

ISSUE 183

PS
★

1967 Series

THE
PREVENTIVE
MAINTENANCE
MONTHLY



IT'S THE
IDEAL
I WANT TO
CONTROL AN
OTHER PROGRAM
IN TEST
MAINTENANCE.



INDUSTRIAL SERVICE
CORPORATION
1967-1968

EQUIPMENT

THAT'S

READY!



More and more commanders, ranging from platoon level all the way to the top of the Army, are pointing the line to our real test: these days!

Make Equipment Ready For Combat

Lots of things are happening to keep equipment ready.

Even clubs are being formed to encourage PM. A recent effort in the Far East got a CLTREF PM Club going. What CLTREF (pronounced Clutref) stands for these words:

CLEAN 
LUBRICATE 
TIGHTEN 
OPERATIONALLY CHECK
REPORT 
FOLLOW-UP!!

The club's purpose is "to reduce maintenance problems by creating an interest in, a knowledge of, and effective management of preventive maintenance programs." It even has its own maintenance report job.

The whole idea is to have fighting equipment that will be ready to fight any time and for as long as it's needed.

Now, how about you? Is your equipment ready? PM every day the CLTREF way can make the difference.

For a closer look on the CLTREF PM Club, write to: PMO (PM) West of PM Magazine.

PS

THE MAGAZINE'S EDITORIAL BOARD
 VOLUNTARILY DONATED THEIR TIME
 IN 1988 (1988)

AN INDUSTRY 3/84
 PAGES 1/8



REPAIRS 1/84
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COMMUNICATIONS 11/84
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ARMED SERVICES 1/84
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GENERAL & SUPPORT
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FOR A LIST OF NAMES OF THE PEOPLE
 WHOSE NAMES APPEAR IN THIS
 DIRECTORY, IN ADDITION TO THE
 NAMES LISTED IN THIS ISSUE

Get Help Now!
 PM Magazine
 Mail Order Dept.
 1988



When this compact of the chopper enters your world, you've got us for a new experience. This gear was designed for performance and easy maintenance.

Insights—there's no ground linkage to hubs, no control cables to check tension or need periodically no hydraulic system to service. With a Daily, 100-hour maintenance and a 300-hour Periodic inspection you can see a crew chief's got it made in the cockpit.

There is no take short but you do have a service chart. Fill 'er up with JPI fuel, MIL-L-7808 oil for the en-

gine, MIL-L-15559 for the main transmission and tail rotor transmission—she's ready for action. The only hydraulic oil used, MIL-H-15555, is for the one-way full-control landing skids.

Course this lightweight (1150-lb) is also cleaned and made plenty of useful "hoist" can, fuel pipes and mechanics.

For the ground handling wheels all you need is ordinary tools—no hydraulic hoist. Lower the tail boom, the

the "in" and "off" operation. Be sure you use a steady, clear motion on the gear lever . . . prevent the stop lock from going loose!

The key to be careful slowly. Avoid sudden starts, stops and sharp turns during towing . . . could mean 'er bust!



Push the bird on level ground. Its power bar floats air resistance always to draw the blades, using light reaction on the eyes. When the bird is the



ground it winds in course of 25 hours are required. The bird should be released at winds higher than 40 hours are on the way.



Fall up as soon after landing as possible. This can only save down on maintenance combinations in the fall with low also large your bird on the heavy side ... in case of high winds.



For more pictures see your Captain for more you eye the organizational maintenance pub, TM 11-1120-214-20 (Jan 67).

Other pubs you don't want to overlook — TM 11-1120-214-20, TM 11-1120-214-20F, TM 11-1120-214-20PF, TM 11-1120-214-20PWF, TM

11-1120-214-20F, TM 11-1120-214-20 and 11-1120-214-20F (the radio type).

Here's how a top-tier mechanic would give you with greater TEC on the Daily Inspection, Maintenance — there is an instruction to look up the Daily to do it up better. The Field standards in the log book enter you to more detailed inspection page in the organizational maintenance pub.



BE SURE YOU CLEAN THE PLASTER SURFACE WITH SOAP AND WATER. IF YOU WIFE 'EM WITH A DRY CLOTH IT JUST RUBS THE DUST ACROSS THE SURFACE AND SCRUBBER IT... SO BE GENTLE!

FORMS, RECORDS — Eye the bird forms and records to be sure they're up to snuff. AF 750-000-1 (Sep 64) on test pubs for aircraft like tells you which ones should be on hand. TM 11-1120 on record procedures but the pump on filing use the log book forms. Be sure to check the log book for discrepancies.

NEW EQUIPMENT

LARRY ... Look for exterior damage. Check the electrical and windows to make sure they're clean.

When you walk in the cockpit or cabin you don't log tests and equipment in the time you spend. It's normal accidents that need to get up when you're the ground with some bit of time after all events.



LARRY ... Make sure light — before, so always clean.

FIELD TALK ... Before you clean, get authorized that the field has it done.

NOT A COPY OF THE 85-280 F THE LOG BOOK LOOKS LIKE A COPY OF THE 70 DIRECT!

I'VE BEEN WONDERING WHAT I DO WITH THOSE RESERVES.





LANDING GEAR — Examine wheels and bearings. Be sure you can find the clearance stops on the tires.



LANDING GEAR FROM OTHER AIRCRAFT —

THESE CHECKS, LOCKS OFF WITH RED, CONNECT!

Stand back and eye your partner and say, "If this has a condition, drop it," check the dampers for leakage. Landing dampers get replaced because a steel damper cylinder has become ground resistance . . . that's a damper to please!



CHUCK HARRIS

PUT THE EARL UPPE AN' OLDSKIN LIGHT DOWN — Douglas's Secret?



DAVE — LOOK FOR THIS — EARL

WHEEL TRANSDUCERS — Check the oil level at the right gauge and add oil if the level is down to the ADD line. FOM 1012480-1016 will get you good kind of MIL-12555. After you add oil be sure the spring-loaded cap closes.



✦ Having your transducer and eyelet after checking the oil level may read below F.O.L. but above ADD for a short time — no sweat . . . this is normal. Don't adjust the level if it will go over F.O.L. after the rate falls.

DRINK AN EXTRA FLAVOR CHICKEN, MEAT SAUCE?— Served? Make sure the extra is drizzle (like sauce) — all the way to top/bottom. Use a vacuum cleaner to get rid of oil.



✦ The big main (chicken chicken) sandwich is for a meal for a third hour. They eat all up everything in a matter of hours. So, be sure you get used to extra and other things.

✦ When you pull Robinson in the night, make sure all of the main order food is ready. Don't forget to check, make you, and you — eating.

YOU HAVE —
SHIRT COVERS IF
YOU HAVE TO...
YOU'VE HEARD OF
POSS AND WANT
IT ONE POT?



POSSIBLE NOT — Look for large sized things.

WITH MISSING
EATING



WALK ABOUT INTO DISAPPEAR — Check for things. For the full and pick leaving things for damage and safety. Check with control and look after to see if it's clean and for things and things attacking you have looked. See that the main report, both how are related or become here.

FIGHT CONTROL, HIGH CHAIRS — Check control for things. If you get an extra order, the parts get replaced — sound.

