

# 

placed mortar or rocket rounds, it's clear that you've got to have battle-ready equipment. When an enemy is trying to do you in with a few well-

Obviously.

Not so obviously. into his peaceful job, it's not so clear that you've got to But, when there's no shooting, and everybody settles

who want to do you in might well do you in. and your country could get caught not ready. Then the guys You must, though — or you, your unit, your command

So, ready equipment is a must. No "Maybe . . . , " This means you baby that gear while you use it. You ," or "Well . . . sometimes." It's got to be ready always.

operating and maintenance jobs right. needs. Use the tech manual to make sure you do the

keep it clean, keep it cool, keep it lubed or whatever it

along the Danube, near the Korean DMZ or contented in CONUS, you're ready, and your equipment's ready. That way, no matter whether you're on the Mekong,



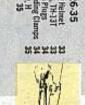
NS48 2-14 Water Trailer To 15 Power Steering Hints 16-17

GROUND MOBILITY 2-17

Issue No. 206 1970 Series HE PREVENTIVE MAINTENANCE MONTHLY

January

IN THIS ISSUE



AIR MOBILITY 26-35

M109 18 M102 19 M2 50-cal MG 20-23

M53 Sightunit Towed Howitzers

FIREPOWER 18-25

DA Form 2408-13 32 OH-SBA Pub 32 Huey Oil 32 Cable PM

1534-13, -15 Engines 35

COMMUNICATIONS 45-55

Battery Tester 4548 Quidepins 48

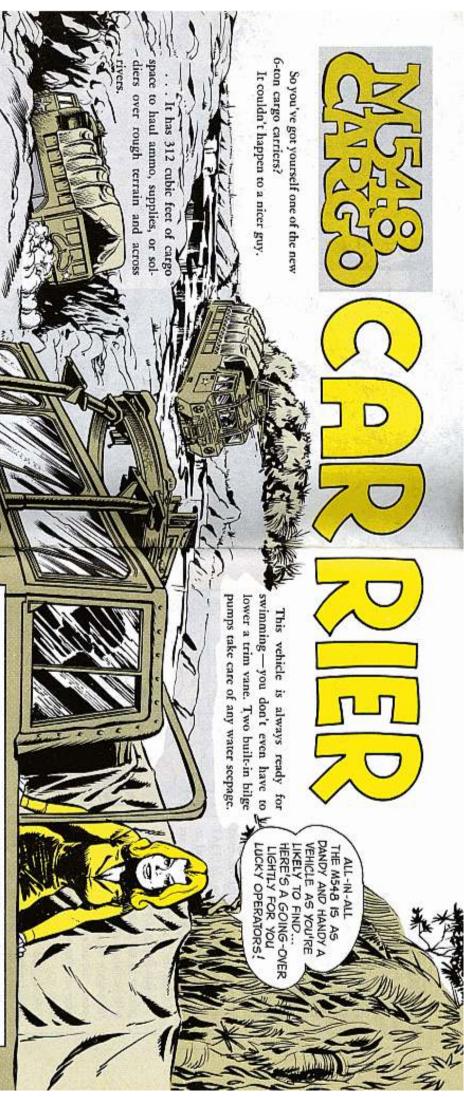
DA Form 2765 50-80 New Publications 36 Supply 4, 7, 9, 12, 13, 18, 20, 21, 24, 33, 34, 35, 45, 47, 48, 49, 51, 52, 53, 54 and 55. SUPPLY

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PS Magazine. Gord Knox, Ky. Sql. Helf-Mest,





at once only if you want to take it off. take it off entirely. Open it at both ends you can open it either left or right or Keep it on and closed while operating. partment door hinged at both ends so The cargo deck has 2 positions and Among other goodies is a cargo com-

38 MPH with a cruising range of 300

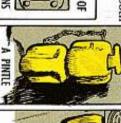
.. On paved roads it can zip along at

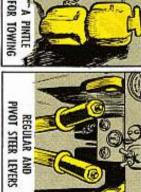
there're plenty of tic-down eyes at both



towing or recovery. trailer and a 20,000-pound capacity front winch with 200 feet of cable for The M548 has a pintle to haul a

prvot steer. for regular steer and one to give you There are 2 sets of steer levers, one







NEW PUBLICATIONS — Manuals in the TM 9-2300-224-series are being superseded for use with the M548 by a new series, TM 9-2320-247. TM 9-2320-247-10 (Feb 69), TM 9-2320-247-20 (Nov 68), TM 9-2320-247-ESC (May 69), LO 9-2320-247-12 (Nov 68) and TM 9-2320-247-20P (May 69) in this series have already been published.

These pubs will give you most of the dope, but here are a few special things you ought to know....

TM 9-2320-247-20

DESMESSIONAL RANGIDMAN

REALE

CARRIER, CARGO,

TRACKED

6-TON: M548
(2320-078-4545)

TRANSFER GEAR GASE—The transfer case on the M548 is different from the transfer on most other members of the M113A1 family. Instead of moving oil to operate a ramp, its oil pump clears oil from the transfer gear case.

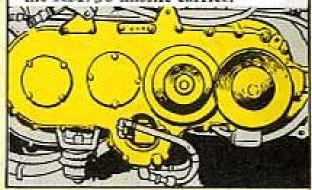
If this pump conks out, oil will pile up in the transfer. Some of it will be forced out the breather but the seals will probably blow. Even worse, the differential won't be getting all the oil it needs and can burn up.

Start and stop smoothly. Jackrabbit jerks can break your transfer gearcase.

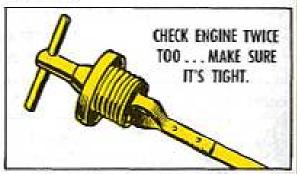
Check the oil in your differential the way it says in your LO before



you start the engine and again after the oil is warmed up. If you have to add oil this shows something is wrong because you shouldn't need any. Cannibals please note: The M548 now uses transfer case FSN 2520-179-5608 which is also found on the XM730 missile carrier.



ENGINE DIPSTICK—Check it before starting and again when you get the oil to normal operating temperatures the way it says in the LO. The special thing is to screw the dipstick down tight after you make your reading. (Turn it clockwise to tighten.)



If you forget to screw it on, the crankcase pressure can blow it out and the oil can go too—leaving you with a burned-out engine.

DIFFERENTIAL VENT — If there're signs that oil has been blowing out through the differential vent, do this with engine running:

Uncouple the quick disconnect on the vent line from the transfer to the differential. Grab the vent line and hold the quick disconnect valve open with the eraser end of a pencil.



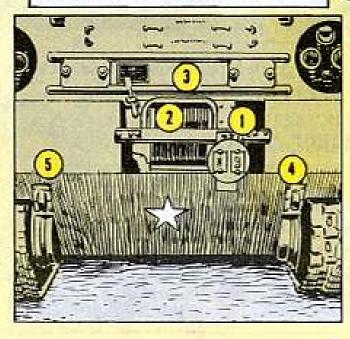


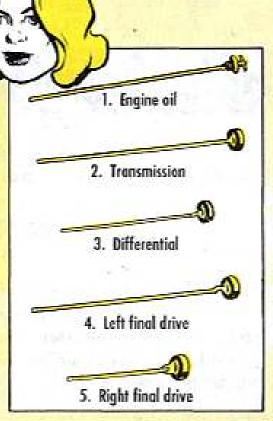
No oil should come out. If it does, tell your mechanic. It's a sign that you probably have a bad sump pump on the transfer case or the quick disconnect on the differential return is not hooked up right.

DIFFERENTIAL OIL FILTER— Make sure it's cleaned at least every Q service and before you put a new vehicle in service. If the filter gets clogged often, it means your oil's dirty, so . . . change it!

THE FOLLOWING ARE DAILY CHECKS.

DIPSTICKS — Eyeball all five dipsticks daily before operation.

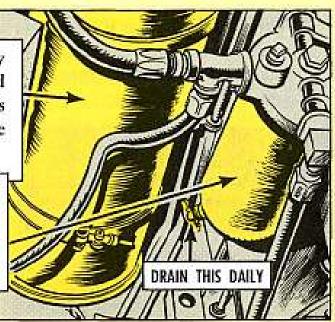






AIR SEPARATOR TANK-Daily draining of the air separator called for by a tag attached to the tank has been superseded by draining of the primary fuel filter.

PRIMARY FUEL FILTER-Drain daily before starting engine. If a lot of water and gook comes out, drain the secondary filter too.



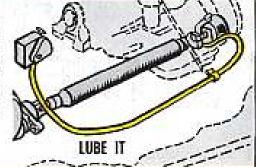
AIR CLEANER - Service air cleaner element as often as necessary. (Daily in dusty areas.) If element is frayed or bent out of shape, replace it. If you can get 100 PSI moisture-free compressed air, use it to clean the element like this:



If you can't get compressed air, clean by gently tapping fins by hand. Be sure you do this gently and without beating up the ends of the element.

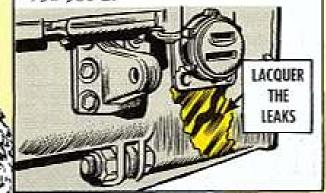
#### MAINTENANCE MUSTS

PTO CABLE — This cable will get stiff and hard to work unless it's lubed. Putting lube on the cable is not easy because there's no grease fitting. So work grease into it by hand. This is a little trouble but worth it.



pump and fan drive belts can get thrown but it's most likely to happen with the fan drive belts. Check both front and rear fan drive belts and the coolant pump belt every 50 miles or so to make sure the tension is right.

FUEL EXPANSION TANK—If there's a leak from your fuel expansion tank get your mechanic to work over the inside of the tank with lacquer the way it tells in TB 750-981-2.



IN DUSTY

YOUR AIR

CLEANER

RIGHT SIZE DUCT?—The duct between the air cleaner and the engine might be too short. Loosen the clamps at each end of the duct and pull it out. If it's 22 inches long, (give or take 1/4-inch), replace it with duct FSN 2940-913-1987, which is 28 inches long (give or take 1/4-inch).



**CHANGE DATA PLATE**—The data plate on the inside of the right cab door may read that the vehicle is an XM548EI. Scratch out or paint over the X and the El so you are left with M548.



IF IT SAYS "XM548E1", CHANGE IT!

TRACK SHROUDS — In the wet season in SEA mud and trash will ball up under your shrouds. You're better off without 'em, so take 'em off, and turn in to your DS, or store 'em. Do not throw 'em away.



prime and OD paint. shield wiper arms have a bright chrome finish. Go over 'em lightly with sandpaper and then WINDSHIELD WIPER ARMS - Some of the wind-





anything. move throughout their entire are without hitting wiping action make sure the blades are free to WINDSHIELD WIPER BLADES - To get a good

adjusting screw.) make an adjustment at the blade holds the window in the windnecessary. (You may also have to shield, loosen the locknut at the base of the arm and adjust arm as If they hit the rubber seal that

YOU HAVE ONE

TRY TO OPEN DOOR LOCKED SIDE OF THE

THE OTHER



before you turn on the defroster or the inside of the cab heat up first the sudden heat may crack a wind-

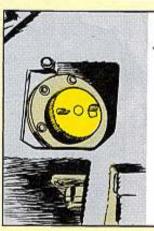
> your headlights out of kilter. Get trip through the brush can push light up everything but the road. you don't put 'cm on and find they HEADLIGHT HAZARD-A little em lined up again before dark so

drain plugs FSN 4730-850-3883. nance will be easier if you replace plugs with female square-drive the 6 female hex-drive winch drain WINCH DRAIN PLUGS-Mainte



3-76 of TM 9-2320 out. Get a new one. it's a sign it's worn shift lever keeps com-SHIFT LEVER-If the (See Pages 3-267 and ing out of adjustment 247-20P (May 69) for

one you have. an unvented cap. Be sure this is the 9118 listed in the -20P will get you the unvented type. FSN 2910-753tank filler cap authorized for use is FUEL FILLER CAP - The only fuel



the parts.



could start the engine with the get damaged. transmission in gear and somebody might get hurt or the vehicle could this switch out of adjustment you NEUTRAL START SWITCH - With

verse or in 1-3 range. transmission in rewill work with the adjust the switch If it does, replace or See if the starter MELY FIRST



operated without the cargo door the rear cargo compartment sides movement. When the vehicle is together and prevents side-to-side hicle because it ties the sidewalls door in place when you run the ve-CARGO DOOR-Keep the cargo

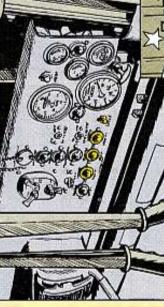
8

#### cover, roll them to the inside so EXHAUST STACK - The engine exyou open the front flaps of the cargo haust stack gets pretty hot. So when

front cover securely tied burned. Also, keep the rest of the they won't touch the stack and get



tight. cure this make sure the bolts are continuous path to ground. To panel "floats" without having a ing? This will happen when the mounting bolts work loose and the panel is not firmly grounded. The lights and gages not always worktrouble with your instrument panel INSTRUMENT PANEL-Having



has started, call the mechanic. seconds. If any, warning light comes on after the engine the engine oil pressure warning light should go out in 10 WARNING LIGHT - After you get your engine running

again. If you can't get onds before starting that time, wait 30 sectry, call for help. it going after your 5th docsn't start within your engine no longer than 15 seconds. If it CRANKING - Crank

# MORE GOOD POOP

SHE XOBYS

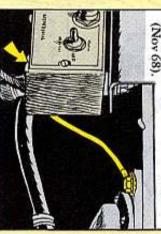
DID YOU

HEATER TROUBLE-

SHOOTING

TABLE?

check the control box ground wire FAULTY HEATER - If the personpage 3-6 of TM 9-2320-247-20 sometimes fail to work. Check the ing good contact, your heater will control box. If it's loose, not makwhere it makes contact with the nel heater is not working right, heater troubleshooting table on

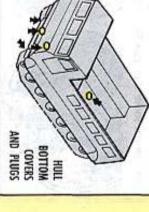


PLUGS WE PULLED THOSE HULL DRAIN YOU REPLACED ARE YOU SURE OUT THIS MORNING ??

> 9-2300-257-10 docs not apply to age location list in the BIIL of TM STOWAGE LOCATION — The stowof TM 9-2320-247-10 (Feb 69) the M548. Use pages B-9 to B-16 instead.

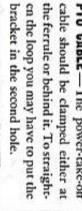
on for a few minutes. To keep the amphibious operation your vehicle. Turn the bilge pumps so don't let bilge water stand in sure they're replaced side in rainy weather, but make hull drain plugs when parking outfuel pumps from rusting, pull the bilge water can short the wiring... resistant, but continuous soaking in FUEL PUMPS - They're moisturebefore an





standard equipment on late-model a quick-release V-band clamp is 5340-886-7081, is a direct replaceremove and replace the power pack, ment for the other clamp. vehicles. The new clamp, FSN NEW CLAMP — To make it easier to

PTO CABLE - The power-take-off

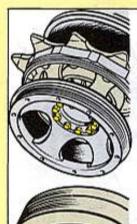


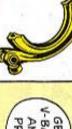


in freeboard, so the loading has to weight balanced side-to-side for an be done exactly right. Keep the combat loaded you have only a 12even keel. Careful not to overload FORDING - When your M548 is



screws on each final drive sprocket on your final drives often. The 10 take 100-115 lb-ft of torque. If you let 'em get loose they can shear off FINAL DRIVE - Check the torque





V-BAND CLAMP-GET A NEW AND USE THE PROPER FSN

### FUEL TANK ACCESS COVERS-Check the 4 fuel access covers for

torque the screws to 45-50 inch screws with lock washers and 5310-194-9211 (MS35336-27) from supply. Then reinstall the Draw 88 tapered lock washers FSN loose screws. If they're backing out, remove and clean 'em with solvent.



to keep up with an M113 over long when fully loaded. distances. Stay under 20 MPH cargo vehicle so it can't be expected NO SPEEDING - Your M548 is a



M548 or you'll run the risk of tearboth final drives before towing the TOWING THE M548 — Disconnect



12

#### make sure they work. If they're of them at least once a week to PUSH-PULL CABLES - Operate all them replaced. them. If this doesn't work, have hard to operate, grease and adjust



# MECHANIC'S

out if you make up a 3-ft extension the front engine mounts easier to get the M548 power pack for the 15/16's socket you use on FRONT ENGINE MOUNTS—IC



ments, FSN 2940-930-2065 or FSN either of 2 optional air cleaner elecleaner element? You can order 2940-930-2066 AIR CLEANER-Need a new air





#### compound rubbed on the threads radiator caps on early vehicles can RADIATOR GAPS - Screw-thread prevents this lock up tight. A little anti-scize



# MEMORY AID

912-9512 for right torsion bars members of the M113/M113A1 family, Use FSN 2530-912-9511 bars for the M548 are different DIFFERENT BARS—The torsion for left torsion bars and FSN 2530 from the bars used on the other



ones from pages 3-128 and 3-301 of they are already gone, order new on with a dab of epoxy cement. If sometimes work loose and fall off TM 9-2320-247-20P (May 69). If you find loose ones stick 'em back TOW CABLE - The rubber strip digging into your rear cargo door pads that keep your tow cable from





TWO FINAL TIPS

SAFETY WARNING

If you would just as soon get hit in the head with a steel beam, pay no attention to this....

