

Issue 156

PS

1945 Series

THE PREVENTIVE MAINTENANCE MONTHLY

WHO FILLED OUT OUR
PREVENTIVE MAINTENANCE
TECH MANUALS F.Y.T.



Carl E. Egan

SPECIAL OFFERING
FOR \$2.00 PER ANNUM
1945-46

FOR THAT "KNOW-HOW"

TRY TECHNICAL ASSISTANCE

Yesterday your outfit was in deep shops. Today it's a different story.

You're having a headache, supply men, operators have items shipped out. New ones aren't plenty waiting.

Where can you get more help — quick?

You pass the word along. Your own commanding officer wants an SMO to support. The support unit could send military operations, or — they could ask for help from maintenance technicians assigned to your area. These technicians are skilled and are real whizzes on maintenance and supply. They're used to instruct-

The maintenance technicians may be right on your side in your head area. If not, word gets passed along through channels to the community command national maintenance point that provides your equipment. There are five U.S. Army Community Commands (Mobility, Weather, Weapons, Munitions) and Elements. The Mobility Command's Tech assistance is handled by three SMO's: Aviation

Material, Command, Tank-Infantry Center and Mobility Equipment Center.

The maintenance technician comes out and helps your CO work out solutions to your unit's maintenance and supply problems and technical difficulties with your gear. He may make recommendations on how to improve maintenance service, equipment records, and supply of spare parts, tools and test equipment.

And, if the CO wants him to, he'll plan, set up organizational methods and instruct so you'll have qualified men to operate and maintain equipment as to take care of supply.

It may take hours or days for the men in your outfit to get up-to-date on your equipment and its maintenance. The technicians will work right with your outfit till he's sure the "know-how" is there.

So — if your outfit needs "know-how," pass the word. Something can be done about it.

It's technical intelligence — what you need it.



PS
 The magazine for the professional soldier.
 It's the only one that gives you the inside story on the latest in military equipment, tactics, and technology.
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THE MAGAZINE FOR THE PROFESSIONAL SOLDIER
 PUBLISHED BY THE U.S. ARMY
 IN THE U.S.A.

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 SPECIAL REPORT
 SPECIAL REPORT

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ARMED MOBILITY 4-11
 SPECIAL 1 SPECIAL 2

See it first in the hands of the soldier
 See it first in the hands of the soldier
 See it first in the hands of the soldier
 See it first in the hands of the soldier

See it first in the hands of the soldier
 See it first in the hands of the soldier
 See it first in the hands of the soldier
 See it first in the hands of the soldier



DA Form 2486-9 (Proof Receipt) Receipt for weapons has been eliminated from the records system.

As spelled out in 4-26 of Change 1, the DA 2486-9 now its weapons logs may be kept in commanders' units, and no longer will they be needed by the commodity command.

"Change 1 doesn't mention it, but a copy of your books will be weapons logs should be maintained," O'Brien added. **ATTN: INTERVQA, Waverly, N. H.**

The record on this issue can be DA Mag, 7-24-14 (1 May 65).

DA Form 2486-11 (Armament Inventory Report Card Receipt) is no longer required for command logs because the line numbers 1-600-4 through 1-600-67. (See the note in para. 4-26 on disposal.)



ARMED, DANGER, PROOF

(1) From all Army organizations and installations (including civilian components) that are required to keep a property book under AR 753-15 in a property account under AR 753-16, it requires DA Form 2486 in compliance with such applicable Utilization Code. (See also in Table VII, Appendix I, above order to be used for material retention reporting.)

(2) To cover all responsible items (as listed in the new Appendix III in Change 1 to Army DAH, VA, DAH) or other special substantiation documents, (Appendix III, list of equipment items for Data Collection, has been revised, as shown in the required booklet items.)

Detailed instructions on preparing DA Form 2486 have been revised and expanded. For example, they spell out in para. 1-600-2 that a multiple-report equipment system will be reported in a single unit; in para. 1-600-13 they say that substitution equipment also has a different line number from the substituted item will be reported on a separate line.

Check the specification para. 1-600-1 for specific guidelines on the use rates of DA Form 2486-11. (See cumulative reports in DAH and DAH command reports day-by-day or for specified periods.)



Para. 4-26

applies not changes in major equipment categories and the following general rules changes on historical records:

1. From through the table in para 4-26 doesn't list a DA Form 2400-1 for an item, a modification record is required upon receipt of an MPRU applicable to the item of equipment. In, you'll add a DA Form 2400-1 at that time — unless a DA Form 2400 is already required for that item. A DA Form 2400-1 also is required on a successful component upon receipt of an MPRU applicable to the component located the component already has a DA Form 2400. In that case, you only need the DA Form 2400.

2. When para 4-26 requires both DA Form 2400-1 and DA Form 2400 for the equipment item, organizational repair and periodic inspections will be recorded on DA Form 2400-1 and if a cumulative repair record is required.

3. Historical records as listed in para 4-26 for communications and electronic equipment are required for the item whether or not it's a part of a major system.

4. Items when designated as administrative-use motor vehicles, normal and support vehicles from 2400-1 through 2400-10 are required to have the historical records will be on their file numbers.

5. When equipment is stock or inventoried, log book records for the vehicle and the associated equipment will be kept in a single binder.

6. When para 4-26 doesn't prescribe a log binder, all log book records for items with their file number assigned to a unit may be kept in one log binder.

Para 4-26 List

The attached listing of required equipment historical record forms, also is completely revised by Change 2.

In addition to detailing DA Form 2400-1 for weapons and eliminating DA Form 2400-11 from commercial vehicle logs, other changes have been made on specific items.

NEW CODES TO COVER IN DA Form 2400-1

Change 2 supplements Change 1 in TSM 14-700 and a number of DA messages.

The introduction to the TSM as revised by Change 2 changes the definition of classified equipment, with relevant items on the new Unit Identification Code and an explanation, explains recording of maintenance manhours on the form, and defines motor vehicles by design, by type, by use, by location and by the way they're obtained.

THE CHANGING CHAPTER 268

ON ORGANIZATIONAL REPORTING

HIGHLIGHTS ON MAINTENANCE RECORDS

NO MORE THINGS NOT LISTED HERE BUT IN CHANGES IN TSM TO SPEAK OF

DA FORM 2400-1 Exchange Tag — Revised para 3-26-70 explains how to handle supply requirements on a DA form when exchange is unable delivered.

DA FORM 244 Preventive Maintenance Schedule and Record — Revised para 3-10 and 3 examples medical equipment as well as standard items on this form. Para 3-11 items rules on use of DA Form 244 for individual soldier's gear (including other up to level 0). Other changes correct errors and/or update the rules. One change Change 2 doesn't specify in that DA Form 2400 (issued in DD 1-14) will be used to schedule and record performance of PM for medical equipment. **DA FORM 2400-1**

DA FORM 2400-1 Material Requisition Report — Complete events with details on preparing the form as noted in the text.

DA FORM 2400-1 Maintenance Request, and DA Form 2400-1, Communication Item — Para 3-70 and 3-71 clearly the purpose and use of these forms, including use as an inventory maintenance request, use report of maintenance effectiveness (equipment device, or a report on maintenance on tactical and support vehicles, and as a report on application of MPRU's.

PARA 3-14-70, advising on FTRAC organizations should be recorded in unit 40578-02 organizations. The Unit Identification Code listed for para 3-7-14-70 in the new code established under AR 14-70.

REVISIONS have been defined. All Equipment Item processing Recommendations must now be prepared and submitted separately and will no longer be combined with any other use of DA Form 2400. Follow the rules in para 3-7-4.

