

Issue 251

PS

1973 Series

October

# THE PREVENTIVE MAINTENANCE MONTH!

HEY! ANY  
OF YOU GUYS  
FIND A BOOT!  
SIZE 10½ E??  
I KINDA  
MISPLACED  
IT....

YEAH!  
IT CAUSED  
THAT HUEY'S  
FOD!

When You're Finished Reading This Copy Of  
PS -- Pass It On!!



# WARRANTY AND

# FILTERS



GRR... CRUMMY TRUCK! AND THAT LOUSY WARRANTY!

A beautiful fleet of new Army trucks rolled off the assembly line and out to soldiers. The soldiers loved 'em!

These trucks really had it over older trucks—less maintenance, more power, longer truck life and all sorts of good things. The manufacturer gave a real good warranty, too.

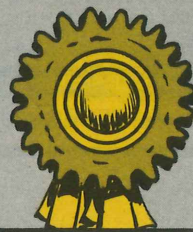
A few engines went bad while the trucks were still fairly new. "Lousy trucks," some guys said. Warranty claims went in, and the technicians checked them out.

"These engines went bad because the filters were never changed. These air, fuel and oil filters were factory-installed, and a few were color-coded. Your warranty is void."

A warranty is good only if you do your regular scheduled maintenance. And a truck is only as good as the maintenance you do.



SOB IT'S YOU 'N' Y'R ZERO PM THAT BLEW MY WARRANTY...



## PS THE PREVENTIVE MAINTENANCE MONTHLY

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PS wants your ideas and contributions, and is glad to answer your questions. Name and address are kept in confidence. Just write to

MSG Half-Mast  
PS Magazine  
Lexington, Ky.

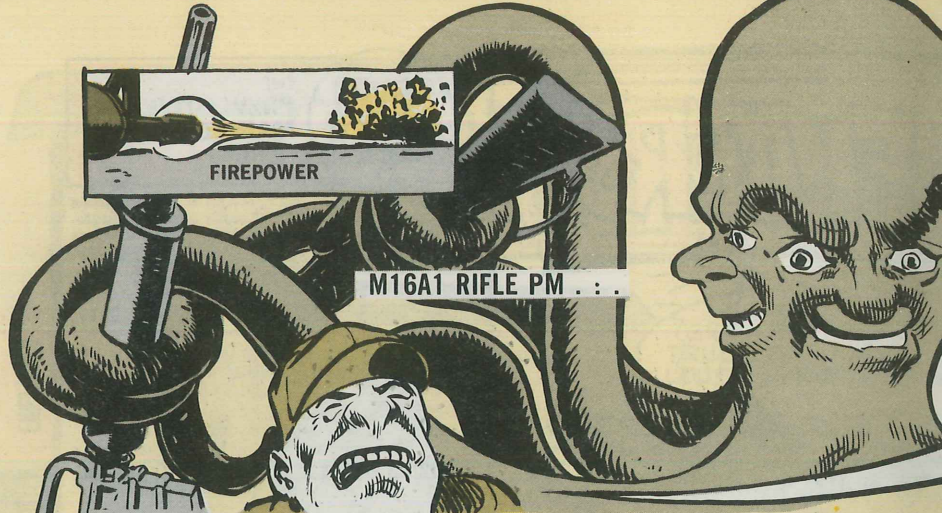
40507

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FIREPOWER  
GROUND MOBILITY  
COMBAT SUPPORT  
ELECTRONICS  
AIR MOBILITY





**FIREPOWER**

**M16A1 RIFLE PM . . .**

When you're in the thick of it, the last thing you need is a stifled rifle. An unready, gunked-up weapon is about as useful as a handful of mud pies.

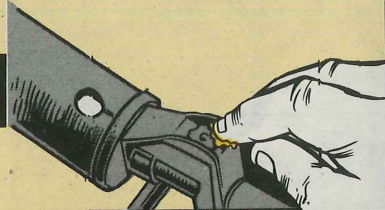
So stay healthy—know your TM 9-1005-249-10 (May 72) inside out. Make a daily check of these crucial spots. When you can, cure the cause of trouble. Otherwise, tell your armorer right now.

### FRONT SIGHT

**Problem:** Can't zero rifle.  
**Cause:** Front sight post, detent and spring rust-frozen.

**Rifleman:** Clean sight with RBC (rifle bore cleaner) and lube with LSA (lubricating oil, semifluid).

**Armorer:** Loosen with RBC just like TM 9-1005-249-20 says. If this doesn't work, turn in to DS.

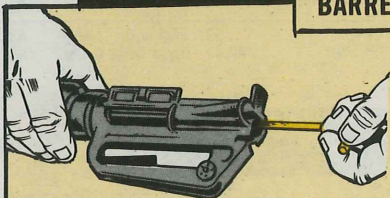


### BARREL BORE

**Problem:** Blows up.  
**Cause:** Bore stopped up by cleaning patch, cleaning rod section, water, mud or other gunk or goo.

**Rifleman:** Eyeball bore before firing.

**Armorer:** Can't repair. Turn in to DS.



2



**STOP  
RIFLE STIFLES**

OPERATOR'S MANUAL



**M16A1**  
RIFLE

TM 9-1005-249-10

POCKET  
SIZE  
MANUAL

### BOLT

**Problem:** Excessive headspace. Rifle blows up.

**Cause:** Switching bolts.

**Rifleman:** Treat each rifle and bolt as a matched set. No mixing allowed.

**Armorer:** When working on more'n one rifle, put rifle Serial No. on tag. Attach tag to bolt . . . thru cam pin hole.



### SLIP RING

**Problem:** Can't keep handguards on.

**Cause:** Rusted or broken slip ring and spring.

**Rifleman:** Remove handguards—clean underside with RBC, lube with LSA.

**Armorer:** Use RBC and LSA on slip ring and spring. If no good, turn in to DS.



3



DON'T LET THAT RIFLE STIFLE "MONSTER" GET YOU GUYS! A GOOD SHOT OF PM WILL FOLD HIM UP. SO DIG THIS INFO.

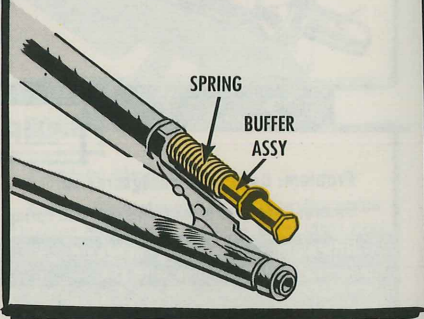
### REAR SIGHT

**Problem:** Can't zero rifle.  
**Cause:** Rusted, corroded detent and spring.  
**Rifleman:** Clean and lube the sight.  
**Armorer:** Loosen with RBC like the TM says. Turn in to DS if this doesn't free parts.



### LOWER RECEIVER EXTENSION

**Problem:** Corroded.  
**Cause:** Moisture.  
**Rifleman:** Pull out buffer and spring. Clean and lube the extension.  
**Armorer:** Remove butt stock. Clean and lube butt screw and extension.



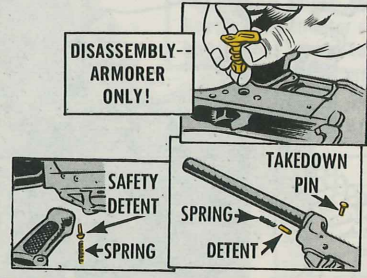
### BUTT CAP SCREW

**Problem:** Can't remove butt stock or drain water from lower extension.  
**Cause:** Rusted screw; mud- or sand-clogged drain hole.  
**Rifleman:** Clear and clean drain with pipe cleaner.  
**Armorer:** Remove screw . . . use RBC and LSA. Clear hole obstruction.



### TAKEDOWN PIN, DETENT AND SPRING SELECTOR LEVER, DETENT & SPRING

**Problem:** Rust-frozen detent, springs. Take-down pin won't hold receiver groups together. Selector zapped . . . won't stay in place.  
**Cause:** Rusted or corroded parts.  
**Rifleman:** Get armorer's help if you can't lube frozen parts.  
**Armorer:** Remove corroded parts for RBC and LSA treatment. Replace parts if necessary.



OL' "STIFLES" CAN'T STAND PM IN ANY SHAPE OR FORM... SO LAY IT ON HIM!



## HAMMER SPRING

**Problem:** Trigger stifled.

**Cause:** Hammer spring assembled wrong (under instead of over trigger pin).

**Rifleman:** Be sure lower receiver parts are cleaned, lubed and put together right.

**Armorer:** Ask DS to reassemble correctly.



## MAGAZINE

**Problem:** Won't feed; feeds double.

**Cause:** Damaged, dirty, rusted magazine spring. Mag catch out of adjustment. Defective magazine.

**Rifleman:** Clean and lube mag and spring. Adjust catch. Get rid of damaged magazines.

**Armorer:** Issue new magazine.



HALP!  
STOP!

AS I SAID,  
A GOOD SHOT  
OF PM ALWAYS  
GETS HIM.

I  
SURRENDER

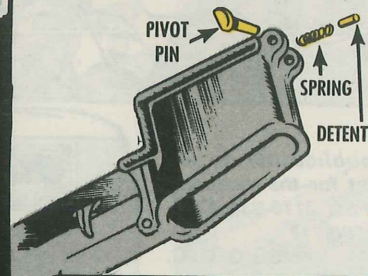
## PIVOT PIN, DETENT & SPRING

**Problem:** Pin loose—won't hold.

**Cause:** Rust-frozen detent and spring.

**Rifleman:** Lube the receiver lube hole, pin.

**Armorer:** Remove—clean and lube parts. Turn over to DS if they won't come out.



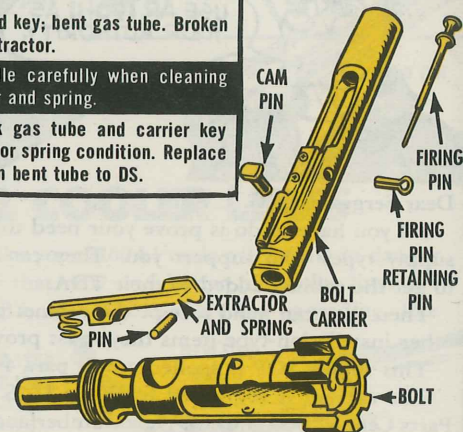
## BOLT CARRIER GROUP

**Problem:** Carrier key and gas tube won't line up. Extractor damaged. Bolt binds; won't extract.

**Cause:** Damaged key; bent gas tube. Broken or carboned-up extractor.

**Rifleman:** Handle carefully when cleaning... lube extractor and spring.

**Armorer:** Check gas tube and carrier key line-up and extractor spring condition. Replace bum spring. Turn in bent tube to DS.





## WEAPONS STORAGE CABINET



"AND SO, WHAT WE NEED HERE IS ONE O' THEM WEAPONS STORAGE CABINETS!!"

Dear Half-Mast,  
What supply publication do we quote on a request for the weapons storage cabinet, FSN 7110-931-0770, authorized by AR 190-11?

MSG O. G. C.



USE AR 190-11 AS YOUR AUTHORITY.



Dear Sergeant O. G. C.,

All you have to do is prove your need to the installation or command supply types who support you. They can use AR 190-11 as authority to get the cabinet added to their TDA.

Then they can hand receipt the cabinet to you—like they do so many other installation-type items they must provide for your outfit.

This supply SOP is spelled out in para 4-5, AR 310-49 (Aug 72).

The cabinet is requested from the U. S. Army General Materiel and Parts Center (USAGMPC), New Cumberland Army Depot, New Cumberland, PA 17070.

*Half-Mast*

## M203 GRENADE LAUNCHER . . .



Y' SAY Y'R TRIGGER RETAINING SPRING DOESN'T HACK IT? TRY ME... TH' NEW IMPROVED TYPE.

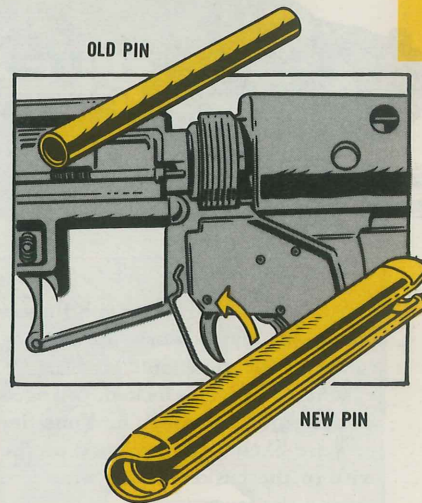
Having trouble cocking your M203 grenade launcher?

Happens if you don't keep it clean. But it could be a bent or broken trigger retaining pin.

Some old style spring pins aren't tough enough to stand the strain.

Get a new spring pin, FSN 1010-103-7099 and stop the downtime biz.

You're authorized one new pin for each grenade launcher.



## FOR COMBAT VEHICLES . . .

### NEW OIL COOLER LINES

AVDS 1790-powered stuff like your M60A1 tank will be less in danger of boondock breakdown now that new and better oil cooler lines are in the system. AVBL's, M48A3's, and M728's share the upgrading, like this:

Tube Assy, right (outer) FSN 4710-152-1288.

Tube Assy, right (inner) FSN 4710-152-1289.

Tube Assy, left (inner) FSN 4710-152-1286.

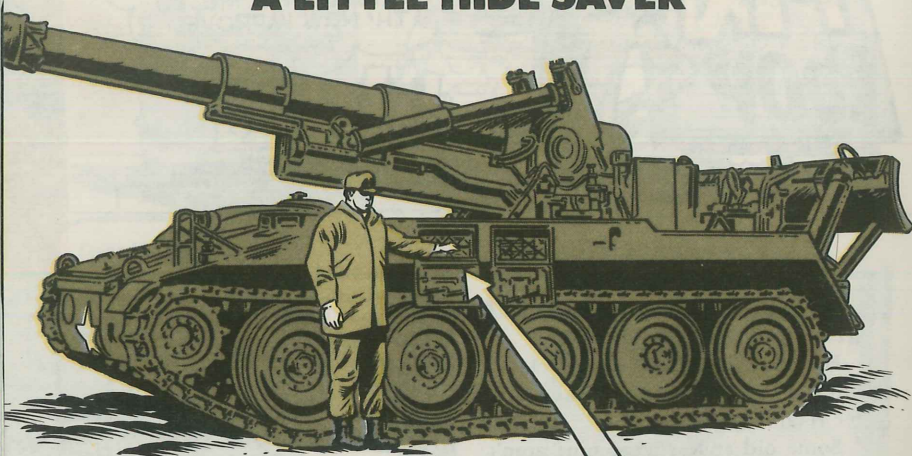
Tube Assy, left (outer) FSN 4710-152-1287.



There may be a few old-style tubes around to use up, but this is the shape of things to come—finer braid, better made.