BE SURE TO EYEBALL THE AREA WITHIN ONE MCH OF THE POOR OPENING IN A MACHINED CLOSING.

MORE

WAX MOTOR OILS—Keep ground level
top the blades for damage and vibrations.



When cleaning the rotor blades, wash them
with only mild soap and water. First, the
white lead paint the airframe and water level
must. It's OK, this to use the cleaning solvent,
P-300. Type II, to get rid of oil stains will
require more solvent. Follow by cold
water and soap.



**GET AWAY
SOULS ABOUT
DESERTS BY
FOLLOW PARA
B-10 OF THE
ORGANIZATIONAL
MAINTENANCE
FORM**



EXCESS OIL TANK—For the right gaps to
check the oil level. If it's out of the proper
level add MIL-O-2102 and get the filter cap
back tight.



**YOUR
SYNTHETIC OIL
FIND A POISONOUS
ADDITIVE THAT'S
ABSORBED BY THE
SKIN... SO WASH
YOUR HANDS
AFTER EACH
REFUEL**



WAX LAMP—Check fuel quantity gauges for
the proper quantity and make sure the filter
cap is on tight.

TAIL BOOM

UNITED STATES

**NO
CRACKS OR
GAPS
PLEASE**

EXCESSIVE OIL—Use your pressure
test the skin. Make sure there is no gap
between the boom and fuselage at the
boom attaching point.



FLAREDS, THE ROTOR TRANSDUCER, ROTOR

HORIZONTAL, VERTICAL TRANSDUCER, UNIT
—(Check damage) Attaching bolts rotated, loose?



THE ROTOR PITCH CONTROL, HUB, ROTOR CONTROL, UNIT — Check out of the gear box and links at the rotor for excessive bending and SLAMING that could cause a twisted condition of movement and security.

THE ROTOR SERVICE — (Check, Re-position, cracks, stains, pits or corrosion) (See right page for greater detail). Begin with the M-1-2000 if needed.



THE ROTOR BLADE, HUB, PITCH CONTROL, UNIT — Look for obvious damage. Bend over the rotor a few times and listen for unusual sounds — look for any binding. Follow the inspection page to page 820 of the maintenance job.



BLADE HUB (BLADE) DAMPER — To prevent severe damage to the rotor use fixed stick for right phasing. Check between flights if you find the phasing was changed by ground handling. Check by holding the tail rotor and putting each blade into both into the best position of the camper's low stage (lowest friction angle).

**DON'T TOUCH TRAILING EDGE OF BLADES...
YOUR FINGERS GOING EARLY
HANDLE LEADING EDGE
OR END OF BLADES.**



ENGINE AREA

TURNING STEER WHEEL CHECK COMPENSATOR — Slowly turn wheel eye over 90°. If this has a steering, up-tilt look about 10°, don't get leading dampers. Re-adjust before replacing. Be sure to check the upper attachment bushings. Settings: ... they take it on the side when a wheel is changed to from ramp down look.



When changing dampers be sure the ball is pushed evenly until the wheel just above the ground ... slip wheel!

STEER — Lighten the wheel steering for loose joints, broken or loose suspension. Check the components for tightness and broken or missing bushings.

Look for fuel and oil leaks. Run your status over the oil cooler and the water separator for tightness. Check fuel and oil lines for chafing.



STEER SCOURED — Grease! Shimming and support bolts tight following re-caps of rotation and in good condition?

BE, NO CHANGE, STRONG — Full lower, low operation, secure. Look for leading bearings, seals, oil/air leaks, infrared shuttles, screws.



EXHAUST DUCTS — Re-bolt the ducts and seals for cracks tight or backing. Check the joints for cracks. See that the clamps are tight and the duct secure at the fan legs.

IGNITION, FUEL PRESSURE SWITCH LEAKS — Re-test, check, marked control? Lower pressure? Brake lockout?

WHEELS, INSPECTION POINTS — Tight? Over-tilt?



How do you tell a stressed wheel joint on your gear? First! The stressed joints are rotated by stress while the non-stressed joints have protruding flanges.

FUSELAGE

LEFT SIDE
Forward, center, aft
LEFT MAIN MOTOR,
LEFT LANDING GEAR

MAIN MOTOR MOUNTS—Don't "strangle" it to check about the depth of bladeless bolts, use a file indicator and follow the bolts to your left of 24 20-000-0000.

MAIN MOTOR HUB, SHAFT HUBS—Use the screw for damage. Check for hole and plate flange, things for damage and wear.

POSITION LIGHT, LOWER AIRCIRCULATION LIGHT EMITS—Check for light and damage.

ACCESS, INSPECTION, OPERATIONAL HOLES—Keep 'em bolted up.

LEAVE WETS AND DOORS OPEN WHEN YOU'RE SHAKED IN THE HOT SUB... THE CIRCULATING AIR WILL HELP PREVENT PLASTIC WINDOWS FROM ENDOURING.

LANDING GEAR FRONT SHOCK MOUNTS—Don't close in the middle. Be sure a proper charge, wet!

LANDING GEAR—Check the vital tubes and bearings for wear. Be sure the blades vibrate on in place.

FOOT CONTROL, REAR, LAR. GEAR—No damage allowed. Be sure to check the area within 3 inch of the foot opening in a modified casing.

WET, TANK WETS—Be sure the wet is clear.

WET WETS—Tap the drum to check for water content. Tap the bottom of the fuselage for fuel leakage.

FOCUS ON

WARNING LIGHTS—Push light test switch to check all warning lights.

WARNING LIGHTS—Be good, correct, complete and visible light for operation.

WARNING LIGHTS—Check the landing, position and reference light for operation.

CRIMSON TAGS ARE HERE...

NOW, WE PROVIDE TAG OR LABEL TO IDENTIFY THOSE PARTS ANYWHERE IN THE SUPPLY SYSTEM!

TAG

IT, MAN!

You can no more sell parts without a name card than you can sell the condition of a used part without a tag or label — that's for sure.

So, give it the practice of using standardized tags, plain tags or as tags as all. To the extent covers TR 710-136 (21 May 67) with material condition tags and labels for commercial and air delivery equipment.

The light green supplement TR 710-770 (10 June 67) identifies the parts, gives its condition, usage factors, inspection data, modification needed and a reference to DA Form 2410.

How important are these tags and labels? Well, tagged parts in supply give you the same as a glove. They save countless hours of opening containers and unnecessary tear-down time... much more.

Here's how the new tags and labels work up.

UNUSABLE TAG NUMBER, DA FORM 137-1

An unusable tag or label indicates you the item is ready for use.

DEFERRED LABEL NUMBER, DA FORM 137-2

A deferred tag tells supply types that the part is awaiting disposition or is being held for administrative purposes.

