! BUTTER!

Ground — Use the screwdriver to push the solenoid plunger and lift all the way back. Looking for the movement inside the solenoid body to click. This should happen just as the front end of the shot in the linkage reaches the punch in the yoke hole. If the solenoid clicks while there's still a space between the punch and the front end of the link shot, the link is too long and must be turned clockwise to shorten it.

If the solenoid fails to click when the front end of the link shot reaches the punch in the yoke hole, the link is too short and must be let out more by being turned counterclockwise.



(NOTE): To change the adjustment of the link, making it either longer or shorter, Ground has to pull out the punch and move the link as needed while firmly pressing down on the solenoid plunger with the end of the 7/16 wrench.

Ground — After the link length is adjusted to the manufacturer's limits of the proper time, Ground takes out the punch, puts back the straight pin and replaces the solenoid plunger just in.



Capita — Changes voltage, switches the mode electric to light then pulling the gun electrically. If the left releases the adjustment is 90.



NUTTY LITTLE NUT NOTES

There's nothing you need less than an **ARFC** nut when you're mitching out a few rounds with your M19.

The nutty little nut that holds the retaining bush on the recoil spring vibrates like a Go-Go Girl when you fire your M19 in a fast burst.

Makes sure it stays on the cap spring by landing the lip of washer **PN**



5119-544-1042 over any of the 8 Bar sides of the nut, **PN** 5119-544-4595.

RAM DEPTH GAGE STORY

If you're got an M307 (P
774-MM) gun, you should also
have the new ram depth gage.

It's listed on page 4-1 of Ch
1 (44b-70) or TM 9-2300-216-10
as gage, ram depth, FM 800-104,
800-107, (P/N 1344289) and is now
ready for regulation.



You need to use this gage every time
you load to make sure the projectile has
been rammed far enough into the car-
tridge. Otherwise, the weapon's firing
range could be off.

After you ram the projectile, put the
ram depth gage into the bore. The
Tread of the gage fits across the casing

break face of the breech ring.

When the Tread is positioned
properly the seating distance of
the projectile is at least 3/16 of
an inch, which is what it has to be
before you can fire the projectile
right. (This distance is measured
from the rear face of the gun breech
ring to the base of the projectile in the
tube.)

After the projectile is seated, it's not
a good idea to try to drive it forward
with power rammer action as this can
bend up your loader-rammer.

If the seating distance is less than
3/16 of an inch, remove the projectile the
way it says in para (a) through (d) on
page 2-46.1 of Ch 1 (44b-70) or TM 9-
2300-216-10 (CA) 50. Follow the pro-
cedures on malfunctions in para 4-12d
on pages 4-14 through 4-20 of the
-10 TM.



NEW SPRING RATE...

FOR YOUR 290M TACH



If the tachometer on your 290M sensor will go over 2100-RPM under load, it's way overdue for a big change—and so's your generator.

The sensor warning should (RPM 7000-814-4118) should be at 1100-RPM (plus or minus 5% is allowed on normal road). And the generator needs a new Etc. RM 7000, with chain and spring, code (10414). Get the word on your support, post-hoc.



What's going on is, a replacement generator spring, RPM 1-1114 has to go into the box, color code red and brown. With this new kit installed the tach is not hands-checkable. An on-exact operating way is the only way to check the RPM. The maximum operating RPM under load is now 21.5% it used to be 25%.

SHIFT GEARS DOWN



Maybe your favorite prospect (didn't sell you, but 'tain't always your engine that makes your DTE's radiator over-heat.

Could be your torque converter.

Rotating the torque in a gear so high that your engine lugs and lathers your heavy loads on your torque converter . . . and it breaks up. The hotter it gets, the more it strokes . . . and the more it lugs.



HEP CONVERTER HELPS IN NORMAL RANGE

That's normal. Torque converters are cooled thru the same cooling system that cools the engine, so that gives your radiator a heavy load, that's double

load, then just plain too much . . . and it lathers.