Additional rules on use of these forms are found in para 3-7-4 on location and 3-7-4 on collection. Para 3-7-4 rules on how to use

DA FORM 2400-1 Component Removal and Repair/Overhaul Record and DA 14-10-1, Transaction Report — Changes on these forms set the requirements to use the new Unit Identification Code (AR 14-10-1, to enter the component failure code at the upper left corner above the unit number, and addition of procedures for recording PM changes and the repair assembly time on

4 MORE

LOG BOOKS

Equipment Log—Part 4 to modify the requirement that the log must be with the equipment when operated by providing it as the log is a central location if "operation procedures or configuration of the equipment" make it necessary.

04 FORM 3400.1

Equipment Daily or Monthly Log



— Changes call for entry of date, miles or hours when next scheduled lubrication is due in block 4, and entry of scheduled hours in column 1 for equipment that requires service at specified hourly intervals but has no hour meter.

04 FORM 3400.2, Equipment Maintenance Record (Organizational) — Most of the changes are clarifications of instructions on preparation and disposition of the form. Para 4-76(d) calls for use of this form for reporting organizational maintenance on tactical and support vehicles (Items 100000 through 100000 designated as administrative use vehicles. Para 4-76(2)(b) calls for a report on fuel added to all fuel consuming equipment — not just vehicles. Para 4-76(3) changes the closure and submission of the form quarterly for all equipment items that require this form and para 4-74 adds details on disposition of report upon form use.

04 FORM 3400.5, Equipment Modification Record — Para 4-764 calls adds a requirement to include this form in the log for equipment when an MPWO is applied, only applicable to an equipment item or component. Further the equipment log is a DA Form 3400 even though disclosure isn't required now by para 4-26.

04 FORM 3400.7, Equipment Transfer Report — Para 4-762 (F) limits entries in block 77 to attachment and recovery items. Component being is not required.

04 FORM 3400.8, Equipment Assignment and Registration Record — Para 4-120(7) calls for listing both old and new PAV's in case vehicle is involved, results in 2001 change.

04 FORM 3400.9, Power Assignment Record — Form deleted. Entries are included in new in para 4-160 under CO system no longer is.

04 FORM 3400.11, Aircraft/aircraft Repair Card Record — No longer required for commercial design vehicles. Subordinate, no change.

04 FORM 3400.12, Army Driver's — Para 4-100(2)(b) gives details on making the form entry.

04 FORM 3400.1

Equipment Maintenance Log (Continued)

04 FORM 3400.1

Equipment Maintenance Log (Continued)

— Para 4-110 gives revised instructions for vehicle and aircraft disposition change use. Subordinate no change.

MOORE

Page 4-23 adds disposal instructions for DA Form 1089 and DA Form 1089-18. Disposal instructions for 2400-series forms no longer required after publication of Change 2 are given in the note at the end of page 4-26.

CALIBRATION RECORDS

Page 6-2 cites AR 174-17 for definition of terms in connection with calibration activities.

For requesting maintenance calibration/comparison check, see DA Form 1087 references and page 6-4 of Change 2.

DA Form 1016, Calibration Data Card — Page 4-1 limits use of this form to calibration facilities with standards traceable to the National Bureau of Standards.

CODES, ADDRESSAL DATA COLLECTION FORMS

Appendix I, Codes — Major revisions are listed in Table VII, Calibration Codes, Table XI, Miscellaneous Codes, and Table XV, Motor Vehicle Use and Supply Status Codes. The Q service definition is corrected in Table V, Scheduled Services.

Appendix II, Mailing Address — These are updated, but the U.S. Army Mobility Equipment Center address now should be:

Commanding General,
U.S. Army Mobility
Equipment Center,
4501 Goodfellow Blvd.,
St. Louis, Mo. 63126.

Appendix III, DA List of Items for Data Collection — Revised list of required equipment data feedback forms.

Appendix IV, List of Annotations Manual Items for Data Collection — New list of required maintenance data feedback forms.

DA Label 80, U.S. Army Calibration — Revised instructions on this form are in page 6-5.



A screw-on the loose is about as easy as replacing at a general store.

To explain what's been tried to run down an unsupervised captive screw, the above makes much sense. When the screws are backed out, like they're not supposed to be, they seem to head for the nearest crack or other convenient hiding place . . . there is *no* law here.

Trying to replace many of the captive screws on various equipment can cost a supply man's hair white. There are no TUN's, and about the only way you can get 'em is to have a general supply store under them.

Which brings up the moral: Captive screws are made so that you don't have to back 'em out to fix whatever they're holding. Screw-on, keep 'em captive.

If you want to insure that they'll stay captive, try this.

Grab a spare nut that'll thread onto

the end of the screw when it's done its good, deed, or whatever. Turn it all the way up the threads until it slips over onto the smooth shaft of the screw . . . and let it stay there. That way, when the screw's backed out, the nut keeps it captive . . . but how the screw, panel or door stays free.



Another simple fix is to open a split washer, slip it on the smooth shaft of the screw, and close the washer with pliers. An "E" ring or "U" ring pressed over the shaft will work the same way.

The big thing is: Keep the screw captive . . . the best way you know how.



IF HYDRA ...

KNOBS'LL KNOCK COMMUNICATIN'



Never have jiggles' loose, knuts' the knobs on your RTTY THERM receiver-transmitter pop off?

No sweat. Just get 'em back the way they belong.

You gotta watch position' on the knobs for the ANT-SELECTOR, XTAL-AND BAND and AF and RF GAIN controls. They'll cut peak performance of that AMBER-5 series radio set if they're installed backwads.

For making sure the knobs are on like they're supposed to be, use the light finger-turning test.

The **ANTENNA** light'll give you a false impression if the **ANT SELECTOR** is turned around. In best way's to turn the select knob to 1 or 2. If the knob's reversed the double-slitte drops to half its output.

The **XTAL-AND BAND** selector knob is on wrong if the indicator light doesn't beam on Band 2, but does on Band 1 and 3. With the knob on right the bulb lights from 1 to all three band positions.



Spotting loosened RF GAIN and AF GAIN knobs on the control section of your set's no problem since you have two tests to go by.

First, you'll get only one-half or less of normal sensitivity output; and second, the knob'll move only in a 90 degree arc. If they're like they ought to be, the knob'll rotate 180 degrees — or almost to a complete circle.

And remember ... to keep your knobs secure from backing off, use a dash of vaseline or glycerin after tightening 'em.

A WRENCH'LL WRECK AN RT



Ah, ah, ah! Don't touch that dial ...!

... That is, not until you've seen the TRANT TUNE spring-loaded wrench in flesh with the great old-time RT-66, 67, or 68 motor-transmission.

If the spring's weak or gets jammed, wrench-stays-a-jaw-adjust screw, a turn of the MCS knob'll clear the flexible disk.

The same's true with the TENTH MCS knob. You might make a couple turns of the screw before anything happens. But, then that ... happens. You wind up with a broken CRT capacitor disk.

No, instead of bustin' it do your motor-transmission in, use it to fix the wrench once and when you take the pressure off the screwdriver.



HERE'S A LIVELY NUMBER



You getting a little run down at the bank trying to locate the right P/N for the H-1110 headst-mkls?

Come out of the supply house, then, and finger the P/N that's in the Functional Parts List of TR 11-9950-241,21P (Rev 41). What you need to shake an H-1110 loose up the line is P/N 11951-805-4871.

And since you're in a supply mood over the headst-mkls, you might remember that its mkls and boom assembly can't be replaced via the supply route. Which means you manufacture ... or buy the whole rig.

You might pass that info along to your operator buddy in the wrong rig. If he gets careless with the mkls boom, he'll owe the milk quite a few francs for a new headst-mkls.





Dear Editor,

Using muscle as the stick is comparable to the DA/ADP-12 autopilot in the Airhawk (OH-1) can run on volcanic action triggered — keeping up with repeats.

