

Issue 106

**PS**

1967 Series

**THE  
PREVENTIVE  
MAINTENANCE  
MONTHLY**

WELL, HAPPY  
KNOW... IT WAS  
ONLY THIS LITTLE  
OL' CONNECTION ALL  
THE TIME!



# GENERATOR PM



THE WHOLE CAMP IS NO POWER!

HEY! NO JUICE HERE!

REPAIR THE LIGHTS!

LENDER! NO MORE PARTS TO CHANGE! NO! I CAN'T DO THAT!

IS THE PROBLEM ON THE BATTERY?

NO BATTERY JUST DOING THE PM ON THE GENERATOR FOR YOU.

Just about the biggest headache for Army units in the field these days? Greater than the enemy tanks out in the bushes shooting at you? It is power generators... mainly because they are started up and forgotten.

Communications, lights and power-operated equipment take a lot of electricity. That's why there are generators in every unit.

And those generators are getting used — around the clock... 7 days a week... 22 weeks a year in places like Vietnam.

When any equipment is used that much, it's got to have regular main-

tenance... every day... even several times a day.

So, if you've got the job of taking care of a generator, you've got a real tough one. You can't fooling and wander off to the PX. Notice.

A generator calls for a man's full-time attention. Before starting up, see that the oil is OK, and that the power lines are hooked up right. Drain the fuel lines and do the oil filter before operation checks your TM calls for. Make sure that's level, not a water puddle, and getting plenty of air circulation.

While it's running, keep your ear tuned to the gear and your eye on the load. Your buddy in the tent shows the five night hook up some gadget that could break your generator's back.

Check the oil level every 2 or 4 hours of operation... more often if the engine's working to run oil. When your generator looks around-the-clock operation, try to have another one available to switch off to so you can do maintenance.

Good generator PM is one of the best ways to keep your G&E Max happy... and your outfit ready to fight.



FOR THE SERVICE MEMBER WHO NEEDS THE BEST AND MOST COMPLETE INFORMATION ON THE PRODUCTS AND SERVICES AVAILABLE FROM PERKINS SOUTH AFRICA LTD. CONTACT THE SALES AND SERVICE DEPARTMENT, PERKINS SOUTH AFRICA LTD., 1000 W. 17TH AVENUE, DENVER, CO. 80202.

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Call Today! Call Perkins South Africa, Inc. Today!



# M-20 Trailer

**ROOF JACK BOLDS**—Bolted, treated, ductile-steel in end set of brackets; [see pg. 46](#).



**FRONT JACK BRACE**—Crescent.



**FRONT JACK RODS**—Bored, cracked, low-water loads; chain plug can't be removed; [see pg. 46](#) for details. **FRONT JACK BOLTS**—Steel, doesn't snap into place when hook is released; [see pg. 46](#) for details. **FRONT JACK BOLTS**—Steel, doesn't snap into place when hook is released; [see pg. 46](#) for details.



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**TURNING BUILT  
PLUGS**—Ball bearing  
can't be moved for oil  
oil mixing.



**TELEVISION TERMINAL  
BLOCKS**—Power cable  
insulation **frayed**, wires  
**loose**, not connected,  
cable loose, oil, dust  
loose.



**DOOR ASSEMBLY**—Mounting screws  
and nuts for doors **loose**, missing, also  
**don't bolt**, **loose**, missing after you've  
set using standard 50% torque/turn  
keys. If you loose them up, but not  
screwed in place, and then reverts the  
mount . . . the doors can put a mean  
load in the right track.



**DIFFERENTIAL SCREW**—Loose, missing.



# M45C Mount

BATTERY  
PLATE  
ASSEMBLY??

CHECK!



**CONNECTION**—Bus  
bars, mixing, wash  
are missing, cables  
**loose** or terminals not  
connected, too little  
oil cover mixing.



**FOOT REST**—Twisted  
out of shape, broken  
pins and chains **lost**,  
oil missing.



**SEAL**—Bipped, pulled  
out of rollers, water-  
proofed, adjusting, and  
**WREN'S** lock, **WREN'S**  
lock, adjusting, start  
**lost** or **don't** don't  
go to adjusting hole,  
**broken**, spring weak,  
**broken**.



CHECK!



**BATTERY PLATE ASSEMBLY**—Latches bent, **broken**,  
nuts missing, pins and roller legs **broken**, missing,  
stamp bent, **loose**, rubber pad **loose**, missing.









**CONTROL, CARRY!**—Feel up, your can't be closed, **locks on handles**, side gates and instructions that **can't be read, pointed over, missing**. (Although you don't use the robot receptacles now, you must know what the labels look like. To do what you can to keep them from getting battered.)



**USE, TALK!**—**Leave no stone, lock, chain broken, missing, rag down?** At night, **take breaks, missing, wires not open, gauge broken, missing, chute broken, missing, dirt doesn't work**. (Check the fuel lines, too —for **locks, stop leaks and bleeding water**.)

**SPRINGING STRAP**—**Loaded, not attached, not, replace missing**



**POWER CABLE**—**Frayed from rubbing, connector battered, filter not loaded, missing, clamp loose, missing**



**CYCLING COOLING FINS**—**Loaded with dirt, loose and the like**



**STARTER SWITCH**—**Doesn't work**



## Publications

An MFR crew that's on the ball has these publications on hand:

IN 4-2000, Ch. 1 May 45, Ch. 2 Aug 45,  
Ch. 3 Dec 45 —MFR News  
IN 4-2001, Ch. 1 May 45 —  
MFR News

IN 4-2002, Ch. 1 Jul 45 —

Three Extra Minutes

IN 4-2003, Ch. 1 Jul 45 —Concrete  
IN 4-2004, Ch. 1 Jul 45 —Concrete  
IN 4-2005, Ch. 1 Jul 45 —MFR News  
IN 4-2006, Ch. 1 May 45 —Steel and  
Core Steel Shapers

IN 4-2007, Ch. 1 Jul 45 —Loading 45 45  
IN 4-2008, Ch. 1 May 45, Ch. 2 Jul 45,  
Ch. 3 Dec 45 —Team Of The Year

It's also a good idea to get in the habit of looking for loose screws, nuts and bolts whenever you have a break in time. When you have two-guns-or-more chomping away, you get a mass lot of vibration. One thing that really gets the shakes is the MFR sight.

If you have trouble with loose screws and nuts, try using lock washers or locknuts that just might do the trick.

You've heard it before . . . and here it comes again — keep steam and high-pressure water hoses away from the MFR. You may get it close real fast, but you might also pay a high price later — when you can't heat afford it.

THAT'S RIGHT!  
FORMAN, THAT'S  
TO-YOU-READY!



DON'T SHOOT YET!



#### Uh-huh! Not Hold it!

Never stick a round in the chamber of your 105-MM M108 SP howitzer till you've checked to make positive the main sliding shaft has returned to its forward position . . . meaning, you can see it in *View of the shaft*.

Why not? Cause if the shaft doesn't return and you can see space down, watch out! You might get an unplanned shoot-off!

Here's the scoop: If the shaft doesn't come back like it's supposed to, it means the thrust bearings have worked loose from the reinforced mounting frame of the firing mechanism group and the shaft is stuck to the rest . . . or could be that point or rest are causing the sliding shaft to seize.

Either way, it forces the cannon plunger close against the firing plunger and loading of the cannon launch mechanism. This causes the percussion mechanism to release automatically when you close the breechblock.

What to do? You'll find the steps on fixing this condition on page 55 of *EP: Edge*. TB 5-1800-280-13/13 (Rev. 65). An M108's also in the works on this. Meanwhile . . . watch it!





HARRY  
NOTES

## KEEP OUT MOISTURE



Let's say you're in a place where the humidity is up there . . . and the wall in your thermostat can move up and down faster than a Go-Go girl can move in any direction.

In what happens when you operate your Hawk AM/TPQ-21 condenser unit . . . that it draws for a couple hours . . . and then more things happening again?