The beam you could get hit with is the cargo hoist beam on M548 cargo carriers with manufacturer's serial number of C850 or higher.

Scems the locking handle of the beam support pin can come unlocked letting the beam fall. ('Course there are 2 beam supports so the beam would likely not





fall all the way but even so it could give you a nasty clout on the head.)

An MWO to take care of this is in the works but for now make sure the beam support locking handles stay locked. You can do this by wrapping the handles with a couple of turns of tape or wiring them in position. Either way is OK just so they don't unlock by accident.

TIME SAVER

A little less slack in the track saves lots of time on your M548 cargo carrier. Page 3-33 of TM 9-2320-247-10 (Feb 69) says "Distance must be 1/4 inch or more with track resting on third road wheel."

Most everybody has been making it 1/4 inch on the nose—which means they have to readjust the track every time they change the vehicle from loaded to unloaded or the other way around.

To save yourself sweat, tighten up on the track so the distance between the top of the second roadwheel and the bottom of the track is 3/8 to 5/8 inches with the track resting on the third roadwheel.

Here's how you do it and makes no difference if your carrier is loaded or unloaded:

1. Drive your MS48 on level, hard-surfaced ground at 8 MPH.

- While power is still being applied place transmission selector in NEUTRAL.
- 3. Release accelerator.
- Allow vehicle to coast to a stop without using brakes.

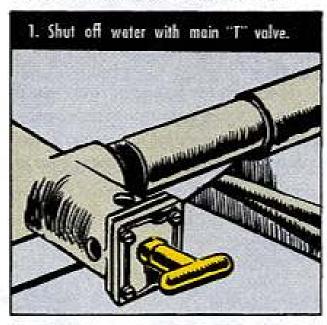
5. Adjust track so you get
the 3/s to 5/s inch reading at the second roadwheel.

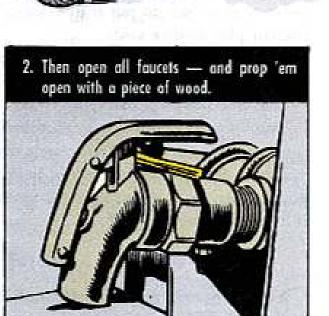


Your M149, M149A1 and M625 water tank trailer and ol' man winter don't mix without help — your help. Like when you forget to drain the outside pipes.

Water left in those pipes will freeze solid.

So, in freezing weather, you drain the pipes every time after drawing water. You can do it fast 'n' easy:





Now the pipes are empty, and there's nothin' in there to freeze.

Although your tank trailer's got a fiberglass liner that'll keep your supply from freezing for a long time, y'gotta be sure to keep the manhole and filler covers battened down tight. This'll keep water heat in and freezing cold out.

In sub-zero weather, it's a good idea to park your water trailer in a shelter where it's warm — like in a tent where there's a field range operating.

And always drain your water trailer completely if you're goin' to leave it parked out in freezing weather for a long time.



Roman philosopher said:

Now, with a li'l twist, it comes out like this: "He who has great power should use it lightly

"He who has power steering should use it right!"

country. What if you had to wrassle that wheel with just your own muscle power! Your power steering is mighty handy, especially for operatin' over rough

if he doesn't use it right! power steering. But that same 90-pounder can bust up a truck's power steering Even a 90-lb weakling would have no trouble ramroddin' a big truck with

## TIME FOR YOUR MUSCLE

time—as long as your wheels are you through just about any place, any Your power steering will help muscle

turn your wheels while sittin' in a mud power steering, though, if you try to hole or trozen rut. You're askin' too much of your

spot you're stuck in, you've got to dig front-mounted winch or from another out — even if you've got help from your Before you try to steer out of that bad

6

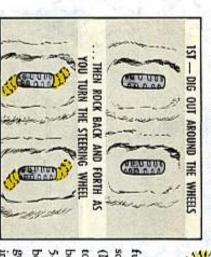
DIG, GEORGE I CAN DIG **GEORGE** I CAN SURE G00P,

> make space all around your front you're steering. flat enough for your wheels to roll while wheels-space that's big enough and So you unlimber that ol' shovel and

your wheels in the direction you want Then you rock your truck as you turn

it's best to get your truck rollin' a little you're just parked on a good surface before you start to turn your wheels. Even when you're not stuck-like

Your power steering will 'preciate it.



BEHIND THE WHEE YOU PUSSY-CATS WHEN YOU GET SOMETHING FOR TURNED - TIGER TERE IS A LITTLE OF A 5-TON

answer is: but for how long is the question. The left turn with your power steering-Sure, you can make a hard right or

IME IS KILLER

more than 5 seconds." full steer position, right or left, for "Never hold your steering wheel in

ture. So a hard turn for too long will burn up your pump. goes up in your power steering pump. As pressure goes up, so does tempera-Why? As you turn harder, pressure



improved. get their power steering pumps ber and contract number groups that better check this MWO and see if your to straighten out the trouble. You'd so hot, so MWO 9-2320-211-30/12 5-ton multifuel falls in the serial num-(Nov 68, corrected Sep 69) was issued fuel engine trucks hasn't been workin Power steering on some 5-ton multi-

#### HOWITZ CONFUSION

Like you already know, the elevating cylinder on all M109 SP howitzers serial number 1123 and above is different from the elevating cylinder on early production models.

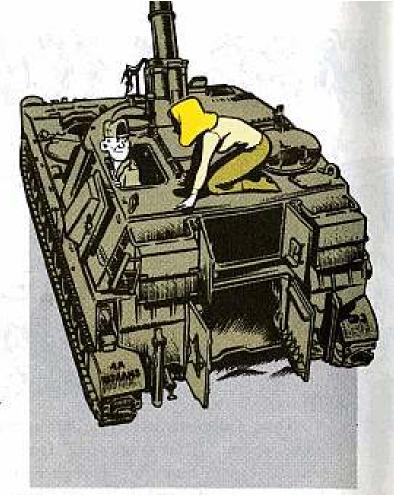
But what you might not know (and the TM's don't tell you) is that there're 2 kinds of late model elevating cylinders and a different seal kit is needed for each one.

So there are 3 different elevating cylinders each of which can be repaired only with its own seal kit.

Here's the whole thing in a nutty little nutshell for your DS:

M109's SN 1123 and above) takes seal replace-

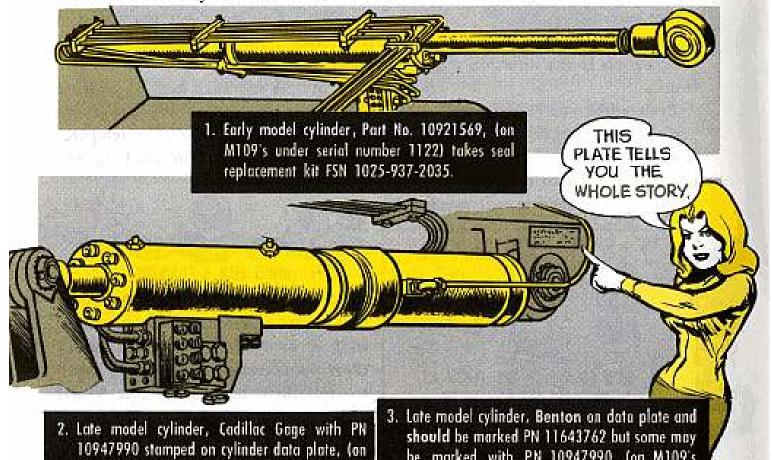
ment kit FSN 1025-946-0044.



be marked with PN 10947990, (on M109's

SN 1123 and above) take seal replacement kit

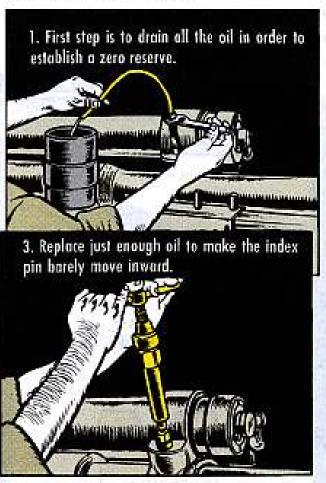
FSN 1025-782-9651.

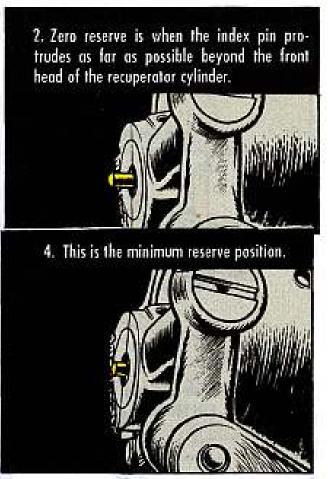




A cool cannon cocker never lets his piece go into recoil shock if he can help it. And tropical heat—like in SEA—really expands recoil oils in those M102 105-mm towed howitzers.

The solution is to establish a minimum instead of normal oil reserve in your M37 recoil mechanism.





Watch the replacement oil for contaminants to be sure only oil enters the recoil mechanism. And make certain all air is purged from the filling hole by twisting down on the oil gun handle as far as possible before removing the gun.

Just as important . . . wait for the lowest possible temperature to reduce your reserve. This will leave the most space for heat expansion of the recoil oil during firing of the weapon.



Heck, you'd never tool off to Nowheresville with a spare tire that doesn't fit

why keep any M2 part that you can't depend on? work in your flexible or cupola-mounted M2 50-cal machine gun? Matter of fact, So why take the much bigger risk of toting along a spare bolt that won't

other parts in the barrel extension and buffer groups - compatibility of internal Here's the pitch: Certain parts in your bolt group must get along with certain

롡

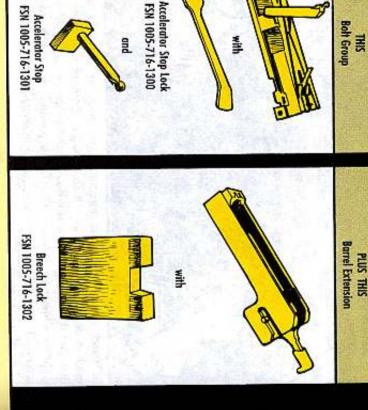
parts is the name and aim of this game.

3 groups. But now the choice boils down to the buffer parts only—those certain Time was you had a choice of 4 combinations of old and/or new parts in these With all the old M2 parts still kicking around you could get fouled up. . . .

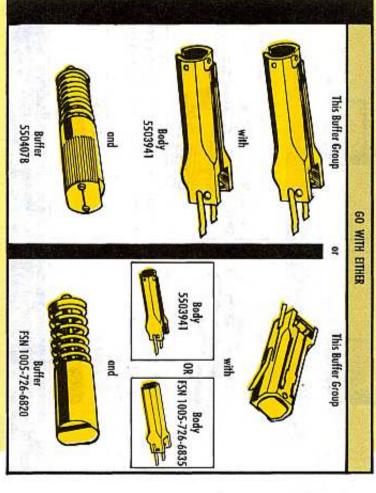
parts in the bolt group and barrel extension must all be new. This chart'll show you. The parts with FSN's are new-the ones with part

numbers are old and can't be requisitioned any more.

M2 COMPA



# TIBILITY CHART

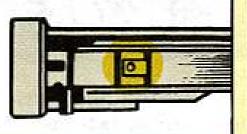


#### WEED OUT THE MISEITS

Now examine your M2's innards—both the spare bolt and the one in your weapon, plus the barrel extension and buffer groups—to see how they stack up.



Turn it upside down. If it looks like this, OK, you've got the new lock and stop in it.



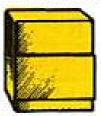
. . . But if it looks like this, you've got the old one-piece sear stop and pin in there Get your armorer to replace it with the 2 new parts.

#### BARREL EXTENSION

Look at it from the top. If you have the cutaway breech lock in there, fine.



. . . But if it's the solid type, get your DS guys to replace it with the cutaway type.



#### BUFFER GROUP

Turn the body upside down. If its surface is smooth, you've got the new one.



... But if it has a tube lock spring and/or groove, it's the old one. Get your armorer to unstake this spring and get rid of it. The body's still good.

Now pull the buffer assembly out of the body. The old type buffer has a perforated bottom and a screwdriver slot on its rear end. The new one is smooth on top, bottom and rear.





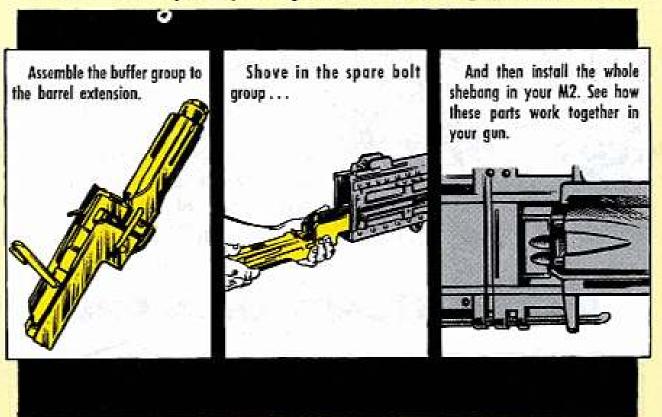
OLD BUFFER



Remember, you use the old-type buffer only with the old body after the tube spring's been removed, natch! But the new buffer can be used with either the old or new type body.

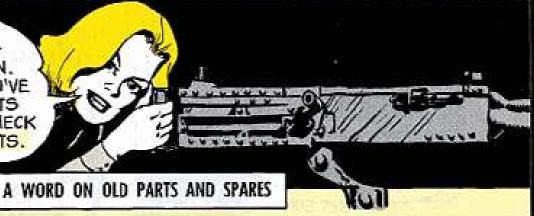
#### NOW FOR THE REAL TEST

To make absolutely sure you've got all those internal parts up to snuff . . .



IF THE BOLT DOES

NOT GO ALL THE WAY—
(LIKE IT STOPS AT \$/4 IN.
FROM HOME) THEN YOU'VE
GOT A FOULED-UP PARTS
MIX AND YOU MUST CHECK
BACK OVER THE PARTS.



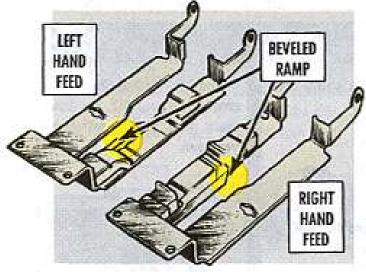
Be sure you check that old body and buffer carefully. If either one is badly worn or chipped or bent or otherwise damaged, replace 'em with new ones. These oldies, y'know, aren't made any more.

And make a habit of checking your spare bolt regularly, just like you'd double-check the air pressure and condition of your spare tire. Keep that bolt protected in the spare parts box. Take it out once a month anyway for cleaning and lubing and inspecting.

'Cause in the showdown your M2's never any better than its spare bolt.

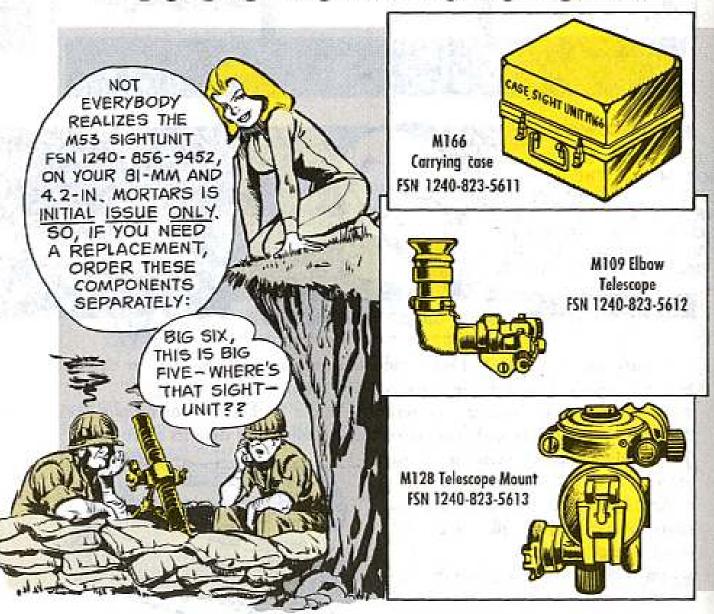


#### **SLANT TOWARD THE SLOT**



Remember, you M85 machine gunners—mox nix if you're setting up for right- or left-hand feed, always face the beveled or slanted side of the link guide toward the center slot of the feed tray assembly. Otherwise the links will hang up and you'll have a stoppage and maybe a damaged gun.

#### **M53 SIGHTUNIT-- ONCE ONLY**



DRIVERS CAN BE CRACKED



No, not you guys who drive the prime movers.