At least that's the way it was here, until we passed along to soldiers a gentle reminder about all the transistors we were replacing.

What can happen is that the power transistors in the motor drive circuit of the rotary actuator will fail if the autopilot is overpowered for more than about eight seconds.

The other pilot in the actuator can't save the transistors, either. The pilot currently protect the bird against any electrical or mechanical trouble in the autopilot which would cause the gear train on the actuator to lock. If this happens, muscle power can be used on the stick to steer the plane and give the pilot moment control.

When making a normal climb or dive, the, no muscle power is needed. You use the pitch control "bump switch" on automatic pilot flight controller GJ160/ADP-12.

To use the pitch control you disengage the vertical engage switch (collocated on navigation coupler DA-PM/ADP-12/v) and make your move. Then you re-engage the vertical engage switch again at the new altitude.

Of course if you have to change altitude in a hurry, you can disengage the autopilot by pressing the pilot release switch on the stick.

George M. Kirby
Instruments Army Depot

DON'T MAKE ANY SLUDGY MOVES—
SAVE THE TRANSISTORS.



(Old Plane — A good reminder.)



HOW TO TRIM A
NEGATIVE ANGLE — 22

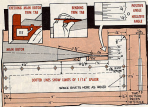
TIT FOR TAT TOOL

HOW ABOUT
TRIMMING WITH A
KIND OF "TIT FOR TAT"
TOOL?

Adding a little tit to your tool for heading trim will make trimmer (22-12) will also let you measure negative trim.

It's just a minor addition to the main trimmer trim tool shown in your T88 16-1426-204-22 (1 Jan-55). But that's what the trim tit does. From the end of the tool enough to let you read minus trim inches of trim along the right hand side of the tool.

The trim heading part of the tool is about the same as the one shown in the T88, except that the parts are a little larger.







**KEEP
A
LOOSE
BOLT**

Dear Henry:

You have an unfortunate history of 10 independent design bolts, P/N 32713-2, P/N 32614-00-0117, in 741 23-12 10-001-000 (2) days after our Order 31-741.

The trouble is, when we change to loose bolt, there's some technical strength, you is that the bolt should be tight with the other is that it should be loose the same.

Can you make this age-old dispute?

WDS L.A.R.

Dear Specialist L.O.F.,

The bolt should be free to turn in the horizontal railhead bracket bearing and bushings because this action keeps wear and stress on the bolt.

When the bolt is put in right, you can't tighten the bolt out to the point where it focuses on the bracket. That's because the bolt is a shoulder type with a snap at the head, just past the threads. The snap prevents a tight fit.

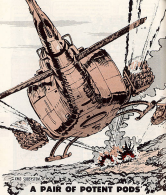
If you use a washer under the bolt head, too, keeping the bolt nut could focus the bolt ... 'tain a healthy situation!

So, you take the bolt lightly and insert it with the nut and washer. Then add one washer, P/N 40000-115, P/N 1000-10-0000, under a new nut, P/N 40000-1, P/N 1110-115-000. Then tighten the nut to a torque of 85-110 inch-pounds and check the railhead design to be sure there's no sticking.

Ask a man to make you, his
the answer is
the 100-10-0000, and
100-10-0000.



Henry



A PAIR OF POTENT PODS

Who-co-opts (KCMR-25-02)

No more welcome sight to a guy with his hat pinned in a vice paddy than a covey of L-17s roasting overhead from a Whay to support him.

You G27s, mechanics and crew chiefs can help make sure your KMS subseam's ready on the firing line by sending in as those PMA-inspection tips between dating missions.

Keep your eyes peeled for possible problems in these areas:

POD ADJUSTMENT

Consider the time to adjust your pods. It's a good idea to get a heady or head a muscle. Lay him pods in on the pod to take the pressure off the front plastic bearing while you're adjusting it. This bearing's hard to get at and unless the weight's off it you're likely to have to use too much belt when you're tightening or loosening this screw. Beware! Off goes the screw's head.



No sweat working on the rear bearings ... they're easy to get at. Of course, you always want to remember that this supporting structure works on the same, one-foot system, meaning that you have to loosen the rear left bearings before you can adjust the front one either to the right or left. And vice versa when you're adjusting the rear bearings.

OVERSIZE BATTERY ASSEMBLY CLAMP — Large cable secured in by clamp until metal cables twisted.

When you're installing the battery assembly like it says in para 11a(24) of TM 9-1005-201-10 (Apr 64), do an A-1 job. The clamp isn't like a cable guide and helps support the large rubber-coated cable that contains the rocket firing circuits. The two metal cables are part of a quick-disconnect deal. Now, when the explosive hole blows, the pod's supposed to fall away from the flap and put tension on the two small cables. This tension should make the disconnect open and this is how the electrical circuit goes from the aircraft. However, if you put the clamp and cables on wrong — like

if the clamp binds the large cable or the two small ones get twisted — the quick-disconnect won't let go and the pod'll hang from the large cable.



EXPLOSIVE BOLTS—Loose, threads damaged, head wires frayed.



**EXPLOSIVE BOLT
WITH WIGGLING CAPS**



Don't forget the safety harness! It's a safety harness that's built into the seat. It's a safety harness that's built into the seat. It's a safety harness that's built into the seat.

The caps only come off after all the tubes have leaked — just before take-off. When you attach the first component to the engine, heads up on getting the right connector markings for the top and bottom hole.

LOOK FOR LEAKS —

Here's a hint: every gap in the world should be in an every minute. Watch out for fuel spillage and gas line leaks before every firing flight. Check the filter caps for right seal, too. If gas fumes get seeping up near a first rocket, you could get an explosion before or after take-off.



Before it's too late, inspect the seal and keep a sharp look-out for these two leaks. Caps standing in front of an inhibited or blocked fueling system . . . or those with its rockets being other small or weak wires or wires drops . . . If these rockets don't go off by accident, they could

LAUNCHER TUBES AND TUBES — Nuts, screws loose on crank-and-rockerbeam and wheeler assemblies; cables and wiring frayed, kinked; module pin attachment wires loose, broken; tubes dirty, dented; wiring pin dirty; launcher-latch retaining groove and contact disc dirty, greasy; switch box assembly damaged, full of contamination.

THE FIRST CHECK MUST BE THE FIRST ONE.

Big checks only on cables and wiring.

Don't take with you any water . . . no paint thinner or mineral spirits — this day. The post 1983 fire truck.

Don't over-tighten module or fixed module attachment pins.

The best driver on flying pin and similar parts from the truck. The 1983 fire truck.

Having trouble with burned-out switch boxes? No sweat. Here's the big news: From now on, when the switch box goes out, you don't have to turn in the entire module. You can replace the box with Bladable Igniter Box, Bladex Launcher (P/N 1045-005-0020). To replace the old one, just take the cap off, put in a new set of "guts" and put the cap back on. Easy how you handle those delicate parts, though.

THE NEW BOX WILL SHOW UP IN YOUR
-TOP IN ONE OF THESE DAYS

Bladex Launcher



GROUNDING —

WHILE EXERCISING, YOU'D BET OFF YOUR SWEATY BEARS IN THE WOODS. IN A JOINTED CONFESSION, YOU DON'T PREFER A NEW-BORN BEAR, BUT YOU'D PREFER A NEW-BORN BEAR.

1. REMOVE THE ALL FINE (GUTS) OPEN.
2. REMOVE THE CAP TO A GOOD BATH ROOM.
3. DON'T REMOVE THE FINE PROVISION. THE THE LUNCH AFTER THE BATH THE BATH IN THE TUB. THEN THE PROVISION. (GUTS) THE BATH THE BATH AFTER THE BATH ROOM.