## A LITTLE HIDE SAVER



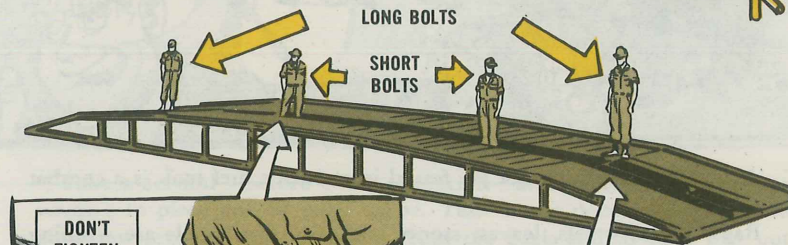
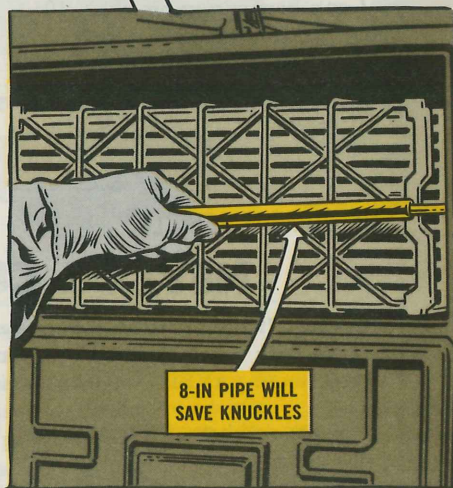
You can really hurt your fingers when you try to work the locking rod lever for the engine air filter.

When the lever is locked, you need a strong pull to unlock it. Your fingers are likely to get skinned on the wire of the basket if you wrap 'em around the lever.

So make yourself a finger-saver out of a piece of pipe (about 8 inches should do it).

Slip this pipe over the lever. The extra leverage will help, and your fingers will be out of the danger area when you lock 'er up.

If you can't get a piece of pipe, at least be good to your fingers by hitting the lever with the palm of your hand. Tough leather gloves can help, too.

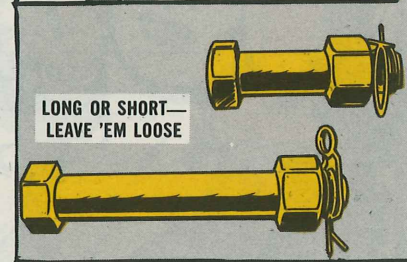
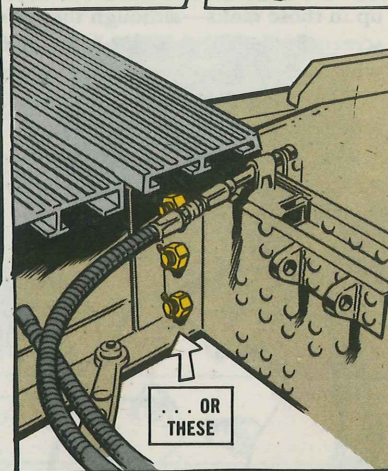


Loose as a goose is the way some of the bolts should be on your launched bridge. Wind pressure and such would break tight bolts.

This applies to the long bolts on the 2 launching diaphragms and to the short bolts on the 2 cylinder beams—a total of 24 bolts.

Some crewmen are shimming these bolts with washers to make a tight fit. They suspect inspectors will pass out gigs for loose bolts.

The inspectors know better, so let the bolts hang there, cool and loose. Run 'em up as far as you can—and leave 'em alone.







About the only thing not yet found in a truck's fuel tank is a combat boot.

Rags, paper towels, leaves, stones and even small tools are winding up in those tanks—although they're s'posed to be guarded by a fine-mesh screen in the filler neck. A lot of fancy troubleshooting has ended up with finding a "foreign object" in the fuel tank.

You guessed it—the filter screen had a big hole in it. Or the whole screen was missing.

Besides stopping big stuff, your screen catches a lot of dirt . . . if your screen is on duty . . . if there're no holes gouged in it . . . if you keep it clean.



Take a second—before every operation—and make sure this filter screen's in place and in good shape. Take it out once in a while and blow low-pressure air through it from the back end to clear dirt out of those tiny holes.



FSN AND TM REFERENCE	FILTER SCREEN USED ON:
FSN 4730-202-6063 TM 9-2320-208-20P (Jan 66) TM 9-2320-244-20P (Nov 71)	TM-208-series ¼-ton vehicles (M38A1 etc.) TM-218-series ¼-ton vehicles (M151 etc.) TM-244-series 1½-ton M715 cargo truck
FSN 2910-423-2780 TM 9-2320-212-20P (Mar 72)	TM-212-series ¾-ton vehicles (M37B1 etc.)
FSN 2910-752-9138 TM 9-2320-209-20P (Oct 72) TM 9-2320-211-20P (May 73)	TM-242-series 1¼-ton Gama Goat vehicles (M561 & M792) TM-244-series 1¼-ton M725 ambulance & M726 telephone maintenance truck TM-209-series 2½-ton vehicles (M35, M35A2, etc.) all gasoline- and multifuel-engine trucks TM-211-series 5-ton vehicles (M54, M54A1, M54A2, etc.) all gasoline-, diesel- and multifuel-engine trucks TM-260-series 5-ton vehicles (M813, etc.) TM-206-series 10-ton vehicles (M125, M123A1C, etc.) gasoline- and diesel-engine trucks



## WIDE-ANGLE MIRROR

In some cases, a wide-angle mirror is mighty handy—like when your operation with a big truck calls for a lot of backing.

Or when you travel a lot in heavy traffic.

If your CO gives you the OK, you can get one. It fastens onto your regular outside rearview mirror real easy.

Order Mirror Assy, Convex, FSN 2540-436-3135. This mirror is standard equipment on the M320T 20-ton crane, and it's listed in TM 5-3810-288-20P (Oct 70).



THAT FSN'S NOT IN THE AMDF YET, SO YOU'LL HAVE TO ORDER IT BY "EXCEPTION-TYPE" SUPPLY REQUEST.

Careful, now. This mirror may not be for you if you operate a lot where tree limbs can snag it. Most guys find the mirror works best mounted out beyond their regular mirror. It's simple to take off and put on, though, so you could stow it when you're out in the woods.

HEY DAD!  
WHAT'S WITH  
THIS SLIPPIN'  
THING?

## TIRE CHAIN AUTHORIZATION



Dear Half-Mast,

We want to get tire chains for our 2½-ton trucks—but we can't find out what authorizes tire chains.

It used to be in TM 9-2300-223-20P, Consolidated Authorized Organizational Stockage of Repair Parts, but that TM has been rescinded.

What's the latest word?

CW3 R.S.L.

Dear Mr. R. S. L.,

It's still exactly the same as you saw in that TM.

Now you'll find it in the "Note" on page 157 of TM 9-2320-218-20P (Jan 72). Although this TM is for the M151-series ¼-ton vehicles, the same poop will be showing up in the -20P TM's for other vehicles.

Half-Mast

## SUFFERIN' BATTERY CABLES!

You can end the misery of shorted battery cables on your M809.

TB 750-981-2 (Apr 73) gives all the poop on fixing your battery boxes so the cables won't wedge under the cover and get cut.

YOWEE! THERE GOES ANOTHER BATTERY CABLE--SHORTED OUT!







CONSTRUCTION BATTALIONS:  
THERE'S . . .

# CCE

# COMING YOUR WAY



HEY! DIG THAT SHARP CONSTRUCTION GEAR THOSE "SOJERS" GOT!

YOU WANNA RE-UP OR SOMETHIN'?

Is your construction equipment looking more and more "commercial"? If so, there's a reason. If not, it's likely to take on that new look soon.

Deliveries start in '73 on 3 off-the-shelf items of commercial construction equipment (CCE). The 3 are a 25-ton truck-mounted hydraulic crane,



a 20-ton dump truck and a 1500-gal truck-mounted bituminous distributor.

These are the first of 20 CCE items to be introduced into Engineer construction battalions in the next few years.

Once you get one or more of these CCE items, here're some points you'll need to keep in mind in maintaining 'em.

1. Each item comes from the manufacturer with its Basic Issue Items, operator maintenance special tools and supplies, 2 sets of the manufacturer's regular commercial maintenance manuals plus the maintenance support plan for users (Maintenance Allocation Chart, training plan and other details not in the commercial manuals). You won't get DA tech manuals.

3. For each CCE item, requests for repair parts (PLL replacements or others) must carry the specific project code assigned for that item as listed in the User Maintenance Support Plan (with this code, no "exception data" will be needed).

4. Each CCE item has the normal commercial-type warranty. So, you make warranty claims (as spelled out in the user maintenance support plan) on parts or components that fail before the warranty expires.

5. Initially, FSN's will be assigned only to PLL and Authorized Stockage List repair parts (which will be listed on the AMDF). You'll use manufacturer's part numbers to request other parts from Defense Construction Supply Center.

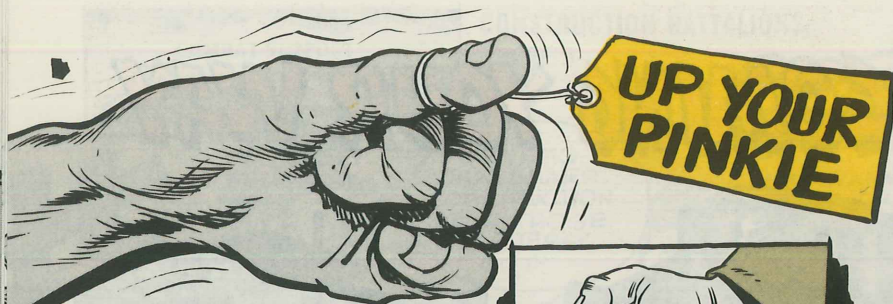
6. Technical assistance will be provided as spelled out in each user maintenance support plan.

7. When components and parts that are **not** on the PLL or ASL fail, they'll be held by units until disposal instructions are received.

So get set now for this new "commercial" look.

2. If your unit's overseas, the manufacturer will ship the unit a 15-day initial PLL package (Prescribed Load List). (Your support unit gets a 45-day stockage.) There's no initial PLL for CONUS units. You request as needed for a demand-supported PLL.





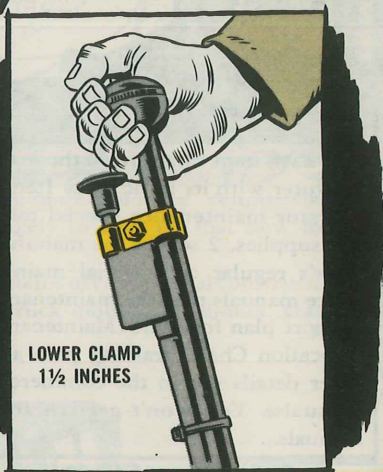
A simple fix will keep your little finger from accidentally downshifting the M320T craneshovel.

Lower the transmission shift button 1½ inches to give your pinkie plenty of operating room.

What a relief it'll be, too.

No more going from 9th to 4th gear in a blink. No more overspeeding the engine, and no more engine shock failures.

Just loosen clamp, lower it and tighten, that's all.



## REAL HOT STUFF

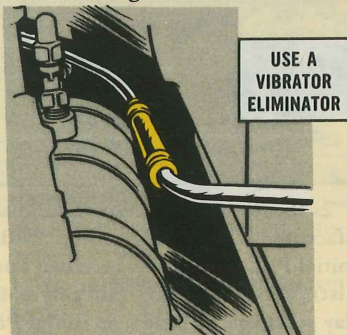
Nothing's worse for mess-hall morale than a refrigerator breakdown while ol' sol is shining hot and heavy.

OK then, why not head off a reservoir tubing bust on the 3,000-BTU Model RTU-27 refrigeration units.

Make regular checks to see if the tube is standing up under the engine vibration. If you spot a leak, call for support fast.

They'll get a vibration eliminator by local purchase or through the supply system with FSN 1430-799-5355 (PN 3838F). They'll fix it right.

But remember, they can't do a thing if you don't find the problem and tell'em about it.



6 HP ENGINE IGNITION TIMING . . .

## SETTIN' IT STRAIGHT



*Dear Half-Mast,*

*I'm lost in the dark. I can't time the ignition on the 6-HP Mil Std engines using Fig 4-26 of TM 5-2805-203-14 (Dec 69). How about some light?*

MSG R. G. C.

Dear Sergeant R. G. C.,

Make these changes and you'll hit the ignition timing for those Models 4A032-1 and -2 right on the nose.

It's the 1-2 side of the coil cover in Step 2 and the 1-2 ignition timing in Step 5. Then, drop steps 7 through 10 altogether.

See the light now?

### HERE'S HOW TM SHOULD READ

- STEP 1. ROTATE THE STARTING ROPE FULLY CLOCKWISE UNTIL BOTH THE INTAKE AND EXHAUST VALVES ARE IN THE UP POSITION ON NO. 1 CYLINDER AND THE ROCKER ARMS ARE ALINED.
- STEP 2. ALINE THE 25 DEGREE BTDC (BEFORE TOP DEAD CENTER) TIMING MARK ON THE STARTING ROPE PULLEY WITH THE IGNITION TIMING MARK ON THE 1-2 SIDE OF THE COIL COVER.
- STEP 3. OBSERVE THE LOWER CONTACT POINTS. THEY SHOULD BE JUST BEGINNING TO OPEN.
- STEP 4. IF NECESSARY, LOOSEN THE LOCK SCREW ON THE IGNITION CAM AND TURN THE CAM UNTIL THE POINTS ARE JUST OPENING. TIGHTEN THE SCREW.
- STEP 5. ROTATE THE STARTING ROPE PULLEY AND ALINE THE TDC (TOP DEAD CENTER) TIMING MARK WITH THE 1-2 IGNITION TIMING MARK.
- STEP 6. OBSERVE THE CONTACT POINTS. THEY SHOULD NOW BE FULLY OPEN.



*Half-Mast*





It's getting to be a sad, sad song.

Like, over and over again, the word goes out on how to handle cables, replace fuses, tighten levers and such on your AN/PPS-4A radar set.

Over and over again, somebody's just not listening. Result: needless damage.

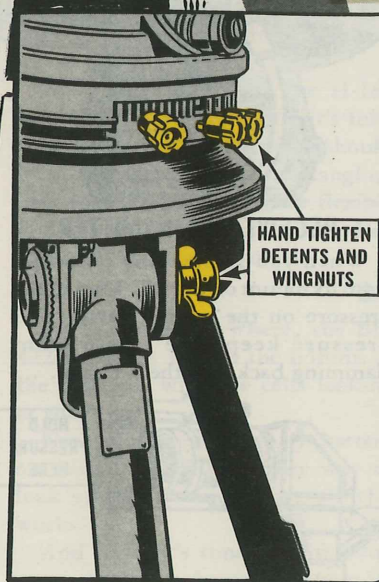
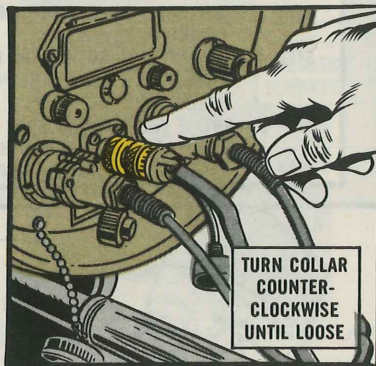
So, here's another chorus, played loud on request and ripe from recent field experience:

### CABLE CONNECTORS

When you remove the set's cable connectors which have locking collars (power cable, for instance), first grab the collar and turn it counter-clockwise (left) until it's loose.

