

PS

THE
PREVENTIVE
MAINTENANCE
MONTHLY

Issue 24
Series 1954





**DURING INSPECTIONS
YOU'LL BE RATED ON**

SERIOUS MATTERS

LEAD-HOE EQUIPMENT "SERIES"

Dear Field-Man,

Again and again the boys cry for a standard of inspection. They say they don't see a damn other standard set out, if only the Institute, groups, job commanders and the damn inspectors will agree on what it is and what it can mean by the regulations.

They also want a method of telling the difference and showing the ones between a minor deficiency—such as a loose or missing glove-compartment latch—and a major deficiency—such as doing seriously bad or all or none. Or say when that deficiency like loose moving parts or leaky brake lines—the use of deficiency which is a real danger to the continued safe operation of the vehicle.

As of now, on most inspections, all gips count alike, and the guy who never expects the examiner's look just as bad as small junk as the manhood who shows little crap that means the vital parts.



APC 25, 26, 27.



THE CONSOLE The major shift-lever is moved, the gas peddle can be used but you don't see it. No, the old-fashioned right kind of arrangement for the vehicle and engine will have the highest service life and long.

IN THIS ISSUE

Issue No. 24

1960 Edition

FEATURE ARTICLES

New Gun Tools	8
440 — Game Ball	9
Hydro-Matic From Suzuki	14
ET Cells/Massachusetts	16
A New Light Fixture	20
New To Pin-Gun & 488	24
New To Gun Brake Pylons	27

1944-1945 by R. C. C.

As I have seen about 100 copies of letters to the Editor from a little while ago and it seems to indicate that I shall not have to be a member of the "New" group for long and will be able to do so.

Johnnie, you are a wonderful comedian, though, in the end, I am sure, you will be a member of the "New" group for long and will be able to do so.

Editor: I have a question for you. I have seen about 100 copies of letters to the Editor from a little while ago and it seems to indicate that I shall not have to be a member of the "New" group for long and will be able to do so.

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Small Motor-Cleaning		Electrician	50
W. Solberg	25	Publications Editor	50
Technical Editor (IEEE New Control)	25	Engineer	50
Manufacturing Editor	25	Construction	50
Books for The World (Engineers)	25	Canada-Russia's Strife	50
Representatives (Engineers)	50		
DEPARTMENTS			
Canada News	15		
Mail Room	50		
		IEEE Magazine - covers your ideas and activities, and is glad to receive your questions. Just write to IEEE, IEEE Magazine, American Institute of Electrical Engineers, 445 North 3rd Street, New York, N. Y.	

The purpose of the magazine is to provide a medium for the exchange of ideas and information among electrical engineers. It is a forum for the expression of your views on technical and professional matters. It is a place where you can voice your opinions and share your experiences with your colleagues. It is a place where you can learn from the experiences of others and contribute to the advancement of the profession. It is a place where you can meet and hear from other engineers and discuss their views on technical and professional matters. It is a place where you can share your ideas and activities and receive feedback from your colleagues. It is a place where you can learn from the experiences of others and contribute to the advancement of the profession. It is a place where you can meet and hear from other engineers and discuss their views on technical and professional matters. It is a place where you can share your ideas and activities and receive feedback from your colleagues.

NEW GUN BOOK

Keep your numbers in this
Little Brown Book and you'll—

ALWAYS HAVE A SURE THING



Everybody's heard about the "Gun Book" that sells big and fast. But we're gonna tell you about the **Little Brown Book**.

It's got the same thing for you, but they cover different types of equipment—and performance.

You know how it is with the little black book. There's at least one guy in every outfit who tells you to buy the book—he has every phone number you ever heard of, complete with gun performance, capacity, limitations, and features listed 'til it makes your head spin.

Same way with this here new gun book (**Weapons Record Book**). It's packed full of the greatest and smartest in giving you the right clue for time you want it—what kind of shape that's in.



The way it does the book is really that simple. The secret is in having one **444**—but **two** books. These two are coupled together so you can have both as one book. How'd you tell 'em apart? **Part I** and **Part II**, naturally.

PART 1

CARRIAGE OR MOUNT

Let's take a look at the newer, third thing to remember is that Part 1 goes with the carriage or mount form. Don't mix it up with the other forms. You'll need to make only one copy of the inside pages in Part 1, since this copy with the carriage or mount card is a continuous development of . . .