STEAM PIST — Missing, wrong type, not fast

You heard the one about "the want of a nail, etc." Well, here's a switch. Because of a nail away a switch's got being up in the brancher all after it went off. Yaps, you've been known to get nails instead of abundance these pins wire (P/N 1045-004-0002—0012500). This authorized wire's made to break at 100-lb pressure. A nail or any other wire that's got more than 100-lb strength is dangerous to use, so stick to the authorized type every time. And, no matter what anybody tells you, don't let a loaded thing get away without a clear pin in the device and the nail



THE ONLY
AUTHORIZED
ALUMINUM
STEAM PIST

brancher rule — and make sure the wire's bent so hard in its place when vibration sets in. The pins might as be about as thick long, by the way.

ROCKETS — Dirty, greasy, wet, and scuffed like motor tubes or have damaged gap between motor and motor tube, head closure and nozzle for assembly and lock wire protruding from rocket motor tube.



A kind thought for those moments pays off too. If they go home, the rocket is too hot, too. You might check their seven case in a while to see that they're lubed and the oil and spring's OK, and the padding's in place. A healthy customer is the sales place to keep rockets till you need 'em.



You'd just better guess 'em when the money's below -40 degrees or above 100. Otherwise, the rocket propellant won't work the way it should. You could get a short round and a cold rocket, bad leg on a buddy . . . or an explosion from a hot rocket in the tube.

Roll pay, too, to protect those rockets from the weather with a tarp when you're stacking or moving 'em.

Incidentally, if you're in action over there, don't make the mistake of "borrowing" holding the rockets from a buddy in the Navy. The Navy type's not scuffed and is made for use in land-flying land-wing aircraft . . . not for a shipper. Ship's've been hurt this way. So, stick to the right brand — ROY 11-00-000-000-0001, and the ones authorized on page 68 of your -20 TM.



IN ONE
TWO CLIPS

MINIHEAD ASSEMBLY —

You want to watch it and close it just after you get out of those tunnels with a rubber gasket ring under the lip of the head-dropping support and a blue chain between the head-dropping support and the head closure.

Make sure you have *unzipped* the chain and the gasket before you thread the neck into the mine.



Otherwise, they're likely to swell up and cause the neckhead to work loose in flight. This is a twist on the old system, so break up, eh?

ROCKET LEADING — That's the trick as to how the two reflectors click.



The first time when you push the rocket off the way into the tube.

The second'll be there after you push half of the way into the tube, and you'll pull the rocket back slightly.

After you have the second click, you can flip the trigger on for impact.

Now, if you don't hear that second click, you'll know the rocket's not seated right — and won't go off when it's supposed to.

MAKE THE SCOT — Mounting across back, lamps, head or horned out, reflector plate and upper objective lens dry. Internal fogging.

Watch your buddies as keep their noses sticking fingers off the reflector plate and lens — fingerprints ruin glass and plastic. The reflector plate's made of plastic, so be sure you don't use alcohol or grease in, here since or a clean, lint-free rag's the order to use.

To get rid of the fogging, follow the steps in para 24b(4) of TM 9-1005-217-28 (Apr 64). A pilot can't see when he can't see in this equipment.

Incidentally, if the Huey's going on a night mission, the present theorem won't allow the bulb to be dimmed enough so's the pilot can see and aim

at the target through the reflector. In fact, it's now built that'll partly correct this. Ask for lamp . . . FMV 8149, 11-6000.



HAWK NOTES

A DIRTY DEAL

YOU THINK ASSEMBLING a whole lot of slip rings and support rods is a dirty deal? Well, it is. But it's a whole lot better than not doing it.

Just that doesn't belong on the slip rings can lead to aching . . . and this can be where cancer does decide — the kind that makes terminals. When this happens in your CRT amp, the tube and slip assembly go on the front.

You can't do anything about cleaning the slip rings, but you can get the word to your support rods to do the job. And it needs to be done between 50 and 75 hours after the slip rings are put into use . . . and then semi-annually after that.

THIS'LL HOLD 'EM, MAN!

Here's all that loose mounting holes on the drive-gear assembly of some Hawk AM/MPQ-34 radar are now working loose and getting people jittery.

Here's how you can keep yours in place. Get your support people to take off those holes (2814-204-004-0000), replace 'em with MS-20574-08-10 and MS-20574-08-11, and then safety wire 'em like it's spelled out in para. 28.1 of TM 9-1458-905-14.

Those holes are listed in TM 9-1458-904-11P/1 (para. 25) under P/N 1086-008-0070 and P/N 5306-025-1005.



Then have 'em drill a hole in the nut (AN309-10) and safety wire it to the gear.

This'll calm things down.



ENERGY ON THE LOOSE

Here's the plan:

The Honda AMFMFG-11 high power transmitter was being rotated between -300 and +300 mHz in elevation and between 500 and 1200 mHz in azimuth when the Doppler tracking code locked. Right?

Everything was OK, while tracking in all other elevation and azimuth settings. What's the issue?

It just so happens that the Doppler



code rotates a track that below the antenna when the antenna is rotated between -300 and +300 mHz in elevation and between 500 and 1200 mHz in azimuth. In the ordinary, as you know, are a high speed motor and pump that turn the RF energy.

Now . . . if the ground straps and the RF shield on the cabinet door and cabinet aren't grounded right because they're corroded, the RF energy can make its way through the antenna. And that's all it takes to lock the DFTL be-

cause the RF energy is within the unit's frequency range.

So what do you do to make sure you don't get DFTL lock? Don't let corrosion build up on the ground straps and RF shield. That's what. And make sure the cabinet door's tightly shut.

ONCE THE WORK

Another thing about your RFV . . . do you have a "leak" in the cabinet? That's what the high voltage power supply could be if its pressure relief valve is installed the wrong way.



There's an arrow on the valve and it wants to be pointing away from the unit at the base of the power supply. If it's not, and your support people say it can be installed upside down.

With the valve installed wrong, the brass nozzle could be put under enough pressure to force something to give, like maybe the sides of the power supply.

When you check

You're 'way off base if you remove or replace any part of the antenna assembly (PM 240000) on your Honda's AMFMFG-11 especially the RF shield without seal.

Why? Cause if you take off or replace any part, the antenna's gonna need reworking—which you're not authorized to do. No plans, hands off, huh?

As for the freshwater seal, if that goes bad, don't you go around to replace it, huh? Let the guys in direct or general support do it.

OH, NO YOU DON'T!



A REAL PUNCH



When you think that a coolant solvent with water could give you a liquid that would get hot as the result of something like a torch.

See that's just what can happen, when the G44 coolant used in your Honda AMFMFG-11 puts any rather more up with water. The solvent-water mix is able and is ready to burn hot due when it's ignited by a flame.

In other words . . . you want to do all you can to keep the coolant and water from getting together. One big help is to make sure the potlocks on the radiator are open so that spilled coolant and loose water have a way to get out of the cabinet before they have a chance to stick it up. And top up with a big bag coolant and water that don't run out the potlocks.



ANNOUNCE

Readers are asked to contribute to the 1984 edition of a book on expanding their export business.

IMPORTERS' NEEDS

The following firms are the U.S. and foreign suppliers of the 1984 edition.

THE IMPORTERS' NEEDS, INC. 10000
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STRETCH YOUR 2765-1 FORMS

Have You Heard?

Every printing of DA Form 2765-1, "Request for Information and Transfer" will consist of a three part form, instead of a three part form. This will help you supply guys who have had to make an additional copy for various uses.

Here's a helpful hint: When your supply support section needs four copies of the DA Form 2765-1, you may have to make up your own four part form by adding an extra copy to the present form.

All you do is put the three carbon and the three copy from a fresh DA Form 2765-1, slip them into the form you're going to use, and staple 'em.