The cure? Go to a lower gear range, especially in very hot weather. When the converter is lugs, run its stall speed



a terrific amount of heat is generated. If you have that engine pulling and straining, and the one extra temp scale starts chattering—change gears if



your shifting won't save you if your crankshaft and transmission guards aren't free of mud and clots. So do keep 'em clean, do downshift when needed—and your overhead problems will go down, too.

WATER PURIFICATION HOSE GASKETS



Dear Mr. West,

I need EPVs for the gaskets that go with the hoses on our Water Purification Equipment Set, P/N 44-385-0700. Can you help?

W. A. S. S.

Dear Specialist A. E. S.,

The gasket for the 1-1/2-in. hose is stocked under P/N 1150-202-4490, and the 2-in. gasket under P/N 1150-202-4495.

The gaskets aren't in your DC 443-97-CL-400 (Jul. 76), which covers your 1150-202 stock associated water purifi-

cation equipment set, but they'll eventually be included. You can quote 28 100-90 (Jul. 69), Expedient Items, at your authority for ordering them.



W. A. S. S.

UNIT OF OR... HOLD IF NEEDED

Dear Mr. West,

On everything but aircraft, DA 2476, para 2-46(1)(c) says to destroy DA Form 2404 used for an EIC rating after the result is recorded on DA 2474.

That leaves us with no details on why ratings are JETTER or RED. Why not hold the DA 2404 EIC rating for all equipment?

W. A. S. S.

Dear Sergeant S. D. S.,

Why not indeed?

DA has recognized a possible need for this rating form at unit level. DA Msg 130050Z Aug 76 gives the unit CO the option to retain DA 2404 EIC ratings all the way EIC inspection.

So check with your CO or maintenance office for your maintenance SOP before you destroy those DA 2404's used for EIC ratings.



W. A. S. S.

TIPSY DUMPER



Dear Mr. Editor,

Some of our Model M244 rough-terrain forklifts are exhibiting the tipping behavior. When the operator applies the brake it acts as if spinning fast or almost dumps the load sometimes it does.

Is there any way to make the hydraulic brake system work more smoothly?

D. L. L. L.

Dear Specialist J. B. S.,

Here is:

Excess braking or the slightest wobble of the brake pedal is caused by excessive brake line pressure. Normal brake line pressure is 215 to 275 PSI. Checking and setting the line pressure at the brake valve is spelled out in TM 10-10940-241-55, to take your braking behavior to support and have them check out and adjust that line pressure.

John S. Smith

CRANE OUTRIGGER WARNING

Something missing from Models 2360 and 2365 Rough Terrain Cranes is a warning that should've been on the outrigger bracket in block letters 1-in high, reading:

WARNING
Extend Outrigger and Use
Full Rated Lifting Capacity

Authority to make Minor Alterations, AR 790-55. You'll find the 1-in stencil in your customer rep kit.