When the collar is loose, the connector will back off easy. If it doesn't, turn the collar a little further.

Never try to remove the cable by twisting it at the heel of the connector! That's a sure way to damage wiring and contacts.



Tripod trip-ups crying for a new tune include:

Manhandling azimuth and elevation detents. The detents are made to be snugged down by hand . . . not torqued into place with a vise-grip or such.

Too tight detents wear out quick. All you need do is snug 'em up until you get some resistance . . . and stop.

A muscle reminder goes for the tripod wingnuts, too.

First, be sure the teeth are meshed . . . and then hand-tighten the wingnuts.

Naturally, once the wingnuts are tightened, you wouldn't want to be tempted to spread the legs unless you loosened the nuts first. Some Joes do . . . and make a mess that ends up in support.



And, while you're setting up the tripod, resist the urge to stand it on its head.

Setting the legs that way often results in dirt and gravel getting behind the azimuth dial. In which case, the dial binds.

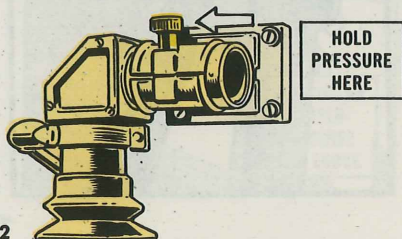
The best way is to keep the tripod head upright . . . or set it up on a floor or covered ground.

Remember to take the tripod lamp cable off the receiver-transmitter receptacle before you lift the RT from the tripod. Saves cables and such.



### RECEIVER-TRANSMITTER

When you remove the telescope from its mount on the RT, keep slight pressure on the mount clamp. The pressure keeps the clamp from slamming back into the RT case . . .



IT'S A SAD  
LITTLE DITTY, BUT  
YOUR PIPSY-BABY  
NEEDS Y'R  
TENDER LOVIN'  
CARE...

where one bang too many can put a hole in the case. Just keep pressure on the spring-loaded clamp until it opens all the way.

The old refrain on the RT's fuseholders still applies. Line up the keyway before you twist the fuseholder into place.

If you have to do any forcing, you're doing it wrong! In which case, start hunting up another fuseholder.



### CARRYING CASES

When you take a component from the carrying cases, stay straight.

That is, lift it straight out . . . especially the RT. That way you keep from damaging the rubber bumpers in the case.

And, when you store the H-183 headset in its case, be sure it's fully seated. Headbands and cords should be stored so that they're not dangling over the case edge, and the flexible earphones should be positioned so that they don't get pinched.

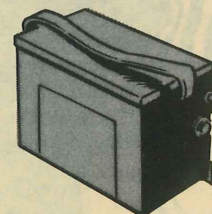


### BATTERY

At all times, anywhere, the BB-422/U battery sits on the bottom of the case . . . with the cells looking at you.

Never operate or store the battery on edge. There's no better way to leak electrolyte and corrode the works.

And thus, it's time for the band to take a break. When the music comes back, maybe you can help it with a new tune.





BE YOUR OWN INSPECTOR ON THE SB-86

# HEY, LOOK IT OVER.

Tried and true, drab not blue, your SB-86/P switchboard keeps putting out because of . . . you.

It may not be built right for love and kisses, but it's faithful enough to merit some thoughtful treatment.

Like, it's not a refreshment stand . . . and about the only thing food

TO CLUE YOU IN, DIG THE TROUBLE-COMING INDICATIONS... THEY ARE IN **BOLDTYPE**.



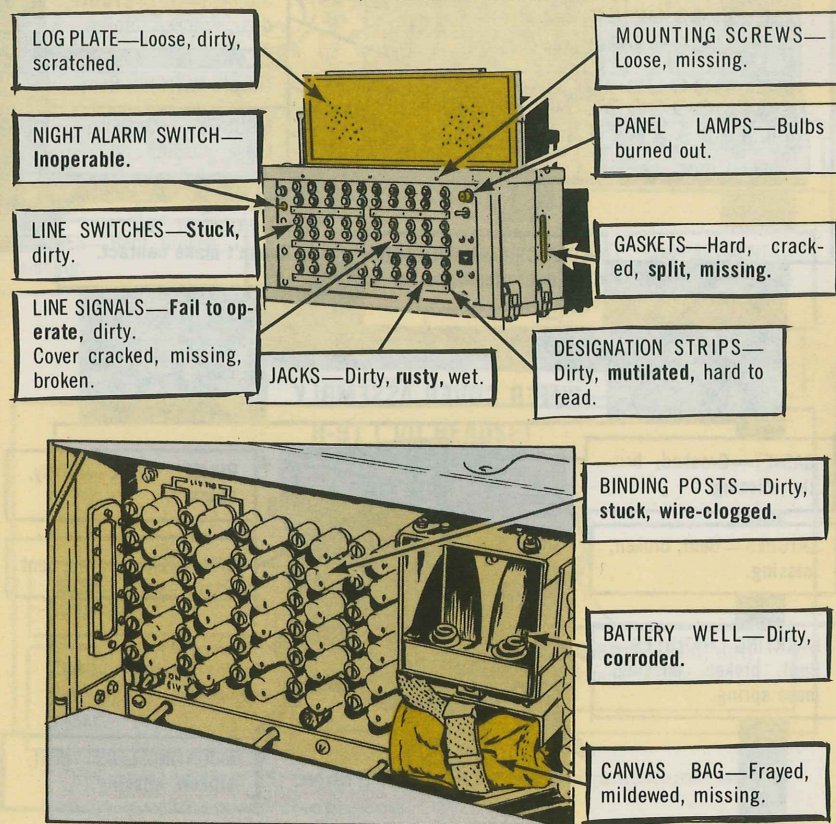
# LEND IT SOME CARE

and drinks do for it is put it down. looking while you're using it.

Neither is it a stool, or a foot rest, To help out, look for these or a center for informal rap sessions. "trouble-coming" indications. Those

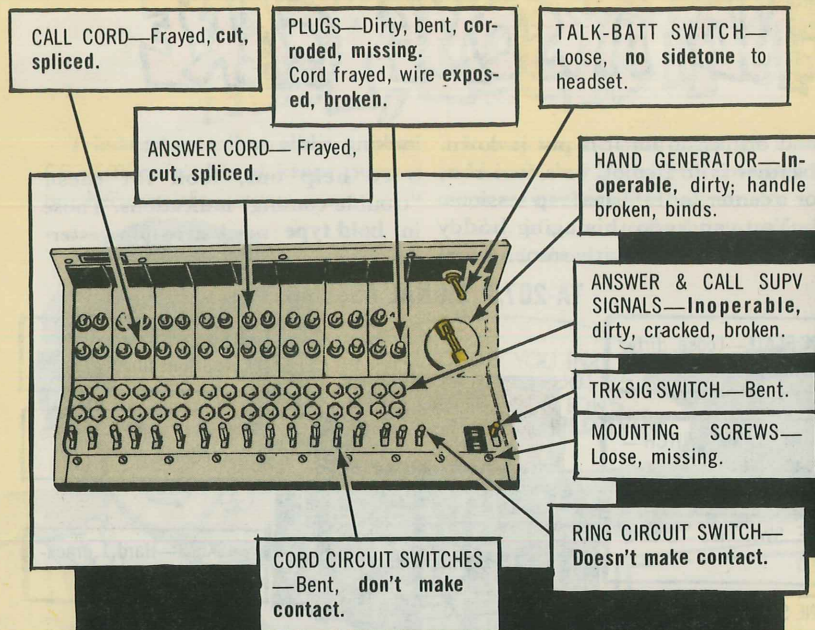
You can keep this aging buddy in **bold type** need attention yesterday for action with some casual day.

## TA-207/P SIGNAL ASSEMBLY

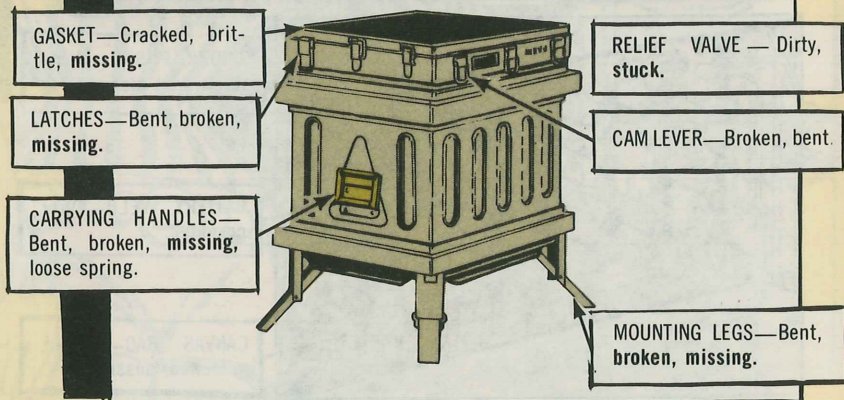




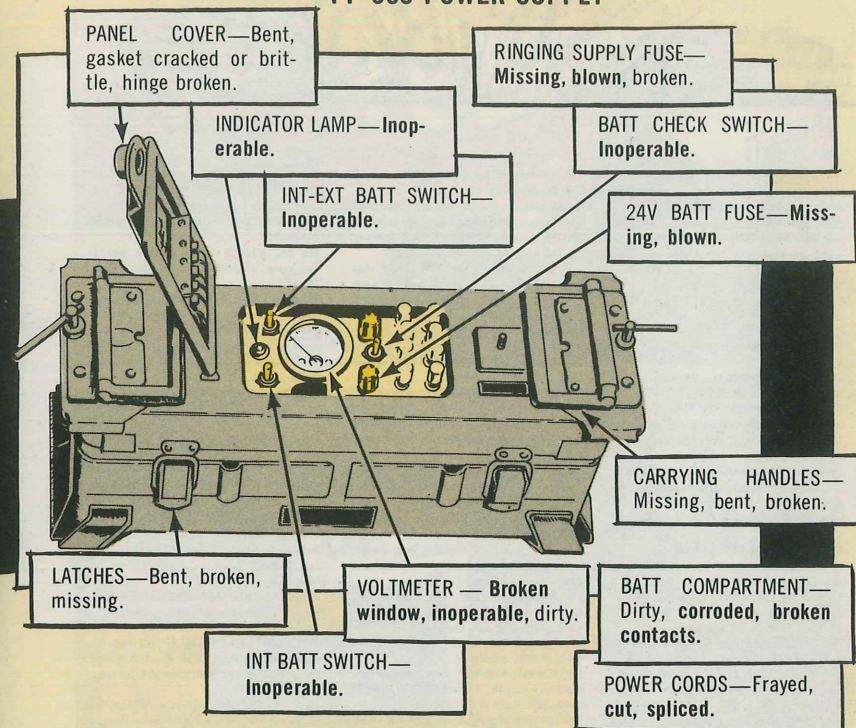
### SB-248/P KEYSHELF



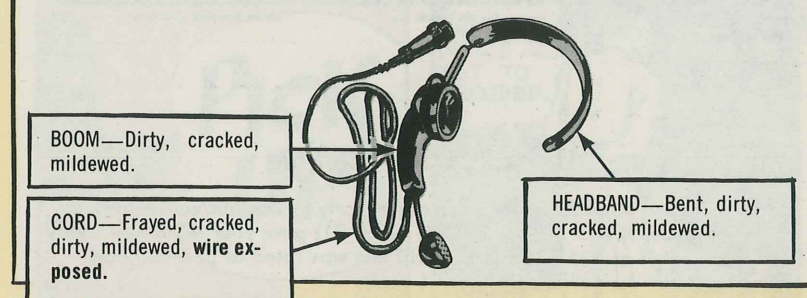
### OUTER COVER ASSEMBLY



### PP-990 POWER SUPPLY



### H-91 ( )/U HEADSET



TM 11-2134 (Sep 55) (with Ch 1 and 4) covers organizational maintenance on switchboard components.



# PUBS

This is a selected list of recent pubs of interest to organizational maintenance personnel. This list is compiled from recent AG Distribution Centers Bulletins. For complete details see DA Pam 310-4 (Jun 72), and Ch 3 (Feb 73), TM's, TB's, etc., DA Pam 310-6 (Jul 72), and Ch 3 (Apr 73) SC's and SM's; and DA Pam (C) 310-9 (Mar 73), COMSEC Pubs.

## TECHNICAL MANUALS

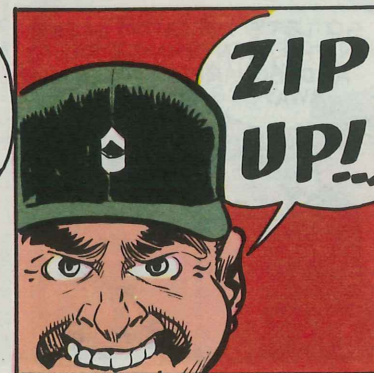
**TM 9-1090-203-ESC** May Armament Subsystem, M28 and M28E1.  
**TM 9-1336-487-12, C1** May Warhead Section, Guided Missile, Training: XM 201.  
**TM 9-1400-380-ESC** May ESC for PERSHING Missile System.  
**TM 9-1410-250-24P-1-1** Jun Guided Missile, Intercept-Aerial, MIM-14A, MIM-14B and MIM-14C (NIKE-HERCULES/Improved HERCULES Air Defense Guided Missile System).  
**TM 9-1410-375-20P** Jul XMGM-31A (Including Ammunition Items) ANDJW35, AND JW49, XM101, XM102 (PERSHING 1A Field Artillery Missile System.)  
**TM 9-1425-382-10-1, C1** Jun PERSHING 1A Field Artillery Missile System.  
**TM 9-1425-485-20, C5** May LANCE Guided Missile System.  
**TM 9-1427-380-20P** Jun Programmer-Test Station, Guided Missile, AN/TSM-87 (XO-6) AN/TSM-87 (XO-7) (PERSHING 1A Field Artillery Missile System.)  
**TM 9-1430-512-14P-2** Jan Simulator Station, Radar Signal Guided Missile System AN/TPQ-21 (XO-1) Training Device (Basic HAWK Air Defense Guided Missile System.)

**TM 9-1430-528-12-2-1, C3** Apr Functional Theory and Schematics: Improved CW Acquisition Radar Set AN/MPQ-48 (XO-1) (Improved HAWK Air Defense Guided Missile System).  
**(C) TM 9-1430-528-12-2-2, C3** Apr Theory and Schematics: Improved CW Acquisition Radar Set AN/MPQ-48 (XO-1) (Improved HAWK Air Defense Guided Missile System).  
**TM 9-1440-380-14, C11** May Erector-Launcher XM1790 (PERSHING 1A Field Artillery Missile System).  
**TM 9-1440-380-20P** Jul Erector-Launcher, Guided Missile, Semitrailer Mounted XM790 XM790E5, XM790E6 (PERSHING 1A Field Artillery Missile System).  
**TM 9-4935-540-14-2, C2** May Schematics for Guided Missile Remote Control System Shop Equipment AN/TSM-104, AN/TSM-105, AN/TSM-106, AN/TSM-108, and AN/TSM-121 and Supplementary Equipment Guided Missile Test Station AN/TSM-120 (Improved HAWK Air Defense Guided Missile System).  
**TM 9-6920-461-20P** May Training Set, Guided Missile Flight Control (DX-43) (M-22) Training Set, Guided Missile Flight Control (DX-44) (M-22) (M-22) Antitank Guided Missile System).  
**TM 9-6920-470-20P** Apr Training Set, Guided Missile System (TOW Heavy Antitank/Assault Weapon System).  
**TM 10-500-29** May Airdrop of Heavy Antitank Assault Weapon System (TOW).  
**TM 10-500-59** Jun Airdrop of 106-MM Recoilless Rifle.  
**(C) TM 11-5895-687-12, C1** May Interrogator Set AN/TPX-50 (U).