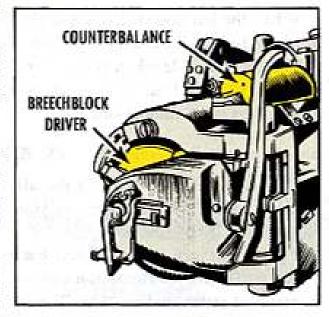
It's the breechblock driver that might develop cracks . . . just so they don't reach all the way across the diameter of the face of the driver.

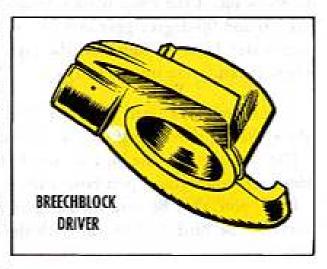
If the breechblock will seat completely, open and close and go through its complete cycle of operations, cracks in the driver should not cause any trouble when you fire.

To have as little breechblock driver cracking as possible, you need to adjust the counterbalance assembly for smooth and even operation of the breech so it opens and closes without slamming or so you won't have to use a lot of muscle.

If your counterbalance needs adjustment your friendly support mechanic can easy do it by following para 65 on page 131 of TM 9-1025-200-35 (Apr 65).

This applies to all 155-MM towed howitzers including the M114, the M114A1 and the M123A1.







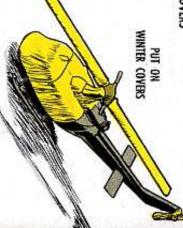
north, pulling maintenance is no bed of roses. When the barometer drops and the snow begins to fly up

can't get your bird under cover. Keeping 'er "snug as a bug in a rug" is your number-one goal. That goes double when you're out in the boonies and you

### USE BIRD COVERS

weather covers and put them on your This is the time to dig out the all-

mission and 90-degree gear box - prewhere it can freeze up the works. vent water from getting into the bird the snow off of the rotor blades, transwaterproof outer surface. They'll keep cotton twill with an aluminum colored The covers are made of soft-back



elbow grease, than going thru a deicing chore on unprotected surfaces. Cover protection will get your bird back in the blue much faster, with less

peratures, when you expect rain or snow. Use covers when the bird is outside for a half-day or longer in freezing tem-

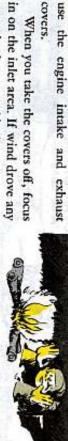
covers. freeze to the bird. Secure 'em with the tie cords and eyelet tabs attached to the One point, tho. Be sure the surfaces to be covered are dry so the covers won't

> not so with the Huey T-53 engine. The only protection you need is to Recip engines need thawing outapply hot air from a portable heater at the inlet section to free it.

the starter because you could burn it Never try to free the compressor with

**USE EXHAUST &** INTAKE COVERS

and tail rotor gear boxes or engine is hub, main transmission, intermediate No pre-heating of the main rotor



rotate the compressor rotor to make sure it's not frozen. If the rotor is frozen Then, take off the filter separator and flow. needed since the oil used for low temperature operation will continue to

snow in there get rid of it.

covers.

use the

and the engine is cranked up, oil pressure will go beyond the red line. When the mercury sinks out of sight

you get an oil temperature reading. So, run the T-53 at flight idle until

and the pressure and temperature will stabilize. Then, continue normal operation,





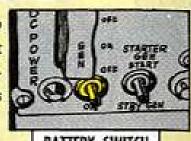
27



#### SAVE THE BATTERY

The nickel-cadmium battery in your Huey will hold up real well in cold weather. You can get satisfactory cold starts down to -65 degrees F. You won't need to preheat the battery at temperatures warmer than -40 degrees F.

That package of power will put out for you if you keep drain on the battery to a minimum. During engine starts don't turn on the battery switch until just before starter engagement. During shutdown, turn the battery off as soon as possible.



#### BATTERY SWITCH

#### SAMPLE THE FUEL

JP-4 fuel in your bird will keep 'er purring no matter how low the temperature goes. Not so with JP-5, which will give you long starts and erratic heater operation (if you have a combustion type heater) at temperatures lower than +10 degrees F.

Use JP-4 and be sure it's clean and DRY. Water in the tanks can cause the fuel boost pumps to freeze . . . you won't even get off the ground.

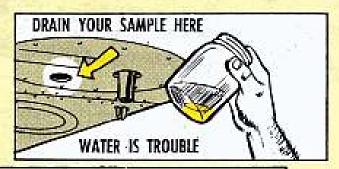


Drain the water out of the fuel system before running the pumps again.

You could even have trouble with the fuel filter which is a two-stage job with a bypass valve.

If the element becomes clogged with ice particles the bypass valve will divert the fuel into the second stage of the filter. At this point the fuel filter caution light will come on which means that the element has to be cleaned before the next flight. Your best bet to keep water out of the fuel is to make with the sampling jar regularly.

Water will settle to the bottom of the fuel tanks so drain off JP-4 until you get no more water.



#### KEEP 'ER CLEAN

When your bird comes to roost in deep snow eye the bottom of the fuselage the first chance you get. The cargo hook extends below the fuselage and may be packed with snow.



Clean the hook out and give it an operating test so that you can haul external loads.



When the landing light is lowered for a touchdown in white stuff, eye the light cavity before it's retracted. A packed cavity will prevent the light from going all the way up and damage the motor.

Sweep loose snow out of the cabin before each flight. Otherwise, it will turn to water when the bird heater is turned on and run into compartments under the floor. The water will freeze and give you a gradual weight increase . . . maybe even restrict control movements! Be sure you eye the drain tubes in the fuselage and tail boom. Tubes jammed with ice and snow won't hack it.

If your baby gets caught out in the cold get rid of ice and snow, especially on the main and tail rotor blades. Do it up brown. If ice and snow removed from the rotor head and blades lands on the fuselage or tail boom clean it off before it freezes.

Chap 2, Maintenance Under Cold Weather Conditions.

You'll find all the info you need to do the job in TM 55-410 (7 Mar 66) . . .

Pulling maintenance during the winter is going to take extra time and muscle. Get a good thing going for you—protect your bird as best you can.



AT LEAST THE BLADES

ARE CLEAN



either 7 or 19 wires in each strand. It's woven together for added strength. Oh, the cable won't fail sudden-like because it's made up of 7 strands with The weak link in a chain, or an aircraft control cable, can upset the applecart.

another. You'll have time to spot broken PMI and PMP checksheets. control cables as called for in the bird wires, and save the day, if you eye the But, one wire will let go-then





tact with pulleys and fairleads. That's those places where the cable makes con-Wites where you'll get cable wear and broken

your hand along the cable will give you a mean cut when you hit a broken wire Even with 20-20 eyesight you can't spot broken wires right-off. And running So, latch onto a piece of cloth. Checsecloth works real well.





allowed in each strand before the cable has to be changed. The checksheets usually have the lowdown on how many broken wires are

	ALL	COMBAT	OVERSEAS	SUNO	COMBAT	OVERSEAS	CONUS	LOCATION
	1 x 19	7 x 19	7 x 19	7 x 19	7 x 7	1×1	7×7	CABLE TYPE
WEAR ALSO COUNTS	1 broken wire per length of cable	6 per 2 ft length of cable	6 per 1 ft length of cable	3 per inch of strand provided that not more than 6 exist in that inch of cable	3 per 2 fi length of cable STANDARD LIMITS TO GUIDE YOU.	3 per l'fileogith oi coble HAVE IT, HERE'S A CHART OF	2 per inch of strand provided that not more than 3 exist in that inch of cable	ALLOWABLE BROKEN WIRES PER STRAND

change the cable. A corroded cable, for example, should get the heave-ho. If you have any doubts that a cable is good after your broken-wire count,

Here're the wear limits. Scrap badly worn cables even tho the number of broken wires is within limits

allowed in the wear spots. thru the wire diameter, or any 7 x 19 cable having 6 wires or less per inch worn not more than half way thru the wire diameter is OK. No broken wires are Any 7 x 7 cable with 3 wires or less per inch worn not more than half way

to have more than one wear spot along the cable. But no adjacent wear spot is allowed around the circumference of the cable. One less worn wire is allowed for each broken wire in the same inch. It's OK

straighten out under normal cable tension, change the cable. When you come across a kinked, twisted or bird-caged condition that won't

Milde has been weakened so, toss goes for a bent cable ter-

> covers and crane your neck. Inch-by-inch at hard to reach places. Remove all the access Cables are sometimes routed thro tairleads



BY THE NUMBERS! PERIODIC INSPEC Freq. hims and procedure THE CHORD LINE IS SEPAR-ATED, THE BLADE MUST BE REMOYED FROM SERVICE. BALANCE SCREWS FOR SAFE. TY, DRAIN HOLES FOR CLOG-CRITICAL INSPECTION ITEM 176 TAIL ROTOR HUB ASSEMBLY REMOYED, DISASSEMBLED, AND INSPECTED IMAGNETIC PARTICLE AND BUILDINGS. NOPE! CENT OR DYE PENETRANT WETHODS), (TM 55-1520-204-SOTTA CRITICAL INSPECTION ITE BE AN 4.12 44 REMOVE THE ROTOR PITCH EASIER

Dear Windy,

In addition to the aircraft periodic inspection, the PMP checklist calls for other checks to be made every 2nd thru 12th time around.

How do you figure which ones are due when the aircraft is past the 12th PE?

SP4 J. O. F.

CHANGE SHAFT, AND CHE RUH-DUT. (TH 55-1521-20-

Dear Specialist J.O.F.,

WAY!

Focus in on block 9 of the DA Form 2408-13 for your bird to see what number PE is coming up next.

Then, just divide all the frequency numbers on the checklist into the PE number. Only those extra checks that divide evenly into the PE number are to be done.

Say, for example, your bird had been around a spell and the PE number is 33. If numbers 2 thru 12 are in the frequency columns of the checklist the only numbers that divide evenly into 33 are "3" and "11".

So, only those checks called for every 3rd and 11th PE are pulled, in addition to the regular PE items.

#### **NEW BIRD PUB**

If there's a brand-spanking-new Kiowa (OH-58A) in your future run your peepers over a copy of TM 55-1520-228-20 (Jul 69). It has all the organizational maintenance poop for the Army's newest light observation helicopter.

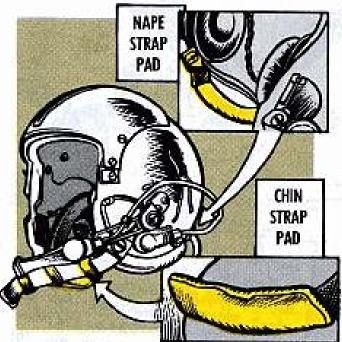
#### USE NEW OIL

The word in message AMSAV-R-EU-6-1339 (20 Jun 69) is that you can now use MIL-L-23699 oil in the Huey and HueyCobra main transmission, gear boxes and main rotor hub when the temp's above -25 degrees F (-32 degrees C). Continue to use MIL-L-7808 oil if you're operating in temps below -25 degrees F.

NAPE -- NOPE, USE CHIN PAD

Read and heed that Ch 2 (Sep 68) to TM 10-8415-202-13 (Sep 66), which covers your APH-5, APH-5A, and AFH-1 protective flying helmets.

You use nape pad, FSN 8415-926-2300, on the nape strap, and you use chin pad, FSN 8415-753-5993, on the chin straps on all helmets. If you're using the nape pad as a chin pad, better order the chin pads pronto."



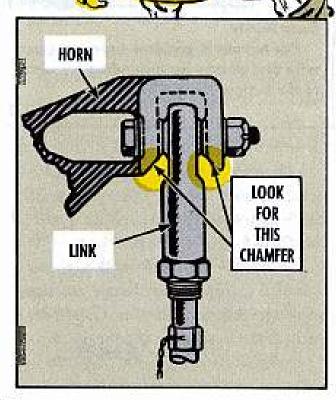


#### PITCH IT

\_Anyone maintaining Sioux (OH-13E, G, H, S and TH-13T) helicopters without chamfered pitch change horns, better go talk with support.

Some P/N 47-120-126-1 horns got by without having the chamfer modification applied by TM 1-1H-13-533 (Oct 57). Even though this publication is rescinded, the chamfer is still required to prevent possible interference between the pitch change link and horn.

Use Figure 8-14 in your TM 55-1520-204-20 (Jun 66) for a guide. And if you find a -1 without the chamfer, ask support to replace it with a -3 or -5 horn.





Dear Windy,
Does the O-540-9A engine use the
same prime plug as the O-540-9 engine? TB 55-2925-200-25 (Feb 66)
lists FSN 2925-056-7054 as the prime
plug for sengines, but the
O-540-9A engine is not listed.
SSG H.D.P.

Dear Sergeant H.D.P.,

The O-540-9A engine is a modification to the O-540-9, so you use the same fine wire plugs listed in the TB for both engines.

If there are massive plugs in your Raven they should come out since they're for test stand and depreservation running only.

#### GROUND WIRE, CLAMP NUMBERS

#### Dear Windy,

I'm having a problem ordering ground wire and clamps for grounding my aircraft to the hangar floor. Clue me.

WO R. L. S.

#### Dear Mr. R. L. S.,

You can get 360 feet of 1/2-in braided, soft copper wire under FSN 6145-194-9840, listed on Page 1 of Fed Cat C6145-IL-A (Mar 68).

FSN 5940-260-0447 will get you a box of 5 clamps. The clamps are listed on Page 3.8 in Fed Cat C5940-IL-A (Aug 69).





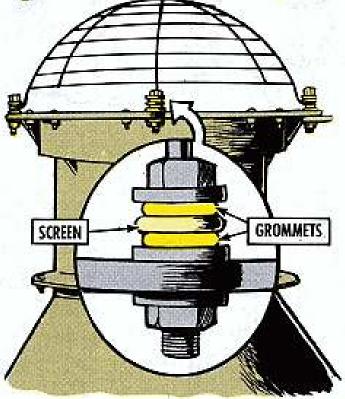
You get more bounce-to-the-ounce with new rubber.

Which is just what you want out of the rubber grommets on the Huey (UH-1D/H) oil cooler screen.

When the grommets harden, blower vibrations will not be dampened out and the screen is sure to crack at one or two of the mounting points.

So, if screen repair or replacement is getting a mite out of hand in your unit, better latch onto some new grommets, FSN 5325-263-6632.

When you put in the new grommets be sure you have the stack-up shown in the parts pub, otherwise even fresh material won't hack it.



Tighten the screen retaining bolt nut snug, plus one-half turn of the wrench. That'll stop screen cracking.

#### **NUTS ON THE FUEL CONTROL**

Dear Windy,

A discussion has come up on the Huey T53-L-13 and T53-L-15 engines about the safety on the actuating rod on the inlet guide vane actuator to fuel control.

Do the rod bolts require a castellated nut and cotter pin or a self-locking nut?

SFC C. N. T.



Dear Sergeant C. N. T.,

Would you believe one model gets a nut and the other one doesn't? It's true!

The T53-L-15 bolt is put through an unthreaded lever arm and is held by a castellated nut (P/N AN150432) and cotter pin.

The T53-L-13 rod is held at the fuel control end with a bolt put through a threaded lever arm and secured with a cotter pin—no nut needed.

'Course, the rods for both engines on the actuator end need a washer, selflocking nut (P/N MS21042-3) and a cotter pin to hold the bolt.

35



This is a selected list of recent pubs. of interest to organizational maintenance personnel. This fist is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pam 310-4 (Jun 69), and Ch 1 (Aug 69), TM's, T8's, etc.; DA Pom 310-6 (Jul 69), and Ch 1 (Oct 69), SC's and SM's, DA Pam 310-7 (Sep 69), MWO's and DA Pam 310-9 (Apr 68), COMSEC Pubs.

#### TECHNICAL MANUALS

TM 5-2410-212-20P, Aug. Tracked Tracior, Light, TM 5-2410-214-20P, Jul, Tractors, Track, Med. IM 5-2420-200-20P, Sep, Wheeled Tractors Med. TM 5-2805-200-15, C4, Sep. Outboard Motors, 25 HP. TM 5-3655-207-15, Aug, Gas Gen. TM 5-3820-233-20P, Jul. Rock Drilling Equip. TM 5-4110-205-15, Jul. Refrig 9,000 BTU. TM 5-4110-223-15 and -25P, Jul. Retrig, 9,000 BTU. TM 5-4120-300-20P, Jel, Air Cond 36,000 BTU, Skid Mid. TM 5-4310-226-25P, Jul, Air Comp 4 CFM 3000 PSI. TM 5-4610-222-15, Jun, Water Purif MET-PRO MOD 600C. TM 5-6115-318-20P, Jul, Gen Sels, 100-KW, 60 HZ. TM 5-6115-413-25P, Aug, Gen Sels: 7.5-KW DC. TM 5-6125-209-25P, Jul. Motor Gen. TM 5-6675-272-25P, Jul, Theodolite. TM 9-1005-208-12, Aug. Rifle Cel .30 Auto Browning, M1918A2. 236 S-1605-210-19, Jon, Carbine, MI ged M2.