That's all.

There's no change in the procedure, or anything else. All you do is fill out three copies, instead of three, for each request and forward the copies to support as usual. Just be sure to pen in hard if you're using a ballpoint pen, so all the copies will be easy to read.





WOLF
ONE



THE NEW VOICE OF
STREET PHOTOGRAPHY
AND THE NEW VOICE OF
STREET PHOTOGRAPHY
AND THE NEW VOICE OF
STREET PHOTOGRAPHY



100% SATISFACTION
 GUARANTEE
 100% MONEY
 BACK GUARANTEE
 100% SATISFACTION
 GUARANTEE



There's just something that you
 "have" come out there
 from that and it's
 not - just the
 a matter of
 carrying out the
 and the... things
 to make the
 good.





Dope Sheet

THE PINPOINT SYSTEM

FOR THE
FLOOD
COMBUSTION
OR
MOTOR



HERE'S HOW THE PUBLICATIONS
SYSTEMS WORK FOR **YOU!**



FORMULA SYSTEM



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

IF YOU WANT TO DISPLAY THIS CONTROVERSY ON YOUR BULLETIN BOARD, OPEN IT UP, LIFT IT OUT AND PIN IT UP!



GROUND MOBILITY

SHORT TIME BRAKES



A big surprise may be waiting for you if you use your M502, M545 or M545 Trac. wrecker's short-time brake lock while you go off up a considerable picking wilderness. When you get back the wrecker's little to be gone — down the mountain.



**PLEASE DO NOT
FORGET
TO LOCK
THE
BRAKE
PEDAL
WHEN
OPERATING
THE
BRAKE.**

**WHETHER YOU HIT THE BUTTON FIRST OR THE BRAKE PEDAL FIRST — JUST MAKE
SURE THE BUTTON'S HELD IN WHEN THE PEDAL IS PRESSED DOWN — THEN RELEASE
THE BRAKE PEDAL BEFORE YOU RELEASE THE BUTTON.**

This brake-lock is meant to be used only when you're operating the crane. It goes into action when you press down on the brake pedal and then push in the lock button. The brake-lock valve locks into the closed position, keeping hydraulic pressure on the lines. Then, to release it, you push in the brake pedal.

Don't use the brake-lock for ordinary parking. You may be gone longer than you think, and all the time that pressure is on your brake system. The hydraulic fluid may leak back or finally run through the weakest spot in the brake system. Then — no brakes!

Your brake-lock won't prevent any other accident when you push the button.

BOWS FOR 5-TONNERS



**NEW BOW
FOR 5-TON
TRUCKS
FOR 5-TON
TRUCKS**

**NEW BOW
FOR 5-TON
TRUCKS
FOR 5-TON
TRUCKS**



There's a new vehicular rig here for 5-ton 5-ton trucks. For 5-ton trucks, replacing 5-ton 5-ton trucks. For 5-ton trucks, replacing 5-ton 5-ton trucks.

It's 5-ton 5-ton trucks — longer than the old ones.

The bow goes on the 5-ton 5-ton trucks, for other models only.

5-ton 5-ton trucks with bow will be 5-ton 5-ton trucks. For 5-ton trucks, replacing 5-ton 5-ton trucks.

LEADS
AWAY!

UGH! BALL JOINT—NO PLAY!



Dancers, workers and construction like these joints, too, your ME-51 1/4-oz. work done's.

Ball joints in your vehicle's front suspension system carry the weight of the vehicle. When your vehicle is at rest with its full weight on the wheels, there's no play in these ball joints — at least, there's not supposed to be.

WELL, YOU MEANT
YOUR ME-51 1/4-oz.
WORK DONE'S! YOU
KNOWED THAT IN THE BALL
JOINTS IN YOUR VEHICLE
THERE WAS NO PLAY
WHEN THE VEHICLE WAS
OFF THE WHEEL.



And another thing — that allowable play doesn't mean sloppy work. It's just the difference between two measurements of the ball joint — first with the vehicle's weight on the wheel and then with its weight off the wheel.

Hold it again, Dave! You want to get a new picture if you lift the wheel off the ground, right? Cause you'll have the weight of the wheel on the ball joint leaning up the stud.

Like it says in your '80 TM, page 141, if you get more than 1/4 in. difference in the two measurements, it's time to replace the lower ball joint.

That little bit of allowable play — just when the vehicle's weight is off the wheel — is in the lower ball joint. That's because the wheel weight is on the upper joint now, besides, the upper joint is spring loaded. There's no pressure on the lower ball joint, so it will give a little.

ME-51
WITH
WHEEL
ON
WHEEL



ME-51
WITH
WHEEL
OFF
WHEEL (NOT
WITH WHEEL
ON WHEEL)

LOOSE PLUG — LOOSE YOKE



Dear Mr. Editor,

Should the front end use differential spline yokes (PSC 1000-140-0000) on our M51 1/4-ton truck for loose when the yoke hole is tight? Will a loose yoke cause any 3-point damage?

YPS L.A.,



Dear Specialist P.A.D.,

The yoke should fit tight on the spline. If it doesn't then it's most likely due to a loose plug inside the yoke. The trouble caused by a loose yoke will wear the spline and lose.

So . . . if the hole is tight but the plug is loose then you need a new yoke changed assembly.

High Heat

NO SWEAT



So normally your M51 1/4-ton truck engine runs away like a hot box on a summer day. But when it's killing you hear an unusual noise coming from the front. Sounds like it's grinding! Some gears. No sweat! The sound you hear comes from the timing gear meshing. Forget it! The noise won't affect either the life or the function of the engine.

PINTLE LUBE FITTING

HEY! LUBRICANTS
DON'T LUBE
THAT!

WHY WOULD
ANYONE WANT
TO LUBE
THAT?

Dear Staff/Alan,

Where does it go?

That then is question is the pintle lube fitting on our 3-1/2-ton G742 series trucks. Some of our fleet's have the pinole attached on stream on page 112 in TM 9-1320-209-10 (Apr 59). This puts the pinole's lube fitting on the the frame where it goes— you can't reach.

Other trucks have the lube fitting on the other side of the frame. Liding this one is no problem.

Can we change all the fittings to the outside position?

SP2 D.B.S.

Dear Specialist D.B.S.,

Yes. The -20P showing the lube fitting behind the vehicle frame has been superseded. Page 112 in the new -20P dated January 1962, shows that the fitting goes on the outer bracket.

Every G742 series truck should have its pintle lube fitting on the bottom of the outside bracket. Just like the new operator's manual TM 9-1320-209-10 (Feb 60) shows on page 112.

Half Mast

LET 'EM DRAIN

Dear Staff Editor,

Some 3-1/2-ton trucks have their hydraulic working drain plug in and some have 'em out. What is the guideline on this? All TB's do not spell it out.

Sgt. D.F.M.

Dear Sergeant D.F.M.,

The general guideline is covered in TB 5-2000-204-10 (Aug 69). This discusses waste oil control wheeled vehicles, except those equipped with automatic transmissions, or have their plugs out.

This is done to keep the engine and transmission lubricated and keep them from piling up and causing the clutch to slip or fail.

The automatic trucks do not have a clutch so they're not affected. Their plug stays put and is only removed when the working mode draining — like after fueling.

John Doe



THIS FOR THAT...

NEW FOR G742



Things look sharp, now, to keep tabs on what you need and don't need for your 2 1/2-ton G742-series truck — and this goes for the M50A1 and other multi-task jobs, too.