MILITARY STANDARD ENGINE POINTS

Dear Mail Man,
Please distribute and the profits of
each number for charitable causes
on the 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 85, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110, 111, 112, 113, 114, 115, 116, 117, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 135, 136, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 159, 160, 161, 162, 163, 164, 165, 166, 167, 168, 169, 170, 171, 172, 173, 174, 175, 176, 177, 178, 179, 180, 181, 182, 183, 184, 185, 186, 187, 188, 189, 190, 191, 192, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 218, 219, 220, 221, 222, 223, 224, 225, 226, 227, 228, 229, 230, 231, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 246, 247, 248, 249, 250, 251, 252, 253, 254, 255, 256, 257, 258, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 272, 273, 274, 275, 276, 277, 278, 279, 280, 281, 282, 283, 284, 285, 286, 287, 288, 289, 290, 291, 292, 293, 294, 295, 296, 297, 298, 299, 300, 301, 302, 303, 304, 305, 306, 307, 308, 309, 310, 311, 312, 313, 314, 315, 316, 317, 318, 319, 320, 321, 322, 323, 324, 325, 326, 327, 328, 329, 330, 331, 332, 333, 334, 335, 336, 337, 338, 339, 340, 341, 342, 343, 344, 345, 346, 347, 348, 349, 350, 351, 352, 353, 354, 355, 356, 357, 358, 359, 360, 361, 362, 363, 364, 365, 366, 367, 368, 369, 370, 371, 372, 373, 374, 375, 376, 377, 378, 379, 380, 381, 382, 383, 384, 385, 386, 387, 388, 389, 390, 391, 392, 393, 394, 395, 396, 397, 398, 399, 400, 401, 402, 403, 404, 405, 406, 407, 408, 409, 410, 411, 412, 413, 414, 415, 416, 417, 418, 419, 420, 421, 422, 423, 424, 425, 426, 427, 428, 429, 430, 431, 432, 433, 434, 435, 436, 437, 438, 439, 440, 441, 442, 443, 444, 445, 446, 447, 448, 449, 450, 451, 452, 453, 454, 455, 456, 457, 458, 459, 460, 461, 462, 463, 464, 465, 466, 467, 468, 469, 470, 471, 472, 473, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 485, 486, 487, 488, 489, 490, 491, 492, 493, 494, 495, 496, 497, 498, 499, 500, 501, 502, 503, 504, 505, 506, 507, 508, 509, 510, 511, 512, 513, 514, 515, 516, 517, 518, 519, 520, 521, 522, 523, 524, 525, 526, 527, 528, 529, 530, 531, 532, 533, 534, 535, 536, 537, 538, 539, 540, 541, 542, 543, 544, 545, 546, 547, 548, 549, 550, 551, 552, 553, 554, 555, 556, 557, 558, 559, 560, 561, 562, 563, 564, 565, 566, 567, 568, 569, 570, 571, 572, 573, 574, 575, 576, 577, 578, 579, 580, 581, 582, 583, 584, 585, 586, 587, 588, 589, 590, 591, 592, 593, 594, 595, 596, 597, 598, 599, 600, 601, 602, 603, 604, 605, 606, 607, 608, 609, 610, 611, 612, 613, 614, 615, 616, 617, 618, 619, 620, 621, 622, 623, 624, 625, 626, 627, 628, 629, 630, 631, 632, 633, 634, 635, 636, 637, 638, 639, 640, 641, 642, 643, 644, 645, 646, 647, 648, 649, 650, 651, 652, 653, 654, 655, 656, 657, 658, 659, 660, 661, 662, 663, 664, 665, 666, 667, 668, 669, 670, 671, 672, 673, 674, 675, 676, 677, 678, 679, 680, 681, 682, 683, 684, 685, 686, 687, 688, 689, 690, 691, 692, 693, 694, 695, 696, 697, 698, 699, 700, 701, 702, 703, 704, 705, 706, 707, 708, 709, 710, 711, 712, 713, 714, 715, 716, 717, 718, 719, 720, 721, 722, 723, 724, 725, 726, 727, 728, 729, 730, 731, 732, 733, 734, 735, 736, 737, 738, 739, 740, 741, 742, 743, 744, 745, 746, 747, 748, 749, 750, 751, 752, 753, 754, 755, 756, 757, 758, 759, 760, 761, 762, 763, 764, 765, 766, 767, 768, 769, 770, 771, 772, 773, 774, 775, 776, 777, 778, 779, 780, 781, 782, 783, 784, 785, 786, 787, 788, 789, 790, 791, 792, 793, 794, 795, 796, 797, 798, 799, 800, 801, 802, 803, 804, 805, 806, 807, 808, 809, 810, 811, 812, 813, 814, 815, 816, 817, 818, 819, 820, 821, 822, 823, 824, 825, 826, 827, 828, 829, 830, 831, 832, 833, 834, 835, 836, 837, 838, 839, 840, 841, 842, 843, 844, 845, 846, 847, 848, 849, 850, 851, 852, 853, 854, 855, 856, 857, 858, 859, 860, 861, 862, 863, 864, 865, 866, 867, 868, 869, 870, 871, 872, 873, 874, 875, 876, 877, 878, 879, 880, 881, 882, 883, 884, 885, 886, 887, 888, 889, 890, 891, 892, 893, 894, 895, 896, 897, 898, 899, 900, 901, 902, 903, 904, 905, 906, 907, 908, 909, 910, 911, 912, 913, 914, 915, 916, 917, 918, 919, 920, 921, 922, 923, 924, 925, 926, 927, 928, 929, 930, 931, 932, 933, 934, 935, 936, 937, 938, 939, 940, 941, 942, 943, 944, 945, 946, 947, 948, 949, 950, 951, 952, 953, 954, 955, 956, 957, 958, 959, 960, 961, 962, 963, 964, 965, 966, 967, 968, 969, 970, 971, 972, 973, 974, 975, 976, 977, 978, 979, 980, 981, 982, 983, 984, 985, 986, 987, 988, 989, 990, 991, 992, 993, 994, 995, 996, 997, 998, 999, 1000.