TM 9-1005-212-25, Jun, Moch Guns, Col .30, M37, M1919A4, M1919. TM 9-1005-298-12, Aug. Armoment Subsystem XM27E1. TM 9-1005-304-12, Jul. Armomeni Subsystem .50 MG, XM59. TM 9-1005-304-20P, Jel, Armoment Subsystem ,50 Mach Gun, XM59. TM 9-1430-250-15P/22, Jul. Nike-Here: TM 9-1430-253-15P/2/1, May, Nike-TM 9-1430-502-25P, Jun. Howk. TM 9-1440-517-25P, Jun, Hawk. TM 9-2300-224-20P/3, C7, TM 9-2300-224-20P/3, C7, Aug. M113, M577, M106, XM474E2 Corriers and flame Thrower M132. TM 9-4935-517-15P, Jon, Howk. TM 9-7218, C11, Sep, Twin 40MM AA, SP Guns, M42, M42A1. TM 10-3930-210-25P, Jul, Truck Mtd Cranes. TM 10-3930-222-20P, Jul, Fork Lift. Trucke. TM 10-3930-607-15, Sep. Fork Lilt. Truck 4,000 Lb. TM 11-5820-549-20P, Avg. AN/ PRR-9, AN/PRT-4 Radios, TM 11-5835-239-20P-1, Sep, Repro Set, Sound AN/ASH-24 OV-1A-18-1C. Of-47A, UH-18, UH-10, TM 11-5095-555-25P, Aug. Control. Indicator CB157/ARC for aircraft. TM 11-4625-2405-15, Aug. Maint Assy Kit MK-1192/ARM. TM DPSC 6515-265, Oct. Med Mot Repair Parts Pare 265.

TM 3-4230-203-E5C, C1, Jul, Decon-TM 3-4230-209-ESC, Sep. Decon M12A1.

TM 5-4300-229-25C, May, Air Comp-100-600 CFM,

TM 5-6100-212-ESC, Sep. Gen 5 KW, 400 HZ.

TM 9-1015-303-ESC, May, 105-mm Howltzer M101/M101A1.

TM 9-1220-221-ESC, Aug. Sun Dir Computer.

TM 9-1400-380-ESC, Aug, Pershing. TM 9-1400-500-ESC, Sep, Howk.

TM 9-1425-585-ESC, Sep, Chapanal. TM 9-2300-216-ESC, May, Operator M107 and M110 Artillery.

TM 9-2300-224-ESC, Jun. M113, M577, M106, M132,

TM 9-2320-224-85C, May, M114/ MILIAAL.

TM 9-2320-244-85C, May, Trucks, M715 and 725.

TM 9-2350-208-ESC, Jun, Tonk **从43人2C** 

TM 11-1520-228-ESC, May, Electronic Equipment, OH-58A Hel. TM 11-5820-292-ESC, May, AN/

PRC-8, AN/PRC-9, AN/PRC-10 Radios.

TM 11-5820-498-ESC/2, May, AN/ YRC-53 Radios.

#### MODIFICATION WORK ORDERS

9-1400-250-50/53, Avg. Nike-Herc. 9-2320-272-20/1, Oct. M131A3C Semi-9-4900-500-30/65, Oct. Howk. 11-5840-211-30/1, Sep. Rader AN/ PPS-4, AN/PPS-4A. 55-1500-200-20/1, Oct, OH-23.

55-1500-210-30/12, /24, Sep. 個時時,1971年1 45-1500/310-30/20, Oct., Cit-47.

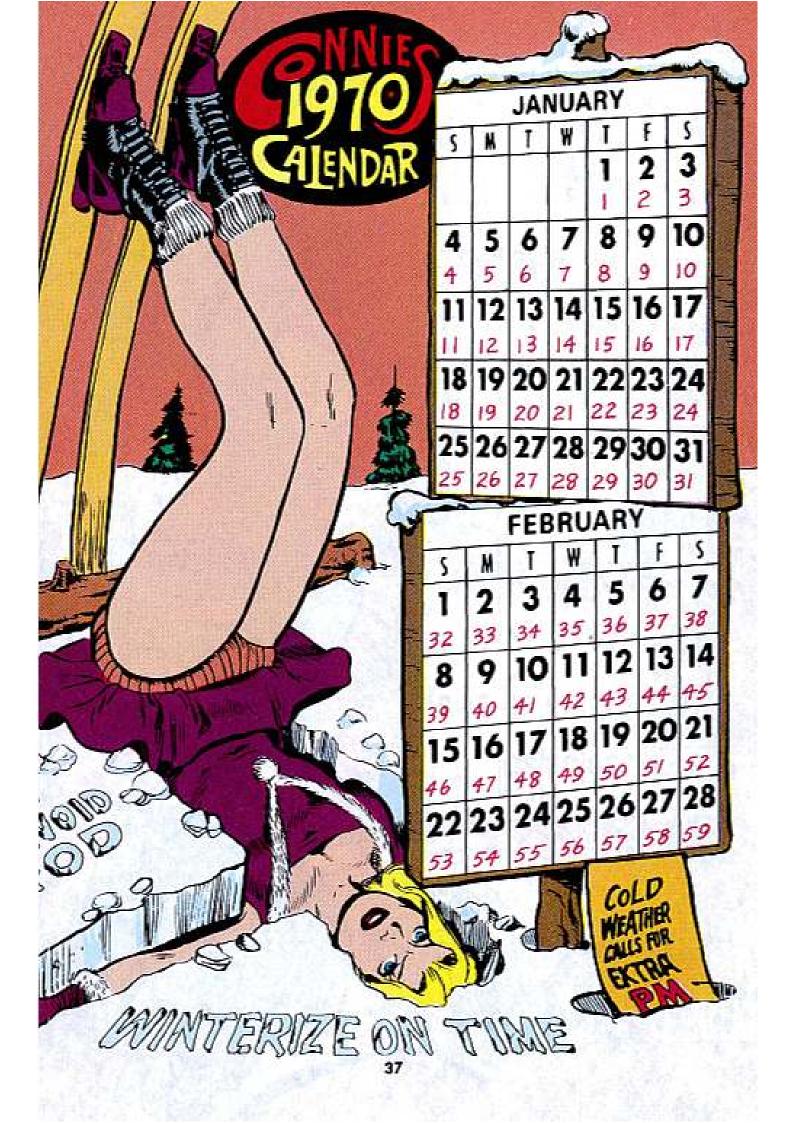
55-1520-227-50/6, Aug. Ol-47 Troms posider.

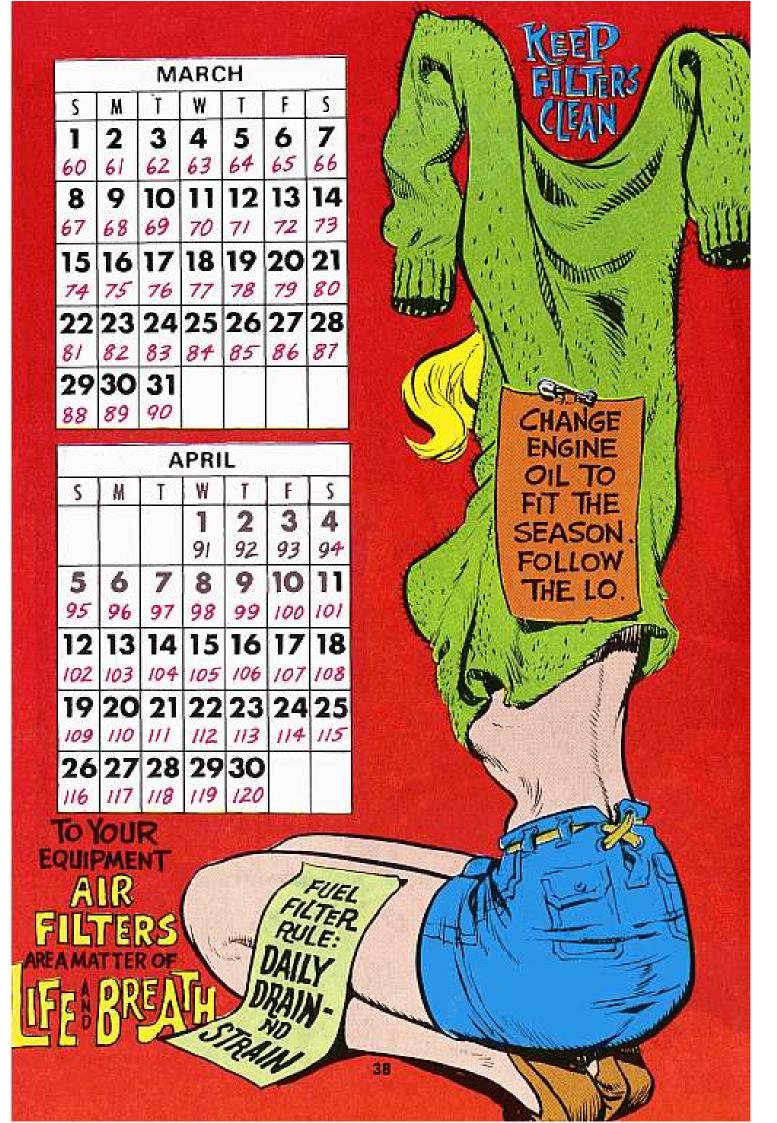
35-1680-208-20/2, Oct, All Reed and Beter Wing. 55-3840-234-29/1, Oct. CH-47.

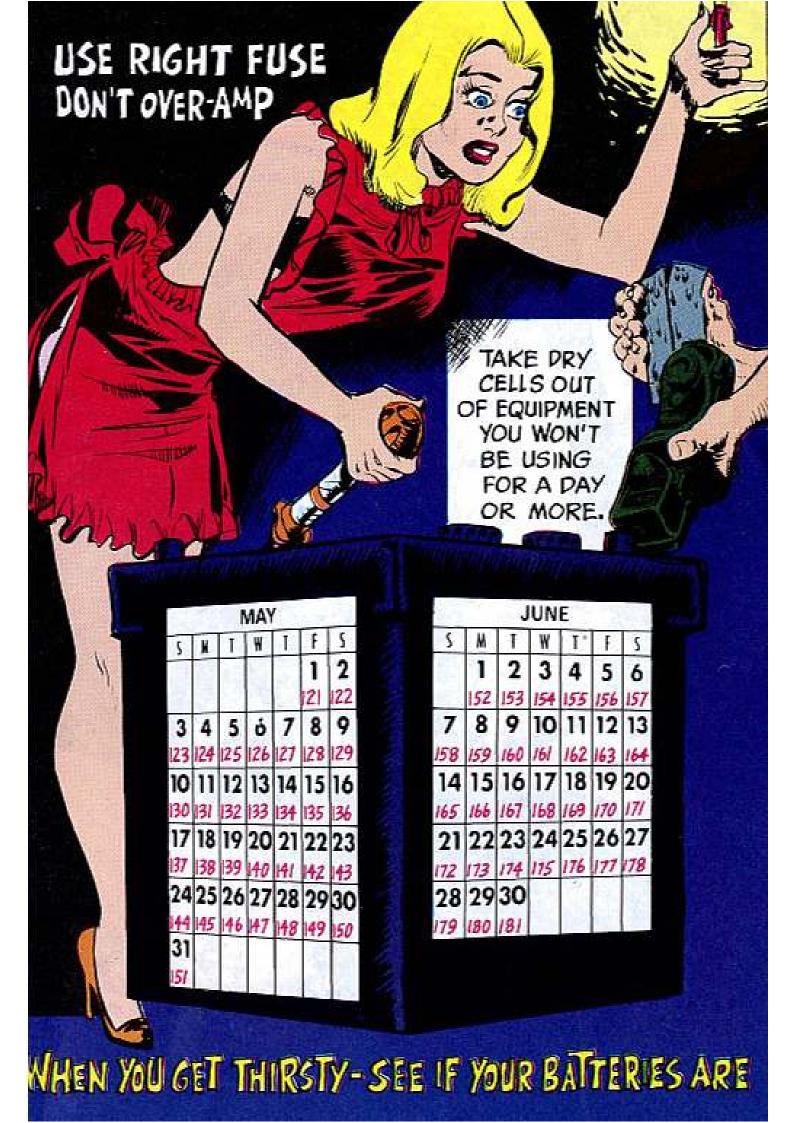
#### OE or PE for M113?

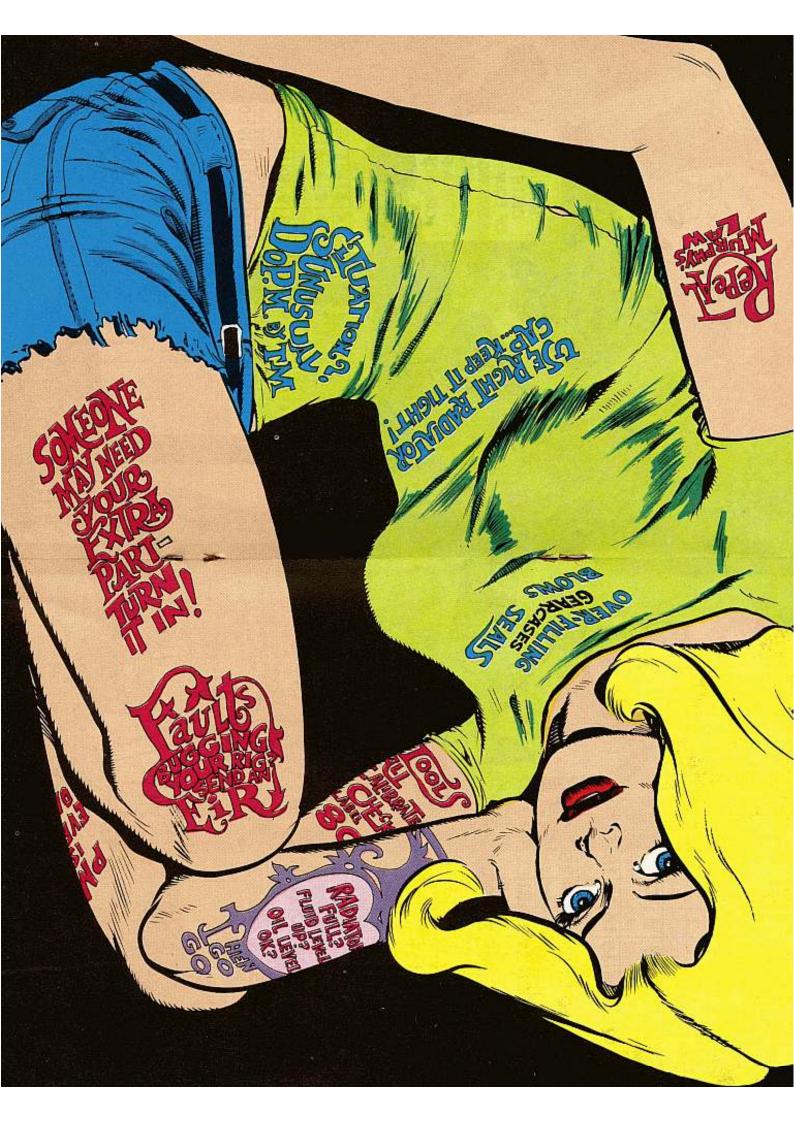
If you've got any of the M113 (gasoline engine) family of vehicles, LO 9-2300-224-12 with changes 1 and 4 could get you a little confused about what kind of oil should be in the transmission.

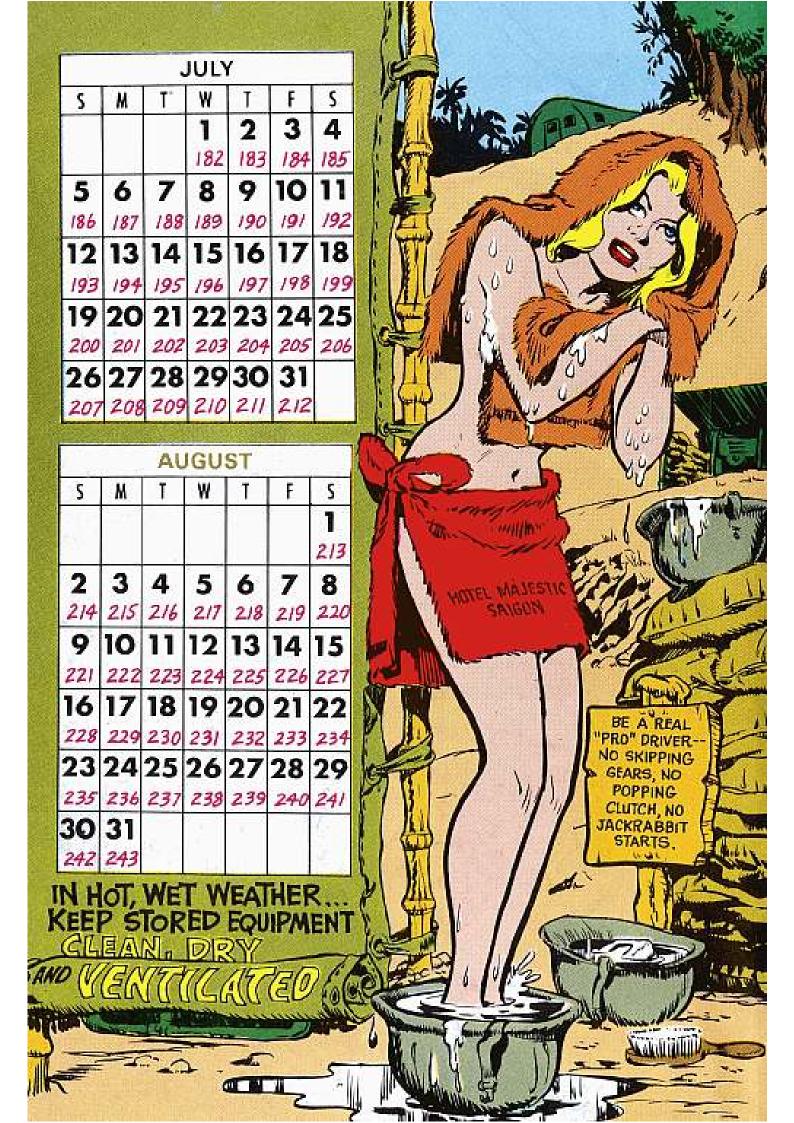
You should have the original PE oil until the first 2000-mile or semiannual oil change — after which you use one of the OE group of oils, (OE 10, OE 30 or OES) according to the temperature. If you need to add oil before your first oil change use OE, not PE. Change 5 to the LO should make this clear.