Right as rain. Rain. Is what you think it's done on places built the standard means — like the concrete walls and the plus insulation, window shades, cut-back compressor and electric compressor devices. And when you get moisture around electrical gear, you know you can have all sorts of problems.



One way to fight the condensation battle is to run the unit in steadily instead of completely shutting it down. The best ground in steady is a big help.

It's also worth noting on the heating system before going into operation—until you see that any condensation has disappeared from the concrete walls and drains.

Another thing . . . take a look at the control for the plug-in boards every so often. The idea is to get rid of any moisture you come across.

## SEEING RED

You want to see red on the power distribution panel in your Hawk AM/TPQ-21 condenser motor.

In detail, it's not too hard to see, and in the form of 10-in high-mounted letters that read "DANGER—240 VAC"

You'll find a copy of the layout sheet under 1000 8000 400 3100 on page 11 of TM 5-4011-00-2107/1 (see 10).

The warning you must still before the handle on the panel.



## LACKS CRACKS?



It pays to give every few days at the brackets that hold the motor in the high-voltage power supply cabinet on your Hawk AM/TPQ-21 make any make.

You just might spot a crack or two in the brackets. If the cracks run too broad and the motor drops, the power supply could take a real beating.

So head off possible trouble by replacing any brackets that look like they've had it.





## TAKE THE HEAT OFF

Make the working load and clear. On your Mack AM/MPQ-50 high-powered alternator.



Why? You can get the good-bye of all pressure buildup in the heat exchanger when you apply control that is it when it's full of coolant, but not connected to the coolant system. When the lines are disconnected, the coolant's trapped in the exchanger. The coolant expands and with it comes the kind of pressure that can burst the exchanger and lower the RPM.

So, remember the warning . . . and if you're in a hurry to get the RPM you want below 10 Hz, run the water in steadily.

## THE SQUEEZE IS ON

You want to make the supply people happy?

Before you send out your Mack maintenance notices, make sure they're right. In fact, it's really simple to:

The shells are hard to come by . . . and when you put one in the engine and drive one in exchange, the supply system looks the plank.

In your part 94 of TM 9-1410-108-11 (14 Jul 63) a hard look before deciding any shells, assemblies or groups in any of your shells make 'em unworkable.



## HEAP BIG TROUBLES

Under signals may be a way of speeding the work, but the work is bad when you are full of work coming from the machine power supply for your Mack AM/MPQ-50 engine only.

It could mean there's an overload CR-11 machine plus circuit breaker in the power distribution panel.

The CR-11 circuit breaker that belongs in the panel is rated at 2 amp, 110 VAC, 600 CPS.

If you have something else, send a signal to your support people.



You speak! But then, when you need to decrease, check to see for your Mack maintenance.

Other maintenance can also try to look on the replacement. And it's a machine that gets right on up the supply line.

A lot of the Mack can be put on the gear who's got a chance that need repair on a shell maintenance . . . and make repairs about them. And when a chance doesn't get repaired and then put back in the supply system, you're going to have changes.

Here's your chance!





**GOT  
A**

# SOGGY

**RADAR  
SET?**

Soggy, soaping communication is about the only thing that can soak up on your AM/FM/4 or AM/FM/33 radio as before you know it.

That Chevrolet company friendly car comes to with a complete punch that just radio equipment deserves the 1980s — and a Mr. 18 radio is something you don't want.

For real answers for communication FM, my idea

1. Keep them only near the tent, but, holding and point only to get in a position.



2. Open up and release from a day.

3. Because all have from the front panel of the 1980's radio's set is one to check-out your set. By the time and trouble with a clean state when you get



radio to operate. Change it to 18 11-1000-01-1111 for your 1980's car radio. For 1800-800-8000 and your 1980's car radio. For 1800-800-8000.



4. From our radio we will use for that? A little maintenance for a year, but it may that you will point ready to use it again.

5. If your 1980's radio comes, open all more panels when the set's not working, if you can't find what for it, even all the components with a possible other water proof' about.

**BAD BUMPERS?  
LET SUPPORT CLIP  
IN NEW ONES.**

6. If you are within in your set's range, make sure communication water solution, you're not left with the previous version. But the set is your about support clip for a better in order to prevent additional damage.



7. To help prevent our and maintain use of your 1980's/1984 radio, keep the set in.



Keep the radio of the moving over the first radio will stick and be replaced.

As you see, the radio is being the radio when you meet the set in the case this kind of gear change in the bumper, from the control panel inside the bumper you will see.



A light layer of white powder (used on the bumper before installing the radio) will prevent the radio from sticking to the bumper.

## PSN'S FOR ARC-SIBX



During double vision building at work, members for major components of the JEM/ARC-SIBX radio set? Don't miss it. Make a note in THE 11-0000-110-000 (Job #1) PSN 1621-000-0001 is for a RT-743/ARC-SI member transmitter, and PSN 1621-000-0002 is for a C-0001/ARC-SIBX radio set control.

## KEEP YOUR MUD GUARD UP



Overhead member transmitters in your Winco-12 radio radio set can make all kinds of trouble for you. And, the mud and sand of Winco are right on hand as the weather warms.

### Like us

Splashed mud and sand make their way into the cooling vents of the RT-240 and RT-120 and keep the Motor from doing its job. Naturally, you've got to check the vents often to be sure they're clean.

To prevent splashed mud and sand from clogging the vents and causing overheating, use the radio set's cover whenever feasible. Not only is the cover a good mud guard but it also helps keep the motor cool.



### COVER IT OR REPAIR IT

A reaction, though the more the cover doesn't block the inside and no loose parts of the receiver transmitters. Blocked parts can overheat a lot faster in dirty vents.

## SPLINT FOR AN ANTENNA

PHOTO: I'VE  
GOT THE  
SPLINT—  
WHEN'S THE  
REPLACEMENT?

DON'T WORRY!  
WE'VE STOCKED UP  
ON 40-100'S ANTENNA  
ELEMENTS.

Dear Editor,

We've come up with a fix for our antennas here in the 12th Division that may be helpful to other units in a similar bind.

The 40-102 antenna elements on our M404's break occasionally from whipping against the spun flash cover.

Since the element that breaks (the 40-100's VBC lower element) is hard to come by at times, we keep communicating with a flexible "splint" that we slide over the element and tape in place. It works fine as long as the center wire of the element isn't severed. Usually, though, it's just the fiber glass cover that's damaged.

What we use for our own get-a-replacement element is a flexible gas pipe spool.

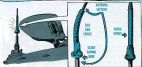
We slide the spool down over the break, bending the break about midway up the spool. Then, tape the spool in place from the bottom up. The spool has to be completely taped to prevent R.F. leakage through the metal holes.

In a bind a wooden splint could be used, but you wouldn't have flexibility.

The "splint" does a pretty good job for us while we're waiting for replacement.

ROBERTSON PERAZZINI

124 Cav, 12th Inf, 8th.



(Editor's Note—A wooden splint is a real fast way to get the word out, although it has limitations as a permanent fix. I'd say get the replacement element for best radio performance.)

## ANTENNA CHOPPER CHOP



Wait a minute! ... Back off!

When you're told that a portable or vehicle radio set becomes a part of you, remember the antenna's three uses.

Take, for example, an AT-3712/VRC, AT-3702/VRC or AN-1703/VRC antenna. It can wind up in the way of, say, a UH-1H helicopter rotary blade and cause all kinds of chaos.

Besides causing communication loss and loss when the blade gives the antenna a heavy chop, the blow can damage the Fleet's gear power and anybody in the area could be seriously injured by falling debris.

Your best bet's to keep the radio antenna out of the rotary blade's reach.

## DULL SHARP ANTENNA

FRESH!

HONEST, HONEST!  
IT WASN'T ME!

Roaming vehicles on a rough road with a steel-core antenna, like Volkswagen, or AR-150R, may be open, but Army eyes don't come to being poked, poked or jabbed that way.