**TM 11-5895-795-10** May RU-21E Aircraft Mission Equipment.  
**TM 55-1520-219-20, C2** May UH-1B Helicopter  
**TM 55-1520-221-20P, C3** Jun AH-1G Helicopter, Flight Trainer - TH-1G, AH-1G, TH-1G.  
**TM 55-1905-217-20P** Jun Landing Craft, MOD I Mark VIII, Navy Design LCM-8.  
**TM 55-2840-229-20P** Jun Engine, Aircraft, Turbine: T-53-L-9A, T-53-L-11, T-53-L-11A T-53-L-11SA, T-53-L-11B, T-53-L-11C, T-53-L-11D, T-53-L-13 T-53-L-13A, T-53-L-13B.

## MISCELLANEOUS

**LO 5-3825-221-12** Apr Distributor, Water, Truck Mounted, 1000 Gal, MacLead Mdl's: W15A, W15A-4112, and W15B 9019, Wisconsin Mdl MVF4D.  
**MWO 9-1005-286-30-1, C1** Jun Gun, Air Defense Artillery, Towed, 20-MM, M167: To Provide a Protective Covering for the Slip Ring Assembly.  
**MWO 55-1510-201-30-21** May Inspection Provisions Installation Wing Center Section Main Spar (U-8F Aircraft).  
**MWO 55-1520-228-30-17, C2** May Replacement of Main Rotor Head Retention Strap Fittings and Pins (OH-58A Helicopters).  
**SB 740-97-4300** Jun Storage Serviceability Standard, TROSCOM Materiel Pumps, Compressors, and Filters Separators.  
**SC 5180-95-CL-A32** May Sets, Kits, and Outfits Components List Tool Kit, Special Weapons: Organizational Maintenance, Missile Battalion SERGEANT.



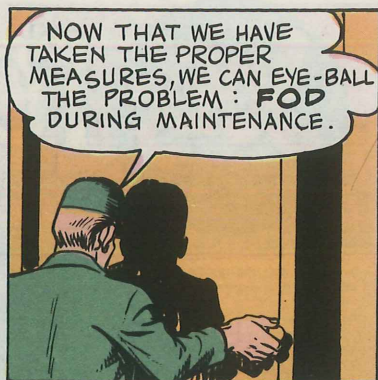
## M3 Disperser Testing

Your M3 agent disperser no longer needs a yearly hydrostatic/volumetric test. That's because MWO 3-1040-214-45/1 (Feb 71) gave your M3 a new safety head that's rated at 125-175 PSI. The old one was rated at 525-625 PSI. The test'll now be pulled only every 4 years. The MWO (and date applied) should be noted on your M3's packing case and on its DA Form 2409. Check there for info before you set up your M3 for an annual check.





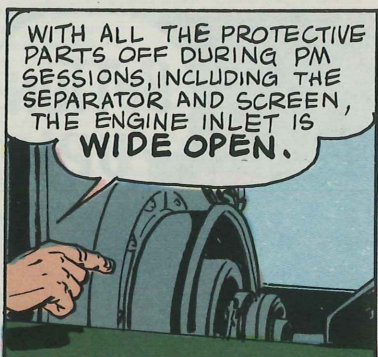
OK...YOU DUDES...FOREIGN OBJECT DAMAGE (FOD) IS BACK AGAIN! DIG IT! LIKE WITH THEM HUEY TURBINE "MILLS" OUT THERE.



NOW THAT WE HAVE TAKEN THE PROPER MEASURES, WE CAN EYE-BALL THE PROBLEM: FOD DURING MAINTENANCE.



SO LET'S MAKE TH' SCENE IN THE MAINTENANCE AREA AND SQUARE THIS AWAY.



WITH ALL THE PROTECTIVE PARTS OFF DURING PM SESSIONS, INCLUDING THE SEPARATOR AND SCREEN, THE ENGINE INLET IS WIDE OPEN.



FUNNY THINGS START TO HAPPEN...LOOSE HARDWARE HAS BEEN FOUND TO DROP IN...UNINVITED!



SO THAT'S WHY YOU CATS SHOULD BE BUTTONED UP AND ZIPPED UP, TIGHT!



WE'VE FOUND... PENCILS, PENS, LIGHTERS!



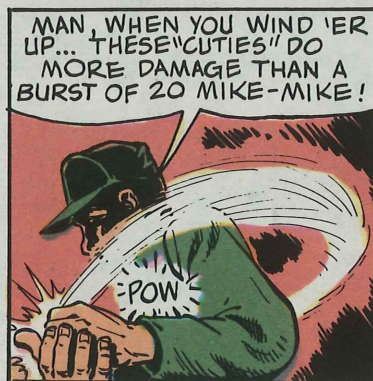
NUTS, BOLTS 'N' SAFETY WIRE...



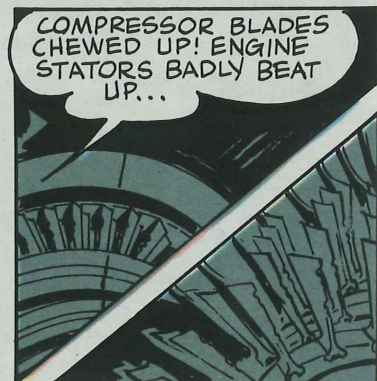
RINGS, EVEN DOG TAGS... AND THE WORST...



...TOOLS! YEAH... TOOLS... DROPPED RIGHT INTO THE ENGINE INLET! SOB!



MAN, WHEN YOU WIND 'ER UP... THESE "CUTIES" DO MORE DAMAGE THAN A BURST OF 20 MIKE-MIKE!



COMPRESSOR BLADES CHEWED UP! ENGINE STATORS BADLY BEAT UP...



**Joe's** Dope Sheet

DIG THESE SIMPLE RULES.

**BUTTON UP**

**ZIP UP**

**CLEAN UP**

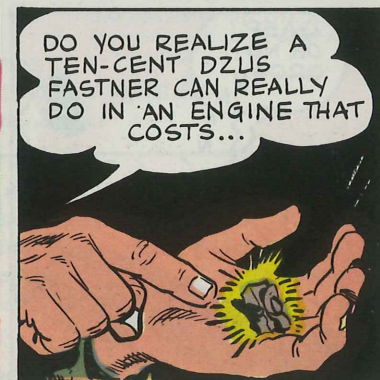
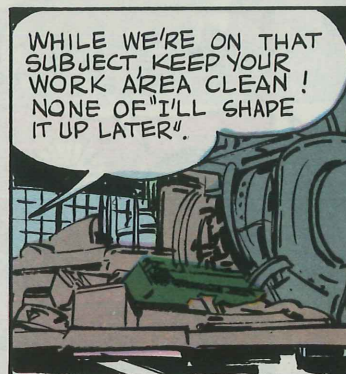
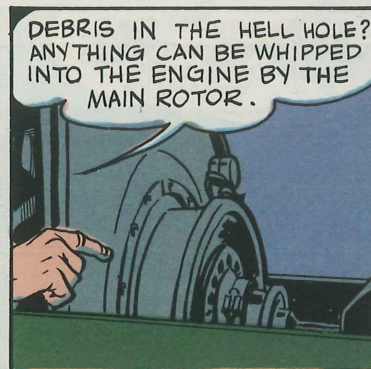
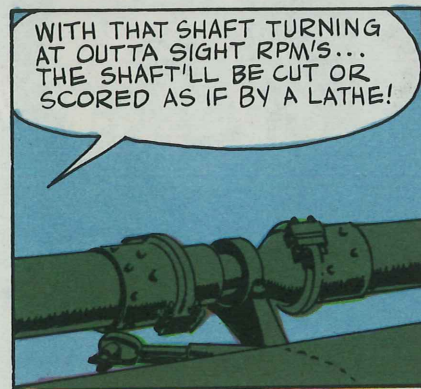
**STOP FOD!**

**WARNING**  
THIS BOX CONTAINS  
**FOD**  
Check Your Tools & Hardware

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

IF YOU WANT TO DISPLAY THIS CENTERPIECE ON YOUR BULLETIN BOARD, OPEN STAPLES, LIFT IT OUT AND PIN IT UP.

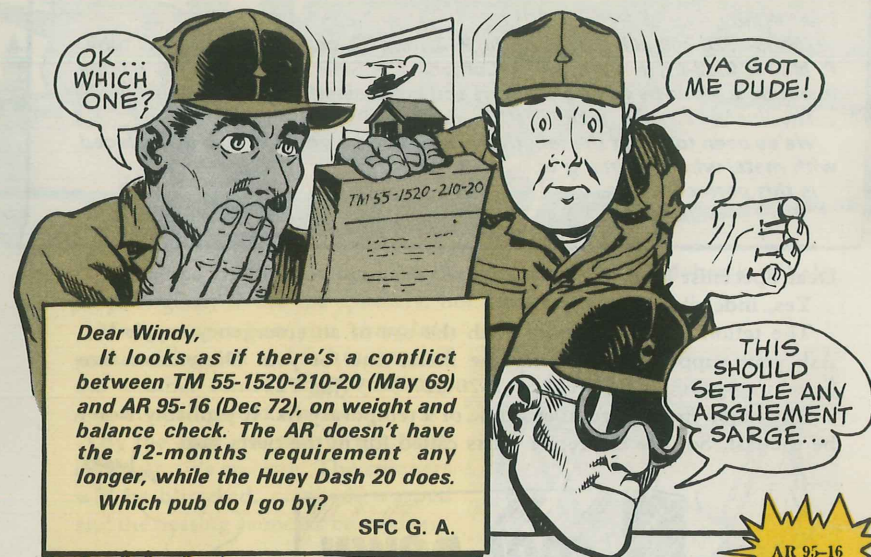








## WEIGHT AND BALANCE...CONFLICT?



ARMY REGULATION

No. 95-16

HEADQUARTERS  
DEPARTMENT OF THE ARMY  
WASHINGTON, DC, 15 December 1972

AVIATION  
WEIGHT AND BALANCE—ARMY AIRCRAFT

Effective 15 January 1973

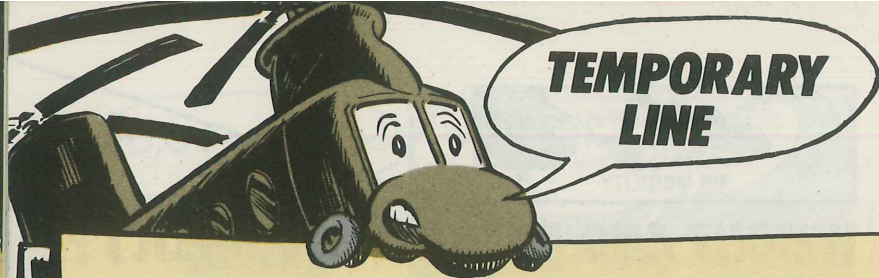
Dear Sergeant G. A.,

Good question. AR 95-16—that's the pub you go by. The pub with the most recent date calls the shot, per AR 310-1, para 1-26.

The discarded 12-months weight and balance check provision will be deleted from all the maintenance manuals as they're revised. Meanwhile, your direct support will take over the weight and balance chores as per the AR.

Windy





Dear Windy,  
 TM 55-1520-209-20P-1 (Aug 71) fig 213, item 32, calls for using metal tube, P/N 114P4038-51, in our Model B Chinook. The SMR code shows the engine fuel tube is made by general support and maintained at organizational level. The line we have is flexible teflon, not metal. We've been told that the teflon line is temporary and it should be replaced with metal when returning to home base. Is this correct?

SP6 R. E. K.

Dear Specialist R. E. K.,  
 Yes, indeed!

The teflon line came about with the use of an emergency repair kit. Ask your support to make up the metal line for you. Dimensions are listed in Appendix C of TM 55-1520-227-34-3 (Jan 72).

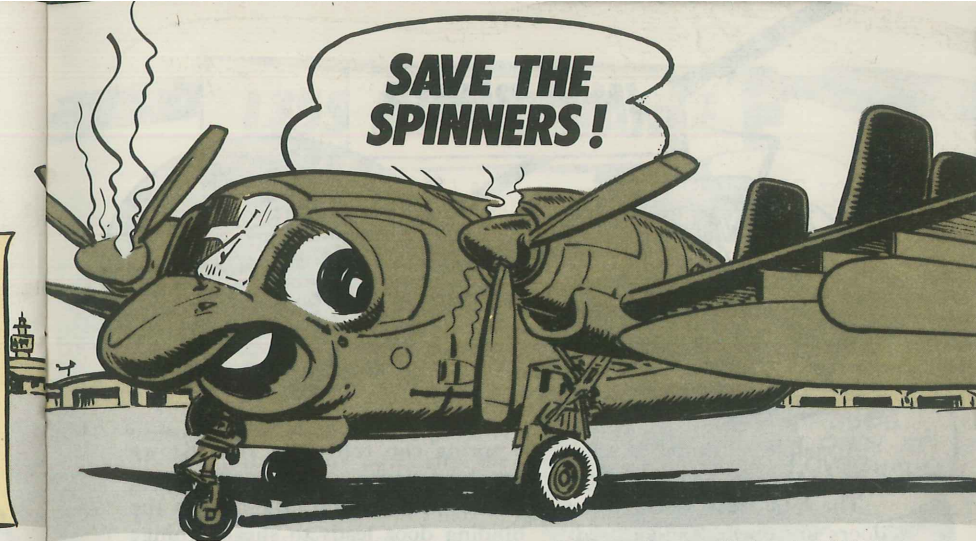
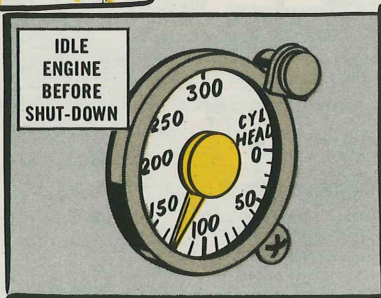
The teflon line is a good example of a temporary fix. It probably won't be the last. So, use the repair parts called for in the parts pub.

*Windy*



Before you Sioux (TH-13T) hot pilots shut down the engine, idle it at 2300 RPM for 4 minutes, according to the poop in para 3-36 of TM 55-1520-226-10 (Oct 69).