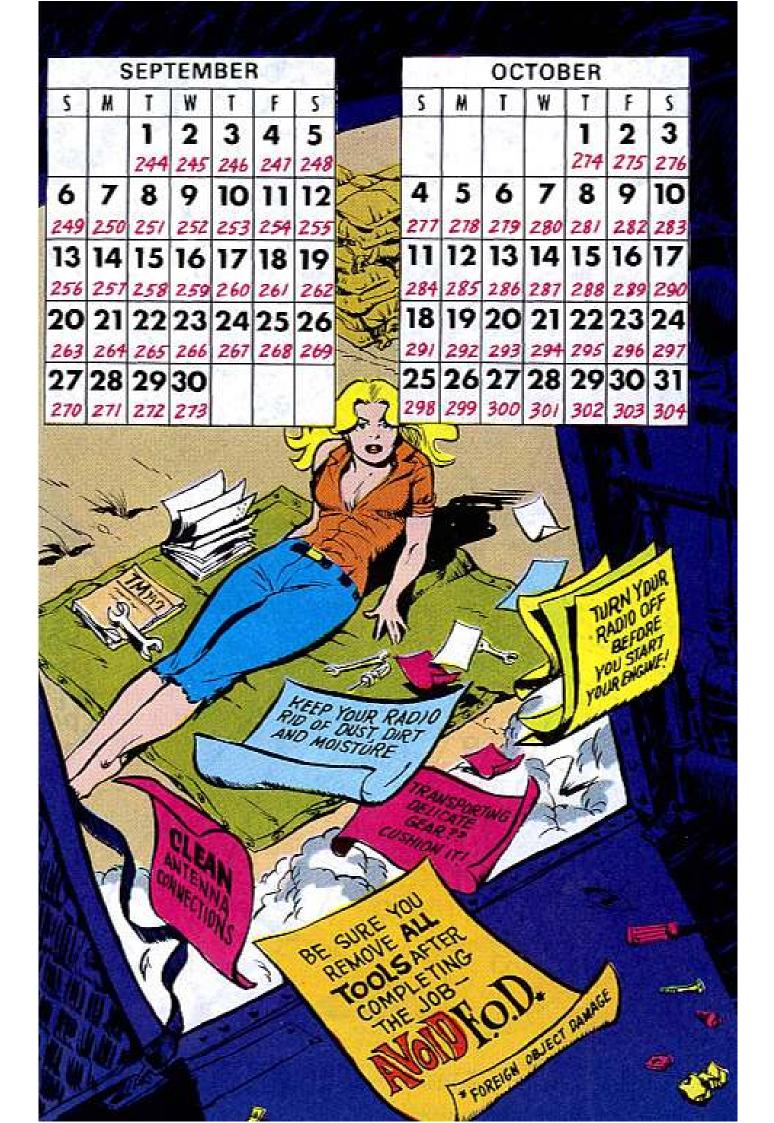


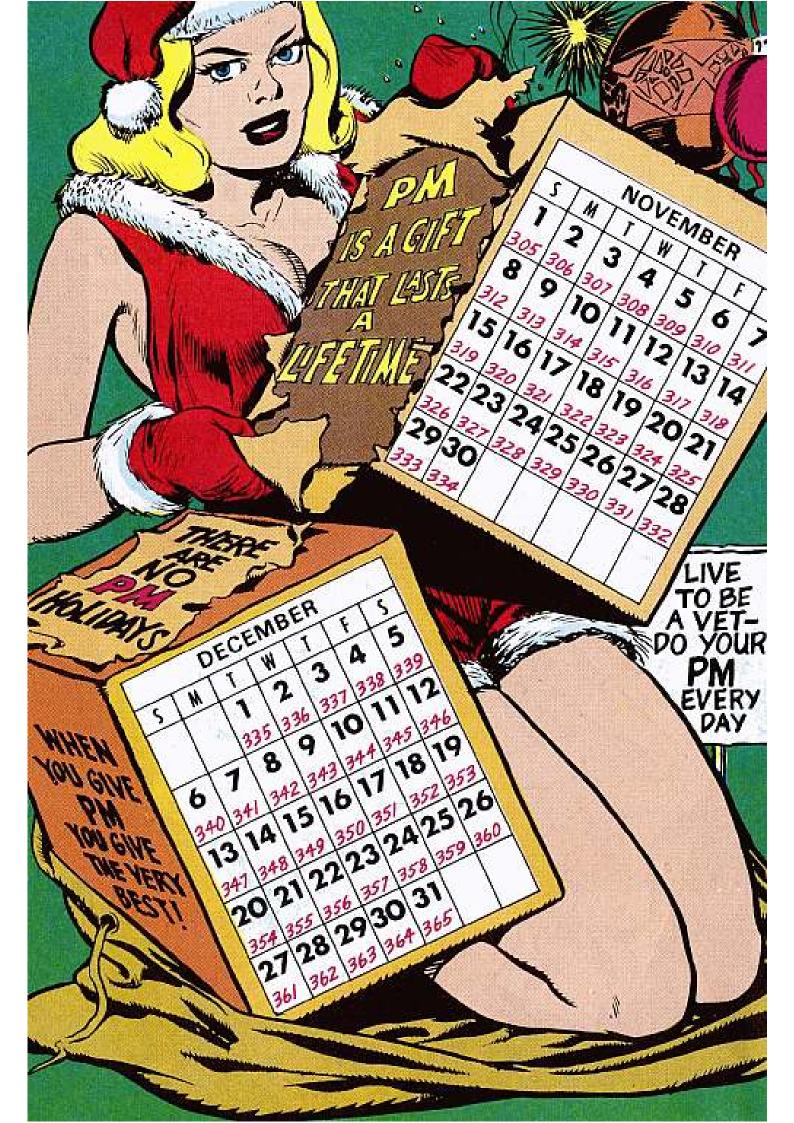


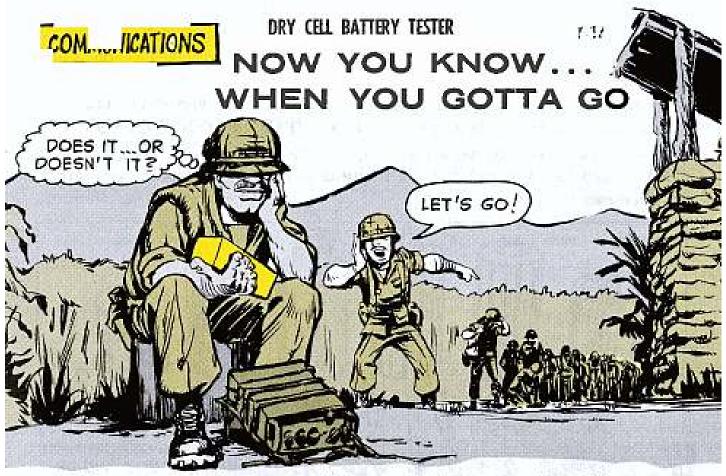












So here you are. Ten minutes till the patrol leaves, one dry cell battery to your name . . . and you're not quite sure whether it's got the juice to get the message back till you get back.

Routinely, you'd probably toss the battery and scrounge a fresh one . . . somewhere.

Chances are good you'd be tossing a serviceable battery. If everybody did that, it'd cost Uncle enough to pay for a division's R & R.

So wot to do?

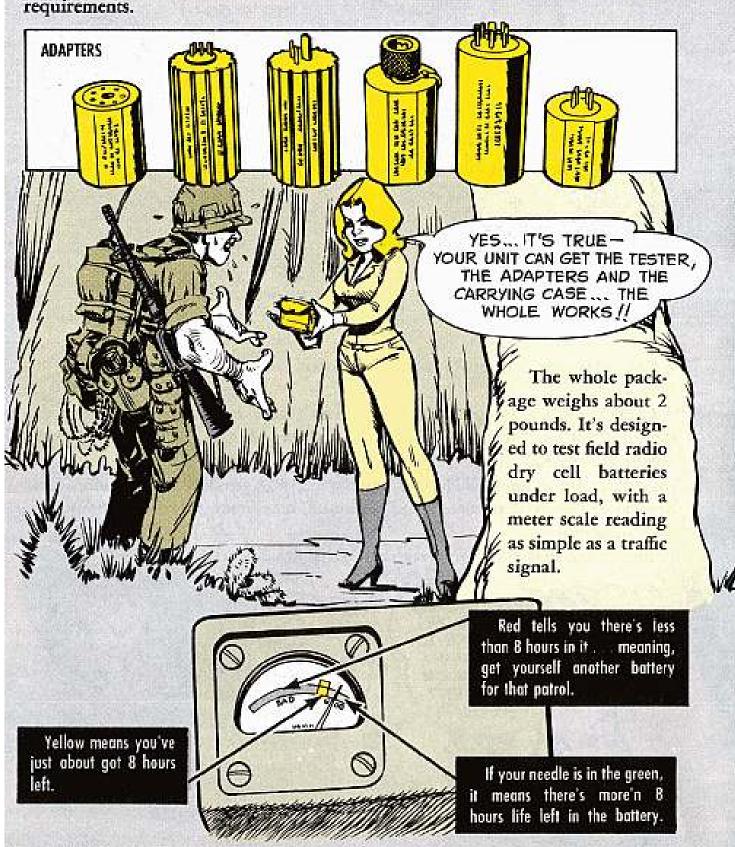
So latch on to an AN/PSM-13 battery test set, a fiendishly clever and simple dry battery tester that takes about a minute, maximum, to tell you how good your battery is.



The PSM-13 has adapter connectors which let you test the batteries for the AN/PRC-25 series, PRC-6, -8, -9, -10 radio sets and the AN/PRC-88 squad radio (AN/PRT-4 and AN/PRR-9).

Your unit can get the tester package with FSN 6625-868-8344. There's a handy canvas carrying bag, the CW-843( )/PSM-13, FSN 6625-936-5490, which lets you carry the test set and any 2 adapters in separate compartments.

SB 11-623 (30 Jun 69) has the requisitioning details, including emergency requirements.



If you've got magnesium batteries, such as the BA-4386 for the PRC-25, use the BA-386 adapter. A green or yellow reading on the magnesium battery means you've got double the life of a similar reading for the BA-386. Same goes for the BA-4505 of the PRR-9. Use the BA-505 adapter . . . and ditto.

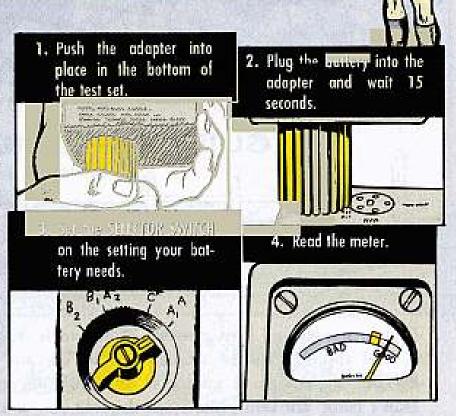
The adapter connectors give you readings for specific batteries . . . and for each section of compartmented batteries. Like, if you've got a 3-section battery, its specific adapter, plus the selector switch on the tester, allows you to check each section.

Naturally, you rate the battery on its worst section. If one section rates "BAD," then all are rated bad.

RADIO SET	BATTERY	ADAPTER	ADAPTER FSN's ARE
PRC-25 series	BA-386/PRC-25 BA-398/PRC-25	U-297( )/PSM-13 U-347	5935-832-4965 5935-832-4970 YOU
AN/PRT-4	BA-399/U	U-314	5935-832-4969
AN/PRR-9	BA-505/U	U-315	5935-832-4949
AN/PRC-8, -9, -10	BA-279/U BA-377/U	U-240 U-240	5935-832-4967 Same as above
AN/PRC-6	BA-270/U	U-241 & U-242	5935-832-4966 (for U-242)
	BA-376/U	U-241	5935-087-1148

Operating the set is as simple as clicking a switch (SELECTOR SWITCH) and looking at the meter. The meter spells out BAD GOOD. There are no numbered readings. etc., to worry about.

The SELECTOR SWITCH has 4 settings. Para 2-4 of TM 11-6625-823-15 (Feb 68) tells you the setting you need for your battery and also gives you the correct adapter.





Two cautions: disconnect the battery as soon as you get your reading, to prevent overheating the adapter and battery discharge. Also, the battery temperature has to be above 35 degrees F for an accurate reading.

Maintenance is simple. The operator keeps the exterior and the meter glass clean (and unbroken); checks the switch for binding or looseness, and assures that the meter pointer is not stuck or bent. There's a pin straightener (FSN 5120-935-0749) that comes with the set in case you should bend the adapter pins.

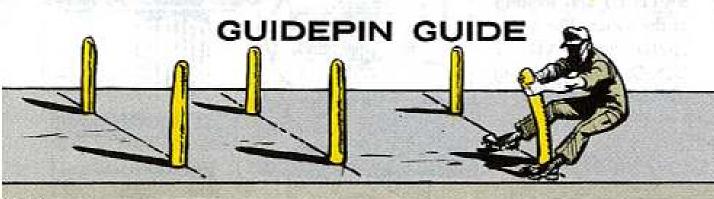
The unit repairman replaces the switch (Knob, FSN 5355-616-9659) and the adapters when necessary.

So there it is. A quick, simple test that keeps you from tossing good batteries just because you don't know how much life they've got left.









Broken guides and bent pins on PCM panels of multiplexers like the TD-202, -204 and -352 can be avoided with a "do" and a "don't."

Do line up the panel guidepins and push 'em in gently . . . by hand. Don't bang 'em into place from the rear . . . or try to force them.



There's a new FSN for the blower vent-hole cover to be installed on your early model MT-1029 mount for the RT-524 and RT-246 receiver-transmitters.

You can request the detachable cover under FSN 5820-918-7783.

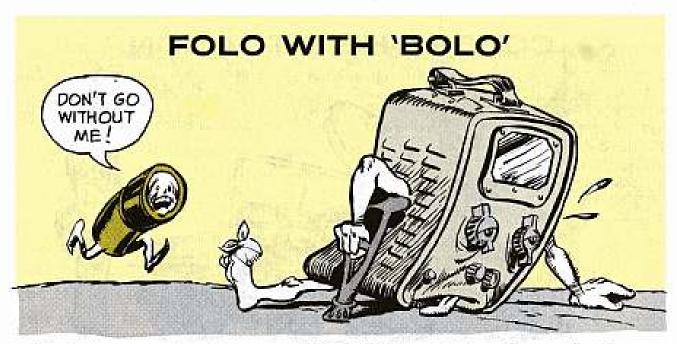
Y'see, if you're makin' messages with one of the early models of the M-1029/VRC mount, you'll need a blower vent-cover to cut down chances of damage to the blower on the RT-524 or RT-246.

That goes even more when the AN/ VRC-12 radio series is installed in open-type vehicles.

Your authority for ordering the cover is still SB 11-586 (Aug 64), which gives installation procedures.

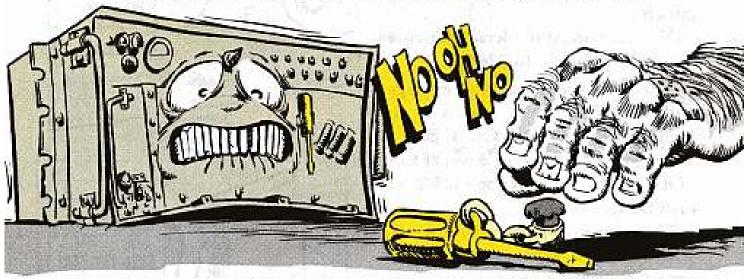






Next time you turn in your AN/URM-98 wattmeter for repair, be sure to include the MX-2144( )/U radio frequency bolometer. The bolometer is required in order to calibrate the URM-98. As a basic issue item, it goes wherever the URM-98 goes.