You can get the point real quick when that long antenna's tied to, say, a short M114 or M1181 in one track.

Your best bet's to dull a thorn-like antenna by sticking a fishing rod or leverage handle through one end of the M118A main antenna.

To hold 'em snug put a couple or three wraps of tape around it.

Then, whether a guy walks into the antenna in the dark or backs into it during the day, he won't feel like he has been stick jabbed.



## CHATTER CHOP OFF CHANGER

YOU'RE  
EATING OUT,  
DUDY!



CHECK YOUR  
AIO COVER AND  
SEE IF IT'S  
STAMPED  
"C-17 NEED  
ADDED"



Next time you're chattering back and forth on your AN/PRC-25 series radio set and you lose your channel or station, consider this.

Your AIO milliamperes in the RT/205 may be your culprit, with replacement of the module the order of the day.

Early model AIO's will not fit the supply system, but a later model has solved the back-and-forth channel problem.

If you lose your channel or station during intermittent transmission get somebody to level an eyeball on the AIO. If it's the improved variety, the AIO cover will be stamped with the words "C-17 NEED ADDED." Manually, you begin to suspect something other than the AIO quibbler.

If the milliamperes are stamped with "C-17 NEED ADDED," replace the AIO cap and your problem ceases.



## ALINE YOUR PRC-6



Dear *Half-Dozen*,

I've would appreciate it if you'd remind PC members that their AN/PRC-6 units also have to be realigned whenever they change crystals.

None in the support shop was able to PRC-6's was repair on the 11th or 12th crystal. But, when the sets go back to the units they have to be realigned if the 11th or 12th crystal is not used.

We got some sets back to good working order, but the setting unit did not realign for the crystal they changed to. Naturally, they thought something was wrong with their sets.

YIP I. A. A. B.

Dear Specialist I. A. A. B.,

Well said. Users often check one per page 13 of TM 11-204 whenever they change crystals. There's a note in the changes to the TM on '91 and '92 cubes that should be heeded, too.

## BENDING PLATES IS TABOO



variable capacitor. That, it's like a safe handle when it comes to figuring out tuning frequencies.

So, your best bet's to keep those plates, screwdrivers and the like, from between the tuning plates.

That goes for dusting and cleaning, too. Never have an unneeded intrusion into the plates 'cause it'll bend them and throw your receiver out of frequency calibration.

Trying to peak the frequency of your radio receiver with commonplace tools can mess with about as much success as a surgeon operating with a mallet or pliers.

The answer, like I've stated, is a TR-115, -107 or -113, will be shown out of calibration by vibrating with the

## TK-115 LEAVING THE SCENE



Go with it, join the in-crowd that's switching over to the TR-115-107-113 1150-004-5175, electronic equipment and kit and holding a low charge to the TR-115-107-113 1150-004-5175, radio again and kit.

Take a peek at ME 11-007 (Sep 68) to get the lowdown on the real kit switches wrap. The supply bulletin gives you 17 more facts and what away 30 million from TK-115.





A collection of book reviews of titles in paperback and hardcover. Titles are listed with their subject matter and price. Some titles are complete sets. All are available only at the store or by mail order at \$1.99 each.

#### Illustrated Histories

**THE UNITED STATES OF AMERICA** by Robert M. Lynd, 1960, 128 pp., \$1.99. **THE UNITED STATES OF AMERICA** by Robert M. Lynd, 1960, 128 pp., \$1.99. **THE UNITED STATES OF AMERICA** by Robert M. Lynd, 1960, 128 pp., \$1.99. **THE UNITED STATES OF AMERICA** by Robert M. Lynd, 1960, 128 pp., \$1.99.

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## DA FORM 12-31 WRITE-IN ITEMS

Here are the authorized "write-in" items on the Form 12-31 for the Helicopter Inventory Collection. See page 3, Section I of the form.

F-47 800 Machine Gun 8M571

H2 800 Grenade Launcher

F-42 800 Gun 8M61

20 800 Gun 8M20

The 12-31 takes the same name as the original one. Companies, Institutes, etc. should forward the form to the next higher headquarters. And don't forget your account number.



# JOE'S

## TEST BEFORE YOU REPLACE

HELP!



WOLF DING!



"SOMEBODY'S  
GONE, HARRIS!  
WITH AN UNCLE!  
WOLF DING!  
SOMEONE IT JUST  
JUST WING, IT  
IS BUILT IN  
SOMEONE TO BE IN  
THE, IN TECHNICAL  
SOMEONE, IN  
THE..."



"FEAR NOT,  
COMRADE WOLF!  
I'VE FOUND YOU!  
SOMEONE, SOME  
WOLF!"

"SOMEONE AS  
LAD, A WOLF!  
MY DEAR... I'LL  
WOLF, IT WOLF!  
LAD, A WOLF!"







**Joe's Dope Sheet**



# THE TESTERS



**TEST PARTS**  
 "WOW, YOU'VE ALL  
 AND REPLACED?  
 GUESSED? A  
 REASON? PLEASE!  
 I AM WILLING TO BET  
 THEY'VE GOT LIFE IN  
 'EM YET — IT CAN COST  
 YOU MORE THAN  
 JUST 'FACE.'"

<p><b>THE TESTER</b></p>	 NO. 100000000 AND NO. 1000 RESISTOR	 TESTS, MEASURES, CONDUCTS (EVEN)	 TESTS BY THERMISTOR	 LIGHT SENSITIVE TUBE	 MEASURES	 TESTS, MEASURES, CONDUCTS	 TESTS, MEASURES, CONDUCTS BY THERMISTOR	 TESTS, MEASURES, CONDUCTS, (EVEN)	 TESTS BY ELECTRON TUBE	 TESTS, MEASURES, CONDUCTS
<p><b>WHERE YOU FIND 'EM</b></p>	IN 1 SUPERMARKET AND IN 1 CLOSET	IN 1 CLOSET AND 1 CLOSET AND IN 1 SUPERMARKET	IN 1 SUPERMARKET AND IN 1 CLOSET	IN 1 CLOSET AND 1 SUPERMARKET ABOUT AND 100	IN 1 SUPERMARKET AND IN 1 CLOSET ABOUT AND 100	IN 1 CLOSET AND 1 CLOSET AND ABOUT AND 100	IN 1 CLOSET AND 1 CLOSET AND ABOUT AND 100	ABOUT AND 100	IN 1	ABOUT AND 100
<p><b>WHAT THEY'RE USED FOR</b></p>	MEASURES PULSES, ELECTRIC CURRENT (CONDUCTS)	MEASURES MEASURES, CONDUCTS AND FULL RAMP IN PULSES AND MEASURES AND THERMISTOR	TESTS CONDUCTS (EVEN) AND CONDUCTS (EVEN)	LIGHT TUBE	ABOUT MEASURES AND CONDUCTS ELECTRIC CURRENT	MEASURES AND ABOUT 1000 IN PULSES	MEASURES AND ABOUT (EVEN)	ABOUT CONDUCTS (EVEN)	CONDUCTS (EVEN)	ABOUT MEASURES AND CONDUCTS

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

IF YOU WANT TO DISPLAY THIS ADVERTISING ON YOUR BULLETIN BOARD, OPEN STAPLES LEFT BY BUYING FOR US.









## BARE ESSENTIALS ONLY



You say your **1994-1995, 2.8L engine fuel filter assembly, P/N 2941-001-1X10**, is clogged up with gunk and you need to put in a new filter?

Hold one before you order the whole filter assembly. The assembly was only for maintenance kits and it'll cost **Wally 180** more!

All you need is the **55-37** replaceable filter element and the O-ring packings. These two items come in **Filter assembly repair kit, P/N 2941-001-0000, P179 294-3098-1**.

This kit can also be used to replace the external filter of the transmission oil system.