UNUSABLE TAG NUMBER, DA FORM 137-1

1. PART NUMBER	2. PART NAME
3. QUANTITY	4. DATE
5. LOCATION	6. COMMENTS
7. INSPECTOR	8. SIGNATURE

UNUSABLE TAG NUMBER, DA FORM 137-1

DEFERRED TAG NUMBER, DA FORM 137-2

DEFERRED TAG NUMBER, DA FORM 137-2

1. PART NUMBER	2. PART NAME
3. QUANTITY	4. DATE
5. LOCATION	6. COMMENTS
7. INSPECTOR	8. SIGNATURE

UNUSABLE TAG NUMBER, DA FORM 137-1

DEFERRED TAG NUMBER, DA FORM 137-2

DEFERRED TAG NUMBER, DA FORM 137-2

DEFERRED TAG NUMBER, DA FORM 137-2

DEFERRED TAG NUMBER, DA FORM 137-2

1. PART NUMBER	2. PART NAME
3. QUANTITY	4. DATE
5. LOCATION	6. COMMENTS
7. INSPECTOR	8. SIGNATURE

DEFERRED TAG NUMBER, DA FORM 137-2

They're there to cover a hole with equipment by using those holes. To get tags like the above number (give the quantity you need on a DA Form 17. Send it thru channels as —

Supplying Office
47 40 Publications Center
1581 Woodson Road
St Louis, Missouri 63114

Send modifications on and to buy or when a modification has to be done.

The unusable (unusable) tag means the part has had it and can't be used.

The unusable (deferred) tag means the part is held for the repair shop.

All items you support only know what you put on the tag and label so be sure you fill and write that according to the tag in the end.

EYE THIS TB

To find out what material condition tag a part uses, based on coverage, for more you read TR 55, 1400 (20-25 (21st 67) on component replacements and use procedures. One point, also, to note you eye Change 1 (28 June 67) on the TB because the tag number given in para 1304 is correctly identified as—Unusable Tag/Label, DA Form 137-1.



KEEP AN EYE PEELLED FOR HORN
BEECHBUCK
SAYS, HE'S
GAY NAME
YOUR
RECALLERS
RIFLE A
BOOTH
TRAVEL



BULLETINS

BOARD



You'll Find This
Same Peep in
TB 750-951-4
(1967)

**PREVENT
ACCIDENTAL
FIRING**



Two things can shake you like a 100-
ton explosion: life going off when it's
not supposed to . . . or seeing it like
MARA1 or MARA40's the ground type
or track-mounted—or the 4-track vari-
ety pointed out by the Marine Corps/
CENTRO-AM with propeller blades.

It's not just you coming and going,
what with its big habit and all! Experi-
ence shows that more accident-
al things are caused by damaged or
badly worn or dirty mechanical parts
that can't work right together . . . or
maybe a thing when it's damaged or
not adjusted right.



But not only you can see with the
naked eye, man, but wear also changes
materials are pretty hard to check
without a microscope or gauge—what
you don't have.

So, here's 3 checks you should
use make to get rid of troublesome
parts, using the parts drawings or
pages. Every week—in about half—pull
a new check. And follow through ex-
actly on the order in which the 3 checks
are listed here.



It'll take only a few minutes, but it
could save a lifetime.

Here're the stock numbers for the
parts you'll be working with: Army
and Marine types bring around are
track-mounted 100's use TB 9, 1000-
201-12-0047-00; w/2-Changes. Marine
types equipped with the CENTRO use
TB 600-008-10 (Eco-10) in conjunction
with TB 9, 1000-204-12.



Firing pinlocking



PN 1015-475-8761

Coil spring



PN 1015-475-8799

Sear



PN 1015-475-1107

Firing pin



PN 1015-475-8798

Firing pin spring



PN 1015-475-0063

To make these checks, you can use parts out of your spare kit or, like me, the GUNTON, you can use parts from any of the other 3 weapons. The important thing is to make sure all parts are clean — clean as you can get 'em with solvent, and break — before you start.

One more very important thing — every time you find a bad part, separate it from the good parts. Make sure it doesn't sneak back in your weapons.

OK, let's get with it.

CHECK

#1

What is
Firing Pin
Locking and
Coil

1. Remove the firing pin from the housing as far as it will go.

2. Push the second wire in the firing pin hole so that it fits snugly into the first wire.

3. Push the wire in the hole all the way through the hole in the housing with the end of the wire toward the forward part of the housing.

If the wire won't go through the housing — if it doesn't show at all on the far side — you'll know the wire and the housing are OK to use.

But, if the wire does go through — even a fraction of an inch — my number one or two will tell you, get a combination that won't let the wire go through the housing. Any combination of wire and housing that won't let the wire go through is safe to use.

That's the most in knowledge that don't use the manual.

Firing pinlocking cap



PN 1015-475-8794

Trigger housing



PN 1015-475-8792

Trigger



PN 1015-475-1106

Firing pin



PN 1015-475-8794

CHECK

#2

What is
Coil,
Spring, and
Firing Pin

1. Push the wire through the hole in the housing with the point of the combination wire from the front of the housing — opposite to the wire you had it in Check No. 1 — leaving about 1/2 inch of the wire now visible on your side of the housing.

2. Push the firing pin in the housing housing 2 until a combination I would like to get the the wire in the pin against the wire that means the firing pin spring and tighten the cap till the firing pin is snug against the wire.

3. Put the wire through the wire hole in the housing. The wire should be free — you should be able to turn it and slide it in and out easily. If it sticks or catches or binds on the firing pin, by a combination or firing pin, the combination that gave you a low overall rate is OK. The combination that binds shows that the wire is really, but the wire is.

**NOW COMPLETE
THE CHECK ON
THE Firing
Pin.**

Take the firing pin out and turn it over to check the wire with your eyes against its opposite side. If either side of the firing pin crosses a blind on the wire, replace the firing pin. The wire you get out of all firing pins that cross a blind.



1. Open the front and eyeball the end of the trigger. Sight gaps along the edges of the air indicator should close. Be sure if they're open.

Get sight gaps, plus, there are gauges or marks show that the trigger's not working right.



However, even if the trigger's in bad shape, don't throw in the towel. You need it to find out what's causing this damage—fill in the next checklist.



1. **Trigger Spring** — Turn the trigger with a screwdriver so it falls to the first position. If the trigger won't return to second position, the spring's weak or broken. In place the spring.

2. **Firing Rod** — Be firing with one hand the trigger in a forward position locked the end of the trigger. The far portion of the trigger should be back with the bit on the trigger housing.



If the trigger's in position 2, turn it to position 1 with a screwdriver. If the trigger returns to position 2 after you remove the tool, you know the cable needs adjusting. It won't get to the adjustment procedure in a minute. Meanwhile, keep on checking.

3. **Binding or Damaged Firing Cable** —

On ground or track-mounted weapons only: Open the breechblock and push the remote firing shaft to fire the cable. Then slowly pull the firing shaft back to the neutral position.

If the trigger won't return to position 1, the cable needs replacing—it's beyond adjusting.



On **CONTOS** weapons only: Open the breechblock and use a screwdriver or similar tool to operate the trigger by turning the solenoid shaft which sticks out from the bottom of the receiver under each of the 4 rifles. Turn the shaft so far as it'll go and then let it return slowly.

If the trigger snaps forward, never force it. However, if the trigger won't return all the way to normal position 1, you've got to replace the cable ... again, it's not for good for adjusting.