WEAPON MOUNTED COPY

FORM 1 (CHANGE FROM EARLIER EDITION)

155-MM HOW

M1

2187

Wvt. R 1952

SUMMARY SHEET

The first form you'll come to is the Summary Sheet. Keep it complete and up-to-date and it'll tell you the whole story of the weapon at any time. One look and you'll know how many tubes have been used, the age of major component parts — questions like that.

DATE	TIME	FIRE	MOUNT	MOUNT	MOUNT	MOUNT		MOUNT	
						NO.	NO.	NO.	NO.
1952	140	M1	2187	M1	1	0			
1952	140	M1	2187	M1	1	0			
1952	140	M1	2187	M1	1	0			
1952	140	M1	2187	M1	1	0			

2 3 ASSIGNMENTS AND SERVICE



RECORD OF ASSIGNMENTS		
DATE	ASSIGNMENT	REMARKS

MAJOR DATA RECORD	
DATE	NAME OF THE PERSON TO WHOM THE ASSIGNMENT WAS MADE
18 Jan 1950	John Smith, 123 Main St., Springfield, Ill. Phone: 1234
21 Feb 1950	James O. Brown, 456 Oak St., Chicago, Ill. Phone: 5678
15 Sept 1950	Robert L. Green, 789 Elm St., New York, N.Y. Phone: 9012
10 July 1950	William H. White, 321 Pine St., Boston, Mass. Phone: 3456



PART II

CANNON

(TUBE) DATA

Here's where the big improvement comes in . . . when you'll be getting a new Cannon tube and launching! You'll see tube data other than vacuum or ratings. . . This data gives you a special window for the vacuum tube.

You'll get a new copy of this section (Part II) every time you get a new tube or vacuum.

Send the order like we show you on the right.



IDENTIFICATION OF CANNON TUBE			
TUBE SYMBOL			
<i>100-24 750V</i>			
CANNON TUBE SYMBOL			
<i>100-24</i>			
CANNON TUBE SYMBOL		TUBE SYMBOL	
CONTRACT	TYPE	MANUFACTURE	YEAR
<i>100-24</i>	<i>750V</i>	<i>100-24</i>	<i>1953</i>
CONTRACT	TYPE	MANUFACTURE	YEAR
<i>100-24</i>	<i>750V</i>	<i>100-24</i>	<i>1953</i>
CONTRACT	TYPE	MANUFACTURE	YEAR
<i>100-24</i>	<i>750V</i>	<i>100-24</i>	<i>1953</i>

CANNON TUBE SYMBOL SYMBOL		
YEAR	TYPE OF CANNON TUBE SYMBOL SYMBOL	MANUFACTURE SYMBOL
<i>1953</i>	<i>100-24 750V</i>	<i>100-24</i>
<i>1953</i>	<i>100-24 750V</i>	<i>100-24</i>
<i>1953</i>	<i>100-24 750V</i>	<i>100-24</i>
<i>1953</i>	<i>100-24 750V</i>	<i>100-24</i>
MANUFACTURE SYMBOL		<i>100-24</i>
MANUFACTURE SYMBOL		<i>100-24</i>
MANUFACTURE SYMBOL		<i>100-24</i>
MANUFACTURE SYMBOL		<i>100-24</i>



NEVER TEAR OUT ANY PAGES, NO MATTER HOW BADLY YOU NEED PAPER.

SEND ANY ORDERS YOU SEND TO THE CHIEF OF FINANCE, ATTN: ORDER, WASHINGTON 25, DC.



These duplicates are needed when Delmonico distributes the valuable information you accumulate in the gas book.

YOUR DELMONICO RECORD			
DATE	YOUR ORDER NO. (SEE PAGE 25)	DELMONICO ORDER NO. (SEE PAGE 25)	AMOUNT PAID
12 Jan 1955	6	6-1012*	---
2 May 55	1710	---	6.830*
8 Aug 55	1711	---	6.260*
Sept 55	1819	---	6.210*

PLEASE NOTE! THIS VERY IMPORTANT BROSSE INSTRUCTION RECORDED COPIES IN TWO OFFICES. YOU MUST FILE IN **BOTH**—BOTH HERE AND DELMONICO NEXT PAGE!