P/N	Item	Quantity
66 120-20-026	Filtering	1
66 120-20-029	Filtering	1
62 120-10-547	Filtering	2
66 120-20-810	Filtering	1
64 P179 294-3098-1-10	Sealer	1

The items **a, d, and e** when replacing the transmission oil filter element, and items **a, b, and c** on your engine fuel filter replacement job.

Wally's still **Wally Right** in **TM 15-P179-294-3098 1200 000**, by **276** and **474**... in a special case, no less!







You wouldn't throw away a part that was only partly used up, would you? (Course not... it rots down the drain!)

But you'll be doing just that unless you keep the D4. From 2400-14 for your half up-to-stuff or else change components.

Take the real main link on the H4y (L311A) as an example.

TM 11-2326-211-26 gives you an overhaul time of 1100 hours. But the yoke has a retirement time of 1800 hours. So if you keep only the hub then the yoke service life will be no overthink. Overhaul types will have to swap the

2400-14		21-1100	
QTY	PART NO.	QTY	PART NO.
1	2400-14	1	21-1100
1	2400-15	1	21-1101
1	2400-16	1	21-1102
1	2400-17	1	21-1103
1	2400-18	1	21-1104
1	2400-19	1	21-1105
1	2400-20	1	21-1106
1	2400-21	1	21-1107
1	2400-22	1	21-1108
1	2400-23	1	21-1109
1	2400-24	1	21-1110
1	2400-25	1	21-1111
1	2400-26	1	21-1112
1	2400-27	1	21-1113
1	2400-28	1	21-1114
1	2400-29	1	21-1115
1	2400-30	1	21-1116
1	2400-31	1	21-1117
1	2400-32	1	21-1118
1	2400-33	1	21-1119
1	2400-34	1	21-1120
1	2400-35	1	21-1121
1	2400-36	1	21-1122
1	2400-37	1	21-1123
1	2400-38	1	21-1124
1	2400-39	1	21-1125
1	2400-40	1	21-1126
1	2400-41	1	21-1127
1	2400-42	1	21-1128
1	2400-43	1	21-1129
1	2400-44	1	21-1130
1	2400-45	1	21-1131
1	2400-46	1	21-1132
1	2400-47	1	21-1133
1	2400-48	1	21-1134
1	2400-49	1	21-1135
1	2400-50	1	21-1136
1	2400-51	1	21-1137
1	2400-52	1	21-1138
1	2400-53	1	21-1139
1	2400-54	1	21-1140
1	2400-55	1	21-1141
1	2400-56	1	21-1142
1	2400-57	1	21-1143
1	2400-58	1	21-1144
1	2400-59	1	21-1145
1	2400-60	1	21-1146
1	2400-61	1	21-1147
1	2400-62	1	21-1148
1	2400-63	1	21-1149
1	2400-64	1	21-1150
1	2400-65	1	21-1151
1	2400-66	1	21-1152
1	2400-67	1	21-1153
1	2400-68	1	21-1154
1	2400-69	1	21-1155
1	2400-70	1	21-1156
1	2400-71	1	21-1157
1	2400-72	1	21-1158
1	2400-73	1	21-1159
1	2400-74	1	21-1160
1	2400-75	1	21-1161
1	2400-76	1	21-1162
1	2400-77	1	21-1163
1	2400-78	1	21-1164
1	2400-79	1	21-1165
1	2400-80	1	21-1166
1	2400-81	1	21-1167
1	2400-82	1	21-1168
1	2400-83	1	21-1169
1	2400-84	1	21-1170
1	2400-85	1	21-1171
1	2400-86	1	21-1172
1	2400-87	1	21-1173
1	2400-88	1	21-1174
1	2400-89	1	21-1175
1	2400-90	1	21-1176
1	2400-91	1	21-1177
1	2400-92	1	21-1178
1	2400-93	1	21-1179
1	2400-94	1	21-1180
1	2400-95	1	21-1181
1	2400-96	1	21-1182
1	2400-97	1	21-1183
1	2400-98	1	21-1184
1	2400-99	1	21-1185
1	2400-100	1	21-1186
1	2400-101	1	21-1187
1	2400-102	1	21-1188
1	2400-103	1	21-1189
1	2400-104	1	21-1190
1	2400-105	1	21-1191
1	2400-106	1	21-1192
1	2400-107	1	21-1193
1	2400-108	1	21-1194
1	2400-109	1	21-1195
1	2400-110	1	21-1196
1	2400-111	1	21-1197
1	2400-112	1	21-1198
1	2400-113	1	21-1199
1	2400-114	1	21-1200

yoke because they don't know the class. No stress on checks these model links.

What's next? Easy, really. Just reach for your copy of TB AVN 23-45 (16 Jan 67) on component reporting, maintenance management and historical data. In a few minutes of reading you can be in support.

In a hurry (like everybody) you need a D4. From 2400-14 for the condition components listed in part 5 and another 2400-14 for the class change components listed in part 6.



By slipping these parts if you'll find the real main link, grip and yoke part numbers listed on pages 12 and 14. Note on the Heavy part numbers, for all models, that get listed on your 2400-14.