I'VE TRIED
A DIFFERENT
P.M.O.



Dear Specialist H. F. M.,

Here's how the ignition repair kits line up . . .

On **1957** cars, 2400-1 and 2400-11 model engines use FSM 2000-170-2004.

2400-11 engines use FSM 2000-171-4841.

On **1958** cars, Model 4400-1 engines use FSM 2000-171-2004.

4400-11 engines use FSM 2000-171-4841.

On **1959** cars, only Buick-Oldsmobile engines are repairable. Both the 2400-11 and 2400-111 use kit, FSM 2000-170-2004. Oldsmobile engines have to be replaced entirely.

Haynes

BABY, I NEED A NAME!

Yes, Mom, I need a name. I'm looking for the name you want to call me. Write my name below and mail to: PS Magazine, Fort Knox, Ky. 40325.

NAME (in all caps) _____

YOUR NAME _____

ADDRESS _____

Please will receive a large pin-up of me in color!





**Conover's
My Mini's**

**COULD
YOU BUY
YOURSELF
FOR A
WHITE?**

Engines Overhaul

Keep your power settings in the green. Hauling loads on the — give your stacks in the cylinder head!

Seminole (248) drives, when you let the other will overheat the O-550 engines.

New All 733-25

All 733-25 (May 76), Supply Procedures for FOM and TCM Units or Activities, gives you the latest on property book and P.L. SOP. It replaces All 733-25 (Oct 65), with its changes, and all 733-5 (Nov 58). It also covers keeping track of general purpose vehicles in relay operations, and reproduces All 733-21 (Nov 54).

Small Area Gage Testing

All 733-240-2 (Jul 76) tells it like it is. Order this guide from your friendly AG Publications Center in St. Louis and learn the fascinating story of how to make your own small area gages are accurate. Included are the plans to send the gages — (get out the one sheet to you) — and a list of the gages themselves.

Small Area Gages

Don't flip over that picture of the All 733-25 on page 17 in 1976 issue 216. All you officers know that you show the All 733-25 from the chamber and.

Year 3 in 1 All

The new All 744-1 (Aug 76) not only covers color and marking of equipment, but it includes preparation of equipment for shipment. It reproduces three All's and all of their changes: 744-15 (Nov 65), 744-17 (Dec 64), 744-20 (Jan 65), 744-21 (Mar 65) and 744-3 (Apr 65).

Supply Aid

New visual training aids for experienced supply are available at your individual support center. Ask for packet TR-11-1 (revised) that goes with SA Form 282-21-1, Organizational Supply. Values reproduction can be done in a by sponsor projector or copied to make slides. (Get your \$5) there's a packet for them, too — Revised TR-11-2.)

Right LSA Combustors

The 2000 and 4000 combustion for lubricating oil, purified, automatic separator (L4) are pretty tough and there's no need worrying them away when they're empty. Our test verified from the gallon size, P24 1155-755-4000.

Would You Stake Your Life ^{100%} on
the Condition of Your Equipment?



DON'T KICK EQUIPMENT WHEN IT'S DOWN

When equipment goes for repair....treat it gently! Pack it right...include log books or needed forms... sanitize it and keep components with it.