YOUR DELMONICO RECORD	
DELMONICO ORDER NO. (SEE PAGE 25)	AMOUNT PAID (SEE PAGE 25)
1710	6.830*
1711	6.260*
1819	6.210*



IF YOU'VE GOT ANY DOUBTS OR HOW TO ORDER THE BROSS INSTRUCTIONS, CALL 1-800-225-2255 (Toll Free)

HOW TO TAKE CARE OF Y&L BROWN BOOK

When the tube (or tubes) is to be replaced, Part II is taken loose and goes with the tube (or tubes). When the tube (or tubes) is condemned, its Part II is sent to the Office, Chief of Detachment, Field Service Division, OREDA, Washington 25, D. C.

You gotta make sure you get the needed data out of it, though, before it gets into your hatch. You gotta summarize the info in Part II on the Summary Sheet in your permanent Part I which stays with the mount or carriage.

If Part I becomes filled before the carriage or mount is condemned, just make additional copies of Part I so it is not too full. They'll all stay together, right with the carriage or mount.

What good gunner would run a weapon record book? None, of course, but it's been known to happen. It sure isn't a real situation should fall on you, here's the only way out. Notify the Detachment officer who's charged with maintenance of your weapon, get a new book, record all the information you can in the new book, and estimate the number of rounds fired from the tube you have by computing the powder gas reaching with the right curve in shown in TR 9-100-2.

Information on any happening of unusual importance concerning the weapon can be recorded in the book.

This new style of gas book replaces the one you've been using—

Form 98-1625. You'll use the old gas book as long as you've got 'em.

When you get your old style book filled up, staple it to Part I of your new one so they'll work together. Then, the first time you get out of a tube (or tubes), summarize the data in the 1625 and your Part II, and enter your summary in Part I. After you do that you can send back the 1625 and Part II of your new book in with the tube (or tubes) you are swapping.

If you've been allowed, you can look in BR 798-115-20 for this data. This new gas book has all production, distributed from OREDA.

HERE'S TH' NOMENCLATURE



WEAPON RECORD BOOK, PART I, DA FORM 9-1-1 STOCK NO. 2003-842100 WITH THE POINT ALWAYS



WEAPON RECORD BOOK, PART II, DA FORM 9-1-1 STOCK NO. 2003-842100 WITH THE TUBE ALWAYS



WEAPON SUMMARY SHEET, DA FORM 9-1-1 STOCK NO. 2003-842100

So there you are—your new style Little Brown Book. Keep track of all your numbers. That way when you gunners are ready to run one home, you ain't have to wonder if she's put her time



HOT TIPS ON HEATERS

Maybe you're boiling water a dozen feet right now, but drop everything and take a quick gander at your personal-leave manifold. That's the metal casing mounted at the top of the boiler, connecting the exhaust tubes to the ex-

haust fans inside (Fig. 1). If yours is one of the few M48's that slipped through with the manifold painted, get that paint off. When it's heated to green off enough to play ball with any handy tankman while broken-up,



You can get out of the pain by stopping or burning it off. Or, let the burner run for at least eight hours; that'll burn out the fatness just the bottoms-out pain. But the main thing is to get it done now. A technical bulletin will tell you all about this.



Now a word about operating the burner. You don't have to close the main-air switch to get heat. However, the gas-fired-burner emergency-switch (located just to the left of the burner control-panel) must be on, as

well as the primary (ON/OFF) switch on the burner control-panel (Figs 7 and 2).

But it, this emergency switch should be left on all the time—except when such emergencies as flooding or enemy gas attack demand that all power be cut off from the burner units.

You never use the emergency switch just to turn off the burner when you're through with 'em.

Here's the reason. These burners are self-purging. When you shut 'em off at the power ON/OFF switch (as you should), the fuel flow stops at once. But, a delay-action thermal switch lets the burners run for two or three minutes longer—so they'll cool the burner and kick out any unburned gases left in the unit.

If you flip off the emergency switch, you override this delayed action and immediately cut off all power to the burner units—including the blowers. Which leaves your burner in a dangerous, unpurged condition. You'll see this in the revised BHT.

**TAKE A GOOD LOOK AT YOUR GAS HEATER BEFORE
—YOU MIGHT HAVE EITHER ONE OF THESE...**



TOUCH or TACED

If you're liked because your M16 is more a tachometer, may as well quit ya' watchin'—and learn to live without it. A little practice and you've got the "touch" or "tact" of the engine speed you'd to know.