Hub P/N	Grip P/N	Yoke P/N
2400-14A-1	2400-14A-2	2400-14A-3
2400-14A-4	2400-14A-5	2400-14A-6
2400-14A-7	2400-14A-8	2400-14A-9
2400-14A-10	2400-14A-11	2400-14A-12
2400-14A-13	2400-14A-14	2400-14A-15
2400-14A-16	2400-14A-17	2400-14A-18
2400-14A-19	2400-14A-20	2400-14A-21
2400-14A-22	2400-14A-23	2400-14A-24
2400-14A-25	2400-14A-26	2400-14A-27
2400-14A-28	2400-14A-29	2400-14A-30
2400-14A-31	2400-14A-32	2400-14A-33
2400-14A-34	2400-14A-35	2400-14A-36
2400-14A-37	2400-14A-38	2400-14A-39
2400-14A-40	2400-14A-41	2400-14A-42
2400-14A-43	2400-14A-44	2400-14A-45
2400-14A-46	2400-14A-47	2400-14A-48
2400-14A-49	2400-14A-50	2400-14A-51
2400-14A-52	2400-14A-53	2400-14A-54
2400-14A-55	2400-14A-56	2400-14A-57
2400-14A-58	2400-14A-59	2400-14A-60
2400-14A-61	2400-14A-62	2400-14A-63
2400-14A-64	2400-14A-65	2400-14A-66
2400-14A-67	2400-14A-68	2400-14A-69
2400-14A-70	2400-14A-71	2400-14A-72
2400-14A-73	2400-14A-74	2400-14A-75
2400-14A-76	2400-14A-77	2400-14A-78
2400-14A-79	2400-14A-80	2400-14A-81
2400-14A-82	2400-14A-83	2400-14A-84
2400-14A-85	2400-14A-86	2400-14A-87
2400-14A-88	2400-14A-89	2400-14A-90
2400-14A-91	2400-14A-92	2400-14A-93
2400-14A-94	2400-14A-95	2400-14A-96
2400-14A-97	2400-14A-98	2400-14A-99
2400-14A-100	2400-14A-101	2400-14A-102
2400-14A-103	2400-14A-104	2400-14A-105
2400-14A-106	2400-14A-107	2400-14A-108
2400-14A-109	2400-14A-110	2400-14A-111
2400-14A-112	2400-14A-113	2400-14A-114
2400-14A-115	2400-14A-116	2400-14A-117
2400-14A-118	2400-14A-119	2400-14A-120
2400-14A-121	2400-14A-122	2400-14A-123
2400-14A-124	2400-14A-125	2400-14A-126
2400-14A-127	2400-14A-128	2400-14A-129
2400-14A-130	2400-14A-131	2400-14A-132
2400-14A-133	2400-14A-134	2400-14A-135
2400-14A-136	2400-14A-137	2400-14A-138
2400-14A-139	2400-14A-140	2400-14A-141
2400-14A-142	2400-14A-143	2400-14A-144
2400-14A-145	2400-14A-146	2400-14A-147
2400-14A-148	2400-14A-149	2400-14A-150
2400-14A-151	2400-14A-152	2400-14A-153
2400-14A-154	2400-14A-155	2400-14A-156
2400-14A-157	2400-14A-158	2400-14A-159
2400-14A-160	2400-14A-161	2400-14A-162
2400-14A-163	2400-14A-164	2400-14A-165
2400-14A-166	2400-14A-167	2400-14A-168
2400-14A-169	2400-14A-170	2400-14A-171
2400-14A-172	2400-14A-173	2400-14A-174
2400-14A-175	2400-14A-176	2400-14A-177
2400-14A-178	2400-14A-179	2400-14A-180
2400-14A-181	2400-14A-182	2400-14A-183
2400-14A-184	2400-14A-185	2400-14A-186
2400-14A-187	2400-14A-188	2400-14A-189
2400-14A-190	2400-14A-191	2400-14A-192
2400-14A-193	2400-14A-194	2400-14A-195
2400-14A-196	2400-14A-197	2400-14A-198
2400-14A-199	2400-14A-200	2400-14A-201
2400-14A-202	2400-14A-203	2400-14A-204
2400-14A-205	2400-14A-206	2400-14A-207
2400-14A-208	2400-14A-209	2400-14A-210
2400-14A-211	2400-14A-212	2400-14A-213
2400-14A-214	2400-14A-215	2400-14A-216
2400-14A-217	2400-14A-218	2400-14A-219
2400-14A-220	2400-14A-221	2400-14A-222
2400-14A-223	2400-14A-224	2400-14A-225
2400-14A-226	2400-14A-227	2400-14A-228
2400-14A-229	2400-14A-230	2400-14A-231
2400-14A-232	2400-14A-233	2400-14A-234
2400-14A-235	2400-14A-236	2400-14A-237
2400-14A-238	2400-14A-239	2400-14A-240
2400-14A-241	2400-14A-242	2400-14A-243
2400-14A-244	2400-14A-245	2400-14A-246
2400-14A-247	2400-14A-248	2400-14A-249
2400-14A-250	2400-14A-251	2400-14A-252
2400-14A-253	2400-14A-254	2400-14A-255
2400-14A-256	2400-14A-257	2400-14A-258
2400-14A-259	2400-14A-260	2400-14A-261
2400-14A-262	2400-14A-263	2400-14A-264
2400-14A-265	2400-14A-266	2400-14A-267
2400-14A-268	2400-14A-269	2400-14A-270
2400-14A-271	2400-14A-272	2400-14A-273
2400-14A-274	2400-14A-275	2400-14A-276
2400-14A-277	2400-14A-278	2400-14A-279
2400-14A-280	2400-14A-281	2400-14A-282
2400-14A-283	2400-14A-284	2400-14A-285
2400-14A-286	2400-14A-287	2400-14A-288
2400-14A-289	2400-14A-290	2400-14A-291
2400-14A-292	2400-14A-293	2400-14A-294
2400-14A-295	2400-14A-296	2400-14A-297
2400-14A-298	2400-14A-299	2400-14A-300

When the overhaul time rolls around and you slip the hub back to support the main you 80 and steel along 3-24A from 2400's—use with the hub and, another with the grip-link and a third with the yoke class. No job... this poop is right in part 6 of TB 4 FN 23-45. Of course, you get the pump for the 2410 from the 2400-14.

When the hub gets an overhaul the grip and yoke are separated from the hub and the yoke can be used again if it doesn't reach retirement class before the next hub overhaul.

Go ahead, pick up the big links on your mind and use if you've got the hub components listed on the 2400-14.

What's next—you find the hub listed that out the grip and yoke? No sweat!

No sweat—no waiting around eye parts 106 of TB 21-1508, 106-25 (Mar 67) on aircraft component replacement and repair procedures. If you will don't make me, contact 480006, ATTN: 480006 FORM.

# CHECK FOR BAR GREMLINS!



When the sky opens up and pines, rain and dogs, plant life goes on a spree—and so does corrosion. You have metal parts of your Huey (UH-1).

Corrosion gremlins may go to work on the stabilizer bar, break down the cushion plating, eat away and weaken metal in the joints of producing cracks. On the highly stressed stabilizer bar cracks lead to crashes!

So, next time you receive your charge, eye the bar for cracks. It's better cut loose from the in-and-out retaining-bolt. If you spot any cracks, the stabilizer bar assembly gets replaced, pronto!

## YOU ALL SHOOK UP?



Vibration is something flap-wing mechanics learn to live with—when it doesn't get out of hand.

Fortunately, you can tell easily enough if trouble's shivering with the main grip bearing in your Chinook-model Huey (UH-1C).

Just level the main rotor and stabilizer bar.

Next, move the bar in either direction. The blade grips should change pitch smoothly and freely. If you get a bind—or hear the bearing grate—better locate the bind off as direct support for a thorough checkup. It'll save time, parts . . . and loose blades.



The old tale about a mechanic not being able to do a job without tools was never truer than on the **Ray**™ **F3M-FC** 5-1/2" cone system.

It's a capital idea to inventory your special tools with **TM 55-1120-240-200** (Daw 444) and **TM 55-1120-240-210-2** (Daw 475) to make sure you have the new tools needed to maintain your **Charlie Model** 5-1/2" cone system.

Expanding any existing tools—you bet!

## THIN SOCKETS ARE HERE



HEY, HEY! I'm a NEW-BILLED CAT THAT'S IN ON THE INSIDE, REEELER!

Get that speaking now! **Arnold's General Mechanic's Tool Kit** will make yourself a new **F3M 55-1120-04-0100** get you a 7/16" grade plug socket; **55M 55-1120-04-0100** does the same for the **1/2" 5/16" size**. **NC 55M055-CL-006** (Step 46) was put together before **F3M's** for these 2 sockets became available. Be sure to check out these in your kit to see if you've got 'em.

WATE WASTE!

## LOOK SHARP!

I DIDN'T LOOK!



When your bird comes in to meet after a mission, be sure you check for battle damage with a fast-visual check.

Now, you can easily locate buffer entrances and exit holes and get them patched right-off. But what about in between? If a hook of fuel causes a fuel, oil, hydraulic or electrical line or control cables and rods you've got a weak part that has to be replaced, pronto.

So, be mighty sure you trace a bullet path to find hidden damage. You wouldn't want a weak part to be go over Charlie's cartney.

CHECK CHECK  
AFTER EVERY HOT  
FUSION... IT COULD  
PREVENT A CRASH!



## OLD JACK -- NEW PUB

YOU GOT  
YOUR  
NEW  
PUB  
BUY!



Maybe you overlooked it, but Ext. Part 1454 literature pub for Jack, System 145401, Type 86, P/N 14540178, P/N 1754016009.

This 18-oz heavy was originally issued only to Stewart (KH-11) and Army Main (KH-24) helicopter units, but other units may have interested in.

The pub for this old unreducing exactly: a TM 99-1754-108-11 (Old 88). A replace Air Force T.O. 15A23-11-1 and -4 (Doc 17).

# STOP RUSTY!

• Rusty Corrosion is a nasty character.

He'll make in a Chevrolet 100-475 cover blade make things pin hole during the rainy season.

The hole is also passed—which means water can collect in depression. The result is corrosion pin that can lead to bridge cracks—maybe a crack-up.

How do you stop Rusty?

Easy. At the FPM measure 100 hours since the blades were manufactured, overhauled or repaired last, take them off and eye each make hole for rust and forming corrosion marks. This special inspection is called for in TM 11-1120-200-20, Ch 5 (3 Aug 68).

Close the eye nut with corrosion resisting compound, MLL-10715, Type 1, FPM 10700-200-1116, during the big task . . . and to help keep you from getting swamped again, coat the box with anti-rust compound, MLL-4-10717, JAN-4-500 or TY-4-500.