#### RESIST THAT SCREWDRIVER



Hey, there, operator friend, the fact that the CV-1548/G telephone signal converter, multiplexers TD-202/U, -203/U, -204/U, -352/U, -353/U and a few other multi-channel communications systems items have screwdrivers handily attached doesn't mean you should merrily go about turning every channel and tuning screw in sight.

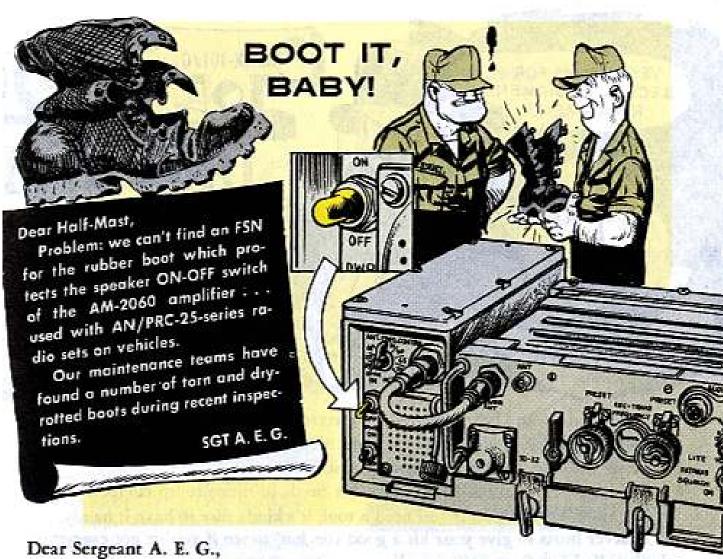
Let those panel screws alone.

The screwdriver's for maintenance types, who use it with handy test equipment like oscilloscopes and such.

Messing with 'em can put your equipment down.

'Nother thing. That test button on the 18A3A and 18A3B panels of your CV-1548 takes the light touch to do its job.

Heavy fingering can push the button clear into its shell.



FSN 5975-099-5747 will get you the switch boot. It's for the S1 switch of the OA-3633 (or AM-2060, whatever you wanna call it). Half-Mast

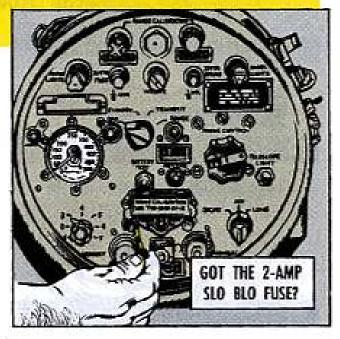
#### PIPSY-4A NEEDS NEW FUSE

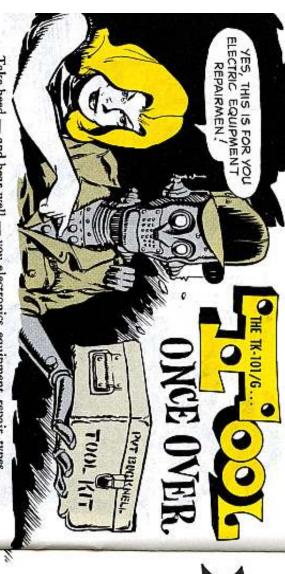


Hey there, man! Hold up with that 5-amp F102 power fuse you're about to put in the control panel of your AN/ PPS-4A receiver-transmitter.

The -4A, which needs less power than the Pipsy-4 plain model, gets a 2-amp slo blo, FSN 5920-228-7882, to replace the 5-amp job. The lighter rated fuse gives protection to the power converter. It's still an "F102."

TB 750-911-1 (Oct 69) has the dope.





Usin' a tool kit loaded with the right tools, you can make sweet music fixin' Take heed — and hear well — you electronics equipment repair types . . .

. . in other words, Mac, if you need a tool, it's kinda nice to have it handy. That means your TK-101/G tool kit needs to measure up component-wise

those downtimed radar, radio, and avionics items.

that's called for. So-o-o-o-It never hurts to give your kit a good checkin' to see if you've got everything

tration of each tool. Here's a list of tools, nomenclatures, and stock numbers tied in with an illus-

If you've got 'cm all . . . fine . . . if not, better start addin'!

## TOOL KIT TK-101/G, ELECTRONIC EQUIPMENT FSN 5180-064-5178

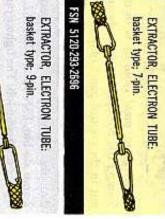


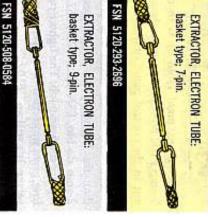
### 8020-245-4509

bleached; 36 in wd, 1 yd lg. CLOTH, COTTON: cheesecloth, lintless;



52



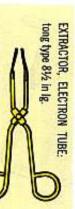






spline drive

KEY SET, SOCKET-HEAD SCREW,



## FSN 5120-293-0808



Lens, diffusion .15 amps Battery BA-30 Lamp, incandescent, 2.7 volts, Filter blackout FSN 6240-155-7935 FSN 6230-356-4825 FSN 6135-120-1020 FSN 6230-300-8101

black; .007 in thk x ¾ in wd INSULATION TAPE, ELECTRICAL: plastic;



## FSN 5970-284-8410

KEY SET, SOCKET-HEAD SCREW: hexagona Allen wrenches) with carrying container

0	J	P
FSN		
5120-	H	
585-62		

Size .144	Size .110	Size .094	Size .076	Size .069	Size .060
				FSN 5120-224-2496	



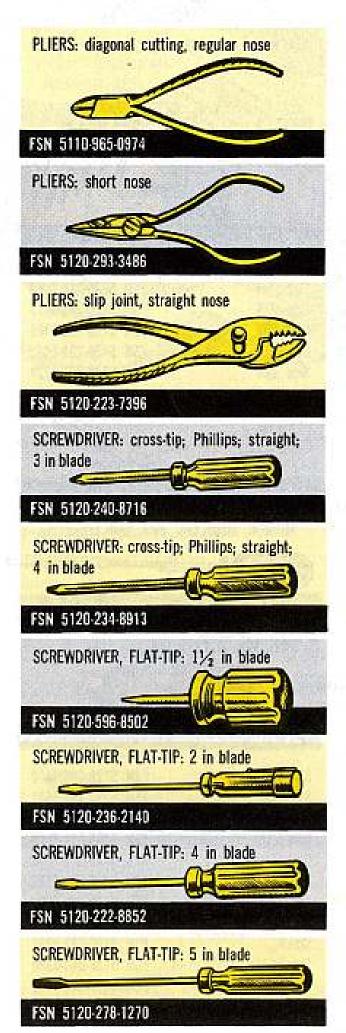
MIRROR, inspection, oval, with pocketclip

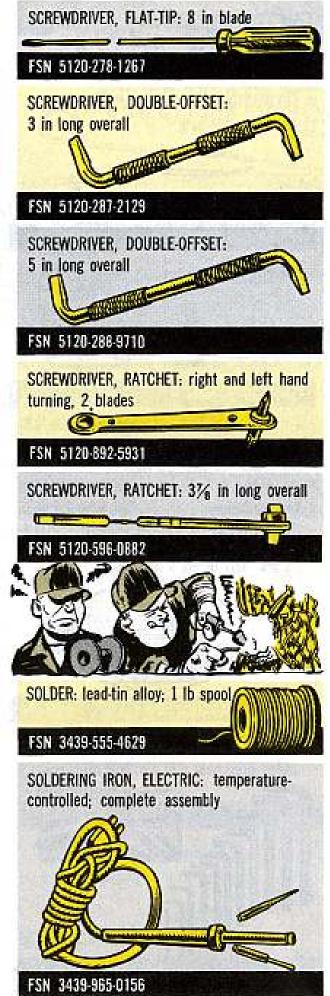
## FSN 5120-596-1098



## FSN 5120-392-836

Size 1/2	Size 1/2	Size ¾	Size 3/2	Size %	Size 1/6	Size 1%	Size 3/2	Size %	Size 1/4	Size .050	Size .035
FSN 5120-224-4659	FSN 5120-242-7411	FSN 5120-240-5300	FSN 5120-198-5392	FSN 5120-889-2163	FSN 5120-240-5292	FSN 5120-889-2162	FSN 5120-242-7410	FSN 5120-224-2504	FSN 5120-198-5398	FSN 5120-198-5401	FSN 5120-198-5400









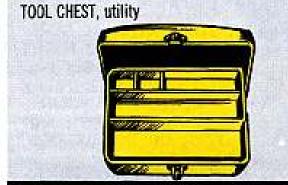
#### FSN 3439-866-6258

TIP, SOLDERING IRON: screwdriver shape, 1/6 in size; 600 deg F temp rating

#### FSN 3439-898-4497

TIP, SOLDERING IRON: screwdriver shape; % in size; 700 deg F rating

#### FSN 3439-993-2770



#### FSN 5140-678-4805

WRENCH: adjustable; open-end; single head; 6-in size



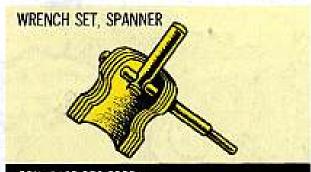
FSN 5120-264-3795



#### FSN 5120-542-5799

Size (in)	Length (in)	
3/6	6	FSN 5120-224-2599
1/2	6	FSN 5120-277-1801
1/4	6	FSN 5120-241-3188
3/6	6	FSN 5120-224-2596
11/2	6	FSN 5120-293-0796
3/6	6	FSN 5120-596-1263
1/6	7	FSN 5120-222-1499
1/2	7	FSN 5120-293-0375
%	7	FSN 5120-294-9514
The state of the s		

ROLL, TOOL: Fed spec GGG-W-641 (furnished with set)



FSN 5120-658-9805





OUT FORM WILL DELAY FOR A CARELESSLY MADE-IT'S FILLED OUT RIGHT. SUPPORT, MAKE SURE REPAIR PARTS ... AND SEND THIS FORM OUT ON ITS JOURNEY TO RECEIPT OF YOUR WHEN YOU

came time to send little

how to do their thingabout how it really is and

So, one day, when it

all the parts poppers round to get supplies, she gathered DA Form 2765 back to support

her and ...

and maintenance — telling

TROUBLE-SHOOTING DA FORM 2765, REQUEST FOR ISSUE OR TURN-IN... HANDLE IHE

## FORM RIGHT

repair parts: What can you do to help speed up your supply of

Could be you can do a heck of a lot

it comes back to you? Do you fill the form out right? Do you read it right when For a starter—how's your SOP on DA Form 2765?

well it's made out. it does on its shopping trips, always depends on how know. It's your buyer at supply support. And, how well The form's like money in the bank for your shop, you

empty handed. So, the first rule is: Accuracy across-theup the support types, and most likely will bounce back board for all your repair parts requests. (in most any block or column), will delay a request, foul A form with incomplete, incorrect or scribbled info

ing repair parts. are some pointers to help you check your SOP on request-Change 1 to AR 735-35 (Oct 65), And, right now here Form 2765, check Figs 4-1 and 4-2, and para 4-1, in For easy step-by-step guidance on making out a DA

WHEN IT GETS HAPPENS TO IT COMES THERE, AND ABOUT WHAT MHEN

> spaces, and give exact item identification (FSN, nomenclature, plus all other info you're responsible for). you shoot it in. Write clearly, use the right info in the right Be Right — Always double-check each request before

> > MAKEIT SKEWER THEY'LL NEVER

FORM WILL

THAT

all your entries are accurate. You don't have a pre-printed 2765? Then be real sure

SURE

표모

carefully. Keep 'em clean and fresh. And, even nomenclature, etc., info from support toss out covering the Item, check to be sure you've got if you keep 'em filed with the DA Form 3318 have on file with the old info (or correct, if possible) any pre-prints you When you receive new FSN, unit-of-issue, the right card before you start filling it out Pre-prints — Handle pre-printed 2765's









supply support tally keepers. For example, an to keep the items in stock for you according to "R" means the item is a recurring demand 13) is a must. The code's a special signal for Demand Code — The demand code (block , like your PLL stocks. Support knows it has

recurring demands on support. support. Your requests for initial PLL stocks provides a different kind of demand into at time, non-recurring demand. And, the cade An "N" means your request covers a oneparts for MWO's, for example, are non-

BACK TO SUPPORT A WRONG ENTRY IS ROUGH ... AND

9071-003

CAN SEND HER OFF THE PATH

PARTS SUPPLY

THE ROAD

it's used on. If you can provide a sketch, pic ture or drawing of some kind so much the tify the major item, component or assembly a good word-picture of the item. Give 'em or supply publication reference, and made of, where it fits, what it does and ideninfo like on size, shape, weight, what it's number, contract number, etc., give support using a manufacturer's parts manual, model No FSN? — When you don't have an FSN you're

> stack in your parts manuals. The same applies to items listed as non

or identification and manufacturer's manual parts manual info. are good references when you don't have plates, and component or equipment numbers Packing lists, shipping lists, equipment data

> TITLE ONE

requests for non-FSN'd, non-stock items for any special SOP they may have covering And, by all means check with your support

> AN' SHE'LL UP FSN,

OUT

scription of the item you're ordering. Item Description — Block M takes the de-

\$481.00 9 11

735-355

For IPO's 1 through 8 you need a signature IPD (Issue Priority Designator) 110 ACCT. STREET BC 33 i 901 089 - 6912 M9-2300-223-20P JUL 65, THERETERING THE STREET HOSE, FUEL LINE ALMERICA DATA AND DESCRIPTION OF PARTY AND PARTY OF THE PA EA PG123

0

HEQUEST FOR ISSUE OR TURN-W

the cades and use 'em right. UND (Urgency of Need Designator)—Learn

if has for specific items.

quantity info delays the shipment and feed

you know what you're ardering. The wrong

support the wrong demand info. Support, too

you know, stacks according to the demand

the request while they re-check to make sure goot, for example, support will have to stop mess things up a-plenty. If it's a gosh-awful quantity goof can hold up your request and

PLL, in parts manuals or supply catalogs. A

issue (or unit-of-measure) info listed on your

Quantity — Be certain. Study the unit-of-

0

on your document register (the CO, or whoever

code is authorized). See Appendix II in Change he OK's, signs the register when a top priority

see page 65).

info for black 20. (For more scoop on IPD'

info on priority codes and you'll have the right

AR 735-35, or AR 735-35-1 for complete

nance or repair or for manufacturing parts takes a **D** UND. Items for scheduled mainte-A request for normal PLL replacement stock

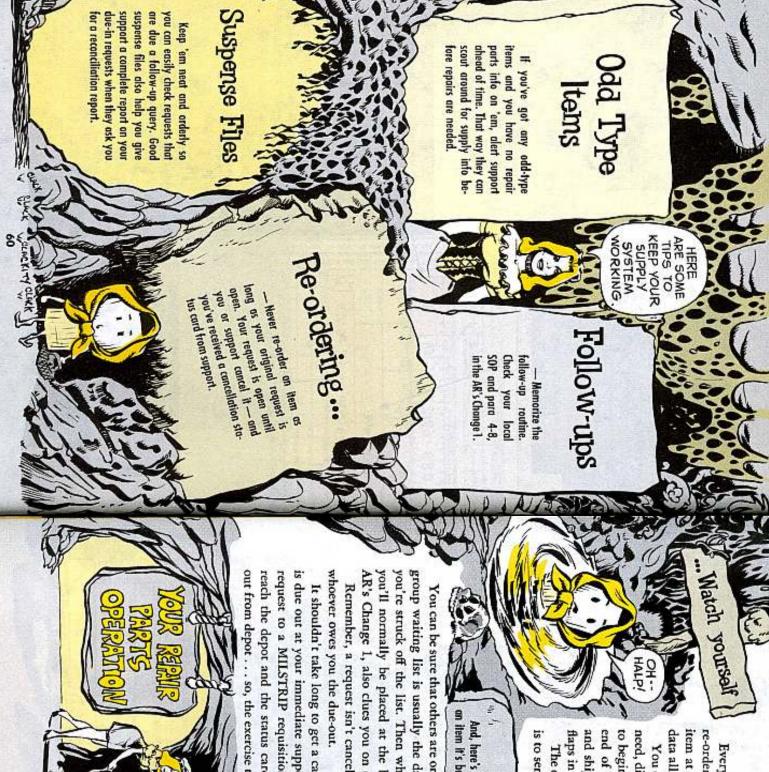
are at zero balance you rate a B UND for your IPD. Some SOP's call for this entry — others When your PLL stocks, or on-board spares

4-1c in the AR's Change 1. manual, you list both the maintenance manual says your shop's authorized to replace a part the parts manual, or catalog that lists the part and the parts manual in block O. See para If the MAC (Maintenance Allocation Chart) Publications Info — In Black O you quote the part is not authorized in the parts

sender. So spell it right, when thing on the form that identifies you, as the your section, shop or activity. It's the only 2765 the UIC is the same as the name for The UIC (Unit Identification Cade) — On n you fill

N. A.

58



Everytime you repeat an un-canceled request, your re-order can be registered as a new demand for the item at support. That'll eventually foul up demand data all the way up the supply line.