6. Now, after you complete the work of both in **Step No. 4**, lockback a pencil to **Step No. 5**. If your eyeballing showed the trigger to be loose, adjust a gauged, get yourself some trigger.

TRICK

#5

**Working on the
Gear With The
Gear Installed**

Open the breech and push the gear with your thumb and forefinger. The gear should move back and forth freely. If it can't move freely, take the breech apart and go through **Steps No. 1** and **No. 1** again.



THEN, AFTER YOU DO THAT, IF THE GEAR STILL WON'T MOVE FREELY, TELL YOUR SUPPORT SQUAD. THEY'RE THE ONLY GUY WHO CAN HELP YOU NOW!

NEVER! NEVER YOU DO— DON'T FUSE THAT GUY!

ADJUSTING THE TRIGGER GEAR

Here's what you do:

Open the breech. Put the firing cable adjusting tool (PWSA 0013-700-75) in the firing cable operating lever so that the propeller on the tool goes in the slot in the lever.



The groove on the end of the tool should fall between the 100-PSI and 150-PSI lines on the 100 side of the quick-breakdown gauge cover.



If the groove won't line up this way, here's how you adjust the valve.

WATCH THIS, WHEN YOU'RE TURNING THE GAIN FOR ADJUSTMENT! BE SURE BOTH ENDS OF THE GAIN ARE POSE AND TURNING!

1. Use fingers to advance valve gear clockwise — and tight.

OK, now close the branch to check the firing valve, like this.

2. Use the valve by turning the adjusting tool toward the 100 line on the quick-breakdown gauge cover. The trigger should turn the valve — close to the tail of the firing pin. The valve should be after the first corner of the tool reaches the 100-PSI line and before the cover on the tool passes the 100-PSI PSI line.

3. Take out the firing valve locking nut from the right side of the quick-breakdown cover with your combination wrench (PSI 100-150-200).

4. Turn the firing valve to control the quick-breakdown cover by hand till you line up the groove between the 100-PSI and 150-PSI lines. If the valve won't tight, loosen it with the wrench, the trigger should begin to close as the cover starts and passes the 100-PSI line.



THE 100-PSI GAIN PSI BEHIND 100 ...

... AND 100



Now, get this: If the valve does before the first corner of the tool reaches the 100-PSI PSI line, replace the firing pin and retighten as in 4 above. And, if the valve still does before the corner of the tool reaches the 100-PSI PSI line—after you've replaced the firing pin—get yourself a new one.



CALL FOR TIPS

Never forget that an injured cable can cause accidental firing. Educate everybody in your unit—and pass the word along to your support units, too—in bounds that firing cables and gun-like or all items.

This means when you take the cable out for cleaning and make like, never point it up. Never walk on it as if a vehicle can run over it. And keep it free of dirt and grease that'll draw out the rubber sheathing.

On-premises PM—cleaning and lubing the brightback parts after every firing like the EO cable box, and making those parts shockproof every week will help you stamp out premature firings.

Worth the trouble!



READ 'N HEED



When you're where the dispenser is, that's the time to pop close attention to the EO for your M107-mm SP mortar. That means Ch 1 (On EO) to EO 9-1508-124-12 for the M107 and EO 9-1508-124-1273 (On EO) for the M107A1 carrier.

One place you want to eyeball on the EO is where it says to use G-4 quantity on the part of the mortar socket that supports the bridge assembly. It may take a few minutes, but it's worth it to keep away rust—rust that might keep you from running the mortar when the time comes.



Your car's complete lubrication that'll help you and your engine get the most out of every mile. Look for Castrol Synthetic Motor Oil (SAE 10W, Castrol Synthetic Motor Oil (SAE 15W) and Castrol Synthetic Motor Oil (SAE 20W) at the way for the city — use that 15W oil for the way for the city. Call 1-800-333-3333 for more information.

FOR DETROIT AND LAKE MICHIGAN
 IF YOU LIVE DOWN TO ROAD

M16A1

LSA LUBE GUIDE



Yeah, LSA's there to stay. It does a better lube job on working parts, especially in a muggy, wet climate like Vietnam's... it lasts longer... it really protects metal surfaces. Here're the stock numbers that'll track it for you: POM 0156-000-1112 — Gun motor; POM 0156-007-1101 — Lap gun; POM 0156-715-0000 — Legal gun.

WHERE AND HOW MUCH LSA?

The big trick to using LSA is to get plenty of it on the working parts — like those inside the upper and lower receivers — and very light coats in other places — like the bore and chamber, inside the carrier key, inside the bolt and on the firing pin and the magazine spring — and some as well on your slides or on the inside of your magazines.

GENERAL — Normally, you want your rifle's upper and lower receivers to have you apply LSA to do a real good job after every firing session, following the good word in your TM.

You have fighting? OK, then postpone the cleaning BUT lube all the working parts with LSA frequently and generously.

LUBE THESE PARTS **GENEROUSLY!** AND FREQUENTLY WITH LSA!

LUBE THIS UPPER RECEIVER

GENERALLY LUBE ON DETROIT

LUBE BOLT CARRIER GROUP PARTS BUT LIGHTLY ONLY

LUBE THIS LOWER RECEIVER

LUBE BOLT

LUBE FIRING PIN

LUBE MAGAZINE SPRING

THESE PARTS GET LUBED **LIBERALLY!** USE A BRUSH TO APPLY LSA TO THESE PARTS WITH LSA.

LUBE THE BOLT AND THE UPPER RECEIVER

LUBE THE BOLT AND THE UPPER RECEIVER

LUBE THE BOLT AND THE UPPER RECEIVER

BEFORE SPRING LUBE

AFTER SPRING LUBE

BEFORE SPRING LUBE

AFTER SPRING LUBE

BEFORE SPRING LUBE

AFTER SPRING LUBE



YOUR ASSISTANT WILL LUBE THESE PARTS SEPARATELY WITH LUB.

YOUR ASSISTANT'S DREAM



BLACKEN LEVER SPRING AND SPRING



NEED SUPPORT ARMS

THE ASSISTANT WITH SA



YOUR DIRECT SUPPORT GUNDS WILL TAKE CARE OF THESE PARTS.



FLASH ON THE FLASH

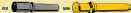
Don't get impatient if you see another guy with a new closed-type flash suppressor on his M16A1 rifle. Your turn will come.

The new suppressor, according to PNW 1000-006-0000, was developed as a result of grips that the old 3-prong open-type (PNW 1001-006-0000) reaches on vines and bushes.

The closed-type suppressor's being produced for the latest M16A1's only need to spend for these new weapons. It'll be a while probably before there'll be enough around to replace the open-type suppressors on all weapons, which do just as good a job of flash suppressing.



NEW BUFFER AVAILABLE



Here's the news: There's a new and better buffer (action spring guide) now! It's available for your M16A1 . . . no more rattles and no hydraulic lock.

Get your Direct Support people to install one for you soonest. The new one comes under PNW 1001-007-0070.

It'll replace the old one . . . PNW 1000-000-0000.

SPRING GOES ON TOP

Watch it, you knowers, when you're handling the hammer spring, hammer pin and trigger pin on an M16A1 rifle.

The ends of the hammer spring must go on top of the trigger pin, with one end of the spring resting in the groove of the pin.