ITEM 1  
CALL BOX



## TORQUE CHECK

Dear Windy,

How 'd' share the FBI's tip to "check" torque on a screw, bolt or nut.

Some guys check torque on nuts by turning the safety, turning the wrench or the minimum torque called for and making with the results. If the nut doesn't turn, or if there's a click, they figure it's got the proper torque.

Others say that to check torque you set the safety, back the nut off a few turns, then tighten to the proper torque value. In that, they re-torque the nut.

What say you, Windy?

BOB L. L. III

Dear Sergeant L. L. III,

It's nigh-on impossible to check the torque value of a tightened nut because torque indication is good only when the screw, bolt, or nut is moving. You have to start from scratch.

So, to check torque, the nut must be re-torqued. Just back off on the nut to below the minimum torque and then bring it back to the torque given in the maintenance job.



## AMBER FOR CHIPS

If your Buick 70-81 came back from a shop with an engine chip detector under caution light, don't worry. The caution light replaces the red one to make all kind chip detector lights the same color. Ch 1 (44 Apr 80) to MPPD 55-1518-201-2474 authorized the switch.



WEE THERE GOES MY RED AMBER LIGHT!



READ THE SIGNIFICANT ...

## YELLOW OR OD?



### Dear Wendy,

Para 24, AR 15-60-8 (Sep 66) says that ground equipment used in landing strips, heliports, perimeter roads, and aircraft flight areas should be painted yellow for safety reasons.

Does this go for all areas?

WM C. G. C.

### Dear Sergeant C. G. C.,

It depends on whether you're in a marked or non-marked area.

Para 174, sec Y, AR 700-1 (Apr 66) Color and Marking of Army Material has the answer. It requires various handling equipment including aircraft towing, fuel and oil dispensing vehicles used in non-marked areas to be painted gloss yellow No. 15028, M&E-7729.

If you're in a marked area this equipment should be painted non-gloss olive drab No. 314897, M&E-81127.

When you make with the yellow, para 23 of the AR says that certain vehicles and equipment may be painted with contrasting stripes to make 'em more readily visible to pilots and drivers of other vehicles.

The AR also spells out what color of contrasting paint you'll use on OD or other dark colored vehicles, or on yellow or light colored ones.

## GROUND MOBILITY

874-882 2-1/2 IN. EXHAUST...

## EXHAUST SYSTEM PARTS

Get the "meat, all you from waste-type, while we put the right cap on the right part for the right vehicle—selection is for the greatest job, stand of material.

Make a case, right now, that "8000 Group" means all from greatest engine trucks, even the plate 8025 is one of the clean from waste trucks. Make way, "8000 Group" carries all from waste and "8000 Group" sweeps up all from material.

Now here's the exhaust pipes, mufflers, tail pipes and connections for the 1 different groups.

### 8000 Group

Fig. Exhaust Tail Pipe (left-hand):  
VIN 270-45-478 — for 8025, 8026

Fig. Exhaust Tail Section (left pipe and  
exhaust pipe):  
VIN 270-57-157 — for 8025

VIN 270-57-158 — for 8026

Fig. Exhaust Tail Section:  
VIN 270-57-157 — for 8025, 8026

### 8025 Group

802-50-1 and 802-50-1A engine, modified  
with 802 5-1/2 IN. DIA. "D" bearing set-back.

Fig. Exhaust Pipe (left-hand) is adapted:  
VIN 270-45-478 — for all models

Fig. Exhaust Section (exhaust pipe and  
tail pipe):  
VIN 270-57-157 — for all models

ALL THESE PARTS  
ARE AVAILABLE TO  
USERS OF  
TA 8-1500-24-200.

### 8026 Group

Fig. Exhaust (modified) muffler:  
VIN 270-174-220 — for all models

### Muffler (tail)

VIN 270-174-220 — for 8025, 8026, 8027,  
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REPAIR-ORBIT TRUCK

## SMOKING TOO MUCH?

Trucksmen exhaust smoke from an M1042 or other M1042-series modified 5-ton truck can be cut by changing the fuel injection needles—from the original 1-hole to 2-holes on the 120-450-1 engine.

WORLD'S BEST EQUIPMENT CO. (Inc. 66) will have your support can replace the 1-hole needles with the type needed and in 24-hour modified engine trucks.

AND, M1042 5-TON TRUCKS ...

## GIVE 'ER THE GUN!

AND IT SAYS, AND!  
FULL THROTTLE!



Full throttle when you're operating the crane on an M1042 or M1043 5-ton truck.

Some guys didn't realize this when they read Sep-6, page 51, in *THE 7-11-20-11-10*. So the hydraulic pump didn't run fast enough to open the valves all the way. The valves got chattering, and pretty soon the pump went bust.

Now there's no mistaking what the TBI means, because, in Ch. 2 (Jan 64), it says: "Full throttle control valve to full open position."

FROM MATURE TRUCK ...

## MASTER CYLINDER MISERY

WELL,  
NOTA IN  
THINK!

BRACE  
YOURSELF!

WARRING  
NOT!

I HOP TO  
CRACKLE... THE  
ONLY BLISSFUL  
PERSPECTIVE YOU  
MAY NOTICE THE  
DISTINCT ABILITY!

Maybe it's not your master brake cylinder's fault if it's leaking. How about the booster valve in the rear square? Here you get the right one on your 2-stroke modified engine truck!

BMW 9-2130-311-2818 (Sep 84) says to replace the original booster with Booster Assembly, Valve, FSM 1128-112-7600.

If you don't have the new booster, you could get a pressure buildup that'll spring a leak in the master cylinder when you hit the brakes.

There's no allowable leakage of the master cylinder. But if you find some moisture in the line, don't get excited until you've checked it. It could be rubber preservative put inside the line in production.

STOP VAN  
WARR...

THINK  
YOURSELF!

## CABLE YOUR WAY TO POWER

With this cable, I can read ... and SC 4930-4E (Oct 84) is the generator and the stop van.

And the same goes for any van running electrically-powered tool or stop van in either the BMW 49-743 or M100 49-749 114-volt stop van. The way to carry the juice from your favorite external power source is with a 7-line cable which goes by the identification of FSM 4930-009-1009 ... at a cost of \$14.94 each.

In a lot of stop vans, though, this 7-line cable won't reach all the way back to the van. So you'll need a 25-line identified as FSM 4930-009-1004. This one costs \$36.99 each.

Both of these cables are listed on page 49 of SC 4930-4E. So look carefully with a supply support man on this arrangement and just watch what it does for your piece of mind (your maintenance mind, of course).

# SNEAKY ENGINE SMASHER

Just try to jam 2 pounds of sugar in a 1-1/2-lb bag. You get some idea of what happens if you try to run your vehicle's engine against hydraulic lock.

Hydraulic lock happens when liquid gets into an engine cylinder—sometimes you do it all the cylinders. Liquid—water or fuel—won't compress like air and gas do. So the piston can't go to the top of its compression stroke.

This liquid engine will be wet!



Like the 1-1/2-lb bag, something's gone awry. In your engine, the offending part'll probably be fuel or the piston packing. If the engine isn't rotated, it'll be badly damaged.

### THE FIX

So how do you know you've got hydraulic lock? How do you stop it from busting up your engine? What do you do to get rid of it? How do you keep it from coming back?



Like you expect a boiler trap, you use your engine for hydraulic lock before getting down to the business of starting to go.

That's done with the ignition switch off. Or, if your crank's got a manual or mechanical engine, you hold the engine stop handle to the "dead off" position.



Figure what would happen if you got ignition in a "closed" cylinder when there was liquid in another cylinder. The piston with liquid above it top of

it would drive up like a hammer run. It would try to compress the liquid. The liquid wouldn't compress and the cylinder head wouldn't give, but you can bet your boots some other part of your engine would give.