You can end up with a big load of stuff you don't need, didn't want, and that you're not authorized... to begin with. And, in the process you can create no end of shortages, costly, time-consuming transfers and shipment of supplies, plus a lot of other costly flaps in the repair parts supply business.

The only safe thing you can do on an open request is to send in your timely followups, or cancel it.

## Canceling

And, here's a word of caution on canceling. As long as you need on item it's best not to cancel your request. Here's why:

You can be sure that others are on the waiting list, too. Your place on a priority group waiting list is usually the date of your original request. If you cancel, you're struck off the list. Then when your new request goes in for the item, you'll normally be placed at the bottom of the waiting list. Para 4-8, in the AR's Change 1, also clues you on canceling requests.

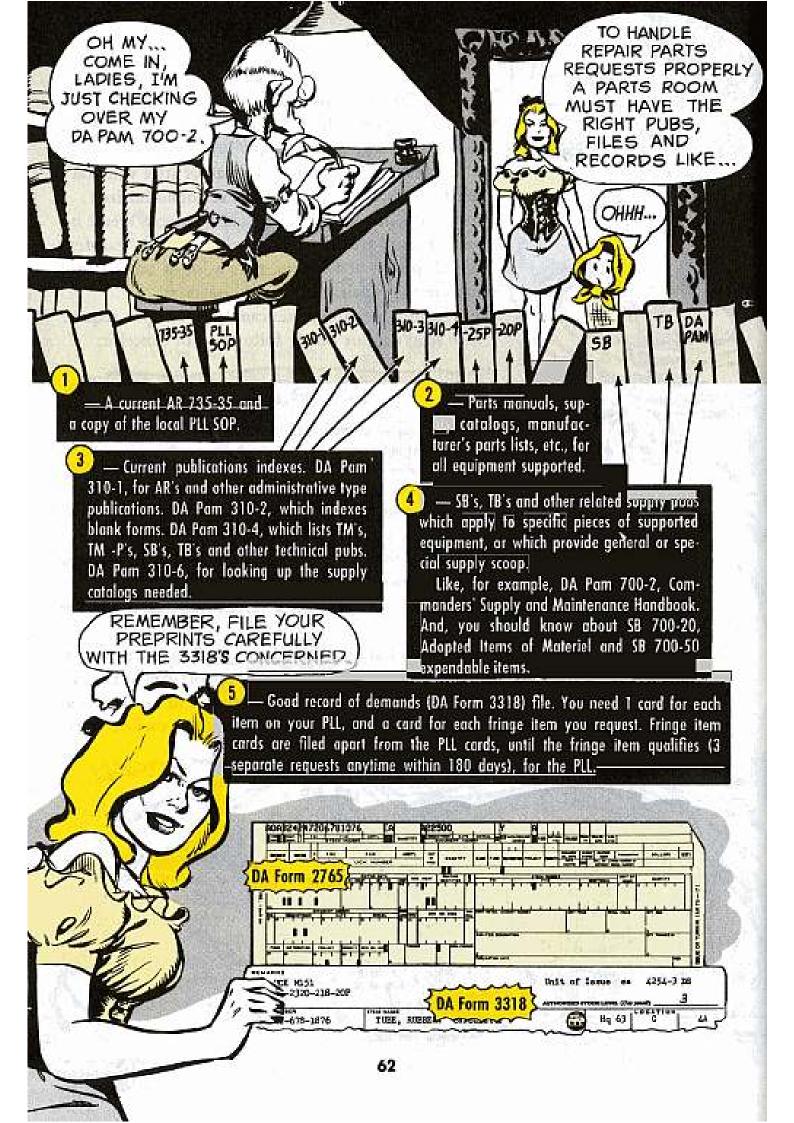
Remember, a request isn't canceled until you get a "Roger" status card from whoever owes you the due-out.

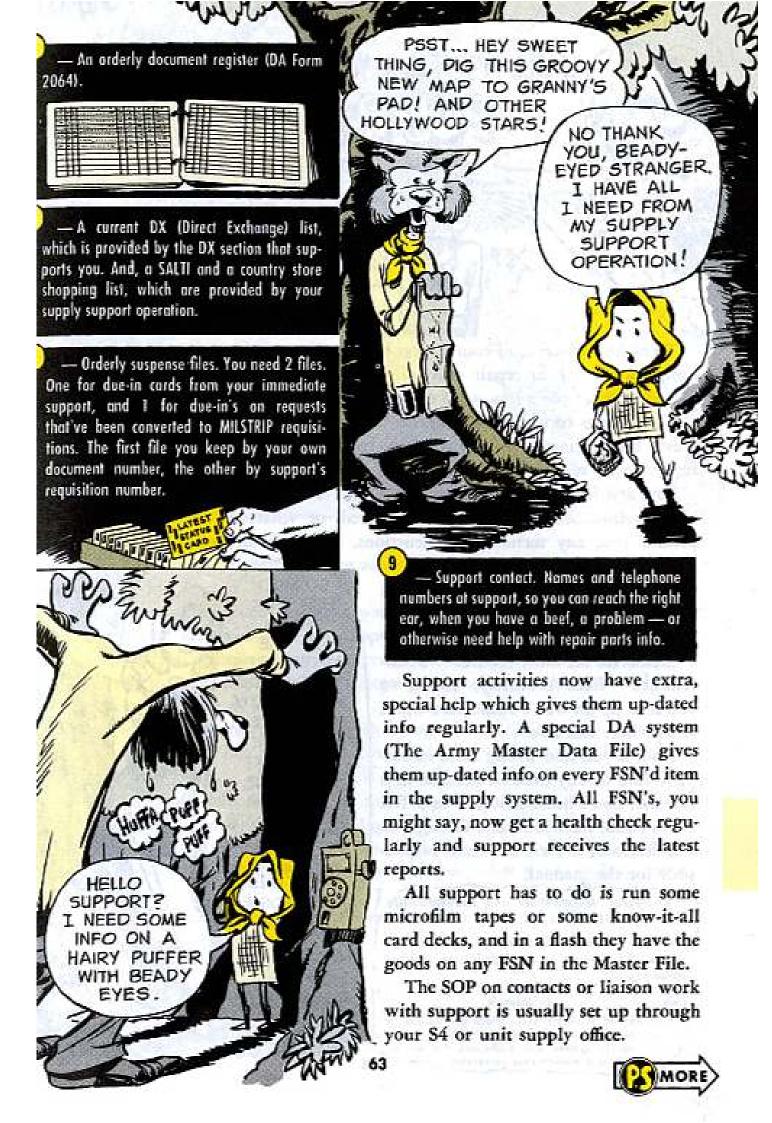
It shouldn't take long to get a cancellation squared away when your request is due out at your immediate support outfit. But, when support converts your request to a MILSTRIP requisition (AR 725-50), your request to cancel has to reach the depot and the status card, confirming your request to cancel, starts out from depot . . . so, the exercise takes a bit longer.

PROPER REPAIR
PARTS ROOM.

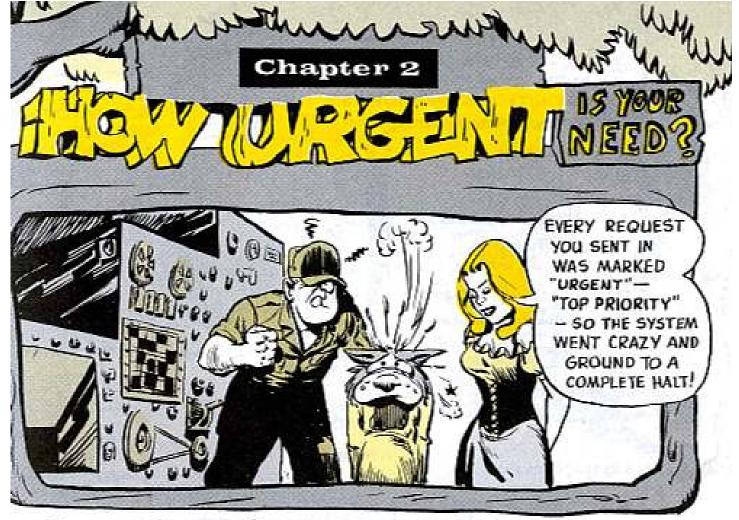
MORE

LET ME









How urgent is your need?

Only you can tell. And, it's to your advantage to tell it right . . . every time. Here's why:

The Army supply system is geared to support you and everyone else on an issue priority basis. That means the best support possible for everyone concerned. But, it also means top priority support for specific items needed to keep essential equipment ready to shoot, scoot and communicate — or, pull its combat-essential job... whatever it happens to be.

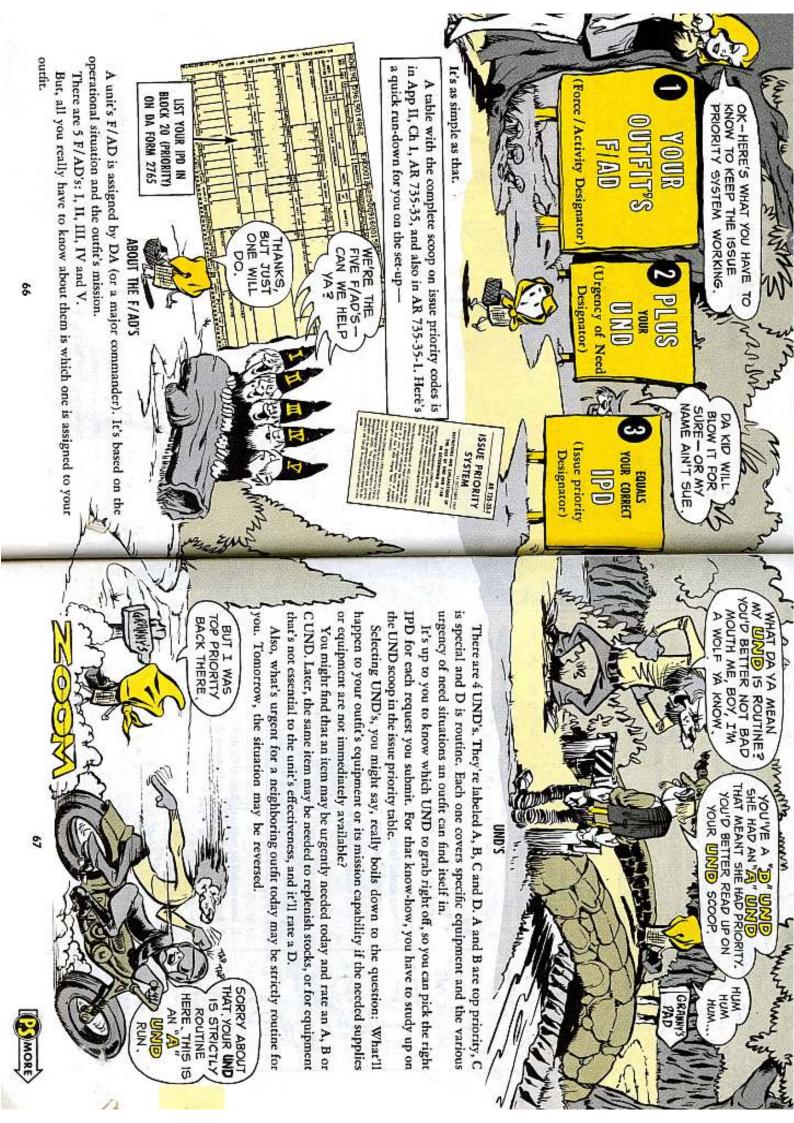
Equipment and items of equipment that won't directly affect an outfit's combat readiness, of course, rate a lower issue priority. That's where you really have to play the game right . . . otherwise you'll cause all kinds of grief for yourself and create gruesome bottleneck problems in the supply system.

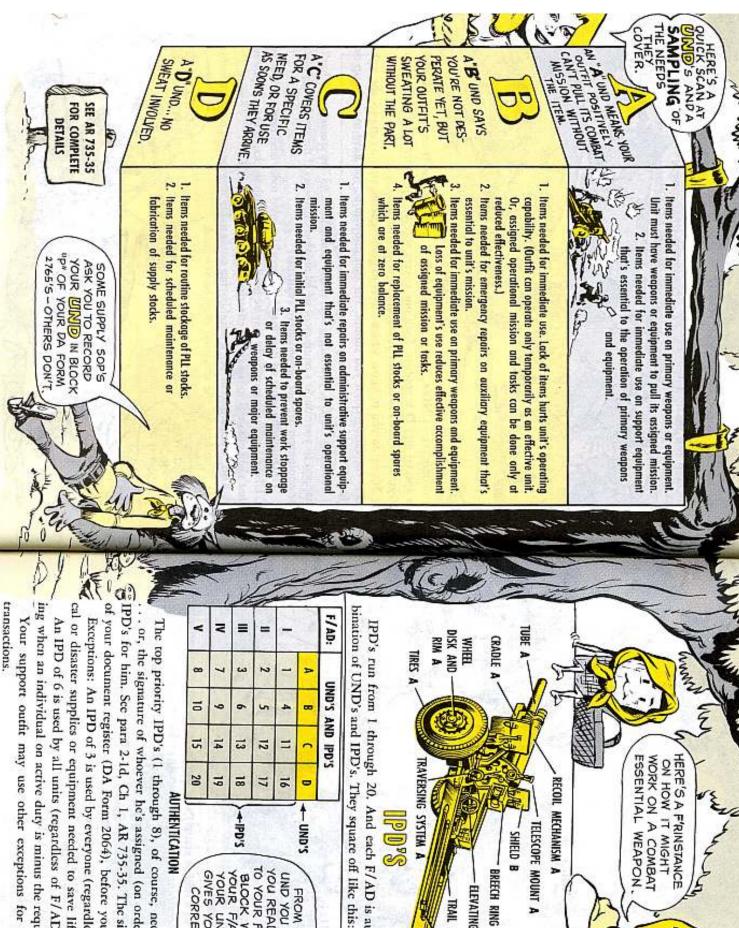
In a nutshell—supply support must go all out when you send in a top priority request. They drop everything and work around the clock to find what's needed, and ship it soonest . . . by the fastest means available. That means by high priority jet plane for many items.

That's no sweat. The system's set up to respond that way to urgent needs.

But, when you (and too many other supply types), accidentally or unknowingly demand top priority service on everything you order, support's issue priority operation gets flooded, over-loaded and bogged down. Eventually, your entire supply support system is crippled and slows up as it tries to catch up and dig out from under. That means all requests are delayed and nobody gets what he needs when he needs it.







IPD's run from 1 through 20. And each F/AD is authorized a specific com-TUBE A DISK AND ESSENTIAL WEAPON WORK ON A COMBAT HERE'S A F'RINSTANCE ON HOW IT MIGHT TRAVERSING SYSTEM A RECOIL MECHANISM A Selle TELESCOPE MOUNT A SHIELD B BREECH RING A -ELEVATING SYSTEM A TRAIL A , HANDSPIKE C DRAWBAR B

F/AD: < UND'S AND IPD'S 5 9 5 14 3 12 20 19 8 6 NO.S +IPD'S TO YOUR F/AD, THE YOU READ DOWN GIVES YOU YOUR YOUR FAD AND YOUR UND MEET BLOCK WHERE UND YOU SELECT FROM THE CORRECT IPP

PD's for him. See para 2-1d, Ch 1, AR 735-35. The signature goes in block d of your document register (DA Form 2064), before you shoot off the request cal or disaster supplies or equipment needed to save life or prevent suffering. ... or, the signature of whoever he's assigned (on orders) to OK top priority Exceptions: An IPD of 3 is used by everyone (regardless of F/AD) for medi-An IPD of 6 is used by all units (regardless of F/AD) for individual cloth-The top priority IPD's (1 through 8), of course, need your CO's signature AUTHENTICATION

transactions. ing when an individual on active duty is minus the required clothing. Your support outfit may use other exceptions for special items or issue

69

68



71

MORE



Each status card you receive brings you either:

#### SUPPLY STATUS

What's happened up to now on your request. Sometimes it answers your request for followup or cancellation information.

....OR

#### SHIPMENT STATUS

How, when and what quantity will be shipped.

Both types of status can include other information from time to time: such as changes in stock number, unit of issue or quantity, partial due-in, rejects, cancellation verifications, etc.

#### TWO DUE-IN SUSPENSE FILES

You keep these status cards in two different suspense files under two separate numbering systems.

Your temporary due-in suspense file contains due-in cards from your DS and are filed by the organization document number in Block C1 of your DA Form 2765 request.