If you goof up and get the bottom of the hammer spring under the trigger pin, the pin's just what you need to fix it: won't get any action 'cause the hammer shoe won't have enough tension to hit the firing pin.

Incidentally, you can put the hammer and trigger pins in from either the left or right side of the receiver, now.





...of which the ... of ...
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JOE'S
DOPE

ALAS—
WRONG
GAS
CYLINDER!







BEFORE EACH BOTTLE OR CYLINDER IS LABELED, WORKERS MUST DESIGN WITH THESE OWN DISTINCTIVE SHAPES.

THAT'S THE STRIPE ON YOURS!



STRIPES OF COLOR INDICATE A COMBINATION OF DANGERS...

THIS, FOR EXAMPLE, WOULD TELL YOU'RE DEALING WITH A MATERIAL THAT IS BOTH EXPLODIBLY FLAMMABLE AND TOXIC!

WELL, THAT TAKES SPECIAL HANDLING, RIGHT?



NOT SPECIAL... JUST HEADS-UP HANDLING... DON'T THINK YOU GO TO **READ** THE LABEL... YOU CAN'T SEE THAT... GET OFF YOUR ASS AND TAKE SOME OTHER COURSE TO TALK TO, YOU WANT TO BE SURE!

SURE IN THIS BAZZET YOU GOTTA BE SURE!



BEFORE I'E GO ON... LET'S FORGOT THIS PRO-LO!

WELL, BUT HERRY! IN ANYCASE TO HAVE THE BEST OF TEST!



Dope Sheet

The SIX HORSEMEN OF CYLINDER GAS

NEVER
MIX 'EM
ON YOUR
OWN!

DON'T
TAMPER!

KEEP
AWAY
FROM
HEAT
AND
OILS!

KNOW
THE
NAMES
AND
COLORS!

NEVER
USE
AS AN
AIR
CLEANER!

KNOW
HOW
TO
USE!

FLAMMABLE
COMBUSTIBLE
MISCELL.

PRESIDENT
TALK
A MESS OF IT ALL

ANESTHETICS
AND
POISONOUS
COMBUSTIBLE

RYZEN
THE FIGHTING
MISCELLANEOUS

HIGH PRESSURE GAS
FOR ALL THE
MISCELLANEOUS

THE FIGHTING
MISCELL.



These are the six horsemen of gas!
They're each coded with color by class.
You must know them by heart!
Be sure 'ere you start!
One gas'll be off your horse, pal... unless!

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



HERE ARE SOME
BASIC SAFETY
TIPS TO REMEMBER!



WATCH THE TEMPERATURE
AND PRESSURE!
DON'T TOUCH THE
VALVE...
LOOK AT THAT
ACETYLENE
FOR EXAMPLE!

IT'S GOIN'
OVER 20
PSI...
YOW!



NEVER USE GAS OUTDOORS
QUICK! IF IT
GETS UP TO 30 PSI—
IT GOES BOOM!



ALSO, DON'T
MIX GASES OR
OILS WITH OTHER
GASES... IT CAN
CAUSE A REACTION
THAT'S DANGEROUS!
DON'T MIX
GASES AND OILS...
IT CAN CAUSE
TROUBLE!



DON'T FIDDLE
WITH THE SAFETY
CONTROLS, VALVES
OR CAPS... JUST
A LITTLE LEAK
CAN GET YOU
A BIG PROBLEM!



KEEP ALL GAS
BOTTLES AWAY
FROM HEAT!

BE SURE
TO CHECK
THE GAUGE
FOR OXYGEN
AND
ACETYLENE
CYLINDERS
BEFORE YOU
USE THEM!
DON'T
FORGET
TO CHECK
THE GAUGE
FOR OXYGEN
AND
ACETYLENE
CYLINDERS
BEFORE YOU
USE THEM!



TREAT THOSE CYLINDERS CAREFULLY!

NEVER SHOCK A NECK OFF A BOTTLE OF HIGH PRESSURE GAS... OR GET A STRIKE... AND TRACTICALLY... (???)



PLEASE DON'T LEAVE ANY CRYSTALS

NEVER LEAVE ELECTRICAL WIRES OR TUBING, OR HIGH-PRESSURE GAS IN NEAR THE BOTTLE... IT COULD BE A DISASTER!



There's **TWO** BIG POINTS TO REMEMBER: NO WATERS WHICH CAN YOU USE - MUST BE CONTAINED!

I KNOW! KEEP ONLY 10 CUPS OR BACK AWAY FROM A LEAK... THE GREAT WALL BLOW UP!



YES, AND...

NEVER USE HIGH-PRESSURE GAS FOR CLEANING - IN PLACE OF COMPRESSED AIR!

OH?



ONE MORE THING... YOU CAN'T COUNT ON EVERY CLASSIC FOR ME. SOME MARRIED THE AMERICAN THREATS... A CONTEMPORARY CONSTRUCTION ON THE FOOT WITH OFFER MARRIAGE SOLUTIONS OF... (CONFIDENTIAL) GAG... WHEN I BOYCOTT THE (C) MARKING SYSTEM, IT ALL ON HER COUNTRY!



EVEN IF YOU'RE OVERHEARD... YOU'VE GOT TO WATCH BARRACKS... LIKE SOME OVER-THE-COUNTER PILLS... PUT COFFIN INTO YELLOW BOTTLES!



MAN IT'S DARK DOWN HERE... AND A SWEET...

ATOM



HEY... DON'T BRASH... JUST GET MARRIAGE COUNSEL... I WAS TAKEN TO VENER!

RELAX... WE'RE BRING YOU TO COME FOR A QUICK LECTURE ON HOW TO HANDLE SILENT COLLEAGUES -- BEFORE THE CHOPPER BRASH TOLL!

COMMUNICATION

KEEP HEARING THE NEWS



Hey, dearest friend, taking your cool camp shelter you will love following your cottage paint has been knocked, scratched or worn off?

Like, Peleasant, you're getting a fresh building that's causing heat breakdown of lines, ruptures . . . and ruptures . . . in the AN/GRG-40 (1 or AN/GRG-40 (2) rolls set or AN/GRG-40 (1) rolls mounted on, or other on, shelter equipment.

Don't sweat it. Spot or scuffup paint is with the infrared penetrating OD to keep the camp supplied.



The solar heat paint, Mill Spec R-40001 (MOS), is a 60A-1 item. P/N 9019-505-1133 will get a up and P/N 9019-505-1134, a gal.

It will be the way you're painting it clean and has the white undercoating for best painting on the solar heat paint. P/N 9019-505-1131 is for a up of Infrared white and P/N 9019-505-1132 is for a gal. The stock numbers are found in DOD Catalog C0000-R-4 (Jan 66).

Remember, come on regular OD for touching up your cool camp shelter or it'll be back on its old shelter roll.

Of course, if a major paint job's needed, call support.



**RELAY
THIS
MESSAGE**

CONCEPT



**THIS
IS
MERCURY**

You feel 'em everywhere — those TA-88/U digital telegraph/telephone receivers. If you have the equipment, you know that the AN/MSC-49 and AN/MSC-19 radio versions are not two of the same.