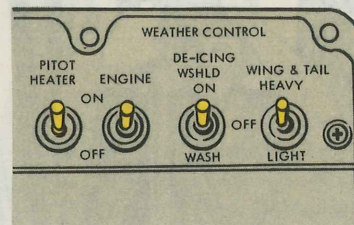
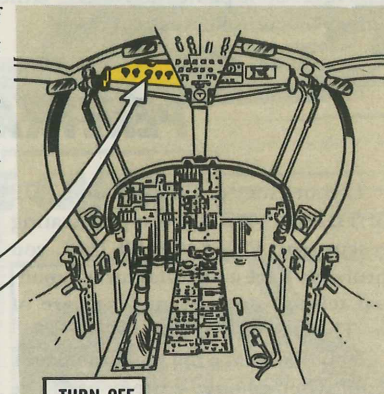
This cooling period reduces oil and metal temperatures, avoids carbonized oil build-up and minimizes warpage of metal parts in the turbocharger.



When the cooling air blast on the spinners of your Mohawk (OV-1) props is gone, so are the spinners, hot pilots.

Happens—when you complete your landing roll and fail to turn off the weather control engine de-icing switch during cold weather.

By the time you taxi to the ramp and park, it's too late. The spinners will be blistered, cracked, warped and the heating elements burned out.

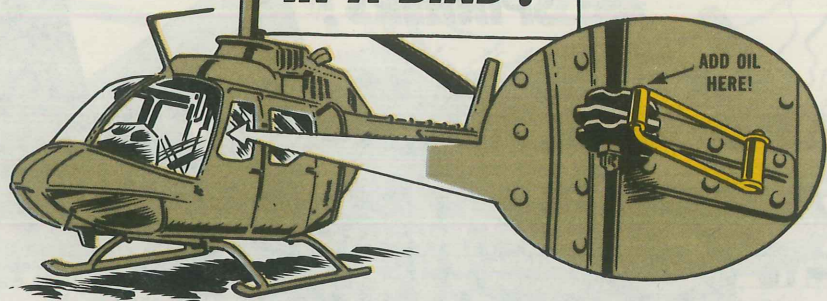


Those babies cost a bundle . . . over a grand and a half each. Which is why para 3-95 in TM 55-1510-204-10/5 (Feb 70) calls for "weather control panel switches—OFF," when turning from the runway. You better believe it!

'Course, you also turn the engine de-icing switch ON during your engine ground operations check. Turn the switch OFF as soon as you notice a slight rise in EGT.



## IN A BIND?



A couple of drops of oil in the spring clip rollers on your Kiowa (OH-58A) front doors works wonders, bird mechs.

The lube frees stuck rollers so that the hinge won't bind when the doors are opened and closed. A binding door leads to sheared hinge rivets and cracks in the hinge or door—means sidelining the bird for repairs.

Never spot-paint the rollers, either, because paint will hamper movement of the rollers. Just oil 'em.

## PENETRATING PUB

If your Huey or Chinook unit TOE or TDA authorizes forest penetrating rescue seat, FSN 4240-199-7353, you probably have a manufacturer's manual telling you how to take care of it. There is no Army manual.

You don't have the manufacturer's pub? Then phone, write or visit the nearest Air Force installation. Ask the pubs distribution officer for a copy of Technical Order 14S6-3-1 (Jul 70) with Ch 2 (Aug 72) on the seat.

Or, you can fill out a DD Form 1149, Requisition Invoice Shipping Document, and send it to the Air Force Publications Distribution Center, Baltimore, MD 21220.



## LESS MAINTENANCE

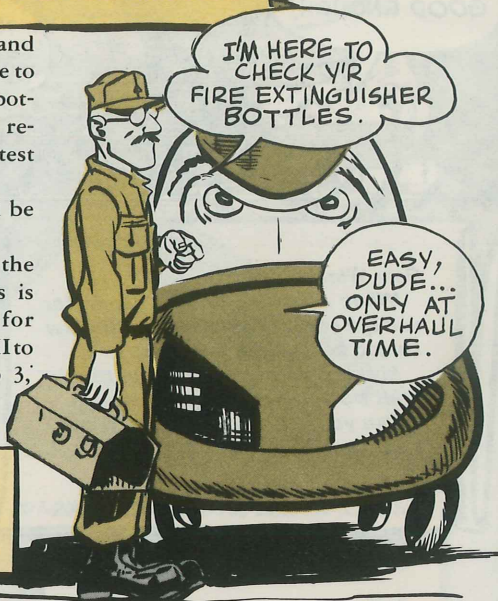
You Super Snooper (OV-1) and Hook (CH-47) types no longer have to test the engine fire extinguisher bottles every 5 years—they're good regardless of the last hydrostatic test date.

From now on, the bottles will be serviced during bird overhaul.

Until the special inspection in the organizational maintenance pubs is updated, tho, your authority for skipping the check is Chap 4, Sec II to TB 750-991-1 (Oct 72) and Chap 3, Sec I to TB 750-992-1 (Oct 72).

These are the bottles affected:

OV-1	CH-47
FSN	FSN
1680-416-2503	1680-939-5434
1680-086-8130	1680-956-9891
4210-835-4860	1680-168-5737



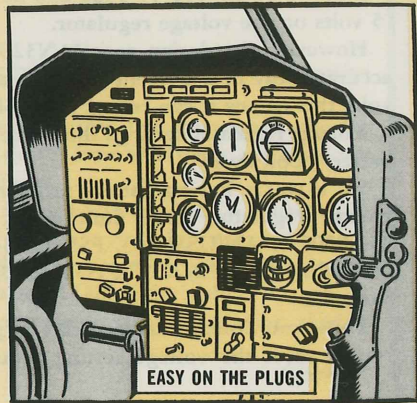
## CONSOLE CAPER

Disconnecting some cockpit console components in the OH-58A?

Fine, bird-mech—but while you're working in the terminal-strip area behind the console, be careful not to hit the terminal-strip plug-in connectors.

If a plug is jarred loose in its receptacle, the transmission and receiving audio could be knocked out.

If you do happen to nudge a connector, give it a friendly push to make things right.





## USE MULTIMETER

THE DC  
VOLTMETER'S  
GOOD ENOUGH!

NEGATIVE!  
EYEBALL V/R  
TM 55-1520-210  
-20.

TM 55-1520-210-20

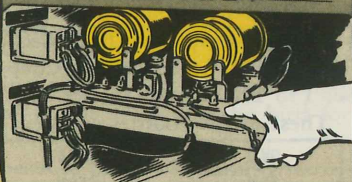
Dear Windy,

When adjusting UH-1H generator voltage output, I believe a multimeter should be used for accuracy.

My buddy disagrees. He says the aircraft DC voltmeter is good enough.

Can you settle the dispute, Windy?

CW2 C. A. P.



USE MULTIMETER ON  
VOLTAGE REGULATOR

Dear Mr. C. A. P.,

The dependability of a multimeter is greater than that of a bird voltmeter. The multimeter is calibrated regularly and is not subject to aircraft vibrations and temperature changes.

Para 12-18 of TM 55-1520-210-20 (Sep 71) calls for adjustments of 5 volts on the voltage regulator.

However, the design spec (AN3203) requires that the voltmeter be accurate only to 2 percent of full scale. Since the voltmeter scale is 30 volts this means it can reflect a .6 volt error.

Voltage regulator settings should be right on the money to help prevent battery "boil over."

So, if you're having battery problems, have your support unit set the voltage regulator using multimeter, Weston Model 281, FSN 6625-356-8306 or AN/USM-303, FSN 6625-933-2406. Both are listed on page C-14, Ch 1 (Aug 72) to TM 11-6140-203-15-2 on aircraft nickel-cadmium batteries.

Those multimeters are accurate to plus or minus 1 per cent, allowing you to meet the voltage setting requirements in para 3-4 in the TM.

Windy

## NO ENGINE FLUSH, PLEASE!



Dear Windy,

Sequence No. 9.12 in TM 55-1510-201-20 PMI Ch 1 (Feb 72) calls for—Engine Oil Changed; Oil System and Radiator Flushed.

My buddy says this means flushing the Seminole engine with drycleaning solvent, P-D-680, every 25 hours.

I say using solvent in the engine can do more harm than good. Only clean oil should be used in the engine.

Who's right, Windy?

SP5 R. W. P.

Dear Specialist R. W. P.,

You are, without a doubt.

Never flush an engine with solvent because it'll remove the protective oil on internal parts . . . bad news!

That's why, for example, some recip engines that have been idle for a time are pre-oiled before starting. Oil drains from vital parts, and cranking up a dry engine can cause bearing failure.

For your Seminole—follow the info in para 1-134 of TM 55-1510-201-20 (Jan 69) when changing the oil.

Take off the oil cooler and flush that baby with drycleaning solvent, P-D-680, according to the poop in para 5-141b of the pub.

'Course, you also clean the oil filter with drycleaning solvent, during the oil change.

Windy



KEEP 'EM MOVING-- SAFELY!

DON'T FRET... IT'S PAINLESS.

GLASS SAVER

Dear Editor,

Here's a little puller we made up for removing all the gear box and transmission sight gage glasses on the Huey, HueyCobra and Kiowa for cleaning.

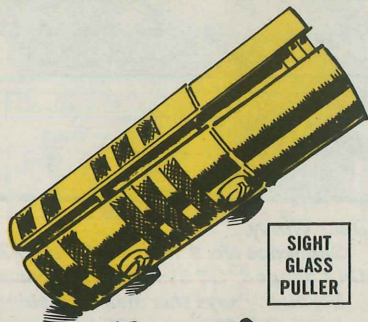
To use the tool just take out the lock ring with a screwdriver.

Back off on the puller screws and insert the puller over the crown of the plastic.

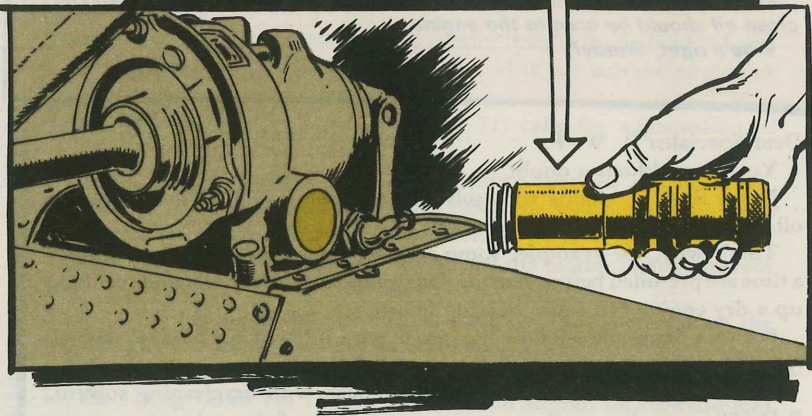
Tighten the puller screws and pull the plastic.

The tool helps prevent breakage of the plastic during removal. It works like a charm.

Frank Hanneman  
Ft Riley, Kansas



SIGHT GLASS PULLER



(Ed Note--OK! Easy does it, when removing the lock ring. A slip of the screwdriver can also break the glass.)

## YOUR NO 1 COMMON SHOP EQUIPMENT



THESE FRIENDS OF YOURS ARE ALL SPECIALISTS-- USE EACH ONE FOR THE JOB IT'S MEANT FOR.

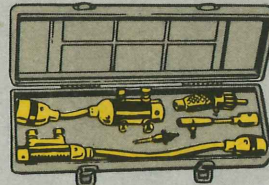
Getting the tools you need and knowing how to use 'em is the secret to good maintenance and keeping your equipment on the go.

The best way to make sure you have the tools you need is to check your latest supply catalog or supply manual for your kit or set, and make sure you get all of the changes to those pubs. SC 4910-95-CL-A74 (Jan 72) has the latest list on your:

### NO. 1 COMMON ORGANIZATIONAL MAINTENANCE AUTOMOTIVE MAINTENANCE AND REPAIR SHOP EQUIPMENT FSN 4910-754-0654 (LIN W32593)

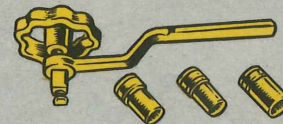
There are different manufacturers so the tool you have may not look exactly like the one pictured here, but it should still do the same job. You get one each unless noted.

ADAPTER SET, ENGINE ELECTRICAL TEST: 24v sealed elec sys for wheeled tactical vehicles



FSN 4910-348-7600

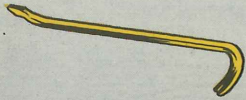
ADJUSTING TOOL, VALVE TAPPET: replaceable wrench socket type, 1/2 in. sq-drive, 1/2 in., 3/8 in., and 5/8 in. sockets



FSN 5120-293-0595



BAR, WRECKING: 3/4 in. dia stk, 30 in. lg o/a



FSN 5120-293-0665

BATTERY FILLER, GRAVITY: jug type w/pitcher type handle, natural or syn rubber cntr, 4 qt plus 2 pt or minus 1 pt, 18 in. lg x 1/4 in. dia hose, 8 in. lg x 8 in. w x 12 in. h



FSN 6140-635-3824

BATTERY FILLER, SYRINGE: 6 fluid oz ru bulb type, rigid bent nozzle, 10 3/4 in. lg o/a



FSN 6140-643-4490

BIT, SCREWDRIVER: 3/8 in fl tip female sq-drive shk, 3 3/8 in lg o/a



FSN 5120-243-7338

BLADE, HAND HACKSAW: HSS, all hard type, 24 teeth per in., 0.025 in. thk, 10 in. lg o/a (10 blades per bundle)

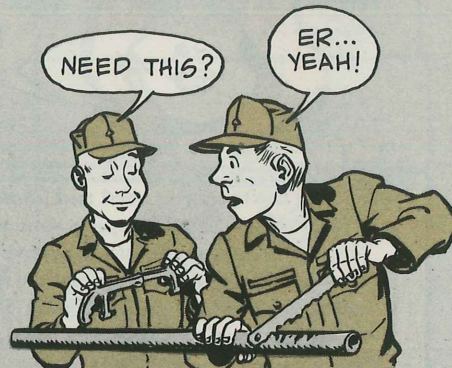


FSN 5110-237-8107

BRUSH, STENCIL: lg hdl, 1 3/8 in. dia of bristles at ferrule, 9 1/2 in. lg o/a



FSN 7520-223-8000



BRUSH, WIRE, SCRATCH: S wire, curved hdl, rocker rect face, 1 1/8 in. to 1 1/4 in. lg clear of block, 4 rows w, 18 rows lg, 5 1/2 in. to 6 1/4 in. lg brush part, 13 1/8 to 14 1/4 max lg



FSN 7920-291-5815

4 in set

CABINET, STORAGE: vehicle repair parts and tools, steel body w/wooden top, w/11 drawers, 35 1/2 in. h x 25 in. w x 27 in. deep overall



FSN 7125-330-0130

CABLE ASSEMBLY, SPECIAL PURPOSE, ELEC: 2 cond stranded no. 1 AWG, ru insulated, ru jacket, 20 ft lg o/a, 3/8 in. x 1 1/2 in. cross sec, 2 plug type term. fittings