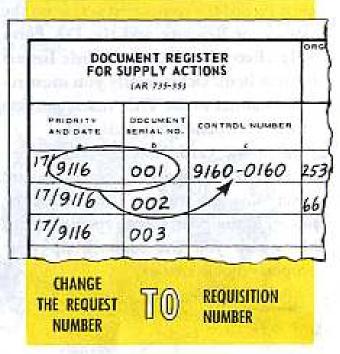
Your regular due-in suspense file holds status cards which DS has converted into requisitions that are forwarded to a higher supply source. These cards are filed according to support's requisition number. This number either appears manually in Blocks 9-12 or is punched and printed into card columns 30-43.

# REGUISITION NUMBER IS EITHER ENTERED MANUALLY (BLOCKS 9-12) OR MACHINE PUNCHED (CARD COLUMNS 30-43) TEMPORARY DUE-IN SUSPENSE FILE— USE THIS NUMBER I JUST REQUESTED HER TO JOIN ME IN SUPPER, IT WASN'T REALLY A REQUISITION.

FROM REQUEST TO REQUISITION

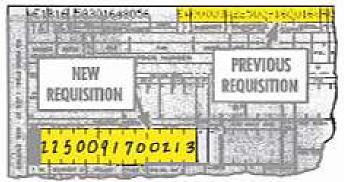
When your initial request has to be converted into a requisition, support sends you a new status card with this requisition number on it. You transfer this due-in to your regular suspense file by noting your organization document number on the new card and throwing away the card in your temporary due-in file.

All future status cards on this due-in will also carry this requisition number. That's why you must add this number to the original entry on your DA Form 2064 (Document Register for Supply Actions).

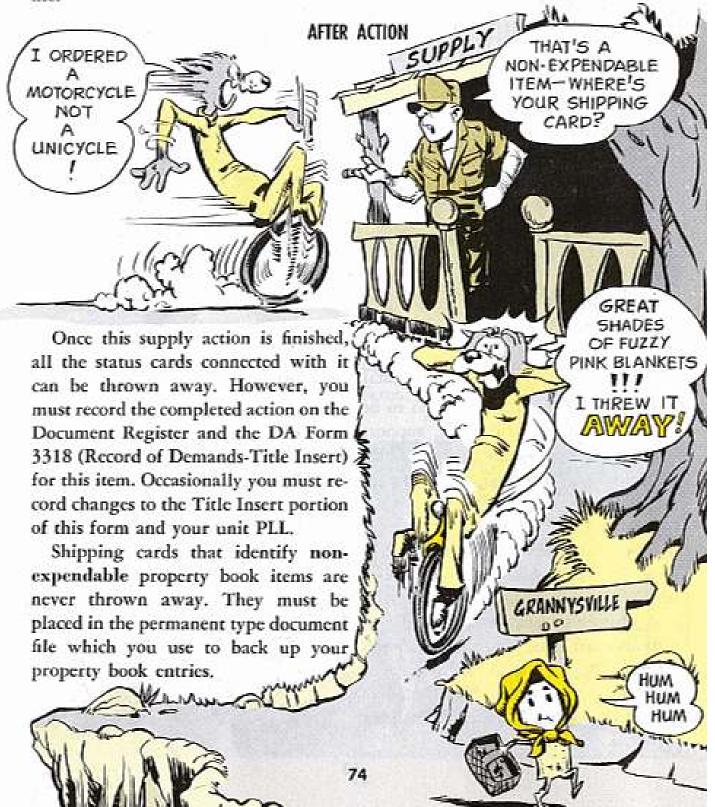




If the first request/requisition for this item is rejected, your DS may try to reorder with a new requisition number. That means a new status card comes to you with the new requisition number in Blocks 9-12 and the old requisition number in card columns 30-43.

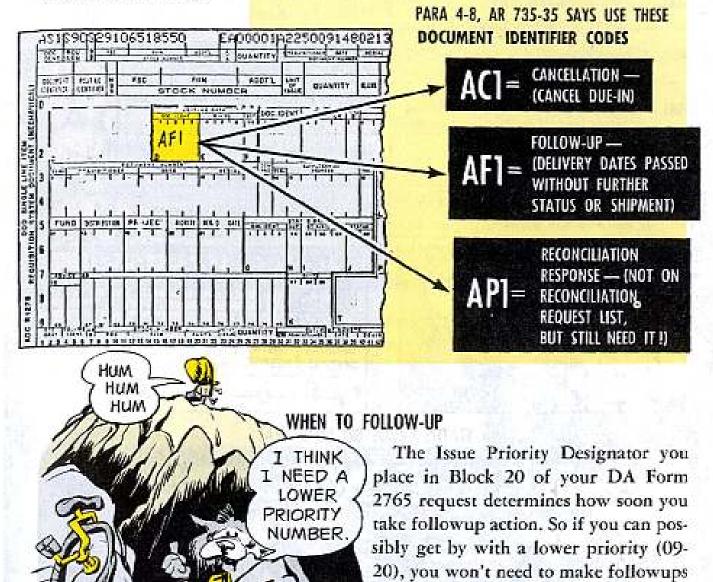


You change the requisition number on your Document Register, add your original organization document number to the new status card and fasten the new card to the front of any other cards you have on this request in your due-in file.



#### DOCUMENT IDENTIFIER CODES

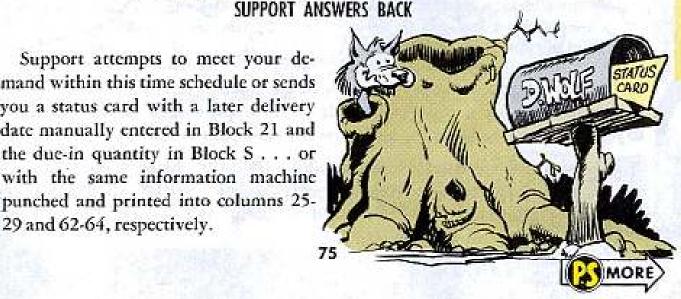
Always place the latest status card received in front of all others filed on the same request, since you must use this card whenever you start a Followup or Cancellation request. If you do not have a recent status card in the file, use a fresh DA Form 2765.



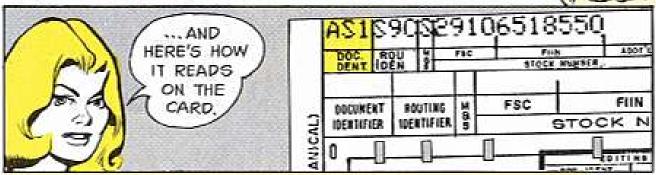
as often.

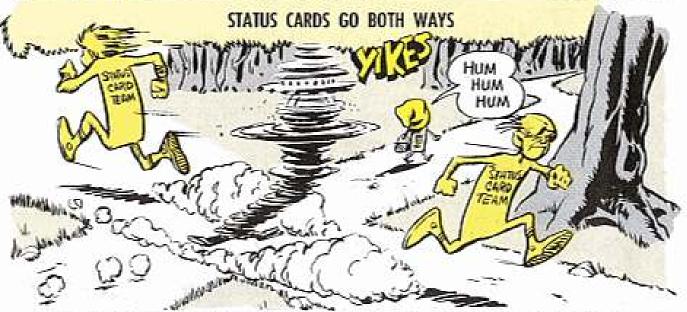
Support attempts to meet your demand within this time schedule or sends you a status card with a later delivery date manually entered in Block 21 and the due-in quantity in Block S . . . or with the same information machine

29 and 62-64, respectively.

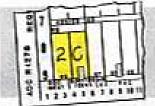


DOCUMENT IDENTIFIER CODE	MEANS PURPOSE OF
AAI — Supply Status — reply to followup	Answer to your followup request.  THIS STATUS CARD WILL BE IDENTIFIED BY ONE OF
AEI — Automatic Supply Status	Latest status sent without THESE DOCUMENT IDENTIFIER CODES
AGI — Reply to cancellation request	Verifies your request, permitting you to close out Register and files.
ARI — Shipment Status — reply to followup	Answers followup request with shipping date and method of delivery.
ASI — Shipment Status (automatic)	Latest shipping info sent without request for followup.
AUI — Reply to cancellation request — with Shipment Status	Request too late to cancel shipment.





Every status card carries a two-way message channel in card columns 65 and 66. Status codes transmit decisions made by the supply source for that item down to you and your DS. Advice codes follow the same path in the opposite direction.



Advice codes should be limited to the occasions when they are really needed, such as telling your DS what restrictions should be considered in filling your request. Here are the most commonly used.

	Advice Code	Why You Use It
2 /	Could not manufacture fabricate or buy locally.	No local dealer, boneyard's bare, support shop doesn't have capability.
2 E	Can't accept substitute.	Ex: Thin wall wrenches for aircraft use.
2 (	Fill or Kill. Don't want due-in on any part of order.	Immediate need. Due-in quantities would be too late to meet field exercise or deadline requirements.
2 F	Know item's "obsolete" but still needed for immediate use.	Required to support equipment on hand.
2 J	Fill or Kill. Can't accept substitute or back order.	Similar to 2C — but substitution not acceptable.
21	Resubmitting confirmed quantity requirement.	Verifies previous request rejected by status code CS = wrong or excessive quantity.

Each status code carries a supply decision which affects the status of your request . . . and may ask you to take some action in return. Here are the actions required by you at the using unit level on the most commonly used codes.



	Status Code	Your Action
BA	Item being processed for release and shipment.	Place card in suspense file.
88	Item back ordered. Estimated release date in columns 62-64.	Enter new date on Document Register. File card in suspense. Send followup according to local SOP if date passes without shipment or further status report.
ВС	Item back ordered. Long delay. If acceptable, cancel and order substitute instead.	Cancel request. Post action to records and order substitute item. If substitute won't do, file card in suspense and wait for issue on original request.
BD	Item delayed. Estimated release date in columns 62-64.	Enter new date on Document Register. File card in suspense, Followup if date passes without shipment or further status.
B G	Stock number changed or newly assigned. Also check unit of issue and quantity for possible changes.  Adjust records.	Change Document Register, Record of Demands, Title Insert and PLL as necessary. File card in suspense.



- BH Substitute item supplied. See stock or part number entry. Also check unit of issue or quantity for possible changes. Adjust records.
- B J Unit of issue and / or quantity changed.
  Adjust records.
- B K Addressed wrong, Request rerouted. Forward future followups to activity indicated in columns 67-69.
- B L Followup forwarded to activity in columns 67-69, who will furnish status. Send future followups to last known source.
- B M Request referred to activity in columns 67-69.
- B N Request processed as free issue. Signal and fund codes corrected. Adjust local fund obligation records.
- B Q Canceled. Answers cancellation request from you or some other activity.



Same action as BG and BH.



File in suspense. Followup to support after prescribed time frame.



Same action as BK and BL.

Adjust financial control records if you have them. Otherwise, throw out card.

Verifies cancellation request. Cancel Document Register and Record of Demands entries. Throw out suspense file card(s).

#### All "C" codes mean rejected. Second letter in code gives the reason.

- CB Initial request said reject quantity not available for immediate release.
  Unfilled quantity indicated. (Often used to answer advice codes 2C and 2J.)
- CG Unable to identify. Resubmit with correct FSN, end item application or part number (including publication or drawing reference).
- CJ Coded "obsolete" in latest publications.

  Not for issue. If still needed, reorder
  with advice code 2F and give technical
  data (end item use, component, make,
  model, series, serial number, drawing,
  piece and/or part number, manual
  reference and applicable publication.

Only used if you told support not to back order for complete fill. Change Document Register and Record of Demands entries. Throw out status card.

Cancel Document Register and Record of Demands entries. Rearder according to instructions.





CN Source of supply is local manufacture or fabrication.



- CS Quantity rejected as either excessive or wrong, and indicated on card. Partial quantity being supplied. If still need remaining quantity, submit new request with advice code 21.
- CT Submit new request with enough information to identify; such as make, model, series, serial number and/or end item use or publication reference.
- CU Part of repair kit. Order kit.

If you're authorized the higher assembly, and support can provide it from their own stocks, they may issue it on your original request... or they may cancel your request and ask you to reorder.

If support reorders, use their new requisition number to change your records and suspense file card.

If support cancels, enter this on your records, throw out suspense card(s). Reorder if you're authorized the next higher assembly, component or kit.

Cancel Document Register and Record of Demand entries. Reorder according to instructions if you're authorized, and can use, component parts.

Support provides new number if it takes action to local purchase or fabricate. If support cancels your order, cancel your entries and throw out suspense card(s). Reorder if still need, with advice code 2A.

Cancel remainder of order on Register and Record of Demands, Throw out suspense card. If reorder, use advice code 2L.

Cancel Register and Record of Demand entries. Throw out suspense card(s). Reorder with additional information.

Cancel Register and Record of Demands entries. Throw out suspense card(s). If authorized, reorder kit.

#### DO YOUR OWN LIST

Some theaters and local supply channels may have slightly different status code listings which implement and modify those used in AR 735-35. It's your responsibility to be sure you know all the codes that apply to using units. After all, you're the one who really needs the item—the supply activities who support you are just trying to help.

#### KEEP IN TOUCH

You can also save a lot of time by staying in close contact with your immediate support activity . . . passing information back and forth each time either one requests or receives status. This cuts down on useless followup requests for the same item.

The code of cooperation is just as important as the codes on your status cards.

#### PLL = 3 DEMAND TRANSACTIONS

Dear Half-Mast,

If I order 3 of the same oil filter — and it has never been a fringe item or on my PLL before — can I pick up this item on my PLL now? Is a demand based on the QUANTITY requested . . . or the NUMBER of transactions involving the same item?

CWO F. H.

Dear Mr. F. H.,

It's how many times (the number of transactions) you order this same FSN that determines if it becomes a PLL item ... and that's 3 times in 180 days.

Whether you request a quantity of 1 or 50 on that DA Form 2765 makes no difference. One DA Form 2765 = one demand.





DA FORM MARIES DA FOR DA FORM 2527, 1	N 1543, 1 M		- 688	COR
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9122-009	3	3	0	
9146-011	4	7	0	
9218-002	2	9	0	

And then there's the exception to the PLL rule. AR 735-35 (Oct 65) allows a major commander to change the usual PLL policy in para 6-6e, page 6-5, of Change 2 (Nov 68). In other words, he can authorize your oil filter as a "right now" PLL item if he anticipates a continuing demand for this filter due to certain conditions within his command.

0	DA FORM	18		RE	CORE
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	AVCG - P	X.1,	4 April	1969)	

repair parts accounted to be there is no further end item application unit/organization.

e. Exceptions. Exceptions to addition and defection policies enumerated in a and d (1) above may be made by the major commander based upon known or foreseeable changes. The object of this latitude is to permit commanders to adapt to changes in equipment configurations, density, geographical and tactical conditions.

★6-7. Missile System Stockage List (MSSL). a Missile system stockage list for support of select

AR 735-35

Half-Mast



#### L for "Other"

"Other feedback forms" for COMSEC equipment go to L—not X—as listed in Appendix II of TM 38-750. The word went out in DA Msg 889084 (Dec 68). So, send unclassified feedback copies of DA 2406, DA 2407 (except EIR) and DA 2408-7 and -8 to your Data Center. They'll punchcard 'em along to L.

#### Prevent Slips

Webbing retarder springs on aircraft troop seat belts and shoulder harnesses will keep them from slipping out of adjustment. MWO 55-1680-200-20/2 (8 Oct 69) tells you how to get 'em in your bird's shoulder harness. MWO 55-1680-200-20/1 (7 June 65) put 'em on seat belts.

#### No More M-5-7-4-R

That means "Maximum Safe Fuel Acceptance Rate." You don't put it on your vehicle anymore. You don't have to remove the M-S-F-A-R already painted on your vehicle—unless your CO says to. The word went out worldwide to all commands in US Army Tank-Automotive Command letter dated 19 May 69, subject: "Marking Requirement for Maximum Safe Fuel Acceptance Rates, TB 746-93-1."

#### Correct 077 Numbers

You can get the OHT you need for your M60/M60A1 tank hydraulic equipment by ordering it as FSN 9150-935-9807 for 1 qt; 9150-935-9808 for 1 gal; or 9150-935-9809 for 5 gal, and 9150-935-9810 for 55 gal. The 7 FSN's listed on page B-13 of Ch 7 (Aug 69) to TM 9-2350-215-10 (Feb 65) are for OHC, not for OHT. OHT can be added or used whenever OHC is specified, but don't use OHC when OHT is called for.

#### New Switch

You tanker types will get off to a better start with a new snap-action starter switch for your M48A3, M60 and M60A1 tanks, the M728 CEV, the M60A1 AVLB and the M103A2 tank. Ask for switch, starter, FSN 2920-930-6203. It replaces the old switch, FSN 2920-781-1953.

#### Cracked Cover?

You could have a cracked transfer case gear cover on your 2½-ton truck. Some have cropped up on G742-series 2½-ton trucks made before December 1968 under Contract No. DAAE06-68-C-0007. Check yours out. If you find the cover cracked, flash your support unit soonest and fill out and mail an EIR (DA Form 2407).

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