Now that you've got with TM 5-2330-205-10 (Feb 69), you deserve our guess: TM 5-2330-211-10 (Dec 69) and also the operator's manual in TM 5-2022 (Dec 69). Deal now, too, is the staff in TM 5-2330-205-12 (Jan 69) that applied to operators. TM 5-2330-205-20 (Apr 69) is now the new bible for organizational maintenance — this kills off the TM 5-2000 and TB completely. But hang onto your copy of the old TM; it has some good background info that wasn't picked up in the new TM.

And there's a new parts manual on the G742-series for organizational maintenance — TM 5-2330-205-20P (Jan 69). This does away with TM 5-2330-205-20P (Apr 69) and TM 5-2330-211-20P (Jan 69).



TiRES... TEN-SHUN!

Everybody says you, with vehicles alone — but a lot of bunsles couldn't be won without 'em. The day of all push buttons and robots isn't here yet — and when the day does come, a lot of those robots will run on wheels.

So, for a long time to come you and your vehicle carry a big responsibility.

Without you and your truck, a lot of guys won't get where they're supposed to go or won't get the supplies and other stuff they need when they get there.

You're responsible for a real organization when you're gripping the steering wheel of that tactical wheeled vehicle. That vehicle is a whole lot of parts "organized" to do a certain job.

And your "organization" depends on a real bunches equal to do its mission. That's the "tenshun." Without those tens, your vehicle isn't going anywhere — or, less, not very far or very fast.

So you're the "tenshun leader" for those all-important tens. Your "tenshun" may be made up of anywhere from five (including the space) to 14 tens, depending on whether you've got a 14-ton truck or a 4 x 4 random dual job.



GAINING TIRE STRENGTH

Now, how's your "tenshun?" You find out with a full-scale inspection. All you need the first time around is a tire gauge — and a lot of rubber's eyeballs.



USE A GAUGE
BEFORE
BUYING
YOUR TIRES.

Your vehicle's M&M and other places tell you what air pressure's needed — and that'll be still good according to whether you're traveling in sand or snow or on the highway.



THIS IS
THE
BEST
WAY
TO
TENS.

A little too much air is not enough — some more water is often the point the best will be all over it when there's still good tens left in other places — but the best like that before it, too.



FOR
CONTACT
THE
BEST
TENS
ON
THE
ROAD.



ONE

TWO THREE

FOUR FIVE



**VALVE
CAP**



YOUR CAPS MATTER



**VALVE CAPS
MATTER**

You can't check the air pressure without taking the valve cap off—and there should be a valve-cap-on tab off. Without a protective cover, the valve can be knocked up by water, dirt and tire stones.

If it's a dual wheel job you're going over, see if the valves are positioned right. The "right way" protects the valves and makes them easy to get at ... inside ... is the disk in position "on or" ... and other.



VALVE CAPS MATTER, TOO

A little dust or grit'll do it—if you want to check for a leaky valve when your tire's mounted on the vehicle so you can't check it in a safe manner. Dust from the valve stem opening and watch for bubbles. If you've got a leak, maybe the valve stem only needs tightening ... or maybe some dirt's got down in there and is holding the valve open ... or, more likely, you need a new valve stem or need to "change" the threads.



WATCH TEAM

Any team (or horses) a team of horses should be pretty much the same size to get the best results. It's just that simple with tires — they operate in teams, too.

Properly mounted they will remain a well-matched team, and you'll get the most out of each tire ... Here's a guide for matching of the positions:





WATCH YOUR ACHILLES' HEELS — ESPECIALLY THE "BAG" AREAS. HERE.



WHEN TO RECAP

There can show plenty signs of wear and still be good for many more miles before recapping. Keep 'em rolling' right up to the time for recapping — but not a minute longer. Once the cord shows through, that tire's had it — it's junk.



When the tread design is worn off evenly in the center, and has a wide smooth surface, take it off because it's ready to be scrapped.



A surface as medium smooth surface is not worn enough to get it scrapped. There's still plenty of tread design in the center — enough to give more miles of service.



If you find these irregular wear — so that the tread looks like it's not even — it's worn through the tread design in several spots — get it scrapped.



It's the one that looks like this, although I show shallow irregular wear and very little smooth wear surface, is not ready for scrapping. Still get plenty of wear.

MECHANIC TO THE RESCUE

As an operator, you may be only an assistant when it comes to mechanical adjustments, but, as "the squad" leader, you're the guy-in-the-know when it comes to spotting the need for mechanical adjustments to keep your "squad" in good shape.



THAT LINE ON THE SIDE OF THE TIRE ISN'T A SIGN OF WEAR — IT'S A WARNING LINE!



WHEEL SHOULD BE BACKWARD



THIS SHOULD BE BACKWARD



THIS SHOULD BE BACKWARD



Did you know that a wheel on that 'X' looks out of alignment causes the tire to drag it? And in every mile!

You'll have a real of worn rubber behind you, too, if your vehicle's got such other and guess as wrong running alignment, spring axle, faulty wheel bearings or troubles in the brake drum, wheel or spring.

What's your chance got to do with your drive? Well, if your chance is the quality kind, it means you off with a jump — one of the quickest ways to burn some of the rubber off your drive.

LOOK IN WHEEL

In your drive all look really 'in' wheels', huh? From a distance, that is — but how about close up?



DRIVE ON THE LOOKING-GLASS

Now you've given the right-eye to every member of your "squad" — but not. That's you — the leader (also known as "equipment operator").





NOW, WHEN IT COMES TO MOUNTING ...

There's no need to lose your head — which you can do if you're not careful — when mounting tires on rims with locking rings. Stick to the directions, as given in TM 9-1376-1 (beginning on page 61 for these rims, and the rings shouldn't give you any trouble.



Play it safe, too, by making sure you've got the right rings for the rims. And make sure of rings that've damaged or badly rusted so they don't fit snug — and stay snug.

Get all the air out before you start taking the tire off the rim. And when you're assembling the tire, rim and ring, put in only about 5 pounds of air — or just enough to shape and seat the tire. If you have to tap the ring into place, you don't want a lot of pressure behind it in case it pops out.

Plains has snap welded on the tire bead will make the tire and rim go together easier. Oil and grease are not — they'll ruin the rubber.



YOUR NO. 1 COMMON TOOL KIT



Consider it done — Know-how Plus Tools equals Preventive Maintenance. You say you know the know-how but may be missing some of the tools.

It's the No. 1 Common Organizational Maintenance Tool Kit, PSM 4948-0004. You need to check, here's your guide.

Remember, a difference in the manufacturer may make a difference in the way a tool looks but not the way it works.

You get one each of the tools unless noted.

You'll find these tools in ISO 9-4-0000-000 (ISO 9-4) and in three changes.

So start to look for the air compressor, PSM 4548-0004 (ISO 9-4) is now here in a Long Horn Member in your state's TOE.

NO. 1 COMMON ORGANIZATIONAL MAINTENANCE TOOL KIT PSM 4948-0004

AIRPUMP, ELECTRIC MOTOR 1/2 in. dia. x 1/2 in. dia. x 1/2 in. dia.



FOR TOOLKIT

AIRPUMP TOOL, HAND PUMP, 1/2 in. dia. x 1/2 in. dia. x 1/2 in. dia.



FOR TOOLKIT

AIRPUMP TOOL, HAND PUMP, 1/2 in. dia. x 1/2 in. dia. x 1/2 in. dia.



FOR TOOLKIT

AIRPUMP TOOL, HAND PUMP, 1/2 in. dia. x 1/2 in. dia. x 1/2 in. dia.

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FOR TOOLKIT

AIRPUMP TOOL, HAND PUMP, 1/2 in. dia. x 1/2 in. dia. x 1/2 in. dia.



FOR TOOLKIT

AIRPUMP TOOL, HAND PUMP, 1/2 in. dia. x 1/2 in. dia. x 1/2 in. dia.