FSN 6150-073-1268

CAN, RADIATOR FILLING: glvd S, 3 gal cap



FSN 7240-254-4173

CAPS, VISE JAW: br face, 4 in. w jaws



FSN 5120-221-1506

CARRIER, STORAGE BATTERY: quick adj, serrated ru gripper pads, 1 1/2 lb wt



FSN 5120-570-4316

COUPLING HALF, QUICK-DISCONNECT: glvd S, stght flow, exter male 1/4-18NPT fluid end, push-pull coupling



FSN 4730-142-1958

3 in set

COUPLING HALF, SELF-SEALING: steel, stght flow, 1/4-18NPT, swivel type



FSN 4730-595-1813

3 in set

CRIMPING TOOL, TERMINAL, HAND: manual compression type, no. 26 thru no. 10 AWG wire accommodated



FSN 5120-596-9313

CROWBAR: 1 1/4 in. stk dia, 59 to 62 in. lg o/a



FSN 5120-224-1390

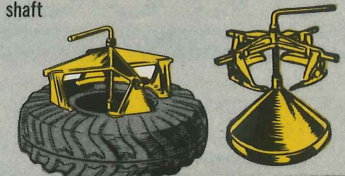


CUTTER, TUBE: for close flare cutoff, inclosed feed mach type, w/deburring tool, 1/8 in. to 1 1/8 in. od tube cutting range



FSN 5110-288-6520

DEMOUNTER, PNEUMATIC TIRE: 7.00 x 16 to 14.00 x 24 automotive tire size, manually drvn, pressure supplied to working mech by screw shaft



FSN 4910-683-9362



DISPENSING PUMP, HAND DRIVEN: for gasoline or kerosene, continuous flow type, pump head body flange mounted for 1½ in. or 2-in. bung opng, discharge fitting, ¾ in. thd nozzle hose, 8 ft lg o/a, 42 in. lg nonadj intake pipe, 12 gal per 100 revolutions



FSN 4930-811-6857

DISPENSING PUMP, HAND DRIVEN: piston self-measuring type, flgd mtg pump hd body, 1½-in and 2-in bung opngs, ½-in thd nozzle discharge fitting, adj intake pipe, 1qt per stroke



FSN 4930-287-8293

DRESSER, ABRASIVE WHEEL, HAND: revolving cutter whl type, 1¼ in. dia cutter, w/the following replaceable components



FSN 5120-223-9952

CUTTERS, ABRASIVE WHEEL DRESSER:



FSN 5120-278-6641

DRESSER, CONTACT POINT: w/sq-ends, ¾ in. w x 0.025 in. thk x 4¼ in lg o/a



FSN 5345-250-1345

12 in set

DRILL, ELECTRIC, PORTABLE: ½ in. size, hv-duty, 650 rpm, ac/dc, 115 v



FSN 5130-889-9004

DRILL SET, TWIST: HSS, strght rd shank, frac series, rh w/case, consisting of 1 each of the following:



FSN 5133-293-0983

FSN	drill dia		fluted lg	lg, in.
	in.	in.		
5133-227-9646	⅛	⅞	1 ⅞	
5133-227-9647	⅜	1	2	
5133-227-9648	⅜	1 ¼	2 ¼	
5133-227-9649	⅜	1 ½	2 ⅝	
5133-227-9650	⅜	1 ¾	2 ¾	
5133-227-9651	⅜	1 ¾	2 ⅞	
5133-227-9652	⅜	2	3 ⅞	
5133-227-9653	1 ¼	2 ⅞	3 ¼	
5133-227-9654	⅜	2 ⅞	3 ½	
5133-243-9612	1 ¾	2 ⅞	3 ⅝	
5133-227-9656	⅜	2 ½	3 ¾	
5133-243-9611	1 ¼	2 ⅝	3 ⅞	
5133-227-9658	¼	2 ¾	4	
5133-227-9659	1 ¼	2 ⅞	4 ⅞	
5133-227-9660	⅜	2 1 ⅝	4 ¼	
5133-240-8443	1 ¼	3 ⅞	4 ⅝	
5133-227-9662	⅜	3 ⅞	4 ½	
5133-243-9613	2 1 ¼	3 ⅞	4 ⅝	
5133-227-9664	1 ½	3 ⅞	4 ¾	
5133-227-9665	2 ¾	3 ½	4 ⅞	
5133-227-9666	⅜	3 ⅝	5	
5133-227-9667	2 ¾	3 ¾	5 ⅞	
5133-227-9668	1 ¾	3 ⅞	5 ¼	
5133-227-9669	2 ¼	3 1 ⅝	5 ⅝	
5133-227-9670	⅜	4 ⅞	5 ½	
5133-227-9671	2 ¾	4 ⅞	5 ⅝	
5133-227-9673	1 ½	4 ⅞	5 ¾	
5133-227-9674	3 ¼	4 ⅞	5 ⅞	
5133-227-9672	½	4 ½	6	

EXTRACTOR SET, SCREW: taper type, spiral fluted drill style, carb tool steel, c/o 1 each of the following:



FSN 5120-610-1888

FSN	screw size in.
5120-240-5223	⅜ to ¼
5120-580-2359	¼ to ⅝
5120-240-5221	⅝ to ⅞
5120-240-5222	⅞ to ⅞
5120-240-5219	⅞ to ¾
5120-240-5220	¾ to 1
5120-240-5217	1 to 1 ⅞
5120-242-1118	1 ⅞ to 1 ¾
5120-240-5215	1 ¾ to 2 ⅞

FILE, HAND: American patt, flat type, dble-cut bastard faces, sgl-cut bastard edges, 12 in. heel to pt



FSN 5110-234-6539

FILE, HAND: American patt, half-rd type, dble-cut bastard faces, 10 in. heel to pt



FSN 5110-241-9153

FILE, HAND: American patt, half-rd type, sm-cut, fl side dble-cut, back side sgle or dble-cut, 8 in. heel to pt



FSN 5110-241-9152

FILE, HAND: American patt, mill type, sgle-cut sm faces and edges, 12 in. heel to pt



FSN 5110-203-4645

FILE, HAND: American patt, rd type, ½ in. dia of largest sec, dble-cut bastard faces, 12 in. heel to pt



FSN 5110-234-6557

FILE, HAND: American patt, three sq type, dble-cut sec-cut faces, 8 in. heel to pt



FSN 5110-239-7556



FILE, THREAD RESTORER: 11, 12, 13, 14, 16, 18, 20, and 24 threads per inch



FSN 5110-373-1691





**FRAME, HAND HACKSAW:** adj, open pistol grip hdl, 3 in. to 3 $\frac{3}{8}$  in. deep throat, 10 in. and 12 in. lg blades accommodated



FSN 5110-289-9657

**FUNNEL:** steel, glvd finish, 1 qt cap, 8 in. lg flex. tu spout w/removable strainer



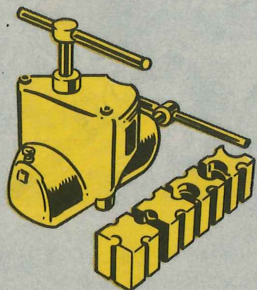
FSN 7240-559-7364

**FISHING TOOL, PNEUMATIC TIRE VALVE:** w/ valve core for tire inflation



FSN 5120-516-4220

**FLARING TOOL, TUBE, HAND:** swv cone, hinged dies type, for  $\frac{1}{8}$  in.,  $\frac{3}{16}$  in.,  $\frac{1}{4}$  in.,  $\frac{5}{16}$  in.,  $\frac{3}{8}$  in.,  $\frac{7}{16}$  in.,  $\frac{1}{2}$  in.,  $\frac{5}{8}$  in., and  $\frac{3}{4}$  in. tu, 90 deg incl angle of flare produced, w/4 swedging adapter for  $\frac{3}{16}$  in.,  $\frac{1}{4}$  in.,  $\frac{3}{8}$  in.,  $\frac{1}{2}$  in.,  $\frac{5}{8}$  in., and  $\frac{3}{4}$  in. tube



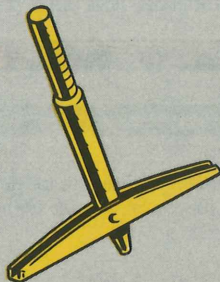
FSN 5120-251-2267

**FUNNEL:** steel, glvd fin., 2 qt cap, 2 $\frac{1}{6}$  in. lg rigid spout w/o strainer



FSN 7240-230-2397

**GAGE, DEPTH, TIRE TREAD:** 1/32 in. spiral grad, 1 in. depth. 3 in tread contact pl



FSN 5210-019-3050

**GAGE, TIRE PRESSURE, SELF-CONTAINED:** calibrated 10 to 160 lb, calibrated in 1 lb div from 10 to 60 lb and 5 lb div from 60 to 160 lb, dual ft chuck, 30 deg mtd angle, 6 in. stght extn, 12 $\frac{1}{2}$  in. lg o/a, w/hang-up ring (The issue of additional gages is authorized at the ratio of one per group of eight wheeled vehicles, including trailers, and/or fractional quantities thereof, as authorized by your TOE)



FSN 4910-204-3170

**GAGE, WHEEL ALIGNMENT:** toe-in and toe-out type, rod type clamped between wheels, w/h measuring chains (Spec MIL-G-19629 Cls 1)



FSN 5210-529-1205



**GOGGLES, INDUSTRIAL:** plastic, w/eye cups, ventilated, adj nose bridge, 1 lens ea aperture, clear glass lens, not polarized, rd, hardened, 50mm dia, headband supported, to be worn over personal spectacles, w/o carrying case



FSN 4240-269-7912

**GRINDING MACHINE, BENCH, HAND OPERATED:** heavy duty utility type, 6 in. dia x 1 $\frac{1}{4}$  in thick wheel



FSN 3415-241-3116

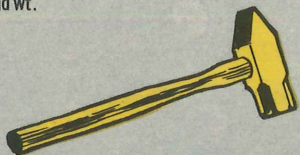
**GUN, AIR BLOW:** strght design, finger grip hdl, button operated, w/hang-up hook, removable tip,  $\frac{1}{4}$ -18NPSH male thd coupling



FSN 4940-241-3075



HAMMER, HAND: engineer's cross peen, 3 lb hd wt.



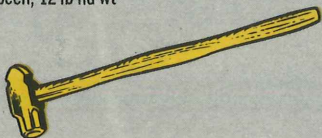
FSN 5120-900-6103

HAMMER, HAND: style 22 carpenter's, nailing, curved claw, 16 oz nom hd wt fibreglass hdl



FSN 5120-892-5485

HAMMER, HAND: sledge, blacksmith's, cross peen, 12 lb hd wt



FSN 5120-224-4139

HANDLE, FILE, WOOD: 1 1/4 in. dia x 4 1/2 in. lg overall, med size



FSN 5110-263-0349

6 in set



HANDLE, SOCKET WRENCH: hinged type; 1/2 in. drive end, 12 1/8 in. lg o/a



FSN 5120-221-7958

HOLDING TOOL, VALVE TIRE REPAIR: (A. Schrader & Son Div, No. 7799)



FSN 5120-223-9346

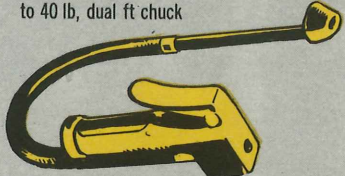
HOSE ASSEMBLY, RUBBER: natural and/or syn, sm bore inner surface, natural and/or syn molded outer covering; 2 br 1/4-NPSM female thd end connections; 1/4 in id, 5/8 in od, 25 ft lg o/a; 150 psi wp, 700 psi burst pressure; for gas equipment air hose



FSN 4720-356-8557

3 in set

INFLATOR-GAGE, PNEUMATIC TIRE: exposed bar indicator, w/deflating position calibrated 10 to 120 lb range, 2 lb smallest grad div 10 to 40 lb, dual ft chuck



FSN 4910-204-2547

INFLATOR-GAGE, PNEUMATIC TIRE: inclosed self-contained ctg indicator, operated by a sep lever, with deflating posit; 10 to 120 lb range; 2 lb smallest grad div 10 to 40 lb; dual ft chuck. Includes following replaceable comp:

Gage, Cartridge: tire ga

FSN 4910-895-6176

Valve, Cartridge: tire ga

FSN 4910-895-6175



FSN 4910-522-3778

INFLATOR-ATTACHMENT PNEUMATIC TIRE: 10 to 90 PSI range, adjustable automatic air cutoff valve, for standard bore valves as used on highway trucks and passenger cars (.302"-32 threaded outside diameter valves), 12" nominal length by 1/4" ID air hose, self-holding straight style air chuck for standard bore valve stems

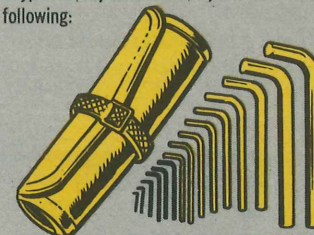
FSN 4910-159-0030

JACK, HYDRAULIC, HAND: self-contained, 12 ton cap, 11 1/4 in. closed h, 16 1/4 in. extended h, sgle pump, w/screw extn



FSN 5120-224-7330

KEY SET, SOCKET HEAD SCREW: hex drive, L-type hdl, w/case or ro, c/o 1 each of the following:



FSN 5120-595-9245

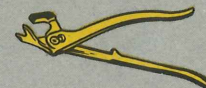
FSN	w across flats	lg arm, in.
5120-198-5400	0.035 in.	1 1/8
5120-198-5401	0.050	1 1/32
5120-198-5398	1/16	1 1/4
5120-224-2504	5/64	1 1/8
5120-242-7410	3/32	2
5120-240-5292	1/8	2 1/4
5120-198-5392	5/32	2 1/2
5120-240-5300	3/16	2 3/4
5120-242-7411	7/32	3
5120-224-4659	1/4	3 1/4
5120-240-5274	5/16	3 3/4
5120-198-5390	3/8	4 1/4
5120-198-5391	1/2	5 1/4
5120-240-5268	5/16	5 3/4
5120-224-2510	5/8	6 1/4

KNIFE, CRAFTSMAN'S: taper pt, 4 in. blade lg clear of handle



FSN 5110-268-3882

LIFTER-SCRAPER, BATTERY TERMINAL: 10 1/2 lg o/a



FSN 5120-293-1039



LIGHT, EXTENSION: w/20 ft lg UL type S acid, alkali and water resistant cable, 2 cond, terminates w/btry clips at power input end, accommodates one 100 w max med screw base 1amp with wire guard, integral reflector and 1 hook, ru hdl, w/sw



**FSN 6230-268-9436**

For replacement use:

LAMP, INCANDESCENT: 12 v 25 w, med screw base, frosted fin, white light, no. 25A-12

**FSN 6240-222-0276**

LAMP, INCANDESCENT: 24v, no amp rating; 25w, med screw, A-19 frosted fin. bulb; white light, 1 tungsten C-6 fil; 3-15/16 in lg; 1,000 hr rated life; burns in any posit; lamp No. 25A (use w/FSN 6230-268-9436 Light, Extension)