WITH 100% FUEL, YOU CAN START A CAR IN 100% ... (GROSS!) WITH 100%

With "ignition off" or "dead off," turn the engine over for 2 or 3 seconds using the starter. You have had fast spins on the starter switch. If you don't pay heed and fire, the engine will burn.



### QUICK TROUBLESHOOTING

If you hear—or feel—a jolting thump, or if the engine just seems to want to stop running over, you may quib. You've probably got hydraulic lock. Whatever's its there—water or fuel—has to come out. And to get it out you'll need the help of a qualified mechanic.



Spark plugs have to be removed. If you've got a spark ignition engine.

On compression ignition engines, fuel injectors usually have to be loosened or removed.

Then you start the engine over a few times. As the piston comes up, any liquid in the cylinders is dumped out the squelching or injector assembly holes.

Make sure, tho, with spark ignition engines that you still have the "ignition off" so there's no chance of a spark jumping to fuel being pumped out.

And that way any liquid that's been pumped out of your cylinders.

After squabblers are replaced, or injector nozzle assemblies tightened back down, your engine should start easily.



### NO BUBBLES

Any time you see signs of coolant leaks—drips and weeps, water in crankcase, oil in coolant—ring out for a mechanic to make a close check. Repairs or replacements are may save you from hydraulic lock and even worse troubles later.

### FUEL IS FOR YOU

Fuel can be a real trouble. Even its seeping up hydraulic lock.

You drop your guard when you forget to turn off all electrical switches. If they're left on after the engine's stopped, fuel could keep pouring against the manifold flapper valves. A little leak here over a few hours can give your engine a real bad case of hydraulic lock.

Even fuel injector needles can lead to hydraulic lock too, leading fuel right into the cylinders.

### WE BUBB

Getting hydraulic lock in your truck's engine may be like pulling the trigger at the wrong time in Russian Roulette. The odds are against it—but when it does happen . . . !!!

A few moments spent checking for hydraulic lock before the odds against doing a "bullet" into your engine.



# PROPERTY BOOK IAR

I'M PUTTING IN  
FOR COMPANY  
DUTY.

Dear Staff/Owner:

A lot of supply men get mixed up when filling out BA Form 444, Inventory Adjustment Report (IAR). Here are the simple rules we give our units for making out property book adjustments.

Use BA Form 444 for:

## 1. CORRECTING ERRORS IN EQUIPMENT NOMENCLATURE.

For example, when a property book page lists a 4-cup truck as #111, instead of an #111.01, a receipt, tag, #66, and #66.01 is entered as a receipt, tag, #66, and #66.01.01, etc.

PROPERTY BOOK IAR		EQUIPMENT NUMBER		DATE	
UNIT NO. 111		111.01		11/11/11	
PROPERTY BOOK NO. 111		111.01		11/11/11	
NO.	DESCRIPTION	DATE	REASON	INITIALS	REMARKS
1	RECEIVED 4-CUP TRUCK	11/11/11	RECEIVED		
2	RECEIVED 4-CUP TRUCK	11/11/11	RECEIVED		
PROPERTY BOOK NO. 111					
EQUIPMENT NUMBER 111.01					
DATE 11/11/11					
REASON RECEIVED					
INITIALS					
REMARKS					
11/11/11					

Pick up the inventory identified item on a BA Form 444, and post the IAR entry on the property book page.

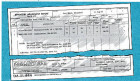
If two different types or models of mechanical equipment (say the #111 and the #111.01) have been accidentally combined for an entry page, make a new page for one of the items, and post the IAR entry on the original page, which continues to record the other item.

File a copy of the IAR in the document file after it's been filed.

### 3. PICKING UP INVENTORY CHANGES

Make up a BA Form 441 for the items in excess of the quantity listed in the property book and post the IAI to the property book. Post it across items.

File the IAI in the document file after it's dated, and file the book-in document when the transaction is completed.



### NO IAI

An IAI is a memorandum change from supply request or from a supply publication doesn't take an IAI. In this case just make the correction on the property book page and note the authority listing the change.

The IAI is not authorized when it's possible that items have been substituted or lost. The IAI, for whom the book is maintained, approves IAI's.

That's it.



Dear CWE S. A.,

Looks good. And, the IAI takes minimum info when it's used for making minor adjustments in the property book. You can use only whatever blocks and columns are needed to identify and describe the adjustment.

For example, the unit price info doesn't have to be noted in the "Adjustment Amount" column. If you find it helpful, tho, you can use those columns to record the quantity of items you're crediting or changing in your property book.

# WHAT CAN YOU PUT ON A PLL..?



To put it another way, any contractor authorized for stocking in your supply or maintenance publications, plus any other items O&M for organizational maintenance, which rack up demand into ERM Item 2177, are authorized for your PLL.

## PLI GUIDES

The basic guides on PLL control are 48-714.11 (O&M 00), Section PL, and your local PLL SOP. And, the CO responsible for the equipment is the approving authority for the PLL. When it's possible, the CO may have his PLL made up by his supply support units, but the list is made up for his O&M.

THAT'S EASY TO ANSWER... WHAT DO YOU NEED? A GOOD PLL (ENCLOSED LONG LIST) COVERS SUPPLIES AND REPAIR PARTS AN O&M MUST HAVE ON HAND OR ON ORDER FOR SCHEDULED OPERATIONS UNLESS A SE-DRY SUPPLY.

FORM OF REQUEST				
PLI	PLI	PLI	PLI	PLI
48M-017	0	0	1	
50C-000	0	0	1	
50P-017	0	0	1	

48-714.11 (O&M 00)



MORE





## PLI SIZE & RANGE

The specific items and quantities authorized by equipment parts manuals for your PII are based on equipment density, which means the overall total of equipment that needs the repair parts, maintenance items or maintenance related supplies.



Here are some of the main PII guide lines:

1. TM's list minimums of the amount for 30 days of supply.

2. On an initial PII you can stock all repair parts which show a shortage allowance in the TM's.

Some manuals list allowances in round numbers and use equipment density spread values. To find your PII allowance you can check the master volume.

Other manuals show an allowance factor and provide a formula to help you work out your PII allowance. And, if the answer is anywhere from 0.5 to 2.0, you're authorized to stock 1 each of the items on your PII. If the answer is 2.0 or less, you're not authorized to stock the items on your initial PII.

3. If your equipment density is too low to allow initial stocking of items listed in other type of manual . . . no sweat. You haven't run out yet. You can get the items for use as needed, and keep demand records on 'em. Then when an item reflects a repair demand it can go on your PII.

4. Repair parts listed "as required" or with an asterisk, in TM's, are not authorized on initial PII, either. You order them as needed and start keeping demand records on 'em, too.

30-DAY  
PLI

INITIAL  
PLI  
ALLOWANCE

AS  
NEEDED  
PLI

AS  
REQUIRED  
REPAIR  
PARTS

The items you collect demand info on, before you get 'em on your PUL, are pegged "Demand supported" or "DS" items on your PUL records (DA Form 1140).

When you get a request for a non-PUL item you make up a DA Form 2027 for it and file the card apart from the 2027's for your PUL.

Always  
Check  
the PUL



Review this card file quarterly and non-out cards that no longer apply to your equipment and cards that haven't collected 3 separate demands during the previous 6 review periods.

If you collect a minimum of 3 separate demands on the item during a 6-month demand review period, you can go right away to the table on "supported stock items" by 2-1 of 11-55, or list your item during demand by 11-55.



When you make a DA Form 1140 for the item, for "DS", the initial allowance, the date, etc., on the form and file it and the item's DA Form 2027 in your PUL file. You get in a request for the item, and will support the item has been added to your PUL.

ITEM NO. _____ DA FORM 1140 (REV. 1-55)		CLASS. _____ DATE _____	REQ. _____ DATE _____	PUL _____ DATE _____
TITLE _____ (SEE INSTRUCTIONS)	TYPE OF DEMAND _____ (SEE INSTRUCTIONS)	AUTHORITY _____ (SEE INSTRUCTIONS)	APPROVED _____ (SEE INSTRUCTIONS)	REVISION _____ (SEE INSTRUCTIONS)

3. When your needs give you new equipment, you quick-like check the equipment manuals, manufacturer's manual or parts

WELD BURN?  
IT'S AGRICULTURE!