FOR TOOLKIT

TRUNK, SPARE
 MADE vehicle spare
 parts storage. 1 hole
 square top, w/11
 drawers. 20-1/2 in. h.
 25 in. w. x 25 in. deep
 overall.



FOR DISPOSITION

1 in vol

**CABLE ASSEMBLY, CLOSING PURPOSE, ELEC-
 TRICAL** 1 cable standard no. 1 AWG. to 100
 no jacket, 20 ft. lg overall, 20 ft. 20 in. lg
 end termination, 3/16 in. x 1 1/2 in. area
 net, 2 plug type term fittings.



FOR DISPOSITION

1 in vol

GAZE, WIDE OPEN, 10 TON, 4 ft. 10 in.



FOR DISPOSITION

1 in vol

**CORNER, CORNER BATTERY, 1000 amp
 type, 10 ft. 10 in.**



FOR DISPOSITION

1 in vol

**CLAMP, WIRE SPRINGER, SPRINGER WIRE,
 24-28 in. to 4-7/8 in. to 10 in., sliding arm
 type, 1 clamp, 1 clamp per set.**



FOR DISPOSITION

1 in vol

**COILING MAT, 1000 SPRINGER, 1000
 ft. 10 in. to 1000 ft. 10 in. to 1000 ft. 10 in.**



FOR DISPOSITION

1 in vol

**COILING MAT, 1000
 SPRINGER 1000 ft. 10 in. to 1000 ft. 10 in.**



FOR DISPOSITION

1 in vol

**COILING MAT, 1000 SPRINGER, 1000
 SPRINGER 1000 ft. 10 in. to 1000 ft. 10 in.**



FOR DISPOSITION

1 in vol

**COILING MAT, 1000 SPRINGER, 1000
 SPRINGER 1000 ft. 10 in. to 1000 ft. 10 in.**



FOR DISPOSITION

1 in vol

CORNER, 1000 ft. 10 in. to 1000 ft. 10 in.



FOR DISPOSITION

1 in vol

**COILING MAT, 1000 SPRINGER, 1000
 SPRINGER 1000 ft. 10 in. to 1000 ft. 10 in.**



FOR DISPOSITION

1 in vol

EXTRACTION KIT, SCREW (screw type, spiral thread with slots, with head 3, 4, 5 or 6 of the following)



FOR EXTRACTION

FOR 1/8"-10-UNC-2S	0.254 to 0.255
FOR 1/8"-10-UNC-2S	1.414 to 1.415
FOR 1/8"-10-UNC-2S	1.414 to 1.415
FOR 1/8"-10-UNC-2S	1.414 to 1.415
FOR 1/8"-10-UNC-2S	1.414 to 1.415
FOR 1/8"-10-UNC-2S	1.414 to 1.415
FOR 1/8"-10-UNC-2S	1.414 to 1.415
FOR 1/8"-10-UNC-2S	1.414 to 1.415
FOR 1/8"-10-UNC-2S	1.414 to 1.415
FOR 1/8"-10-UNC-2S	1.414 to 1.415

FILE, HAND, AMERICAN PAT. 8 to 10 in. (file cut, round face, file head to pt.)



FOR 1/8" DIA. ROD

FILE, HAND, AMERICAN PAT. 8 to 10 in. (file cut, beveled face, square beveled edges, 12 in. head to pt.)



FOR 1/8" DIA. ROD

FILE, HAND, AMERICAN PAT. (beveled type, file cut beveled faces, 12 in. head to pt.)



FOR 1/8" DIA. ROD

FILE, HAND, AMERICAN PAT. (flat type, one cut, 11 in. file cut, both ends up to other cut, 12 in. head to pt.)



FOR 1/8" DIA. ROD

FILE, HAND, AMERICAN PAT. (flat type, one cut, one face, square on edges, 12 in. head to pt.)



FOR 1/8" DIA. ROD

FILE, HAND, AMERICAN PAT. (flat type, 1 1/2 in. dia. of square cut, file cut beveled face, 12 in. head to pt.)



FOR 1/8" DIA. ROD

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

FOR 1/8" DIA. ROD

FORMING TOOL, PREPARING THE END (square end for the inflation)



FOR 1/8" DIA. ROD

FLARING TOOL, TOOL, HAND, one row, straight end, flat, for 1/8 in., 1/16 in., 1/4 in., 1/8 in., 1/16 in., 1/4 in., 1/8 in., 1/16 in., and 1/4 in. to 1/8 in. (45 deg. angle of face produced, not including distance for 1/16 in., 1/4 in., 1/8 in., 1/16 in., 1/4 in., and 1/8 in. to 1/16 in.)



FOR 1/8" DIA. ROD

FLARE, HAND, BACKLASH, all open (with one row, 1 in. to 1 1/2 in. depth of throat, 12 in. and 12 in. by handle)



FOR 1/8" DIA. ROD



BL, BR, PROTRUSOR curved rigid wire, 12 to 18 in.



FOR 100-025-001

PLUGS rigid wire, 7 in. dia.



FOR 100-025-001

PLUGS, BARE, HEAVY curved, flat, flat and rectangular bare prongs, rectangular 1/2 inch, square and gate end handles, 12 1/2 in. lg.



FOR 100-025-001

PLUGS, HEAVYWEIGHT rigid, bare flat, formed 3/8 in.



FOR 100-025-001

PLUGS flat, rectangular wire type, flat side handle type, 2 1/2 by 3 1/2 in. to 3 1/2 by 4 1/2 in. width range, 7 in. to 10 1/2 in. inside length.

FOR 100-025-001 Continuing on

FOR 100-025-001

1 standard buffer 4 in. lg.



FOR 100-025-001

1 jaw, inside 3-11/16 in. lg.



FOR 100-025-001

1 jaw, inside 4-11/16 in. lg.



FOR 100-025-001

2 jaws, outside 4-11/16 in. lg.



FOR 100-025-001

2 jaws, outside 5-11/16 in. lg.



FOR 100-025-001

1 jaw, single 5-11/16 in. lg.



FOR 100-025-001

1 jaw, single 6-11/16 in. lg.



FOR 100-025-001

2 jaws, puller 3 1/2 in. lg.



FOR 100-025-001

1 end, handle 3 1/2 in. dia.



FOR 100-025-001

2 jaws



FOR 100-025-001

1 side handle 4 in. lg.



FOR 100-025-001

1 end 28 in. lg.



FOR 100-025-001

1 jaw 2 1/2 in. dia.



FOR 100-025-001

1 jaw 2 1/2 in. dia.



STRONG, STEEL, MARKING: 40 and 40T (pencil), letters A thru Z, numerals 0 thru 9, 1 upper case, apostrophe, comma, period, space & 4 end pc. 1 in. 5 characters.



FOR 100-00-000

STRONG, STEEL, MARKING: 40 and 40T (pencil), letters A thru Z, numerals 0 thru 9, 1 upper case, apostrophe, comma, period, space & 4 end pc. 2 in. 5 characters.

FOR 100-00-000

STRONG, STEEL, MARKING: 40 and 40T (pencil), letters A thru Z, numerals 0 thru 9, 1 upper case, apostrophe, comma, period, space & 4 end pc. 3 in. 5 characters.

FOR 100-00-000

STRONG, STEEL, MARKING: 40 and 40T (pencil), letters A thru Z, numerals 0 thru 9, 1 upper case, apostrophe, comma, period, space & 4 end pc. 4 in. 5 characters.

FOR 100-00-000

STEEL, (PAPER/PLATE) MARKING: 40 and 40T (pencil), letters A thru Z, numerals 0 thru 9, 1 upper case, apostrophe, comma, period, space & 4 end pc. 5 in. 5 characters.