**FSN 6240-153-6494**

LIGHT, EXTENSION: 25 ft lg, 2 cond type SO 16 AWG cable, w/2 parallel blade plug connector 1 end, lampholder, guard, hook, reflector, ru hdl, and sw other end, 100 w med screw base lamp accommodated



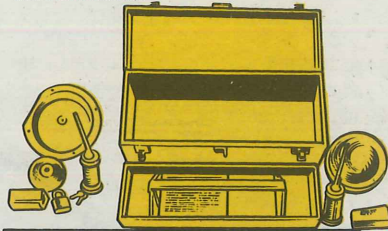
**FSN 6230-239-3518**

LIGHT, IGNITION TIMING:  
(Sun-Electric Corp,  
no. X47, or equal)



**FSN 4910-937-5724**

**LUBRICATING KIT:**



**FSN 4930-357-6301**

consisting of:

Tool Box, portable, steel

**FSN 5140-315-2758**

Padlock, 1 3/4 in. pin tumbler mechanism

**FSN 5340-582-2741**

Oiler, hand pump w/o hdl, 1/4 pt nominal sz

**FSN 4930-274-5713** 2 each

Adapter, grease gun coupling, flexible extn, straight coupler

**FSN 4930-288-1511**

Lubricator, bearing, portable

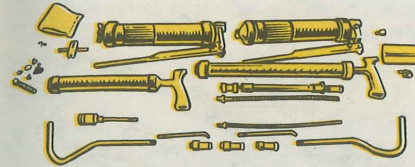
**FSN 4930-704-1852**

Lubricating Fitting Tool, for removing and replacing standard sz fittings, rethreading fitting holes, Snap-On-Tools Corp Part No. GA-22, or equal

**FSN 5120-246-2311**

LUBRICATING UNIT, POWER OPERATED: air operated, grease pressure dev 40 times air pressure applied, 80 to 150 psi air pressure, 6 ft lg lubr hose w/control valve and hyd lubr fitting coupler, 60 lb cap lubr tank, dolly or chassis mtd

**FSN 4930-720-4849**



Adapter, grease gun coupling, rigid extn, strght hydraulic type fitting Lincoln Mfr Code 36251, Part No. 5855 (this is for your M151)

**FSN 4930-204-2550**

Gun, fluid, 6 oz. direct delivery

**FSN 4930-223-3390**

Fitting, lubrication, hydraulic, surface check, 1/8-27NPT(M) threads, steel, strght, single

**FSN 4730-050-4208** 100 each

COUPLING, HYDRAULIC:

**FSN 4930-377-6820**

GREASE GUN, HAND:

**FSN 4930-277-9525** 2

GUN, FLUID, DIRECT DELIVERY: 11 oz

**FSN 4930-222-2680**

Elbow (body), lubrication fitting, 90 degree angle 1/8-27NPT male x 1/8-27NPT female

**FSN 4730-278-4814** 25 each

MEASURE, LIQUID: steel, 2 qt cap, w/flex spout and flow control valve



**FSN 7240-255-8113**

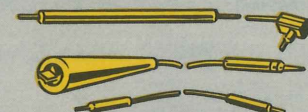
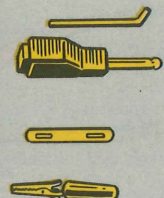
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MEASURE, LIQUID: steel, 8 qt cap, w/flex spout and flow control valve



**FSN 7240-255-5996**

MULTIMETER: type TS-352 B/U, 0 to 5000 v dc in 7 steps, 0 to 1000 v ac in 6 steps, 0 to 10 amp dc in 8 steps, 0 to 10 meg in 5 steps, 50 ua sensitivity, 1.5, 13.5 v dc operating power, int btry source, 6.156 in. x 8.313 in. x 11.313 in. o/a, enmld fin. mtl case, w/accessories



**FSN 6625-553-0142**

NIPPLE, TUBE: br, cd-plt fin. u/w 1/4 in. pipe size, 1/4-18NPSM rh, class 2 fit, 1 3/8 in. lg o/a, 1/8 in. distance across flats, 1/4 in. lg hex, 1 3/32 in. distance hex from end, 30 deg angle of seat

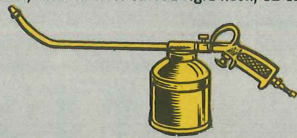


**FSN 4730-287-1589**

3 in set



OIL GUN, PNEUMATIC: curved rigid neck, 32 oz cap



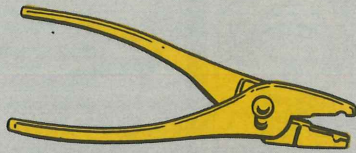
FSN 4930-222-2975

PLIERS, BRAKE REPAIR: comb tool, hyd and mech brake springs, replaceable steel hook, w/socket and guide end handles, 12-in nom lg



FSN 5120-690-8044

PLIERS, HOSE CLAMP: slip joint, w/2 positions, 7/16 in. jaw thk, 7 1/16 in. lg o/a



FSN 5120-537-3375

PLIERS, RETAINING RING: snap ring, formed tips

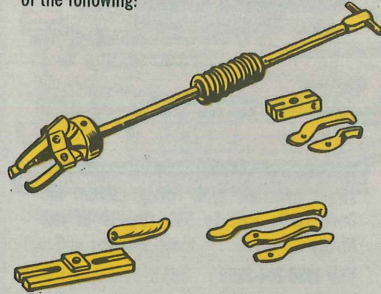


FSN 5120-595-9551

PULLER, MECHANICAL; gear & brg; dble-end grip; 2 exter jaws; 0 to 8 in spread range; 5 1/2 in reach

FSN 5120-595-9305

PULLER KIT, MECHANICAL: univ type, rvrs slide hammer type, 2 and 3 jaw, 0 to 8 3/4 in. outside range, 1 in. to 6 3/4 in. inside range consisting of the following:



FSN 5120-313-9496

1 crossarm puller	in. lg
FSN 5120-313-9502	6
3 jaws, inside	3 1/4
FSN 5120-313-9504	
3 jaws, inside	4 1/6
FSN 5120-313-9505	
3 jaws, outside	4 1/32
FSN 5120-313-9506	
3 jaws, outside	7 23/32
FSN 5120-313-9507	
1 jaw, single	2 1/16
FSN 5120-313-9508	
3 jaws, single	4 43/64
FSN 5120-340-2010	
3 jaws, puller	3 1/2
FSN 5120-357-6278	
1 nut, knurled	2 1/2
FSN 5120-313-9499	
3 pins	
FSN 5120-313-9501	
1 slide hammer	4
FSN 5120-313-9498	
1 rod	24
FSN 5120-313-9497	
1 yoke	2 1/2 in. dia
FSN 5120-313-9500	
1 yoke	2 1/2 in. w
FSN 5120-357-9244	

PULLER KIT, MECHANICAL: wheel, w/short jaws stud nut set, axle protector and mtl box



FSN 5120-587-4151



PUMP, BUCKET, LUBRICATING: hand operated, 25 to 50 lb cap, 1500 psi pressure, w/5 ft lg hose and gooseneck nozzle, w/leakproof cover and loader fitting for grease gun



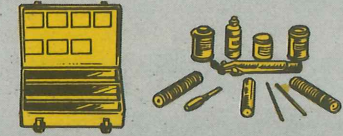
FSN 4930-244-4860

PUMP, BUCKET, LUBRICATING: hand oper, 25 to 50 lb cap, 7000 psi pressure, 1/5 oz per stroke, w/10 ft lg hose, hyd coupler, w/leak-proof cover and follower plate



FSN 4930-244-4859

REPAIR KIT, TUBELESS TIRE: (Adams PSP No. M100 or equal) (As Required)



FSN 4910-922-6921

REPAIR TOOL, PNEUMATIC TIRE VALVE: for std tire valve



FSN 5120-308-3809

RETRIEVING TOOL, MAGNETIC: telescoping type, 16 1/4 in. closed lg, 26 in. lg o/a



FSN 5120-545-4268





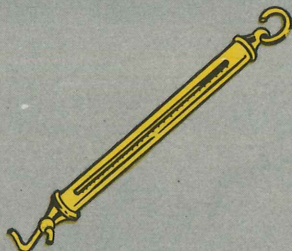
SAW, HAND, CROSSCUT: 24 in. lg blade, 6 in. w at butt, 1 1/4 in. w at pt, 10 pts per in., stght back



FSN 5110-142-4999



SCALE, DIAL INDICATING: weighing, hanging type, 1 hook type load receiver, stght face type dial grad 0 to 50 lb in 1 lb intervals, advp sys, spg type mech, w/o counterpoise weight



FSN 6670-254-4634

SCREWDRIVER, FLAT TIP: plastic hdl w/wrench grip, 3/8 in. w/flared tip, 8 in. lg blade



FSN 5120-278-1279

2 each

SCREWDRIVER, FLAT TIP: plastic hdl, w/wrench grip, bolster forged, hv-duty 5/16 in. w/flared tip, 6 in. lg blade



FSN 5120-278-1283

2 each

SCREWDRIVER SET, CROSS TIP STRAIGHT AND OFFSET: Phillips No. 1, 2, 3, and 4 size tips, plastic hdls, c/o 1 ea of the following:



FSN 5120-580-0334

FSN	tip no.	blade lg, in.	type
5120-240-8716	1	3	cross tip
5120-234-8913	2	4	cross tip
5120-234-8912	3	6	cross tip
5120-224-7375	4	8	cross tip
5120-256-9014	1 and 2	4 3/4	offset
5120-242-3268	3 and 4	6	offset

SHEARS, BENT TRIMMER'S: steel blade and hdl, w/ sharp pointed blade ends, 12 in lg o/a



FSN 5110-203-9642

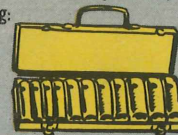


SOCKET, SOCKET WRENCH: 1/2 in. sq-drive, 1 3/8 in. 6 pt opng, deep style



FSN 5120-945-4704

SOCKET SET, SOCKET WRENCH: 1/2 in. sq-drive, 12 pt opng, deep style, w/case, c/o 1 ea of the following:



FSN 5120-596-8622

FSN	opng. in.
5120-243-7351	1/2
5120-243-7348	3/8
5120-235-5898	5/8
5120-243-7346	1 1/8
5120-242-3349	3/4
5120-243-7345	1 3/8
5120-243-7342	7/8
5120-243-7343	1 5/8
5120-243-7340	1
5120-243-7341	1 1/8
5120-243-7339	1 1/4

SOLDERING TORCH KIT: c/o disposable fuel cyl, flame spreader, lt and med flame tips, soldering iron tip, lighter, instructions and mtl case



FSN 3439-542-0531

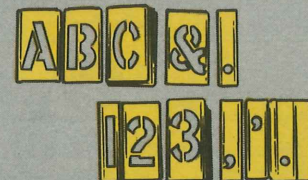
PROPANE GAS: refill cyl, 2 3/4 in. dia, 10 in. lg, 26.7 fluid oz fuel



FSN 6830-584-3041

STENCIL SET, MARKING: 45 adj mtl stencils, letters A thru Z, numerals 0 thru 9, 1 amper-sand, apostrophe, comma, period, spacer, and 4 end pc

FSN	height of characters (in.)
7520-298-7043	1
7520-298-7044	2
7520-272-9683	3
7520-269-9012	4

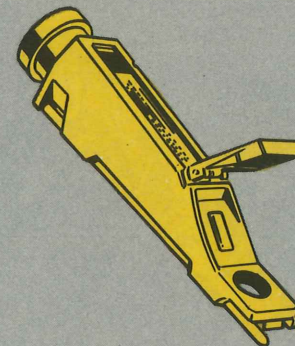


STONE, SHARPENING: comb. type, syn, al-oxide or silicon carbide, oil treated, coarse and fine grit, 6 in. lg x 2 in. w x 1 in. thk o/a



FSN 5345-198-8050

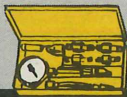
TESTER, ANTI-FREEZE AND BATTERY: (American Optical Co. No. 7181 or equal)



FSN 6630-105-1418



TESTER, CYLINDER  
COMPRESSION:  
direct type



FSN 4910-250-2423

TESTER, INTERNAL COMBUSTION ENGINE:  
unmounted, for testing manifold vacuum and  
fuel pump pressure 0 to 8 lb pressure and 0 to  
27 in. vacuum ga scale  
ranges, w/carrying case



FSN 4910-255-8673

2 each

TIRE IRON: 18 in. lg o/a (Herbrand Corp, 1127  
or equal)



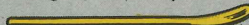
FSN 5120-422-8558

TIRE IRON: curved bead breaker, 33 in. lg o/a



FSN 5120-580-8924

TIRE IRON: curved flat type, 24 in. lg o/a  
(Ken-Tool Mfg Co, T-20, or equal)



FSN 5120-277-4071

2 each



TIRE IRON: hooked spoon-drop center type, 18  
in. lg o/a (Herbrand Corp, No. 1134, or equal)



FSN 5120-449-7073

2 each

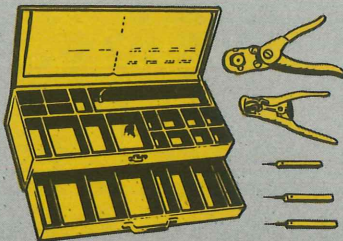
TIRE IRON: lock ring, 40 in. lg o/a



FSN 5120-765-8536



TOOL KIT, ELECTRICAL:  
c/o 1 each of the following:



FSN 5180-876-9336

CASE, METAL: 15- $\frac{1}{16}$  in. lg

FSN 5140-772-9655

CRIMPING TOOL, TERMINAL, HAND:

20 thru 10 AWG wires accommodated

FSN 5120-251-3990

REMOVER: 0.063 in. dia

FSN 5120-797-8495

REMOVER: 0.120 in. dia

FSN 5120-797-8494

REMOVER: 0.187 in. dia

FSN 5120-391-1710

STRIPPER, WIRE, HAND: 22 to 8 AWG

stripping cap

FSN 5110-268-4224

TOOL KIT, AUTOMOTIVE ELECTRICAL:  
c/o 1 each of the following:



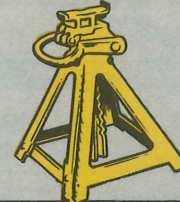
FSN 5180-422-8594

FSN 5120-540-2464 PLIERS, SLIP JOINT: 5 in.  
FSN 5120-293-3183 SCREWDRIVER, FLAT TIP:  
flared tip, plastic hdl, w/external screw  
grippers, nom tip with  $\frac{3}{32}$ -in, nom blade lg  
2-in