YEAH, NOW  
LET'S SEE  
WHAT IT BOWED  
FILL - WIRE.

list, etc., and add to your P&I whenever the publication publishes the organizational maintenance needs.

And, of course, you must always check supply support when you make any changes on your P&I.

### ON DEMAND BIDDING BY RECORD

Anything on your P&I must be on hand or on order at all times.

And, you need good demand records as you can easily add to, or adjust your P&I allowances, like 48 794-13, page 6-4 says.

Once your initial P&I is qualified for its item, your demand records are the authority for your P&I allowances.

**POPS... SOLD ONE !!**

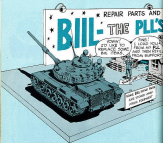
Any items on your P&I that cost over 100-bucks each, and are non-replaceable "I" items, you track only in the quantities listed in the TM's.

You must keep P&I records on these items, too, since they're part of your P&I, but your allowances on such things are fixed . . . you don't change your stockage limits on 'em, like you do on other things.

### FOUR

And, like has not been made, expendable and non-expendable, special and otherwise, are not included on a P&I.

Tool sets and separate tools are accounted for in the main property book. And, expendable, non-expendable tools are requested, controlled and accounted for according to local SOP.



Here's the supply deal on repair parts and maintenance in your BIL (Check Item Item List):

Repair parts and maintenance items listed with specific equipment or authorized for the equipment in the operator's manual, are not normally part of your PLL.

Of course, maintenance items listed with, or authorized for use on equipment, are also included on a PLL, but that's because the items are also authorized by the O&P TM used for composing the PLL.

Normally, the BIL repair parts and supplies are kept on the equipment, the local S&P warehouse OR the storage of the items in some central location. But in any case it's up to the operator to see that the items are on hand or on order in all cases.

#### REPAIR PARTS

No special records are required for the equipment repair parts and supplies.

The TM or the BIL authorizing the items for the equipment is used as input, inventory, and input requirements.

For example, the Form 249-11 is required and contains BIL items and is used for inspection and inventories.



The repair parts through the same supply channels used for replacing PLL items. And, if a BIL item happens to be on the PLL, it can be replaced from the PLL stock, and the demand recorded on the PLL records.

A BIL item, which is not a PLL item, can be added to the PLL when it makes up three separate demands within 100 days of current review periods.

The big thing to keep in mind about BIL maintenance items is that the stuff must always be handy and ready for the equipment it's authorized for.

# ONE, TWO, THREE TESTING



Well, maybe you aren't testing if you have the Simpson Model TDH multi-meter-wired test set, P/N 158L-TDR-158. The instructions on that set are not set for an accurate reading on the disabled ignition system.

That inaccurate reading's caused by a capacitor. Take a look at your manufacturer's manual, Fig. 3, Item 28, number C-10 and you'll see the capacitor that's causing the trouble. That .01- $\mu$ F 10% capacitor should be replaced with a .01- $\mu$ F 5% capacitor.

If you still have the capacitor that gives the goofy reading, write your ad in to your supplier, and they'll get the new capacitor and attached instruction manual from U.S. Army Weapons Command, ATTN: AMOR-58827, Rock Island Arsenal, Rock Island, IL 61204.

RIGHT BY A REAL PROBLEM...

## YOUR IGNITION TIMING LIGHT

Hold one if you have a power ignition timing light, P/N 158B-108-1116, made by Adams Engineering Co., Inc., under Contract DA-11-070-AMC-1534(79).

Some of these models have high-voltage leads up through the case, and you can't tell just by looking at it if you have a stocker or not.



HELP SUPPORT

To play it safe, take your timing light to your direct support. They'll open it up and look at the internal wiring. It may have a 4-hole twisted strip instead of the usual 3-hole strip.



## TO PAINT OR NOT



Dear Mail-Back,

What's the best way to protecting wooden handles for pleasure work, including emergency tools mounted on vehicles? Do we paint 'em, use linseed oil, or what?

SFC W. B.

Dear Sergeant W. B.,

Good you asked. There are a choice to plug TM 3-400 (Jan 66), Engineer Handtools, Para 7 and 9 give you the breakdown on when you paint and when you don't paint . . . and the rest of the TM gives you good tips on tool use and maintenance.



## M20 BA CHECK

If your M20 breaching apparatus (PN 440-570-500) doesn't have a serial number all the way around, You need the number for the BA's TAER's life serial number. Just write to: CG, U.S. Army Ammunition Procurement and Supply Agency, ATTN: SAUHP-RSR, Joliet, Illinois 62450. You'll get a serial number and instructions on how to make it on your BA.

## EXPENDABILITY OK



Dear Bill Reed,

What's the right publication to quote on a property loss page when an item changes expendability?

I say 52 700-02. Our support staff quotes Federal Taxing 52's which is right!

Bill S. H.



Dear Stephen S. H.,

Either the 52 or the PLL is OK. But, it's usually best to use the publication quoted by your support unit since they normally have the latest page first.

New TM's (Circulars) identify expendable items in Item 1B, so they can also be used as expendability authority.

*Bill Reed*

## SPOT PLL TM CH 3

Are you missing Ch 3 (Jul 88) to TM 9-1500-333-2091 May be out. You might've noticed it because it came out unlabeled TM 9-1500-333-2091. You need this change for your current CAME (Conditional Automated Dependent Storage List of Repair Parts for Tank-Insensitive Material).



## Comic Road's BRIEFS

WE ASKED YOU  
TO NOT BE BOWLED  
WE HAVE A  
MAINTENANCE  
PROBLEM.

### LSA'S IT FOR M16/1 RIFLES

WE'VE RELEASED, here this!

WOULD YOU BE GIDDY by the Army Weapons Command (and Laboratories-20), Great-Field, automatic weapons M16-L-1000A—known as LSA—like the best value present value for your M16/M16 M16 rifle.

Buyers the stock numbers for LSA: 4-in. rifle, P20 M16-000-0001, 3-in. rifle, P20 M16-001-0001, 1-gal. rifle, P20 M16-000-0001.

It may be a little more subtle with us than it is with you. Start by using P20 M16/1 (P20 M16-001-0001).... 4-in. rifle and P20 M16-000-0001 (P20 M16-000-0001).... 1-in. rifle and you get your LSA.

Remember this: How good a job your lubricants will do for you depends on how often and how well you clean your rifle and apply these lubricants. Follow the system listed by LSA:

1. Clean your rifle thoroughly after every firing, like the TM requires.
2. Lubricate the bore and chamber,

and the upper lip of the magazine (lightly, lightly—don't smear with a clean rag draped over the lubricant. If you've lubricated us to clean LSA, use it. Best, stick to the TM manual.

3. Lubricate other metal parts of your rifle with LSA or P20 M16/1. The working parts should get good grease and frequent applications.

4. If you're still using P20 M16/1, don't forget to use P20 M16/1 like it says in the TM. But, after you've returned to LSA, please don't get the P20 M16/1.

5. We realize what labor you've got, sorry we say grease or oil on your rifle or in your magazine. Best!

Incidentally, these instructions don't apply to you unless you've paid attention to your low-temperature lubricant LSA—often listed below each degree Fahrenheit.

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1970	Nov	26	688
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# GOT CLUTTERITIS?



If you have anything . . . parts, assemblies or complete pieces of equipment . . . **RETURN REPAIR**, take them in, NOW . . . to the next level of maintenance!! Get 'em repaired, and ready to use!

## JULIAN DATE CALENDAR

Year	Month	Day	Julian Date
1999	Jan	1	1
1999	Jan	2	2
1999	Jan	3	3
1999	Jan	4	4
1999	Jan	5	5
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