And if you want to keep the maintenance out of your support unit's hands a little longer, lay up the equipment as long as three days a week for as little as a dip. The idea is to drain away any condensation that might collect inside the three relays for each receiver. Moisture can make the relays stick . . . and that means a DRU repair job.

While you're at it, you might give the same "best treatment" to your spare receiver.

TESTING? USE YOUR ANTENNA

**HOW
WELL
IS
THE
DIP?**



Now that you've about to make an operational use of your portable radio set (AN/VRC-5, -6, etc.) be sure you attach the antenna first.

Like putting the power on the set without an antenna or a proper 10-ohm dummy load can blow the power amplifier tube. Not only that, it can fry a new tube, but, more important, it puts your set out of service.

HEAT HARD ON RT



There's enough heat in world's hottest hanging around your trucked vehicle's AM/VBC-12 motor rolls on without heating its wires.

Take a moment, the RT-146 or RT-114 motor-connection...

You have to keep the blower intake and exhaust parts free of packs, clothing or other equipment so the rolls will choke up, overheat and cook out on you. It's even better if you keep that gear off the air completely.

While you're in the manufacturing mood, clean the blower motor fans and fan exchangers to help hold the heat down. Dust and dirt can gang up on that RT-quickie's a water buffalo can work.

Put it in EN 11-3830-401-20 (EN 11) tells you in re-boarding the runs and heat exchangers.

FOR A1 SHAPE-TAPE



Good connections can take you — and your rolls — a long way.

And one thing that'll help when it comes to your AM/VBC-12 motor rolls isn't to make sure the antenna has connection is clean... about connection.

When the antenna's off, the antenna makes a landing from the weather, rain air and what-have-you. So keep it covered with tape — but keep the adhesive away from the antenna. If it sticks to the antenna, you're got an unwanted insulator.



FLUSH YOUR WAVEGUIDE



Keep that flippin' flagget from tearing on impedance switches on your AN/MPQ-48 radar set, especially if it has been laying around for awhile.

Take them's a couple of those "pre-operational" things you have to do on black machines and convince them getting the upper hand and breaking out the set.

Take, for instance, the waveguide in the magnetron in the GA-127 receiver-transmitter control group.

Loosen the waveguide flange connected to the maggie, without flagget-matching the window, and leave it loose for 10 to 11 minutes. This is so you can rid the waveguide of moisture that has pugged up on you.

Of course, waveguide sections W1181 and W1182 should be taken apart to be cyclified for clinging corrosion at least twice a month... or more often if you're in an area where high humidity is hanging around.

One word of caution: Be sure the condition, indications and corrective measures for the HD-344 detector are right. See it out in Para 81, Item 5, TM 11-5840-200-18, before you operate the transmitter.



MISSING KC KNOB STOP



Dear Half-Mark,

The one of our new BF-5200 series transmitters the KC knob turns off the emergency and doesn't stop at the end of the scale. Our support says don't expect it 'tween some of the new models do this.

I haven't seen anything on this in test manuals. Does this affect the RT?

W. C. L.

HAIR!



Dear Specialist W. C. L.,

No, Canada models don't have a stop on the KC knob. The only thing this minor manufacturer change might do is speed up frequency shifting when you don't have to go through the scales. They might to get from one end of the scale to the other.

Half-Mark

The Maintenance Daily **FINAL**

BUSHING HOLDER GETS FSN

A bushing-free metal stop in spring holds securely for your KM-1/200-1/25 transmitter is shown as useful as it holds down on a bolt nut.

Search for bushing-free security part problems solve with KM-1/200-1/25-1000, which includes the bushing. The assembly replaces the old bushing-free spring holder. KM-1/200-1/25-1000, in TM 11-4615-205-207.





EVIS APRIL 1975... TIGHTEN M151 FRONT BOLTS

HEY! WE'RE
COM' HOME!

GREAT AS LONG
AS WE KEEP MOVIN'
... JUST RAFTIN' WE DON'T
DOWN... GYT!



Your M151's suspension would be kind of hard to drive with our front wheel gone.

That could happen if you don't check 3 important bolts on a regular every week or so. There's a chain bolt up front that could loosen and hurt you, but those 3, specially front working.

They're the 2 in front and 1 in rear on your lower front suspension arms that hold in the adjustment shims. They come loose, the shims drop out, and you may think you've got a loose wheel bearing.

Don't let it take in, but have your mechanic take up the shock instead. He'll torque the front plate to 41-55 lbs-ft and the back cover to 68-75 lbs-ft.



#51 1/2-TON TRUCK ... GAS TANK STRAINER



Hard up for a strainer in your 1/2-ton truck's gas tank? And there's none available in those truck-line MFI's at your reconditioning point?

Well, if your boss yard's got any MFI's in use, you may be in luck. The fuel tank strainer in the MFI-1 is just like the strainer in the MFI-1.

#52 1/2-TON TRUCK ...

BALL-JOINT TOOL

If you don't own Tool Kit, Set B, for your GM-series 1/2-ton trucks, then you don't have an outside caliper for checking ball-joint play.

But you can make a simple tool that'll do the job.

Cut the 2 parts out of a piece of sheet metal. Form 'em together with a 1/4-in. bolt, spring washer and wing nut. Bump the wing nut down enough so you have to work just a little to make the "jaw" move. Shape doesn't make any difference — just make sure the points are cut far enough from the "handles" to be clear the ball-joint assembly.

Pages 141 and Figure 116 in TM 9-1126-11,8-20 (Apr 66) show how you check for ball-joint play. The same info will go along with your homemade caliper.



PIN LOST? USE BOLT

Now you can use ordinary bolts 'n' nuts when those missing pins on your MHI Home truck go AWOL. This goes for all vehicles in the GM-union family.

Some of those pins are non-supply items and tend to tend at your construction points. If you can't find the right pin, Article 207 in TB 780-981-1 (Jan 87) says you can use a standard nut 'n' bolt on any other kind of pin that'll do good and do the job.

This TB article mentions only one non-bolted pin, but there's no reason it can't be applied to those other bolt-to-fit pins too. Like all "how" in the TB, this's a recommendation. You'll need your OPI OK to make this local SOP. Then you won't get pipped for having those strange-looking pins on your vehicle.

NOT PERFECT,
BUT ANY BOLT
AND NUT OR
A RETAINING PIN
WILL DO THE
JOB NICELY!



GET THAT LOCKER
IN SOL, SWAL,
AND MANY OTHER
JOB WAYS AND
OTHER PIN ON ...



... RETAINING
PINS ON
YOUR TRUCKS
WILL



BOLT NUT
JOB



RETAINING PIN



BOLT NUT
JOB



RETAINING PIN

BRAKE LEVER SHIELD

NEW! FIVE INCHES!
OVER THE NEW-TRUCK
STOP CHAIN

SOME POINT!

That's the word for your MITSUBISHI to-use truck if its world number means about 22-4714. Do you get Shield, Guard, Parking Brake, FOM 1518-952-1508, for your stop-chain type handbrake lever. The lever is for -DIP users but it's not in any supply guide because you — so make sure you specify SAC 824 when you request it.



70-TRUCK SERVICE... ..