WRENCH, OPEN END FIXED:

opngs, in.	thk hd, in.	deg of angle, sm hd	deg of angle, lg hd	lg in.
$\frac{1}{8}$ & $\frac{1}{4}$	$\frac{3}{8}$	15	60	3
FSN 5120-277-3414				
$\frac{1}{8}$ & $\frac{1}{4}$	$\frac{3}{8}$	60	15	3
FSN 5120-277-8310				
$\frac{1}{8}$ & $\frac{1}{4}$	$\frac{3}{8}$	15	60	3
FSN 5120-277-8308				
$\frac{1}{8}$ & $\frac{1}{4}$	$\frac{3}{8}$	60	15	3
FSN 5120-277-8309				
$\frac{1}{8}$ & $\frac{3}{8}$	$\frac{3}{8}$	15	60	3 $\frac{1}{2}$
FSN 5120-277-8311				
$\frac{1}{8}$ & $\frac{3}{8}$	$\frac{3}{8}$	60	15	3 $\frac{1}{2}$
FSN 5120-277-8312				
$\frac{1}{8}$ & $\frac{3}{8}$	$\frac{3}{8}$	15	60	3 $\frac{3}{4}$
FSN 5120-277-8313				
$\frac{1}{8}$ & $\frac{3}{8}$	$\frac{3}{8}$	60	15	3 $\frac{3}{4}$
FSN 5120-277-8314				
$\frac{1}{8}$ & $\frac{1}{4}$	$\frac{1}{4}$	15	60	4 $\frac{1}{2}$
FSN 5120-293-1349				
ROLL				
FSN 5140-708-3431				

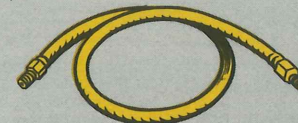
TRESTLE, MOTOR VEHICLE MAINTENANCE:  
5 ton cap, adj type; 15 in h closed, 25 in  
h extended; 110 in sq base area



FSN 4910-262-0392

6 each

TUBE, BLEEDER, HYDRAULIC BRAKE: 2 connec-  
tions  $\frac{1}{4}$ -28 thd 1 end, 10-32 other end, 18 in  
lg o/a



FSN 4910-255-8219

2 each

VICE, MACHINIST'S: swv-base, 4 in. w jaw, 6 in.  
jaw opng, replaceable jaw faces



FSN 5120-293-1439

VULCANIZER, HOT PATCH: bench or wall mtd,  
quick acting clamp type, w/tu roughing tool



FSN 4910-243-3130



WRENCH, AUTO, ADJUSTABLE: 0 to 3 $\frac{3}{8}$  in. jaw opng, 15 in. lg o/a



FSN 5120-264-3793 2 each

WRENCH, BOX: angular offset dbld-hd type, 1 $\frac{1}{8}$  in and 1 $\frac{3}{8}$  in 12 pt opngs, min o/a lg 15 $\frac{1}{8}$ , max lg 18 o/a



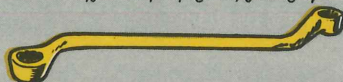
FSN 5120-228-9521 2 each

WRENCH, BOX: angular offset dbld-hd type, 1 $\frac{1}{4}$  in. and 1 $\frac{3}{8}$  in. 12 pt opngs, min o/a lg 18 $\frac{1}{4}$ , max lg 20 $\frac{1}{2}$  o/a



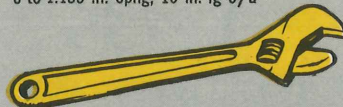
FSN 5120-184-8677

WRENCH, BOX: dbld-offset dbld-hd type, 1 $\frac{1}{4}$  in. and 1 $\frac{3}{8}$  in. 12 pt opngs 17 $\frac{3}{8}$  in. lg o/a



FSN 5120-264-5212

WRENCH, OPEN END, ADJUSTABLE: sgl-hd type, 0 to 1.135 in. opng, 10 in. lg o/a



FSN 5120-449-8083 2 each

WRENCH, OPEN END, ADJUSTABLE: sgle-hd type, 0 to 1.322 in. opng, 12 in. lg o/a



FSN 5120-264-3796 2 each

WRENCH, OPEN END, FIXED: dbld-hd type, 15 deg angle,  $\frac{3}{8}$  in. and  $\frac{1}{2}$  in. opngs,  $\frac{3}{8}$  in. thk hd, 7 in. lg o/a



FSN 5120-184-8620 2 each

WRENCH, OPEN END, FIXED: dbld-hd type, 15 deg angle,  $\frac{3}{8}$  in. and  $\frac{5}{8}$  in. opngs,  $\frac{3}{8}$  in. thk hd, 7 $\frac{1}{4}$  in. lg o/a



FSN 5120-184-8621 2 each

WRENCH, OPEN END, FIXED: dbld-hd type, 15 deg angle, 1 $\frac{1}{8}$  in. and 1 $\frac{5}{8}$  in. opngs,  $\frac{4}{16}$  in. thk hd, 15 $\frac{1}{2}$  in. lg o/a



FSN 5120-277-2326

WRENCH, PIPE: adj jaw style,  $\frac{1}{4}$  in. to 1 in. ips, 10 in. lg o/a



FSN 5120-277-1485 2 each

WRENCH, PIPE: adj jaw style, 1 in. to 2 in. ips, 18 in. lg o/a



FSN 5120-277-1461

WRENCH, TORQUE: rigid frame end drive style, w/rtc adpt, w/visual dial indicating tor mech,  $\frac{1}{2}$  in. male sq-drive, 175 ft-lb cap, w/case



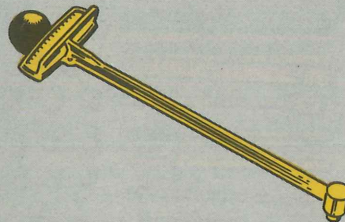
FSN 5120-640-6364

WRENCH, TORQUE: rigid frame end drive style, w/visual dial indicating tor mech,  $\frac{3}{4}$  in. male sq-drive, 0 to 600 ft-lb cap, w/case



FSN 5120-221-7983

WRENCH, TORQUE: deflecting frame end drive style w/visual pl indicating tor mech,  $\frac{3}{8}$  in. male sq-drive, 200 in-lb cap.



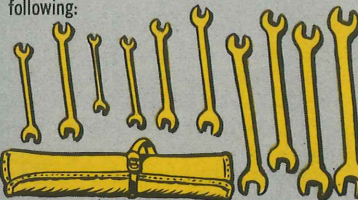
FSN 5120-853-4538

WRENCH, WHEEL STUD NUT, GEARED SOCKET: 36 in. tubr hdl, 20 in. bar hdl



FSN 5120-378-4411

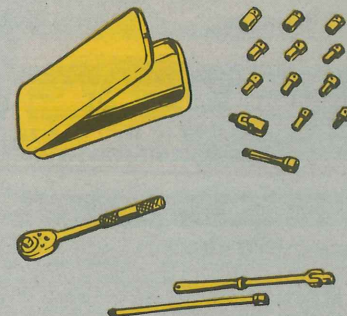
WRENCH SET, OPEN END, FIXED: dbld-hd type, 15 deg angle, w/ro, c/o 1 each of the following:



FSN 5120-317-8068 2 each

FSN	opngs. in.	o/a lg. in.
5120-277-2342	$\frac{3}{8}$ & $\frac{7}{16}$	4 $\frac{1}{2}$
5120-187-7123	$\frac{3}{8}$ & $\frac{1}{2}$	5
5120-187-7124	$\frac{1}{2}$ & $\frac{5}{8}$	5 $\frac{3}{8}$
5120-187-7126	$\frac{5}{8}$ & $\frac{3}{4}$	6
5120-277-8301	$\frac{3}{8}$ & 1 $\frac{1}{16}$	7
5120-224-3102	$\frac{5}{8}$ & $\frac{3}{4}$	7
5120-240-5609	$\frac{3}{4}$ & $\frac{7}{8}$	8
5120-187-7131	$\frac{7}{8}$ & 1 $\frac{1}{8}$	9
5120-277-2693	1 $\frac{1}{8}$ & 1 $\frac{1}{16}$	10
5120-187-7133	1 & 1 $\frac{1}{8}$	10 $\frac{1}{4}$

WRENCH SET, SOCKET:  $\frac{1}{4}$  in. sq-drive, hex and 8 pt opngs, w/case, c/o 1 each of the following:



FSN 5120-203-9573

SOCKET, SOCKET WRENCH:

FSN	opng. in.	shape
5120-236-2262	$\frac{3}{16}$	hex
5120-236-2263	$\frac{1}{32}$	hex
5120-236-2264	$\frac{1}{4}$	hex
5120-189-7906	$\frac{1}{4}$	8 pt
5120-242-3345	$\frac{3}{32}$	hex
5120-232-5703	$\frac{3}{16}$	hex
5120-189-7907	$\frac{3}{16}$	8 pt
5120-232-5704	1 $\frac{1}{32}$	hex
5120-241-3186	$\frac{3}{8}$	hex
5120-189-7908	$\frac{3}{8}$	8 pt
5120-239-0016	$\frac{3}{16}$	hex

EXTENSION, SOCKET WRENCH:

5120-227-8105	2 $\frac{1}{4}$ in. lg
5120-243-7325	5 $\frac{3}{4}$ in. lg

HANDLE, SOCKET WRENCH:

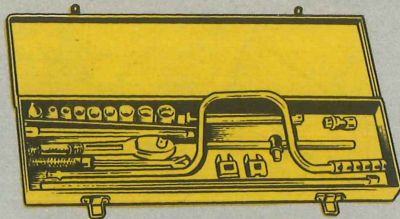
5120-221-7957	4 $\frac{1}{2}$ in. lg
5120-221-7960	5 $\frac{3}{8}$ in. lg

UNIVERSAL JOINT, SOCKET WRENCH:

1 $\frac{5}{16}$ in. lg
FSN 5120-243-1686



WRENCH SET, SOCKET:  $\frac{3}{8}$  in. sq-drive, 12 pt opngs, w/case, c/o 1 each of the following



FSN 5120-449-8200

2 each

SOCKET, SOCKET WRENCH:

FSN	opngs, in.
5120-232-5711	$\frac{3}{16}$
5120-227-6702	$\frac{3}{8}$
5120-227-6703	$\frac{7}{16}$
5120-237-0977	$\frac{1}{2}$
5120-227-6704	$\frac{5}{8}$
5120-237-4973	$\frac{3}{4}$
5120-232-5706	$1\frac{1}{16}$
5120-227-6705	$\frac{3}{4}$

BIT, SCREWDRIVER:  $1\frac{1}{4}$  in. lg

FSN 5120-243-7332

CROWFOOT ATTACHMENT, SOCKET WRENCH

FSN 5120-184-8384

CROWFOOT ATTACHMENT, SOCKET WRENCH

FSN 5120-184-8397

EXTENSION, SOCKET WRENCH

FSN	lg, in.
5120-227-8107	6
5120-273-9205	$18\frac{1}{2}$

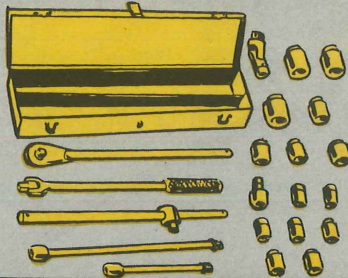
HANDLE, SOCKET WRENCH

5120-240-5364	6
5120-241-3143	7
5120-240-5396	$8\frac{1}{2}$
5120-237-4969	16

UNIVERSAL JOINT SOCKET WRENCH

FSN 5120-224-9215

WRENCH SET, SOCKET:  $\frac{3}{4}$  in. sq-drive, 12 pt opngs, w/case, c/o 1 each of the following:



FSN 5120-204-1999

SOCKET, SOCKET WRENCH

FSN	opngs, in.
5120-181-6816	$\frac{7}{8}$
5120-181-6813	$1\frac{1}{16}$
5120-237-0989	1
5120-189-7928	$1\frac{1}{16}$
5120-239-0021	$1\frac{1}{8}$
5120-235-5871	$1\frac{1}{4}$
5120-232-5681	$1\frac{5}{16}$
5120-189-7931	$1\frac{3}{16}$
5120-293-0094	$1\frac{1}{2}$
5120-189-7910	$1\frac{3}{16}$
5120-199-7765	$1\frac{5}{8}$
5120-199-7768	$1\frac{13}{16}$
5120-199-7769	$1\frac{7}{8}$
5120-199-7770	2

EXTENSION, SOCKET WRENCH

FSN	lg, in.
5120-273-9208	3
5120-243-7328	8
5120-227-8079	16

HANDLE, SOCKET WRENCH

FSN	lg, in.
5120-249-1076	17
5120-709-4072	$18\frac{1}{2}$

UNIVERSAL JOINT, SOCKET WRENCH:

$4\frac{3}{8}$  in. lg  
FSN 5120-243-1687

*Connie's  
Mini Mini's*



*Motor Stables?*

You can forget the horses, but not the horsepower. Dig up Ch 1 to FM 29-2. Its Appendix P gives you the scoop on setting up daily "motor stables" for your unit. For example, every day at 0730 hours you can schedule PM, by the numbers, for everybody and all equipment. Try it; you'll like it.

*8-Oz Lube Oil*

You needn't open a quart can to get a half-pint of MIL-L-23699 turbine engine oil, bird brethren. Half-pint cans can be had now under FSN 9150-180-6266. There aren't any pint cans in the system.

*How's Your Carcass?*

Remove aircraft tires from your bird when any part of the tread wear has reached the bottom of the groove, or the tread pattern is smooth in any spot. Then you'll have enough tire left for re-treading. These babies are listed in TB 55-2620-202-15 (May 72) . . . saves bread!

*Turn Signal Lamp*

Use only Lamp, FSN 6240-419-3185, in your solid state turn signal control. It's the 2,500-hour job. Some guys are putting Lamp, FSN 6240-155-8714, in there. That's a poor substitute . . . won't last long . . . you have to keep replacing it.

☆U.S. GOVERNMENT PRINTING OFFICE: 1973 - 958-439/3

*Would You Stake Your Life <sup>right now</sup> on  
the Condition of Your Equipment?*

*M 561 Torque Tip*

The torque for your Gama Goat starter cable hookup bolt should be 5-10 lb-ft on each nut. Torque the nut holding the stud into the starter solenoid first, after making sure the lockwasher is in place. Then, holding the inside nut with a wrench, torque the outside cable nut. This'll save on stripped studs.

*Vent Valve FSN*

Get the engine ventilation valve assembly for your M151A1 or M151A2  $\frac{1}{4}$ -ton truck with FSN 2805-624-5300. It's the same valve as in TM 9-2320-218-20P, (Jan 72), Fig 1-8, Item 4, but the FSN given in the -20P for the assembly will get you only part of it.

*Fly By Night*

If it's a pilot's clipboard you want, FSN 8465-573-2059 or FSN 8465-433-2073 will get it for you. The first FSN will be used till that supply is exhausted. Put RIC SPT on your request for fast service. Your pub authority is SB 700-50 (Mar 71). Besides instrument flying, this clipboard can be used for maintenance notes too.

*Camouflage Cover Band*

Need the elastic band that supports your helmet camouflage cover? It's FSN 8415-576-2873—on page 28 of SB 700-50 (Oct 72).



# NO MYSTERY

SALVAGE  
YARD

AVERAGE BATTERY  
LIFE:

5 MONTHS!  
(POOR PM)

STILL GOING  
STRONG AFTER  
19 MONTHS...  
(GOOD PM)

JUST GIVE  
ME PM  
BY THE  
BOOK!

THE  
BOOK  
IS...

TM 9-6140-200-14 (AUG 71)