FOR 100-00-000

STEEL, (PAPER/PLATE) MARKING: 40 and 40T (pencil), letters A thru Z, numerals 0 thru 9, 1 upper case, apostrophe, comma, period, space & 4 end pc. 6 in. 5 characters.



FOR 100-00-000

STEEL, (PAPER/PLATE) MARKING: 40 and 40T (pencil), letters A thru Z, numerals 0 thru 9, 1 upper case, apostrophe, comma, period, space & 4 end pc. 7 in. 5 characters.



FOR 100-00-000

1 in. 5

STEEL, (PAPER/PLATE) MARKING: 40 and 40T (pencil), letters A thru Z, numerals 0 thru 9, 1 upper case, apostrophe, comma, period, space & 4 end pc. 8 in. 5 characters.



FOR 100-00-000

STEEL, (PAPER/PLATE) MARKING: 40 and 40T (pencil), letters A thru Z, numerals 0 thru 9, 1 upper case, apostrophe, comma, period, space & 4 end pc. 9 in. 5 characters.



FOR 100-00-000

STEEL, (PAPER/PLATE) MARKING: 40 and 40T (pencil), letters A thru Z, numerals 0 thru 9, 1 upper case, apostrophe, comma, period, space & 4 end pc. 10 in. 5 characters.



FOR 100-00-000

1 in. 5

STEEL, (PAPER/PLATE) MARKING: 40 and 40T (pencil), letters A thru Z, numerals 0 thru 9, 1 upper case, apostrophe, comma, period, space & 4 end pc. 11 in. 5 characters.



FOR 100-00-000

1 in. 5

STEEL, (PAPER/PLATE) MARKING: 40 and 40T (pencil), letters A thru Z, numerals 0 thru 9, 1 upper case, apostrophe, comma, period, space & 4 end pc. 12 in. 5 characters.



FOR 100-00-000



FOR 100-00-000

STEEL, (PAPER/PLATE) MARKING: 40 and 40T (pencil), letters A thru Z, numerals 0 thru 9, 1 upper case, apostrophe, comma, period, space & 4 end pc. 13 in. 5 characters.



FOR 100-00-000



FOR 100-00-000

WRENCH, LEFT FLANK, heavy or wall end
single cutting-edge type, 15/16-in. length tool.



FOR REMOVING

WRENCH, LEFT FLANK, heavy or wall end
single cutting-edge type, 15/16-in. length tool.



FOR REMOVING

2 in. and

WRENCH, LEFT FLANK, offset double type
1 1/2-in. to 1 3/4-in. 12 pt. range, 20 in. length.



FOR REMOVING

2 in. and

WRENCH, LEFT FLANK, offset double type
1 1/2-in. to 1 3/4-in. 12 pt. range, 20 in. length.



FOR REMOVING

WRENCH, LEFT FLANK, offset double type
1 1/2-in. to 1 3/4-in. 12 pt. range, 13-14 1/2 in. length.



FOR REMOVING

WRENCH, LEFT FLANK, offset double type
1 1/2-in. to 1 3/4-in. 12 pt. range, 13-14 1/2 in. length.



FOR REMOVING

WRENCH, LEFT FLANK, adjustable, right-hand type
8 to 1 1/2 in. range, 20 in. length.



FOR REMOVING

2 in. and

WRENCH, LEFT FLANK, adjustable, right-hand type
8 to 1 1/2 in. range, 20 in. length.



FOR REMOVING

2 in. and

WRENCH, LEFT FLANK, offset double type
12 pt. range, 1 1/2 in. to 1 3/4 in. range, 13-14 in. length, 13 in. length.



FOR REMOVING

2 in. and

WRENCH, LEFT FLANK, offset double type
12 pt. range, 1 1/2 in. to 1 3/4 in. range, 13-14 in. length, 13 in. length.

FOR REMOVING

2 in. and

WRENCH, LEFT FLANK, offset double type
12 pt. range, 1 1/2 in. to 1 3/4 in. range, 13-14 in. length, 13 in. length.

FOR REMOVING

WRENCH, LEFT FLANK, offset double type
1 1/2 in. to 1 3/4 in. range, 13 in. length.



FOR REMOVING

2 in. and

WRENCH, LEFT FLANK, offset double type
1 1/2 in. to 1 3/4 in. range, 13 in. length.

FOR REMOVING

WRENCH, LEFT FLANK, offset double type
1 1/2 in. to 1 3/4 in. range, 13 in. length.



FOR REMOVING

WRENCH, LEFT FLANK, offset double type
1 1/2 in. to 1 3/4 in. range, 13 in. length.



FOR REMOVING



RUE REAL EASY

Even when repair parts for your MIRC tank truck's motor and get into the supply system, there'll be no trouble for maintenance' is.

The ground cable that comes off the red is important in equalizing static electricity between your motor and whatever you're pulling' feel less as there'll be no sparks igniting fumes from the fuel.

As when you let the reel unwind the cable, let 'er in easy. If you let 'er fly back, you're going to wind up with a tangled cable or with a reel that won't let the cable out or won't take it back in. And while you're coiled the cable back in, let 'er run through a trap so it won't carry grit and other junk into the reel's innards.

You've probably noticed, too, that the weight of the trap ball intelligently slip out to make the cable end hang down away from the red motor hole.

Then, when you're starting, it whips around and gets chewed up.



If the cable's already chewed up, it's not much of a job to take a fresh bite out of the cable by moving the ball and clip up a bit.



Weapons Go PinPoint

Get DA Circular 210-42 (2 Sep 62) for the recap on artillery, small arms and sighting and fire control equipment going on pinpoint distribution.

DA FORM 12-40—ARTILLERY AND SMALL ARMS

DA FORM 12-41—SIGHTING AND FIRE CONTROL EQUIPMENT

Get your forms in to the DA Issue Policy Center by 29 Nov 62 for tested copies.

ETR Digest

The Electronics Command ER and Maintenance Digest will wear a new official number next time around. Instead of the TR 540 143-series designation, the electronics digest is coming out as TR 750-1 ET (27 Jul 63).

PS Back Issues Going Fast

The only available back issues of PS Magazine are listed below. Drop a note to PS Magazine, Fort Russ, Kentucky 40121 for those you need. Here's what the PS issues 1, 2, 3, 4, 16, 18, 226, 137, 138, 139, 140, 141, 142, 143, 144, 145, 146, 147, 148, 149, 150, 151, 152, 153, 154 and 155.

RL-37 Installation Kit

Been looking for the installation kit that puts the RL-37 rail unit in the M113 gunner's foot? Take a peek at page 2 of DA 11-101 (Sep 62). You'll find the kit under 104 (204) KIT 3890.

A Fandango Tip

Working days don't last? Huh? If you're testing M113 hand grenade simulators on maneuvers, take a tip from Charlie B to TM P-1270-200 (Dec 58) and wear a leather glove on your plinking hand. These simulators have been known to go off ahead of time. Any of these gloves will do: Line Number 308488 (POM 0413-248-8300 size 07), or line Number 308129 (POM 0413-140-0889). You'll find 'em all in Supply Catalog C8405/13-46-A (1 Oct 60).

Final Drive for Comicon

Need a final drive for an M113 personnel carrier, an M113 command post vehicle or an M113 mortar carrier? The right PDM for the final drive assembly is PDM 2520-894-P164. You might want to get this on page 160 of your TM P-1280-214-20473 (Nov 62).

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



**CHECKED YOUR
OIL LEVEL LATELY?**

LIGHT WINTER-
WEIGHT OILS GET
USED UP FASTER
THAN SUMMER-
WEIGHT OILS!
YOU CAN BURN OUT
YOUR ENGINE...
AND CHANGE
THE FUEL OIL.

TRUCK
ROADWARD

80 Km

**CHECK WINTER-WEIGHT
OIL LEVEL OFTEN**