MOUNTING BOLTS LOOSE?

I TOLD YOU THESE
MOUNTING BOLTS
WERE LOOSE!



Trust your girl and the weather forecast and your best friend — if you want to — but never take it for granted that tight engine mounts are going to stay tight.

On your 11½-ton model-truck engine truck, vibration can work at those bolts 'til you catch the engine suddenly deciding to take a nose-dive into your radiator. What a mess!

Keep a close check, especially on those horizontal sets 'til bolts that frame the front mounts to the engine. One down is down, or underneath, and often and make sure they're right. If they're loose, tighten 'em.

Watch out that on mounting bolts or nuts that've gotten the front little bit changed — bent, cracked, threads

stripped. Replace 'em rightaway with Bolt, FOM 1518-181-8541, and Nut, FOM 1518-955-1705.

Tighten 'em to 71-88 lbs-ft.

Drivers are the first line of defense against loose engine mounts, so make this a part of your regular in-cab-and-around inspection. If you slip up on this, you may find yourself in a mighty uncomfortable — and uncomfortable — fix when you're out on the road.





Make sure you get Ch 5 (Feb 67) or TM 5-1576-1. It gives you the latest steps on repair of tubular tires—both commercial and military types. It includes dismantling and reassembling tools. It also shows you the new tubular tire repair kit that you can use to repair punctures without taking the tire off its rim.

We make a change to your change. In Table 1, cross out FM 414-405-9504 for Mowat and Demarest, Paramo Tire. Instead, there's a new compressed air-operated mowat and demarest — FM 414-411-4110. Instructions in the TM don't go with this new piece of equipment, so make sure you don't lose the instruction booklet that comes with it.

MWO BLANKETS GENERATORS



Take another look at that generator in your M-series tactical wheeled vehicle. If it's a Model GEN-4000 UT or BUT generator, it gets the new special mowat MWO 5-1576-289-58/1 (Nov 66). The MWO mounts only UT (purchased without pulley), but the MWO applies also to the BUT job (purchased with pulley).

This MWO supersedes MWO 5-1576-289-58/1 (Jan 66)—just some updating of information.

NO! NO! NO! NO! NO! NO!

GREASE IS OUT

MAKING SURE
THERE'S OIL IN
THE BOOTS!

You can forget about greasing the universal and bearings on your M105 or M113A2 from now on.

These are the bearings you have at each end of the prop shaft running from your power divider and housing to your final gear box and housing.

These bearings get better lubing from oil in the seal bearings. Pushing



with grease just blocks oil from getting into the bearings. Don't worry about oil hardening the boots. First of all, if you pull back the boots and don't find any oil in there, you know the bearing's not getting the oil it should.

Just make sure you keep the oil level up in these seal bearings. Use DOD 9-2120-111-12 (Just 50¢ more).

OF DEVICES ...

FILTER UNIT VALVE CHECK



There's an easy one for you.

The M103 and M1143L gas particulate filter units — in M103 and M1043L tanks and M103 combat engineer vehicles — must be checked every 15 minutes for an unresponsive self-closing valve in the air hose couplings.

That's the quick disconnect couplings that hook the air hose to the mask canisters. The valves must close out because they'll block preheating of the hose in cold weather and they can cause damage to the filter unit's electric heaters.

Be sure to check the coupling for each mask. Just pull the coupling from its rubber connector and check inside the coupling for a valve. If you find a coupling clogged you're in luck, just remove the coupling. But, if it's clogged with a valve here's what you have to do:

Unlock the hose clamp and remove the coupling from the hose.

Then pry out the retaining ring holding the spring and valve in the coup-

ling. Once the retaining ring slips out the spring and valve will slide out easily.



Replace the clogged coupling in the hose and lock it in place with the hose clamp. Another coupling to its rubber connector and you're done.

You can discard the retaining ring, spring and valve.

Record the job on the filter unit's DA Form 2408-1.

How coupling, PPN 4758-005-1040 shows the valve is getting fixed in changes to filter unit TMs.

1 STRAP
WITH FOL
BUSH!

CV'S FILTER UNITS

Gas particulate filter units in combat vehicles are now tagged "installed equipment." That means, no matter when or where a filter unit was installed, it stays put with the equipment all the way back to CV rebuild.

The filter units will be deleted from TOE's inventory, but for now ER and Maintenance Digest TB 4-508 (1 Aug 64) gives the word. CV's TM's, too, will be changed to cover the filter units.

Only exceptions to the new rule are the M113 APC's and M561A1 4-wheel CP guns. Filter units are not authorized for those vehicles.

CALL AND WASH CARE . . . ONE-PIECE STRAP



Simple that is. Now you can secure your gas or water can on your tactical wheeled vehicle with one long strap. When the 2-piece job fastened to the bracket gives-out, just replace it with—

Strap, FSM 11-8-958-008, listed in Red-Car C15-8-B-4, Sept 64.

Start the top end of the strap down thru the back slot in your bracket — or thru the bottom loop if your strap has one. Run the strap down behind and under the bracket out to the front. Then thread it thru the front slot and up.

Now you can your gas or water can in the bracket, pull the buckle end thru under the can handle — and back to up.

If you happen to be outside' around without a can in the bracket, you'd better keep the strap buckled anyway so you don't lose it.



PIPE IT OUT

What you don't smell can hurt you, when you have an air regulator inside the shop or area. Flexible rubber connections to every deadly carbon monoxide burner include some in Red Car C-4758-B-4. Authorization can come from your safety officer.

You'll respond to by the fact. How's your situation today?

PK	U. S. SIZE
4758-174-440	1 1/2"
4758-174-440	2 1/4"
4758-174-440	3 1/4"
4758-174-440	4 1/2"
4758-174-440	6"
4758-174-440	8"

Should you prefer steel, or if you need an additional size to fit your tailpipe, there's a quality alternative in that Red Car. Use RRC 59C for the Deluxe Connection Supply Center, Columbus, Ohio.

But the trick is to get a size that fits snugly over the tailpipe and fit snugly over the door. The part of the exhaust that leaks is where you work could be enough to make you partly dead—or worse!



DRY YOUR FERMENT'S TEARS

Kalman's way of using your International Fermenter 10-KW 20-10-202 generates useful. Luckily, those 4 holes on top of the control panel are part of the trouble.



Those 4 holes were put in for a few rectangular brackets, but plans got changed. Just plug with 1/4" dia. cap screws (round head, flat, or hex) and touch up with paint.

Another leak point could be the connection meter. The receptacle assembly have been put in front of the panel. This will keep the gasket from weeping. You can tell by taking out the screws holding the lower hinged panel and swinging it up. Unless it looks like this, you need a maintenance job.



"THE DUCTILE METAL APPEAR TO BE VERY WET IN THIS POINT."



It may be that no more than a pair of cross-recess screws hold the cover. Then you can take out and replace with washers beneath after you move meter and run to the back side of the panel. On a 10-ferment panel not assembly, though, you'll need to take off the meter and cover, put a heavy hollow-backup bar over the meter, punch out gasket with about a 1/4" punch, and then make with your "in the ear, thud!" on the meter. Then new 1/4" dia screws set in will hold the gasket right behind the cover. You'll wind up with this kind of arrangement and touch up the scratches with the same kind of painty stuff you used before.



HOME ON THE RANGE

What's cooking? That's an easy one to answer if you don't take care of your Model 20 Gasline Field Range Cook (SN 7580-080-11114, and especially the 802 Gasline Burner Unit (SN 7580-080-8417).

You can be just as much at home on the range in the kitchen back home. Of course, you can't just push a burner and get the stove cooked. You're going to have to give that range cook some of the TLC.

If you're going to set up the range in the field, try to pick a level site, and if the ground's soft, put down some planks.

HELP!

It's a must to have plenty of ventilation if you're going to install your range indoors (even in a tent), because it gives off carbon monoxide.

COOK THIS ENTIRE COOK TO A SURETHER SHIRT!

IS YOUR RANGE READY FOR THE NEXT "COOK-OUT"?

WERE WE BORN THING YOU SHOULD CHECK TO MAKE SURE YOU'RE READY TO GO!

BEFORE YOU GET TO IT

COOK AND LISTEN — to care the best they will show you.

VENTILATION IS A MUST — MAKE SURE THEY DON'T SMOKE IT.

7

Let pulsator hose about 2 minutes... or until all of gasometer is hot to touch. Adjust air divider ball open for great flame. If you get yellow flame, turn flame valve clockwise and continue to adjust.



TUNE UP!

DOVY HOT FLAME
MEANS BATTERY SOUP
LATER!

8

After you get great flame, use water burner disk, shut off gas burner burner by turning pulsator valve clockwise all the way.

TURN HANDLE
TOWARD
ELECTRIC
WIRE CORD



WITH
ELECTRIC
CORDS
CONNECTED
LIFT AND MOVE
CORKING-A-BURNING
ON TO B-STOVE.

9

Open flame valve clockwise... also until you get correct liquid flame.

**11**

Now gas burner will fire out of the way into cabinet to start cooking.

**10**

If you sometimes find too much gas, jump to opening pressure. But never use pump if the gas already reads over 20 PSI.



When you want to shut off the unit, close flame valve and place knob in its upright position.

REMOVE CHAMBER BRACKET

You also have to replace the governor governor whenever it gets clogged with carbon and lead deposits. Here's how:

Always lower head controlled valve while holding valve body from turning with other hand.

Lower and holding governor to valve body while holding valve body from turning.

Use all old governor and change out to new one before slipping new governor to valve body.

It could pull after done with the same if valve cover is present.



Hold valve body from turning while tightening nut clockwise between governor and valve body.

Turn in lower head clockwise as far as it'll go.

RELEASE INT.

If the pressure goes over the safe operation range (over the red line of the gauge), then close the main valve and let it cool. Then remove the air valve cap and push in on the air valve until the pressure is reduced to the safe operating range. Replace cap and relight burner in usual manner.

LOWER FLAME IF
PRESSURE GOES OVER
RED LINE.



DO NOT RELEASE THE GAS AIR PRESSURE WHEN BURNING, OR WHEN AN OPEN FLAME.

FOOT AIRS WITH YOU

There's more for feet expansion built into a foot chair.

Foot spot holds an airtight chamber. Simply pump air across between mixing chamber and air control chamber... you feel those natural, after-cupping airtight chamber FOR FEELING YOUR FEET in foot support chair.



Replaces polycarbonate foot assembly with new. If it breaks off, replace assembly with FOR FEELING YOUR FEET.

MADE WITH CARBON

Easy fitting
to chair
to fit
to fit
to fit



Five times more 1/2 gal. airtight
with base of continuous operation.

These sharp edges on the cabinet
are not found.

Easy on the skin holding the foot
back. A flexible chair back is a foot back.

Keep metal pressure plugs and caps
from initial time spent generating.
These away plastic caps and plugs
when handling replacement parts on
barrier unit. (Spraying from barrier
unit will not plastic and shorten new
generator life by flooding up openings.)

FOR FEELING YOUR FEET...

CALL, MAINTENANCE AND
OPERATIONS (800) 555-1234 or
to each, with special, no
one needed FOR
FOR 750-000-0000.

THE 10-750-000-11 Call 800,
Including Repair Parts



KEEP YOUR HANDS
IN SHAPES AND KEEP
THE TROOPS HAPPY!

WAUKESHA POOP

CHECK THAT DAMN O-RING

A leaking drain valve on the fuel-injection pump of the Waukesha, 130-KW generator (PN 3113-000-1404) will give you starting troubles the next time you start the engine. So when your Waukesha has a leak valve on the fuel injection pump, PN 3113006, PN 2810-001-1206.

BOGE THE TOP ENGINE

While your big 1400-cu-in. 130-KW Waukesha **SPICER-211**, is in the shop for fuel drain line oil, be sure to check the oil cylinder head and combustion chambers. Lots of these units break down . . . crack the head or piston rings.

Now that it is in the shop, get the valves and springs are good, then get up to 4750 or 4800 in. on the head bolts, and drop the compression lock torque to between 550 and 700 in. The engine spec list these figures give better results than GM's in the TM.

small size of
**SAFETY AND GOOD
AND AN HEAD BOLTS
AND TORQUE!**

Connie Rodd's BRIEFS

COME, WE BUY IN
"COLOR COORDINATE" AND A
"MAGNIFICENT" (PUBLISHED)



Oh-Oh, Look Again!

Hope you ALL mention gaskets caught it. The picture on page 42 of PE 178 showed the 30-cc linked control being easily overlooked. When you go to load linked 30-cc gears in your MFD make sure the link plate (Rings) on the link goes all the way to the rear of the round . . . as the end of the link fits into the ring-cut in the round. Otherwise, the gears won't load and will bind or bend the cover. Spread the word, will you?

Slide Back Repairs

Before you strap a chopper motor into blade harness you've got the blade damage built in the head experimental motor-rotor pins. And remember — if you or your support can't make a repairable blade . . . a COPPER clip can.

Model Switch?

If — per chance — the 115-115 engine in your Huey II Model gets replaced by another engine model, remember to change the label back to a 2-Model. Paperwork changes should include an appropriate entry in the records column of aircraft inventory, status and flying time. Do form 1202. Also file an model designation for MFD compliance . . . use the bird serial numbers.

Depranged Whang

Trying to see one of the new 3-prong extension cords with obsolete 2-load tools or base plugs, lots of people look out all the round prong. That could be — and often is — fatal. Use the adapter, P/N 933-303-4172, and ground that pigtail to the tool or a ground post . . . and preserve your hearing.

* **R P M C H A N G E** *

* The new MAXIMUM RPM under load for your LH8-400-1 *
* and -1A 3-200 and 375cc engines is 2800. The new maxi- *
* mum no-load RPM is 3000. If your engine will do more than *
* 2800 RPM at full throttle (take it easy!) with no load on *
* neutral, get it to your support — right now. Watch for a TWC *
* issue ATTC on this RPM change. *

Would You Stake Your Life ⁴⁰⁰ on
the Condition of Your Equipment?

Why Do You Keep Your
M16 Rifle Clean

Inside and Out
and Lubed
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CLEAN AND
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