That speed that first can be treated as indication, though, is low like 1000-RPM. Back up your electric tachometer and make this setting at the idle speed adjusting screws on both motor units.

Other speeds you can learn to estimate . . . with a little practice.

High idle, used for warm up, should be between 1800 and 2000-RPM. You learn to feel it as about the highest speed the idling engine takes without feeling like it wants to take off like a big gas ball. Use it with the hand throttle for the five-minute warm up.

Normal idle is in between low and high at about 800-RPM, or a little more.

This part with the hand throttle when you it's necessary to park your buggy for a while with the engine running. At Normal Idle the throttle runs over free and easy, keeping everything ready for a take-off. Long idling at low idle (throttle all the way in) will heat up your plug quick.

To get the speed you need for magazine checks, use about half your throttle play or whatever throttle setting your tank takes to give you the 1000-RPM.

For best results on a mag check—without benefit of tachometer—use an "inside" man. Have a buddy head on ear to the exhaust for signs of misfiring as you check the mags, first one bank and then the other.

COVERS PERISCOPE

When you get your M16 with OVM and remove the driver's package from its box, make sure you don't leave its seal (rectangle) in the box. Some of these jobs slipped through without having the seal removed in the "bags" as it ought to be. If yours is one like that, make some common rubber cement and stick that seal in place (Fig. 4).



DRIVER'S ESCAPE HATCH

Your M40 tank may have either of two types of driver's escape hatches. On the earlier models the hatch release lever pulls upward and then the door drops out. On the newer ones you push the lever sideways (Fig. 5).

Good idea to get familiar with the hatch on your particular tank. Some days you might need to escape in a hurry—and the time you'll lose by fiddling on the lever in the wrong direction may make the difference.

This topic will be in the next revision of THE S-TIMER.



TRACK END-CONNECTORS

You can now use "joint-free" or wedge-link connectors on the M40 track end-connectors. Some on the early type do not fit both final track, a pointing from the first manufacturer's bearing design.

The new connector assembly now can fit a different set-up—a wedge link which engages a drilled-and-tapped

wedge, and a counter sink to protect the wedge-link head.

The later M40 connector is now recommended for use on the M4C. Being "built up" to allow for the counter-sink makes it use the for the present M4C spacers. However, the new body-wedge assembly is interchangeable and is much more satisfactory than the old type with the steel-lined wedge nut.

CONNECTOR SWAPS



WEDGE SWAPS



TANK OIL-CAP LOCK

Dear Editor,

We've had some failures on Continental AV-1790 engines here because the oil-filter caps come off and let lots of dirt get into the crankcase. We blame this on the spring disk in the cap-fitting as a result of engine vibration. But, also, sometimes the drivers are not hanging on in that last rap long enough to be sure it's done right.

I saw your suggestion for a lock for L-12 oil-filter caps in PL, and we applied it to our tank engines as shown in the sketch (Fig. 1). Might be that this would help someone else.

Art Stiller and E. Cassidy
Aberdeen Proving Ground, Maryland



(Ed Note—We don't see why this wouldn't be a good idea. L'VE worked on the AV-1790 engines, too.)

TRUCK HOODS

Dear Editor,

When running our M&B makes in deep mud we have found the hood shown below (Fig. 2) to be useful for getting heavy chunks of mud out of the suspension systems. We make them out of mild-steel or reinforcing rod or similar steel rod, about 1 1/2 inches to 2 feet long, with a flat blade on the back end and a T-handle.

Also we have found that when a couple of days of operating in real sticky mud, it pays to check the truck cap-poor-roller bearings. If the mud is mean and sticky enough, the shape of the hull sometimes forces mud past the oil seals and into the cap-poor-roller bearings.

Captain Swisher
Ft. Hood, Texas



(Ed Note—Two good ideas to stop trouble early.)

Connie Road's "SHORT & SWEET TIPS"



Missing a valve

A lot of you folks are asking a question when it comes to an engine that's misfiring. How come your crank-out spark plugs, points and distributor—or even change-over carburetor. And did they miss it? Well, had the valve?

All these parts and energy're wasted in a lot of cases. They're not looking in the right place first for that tricky valve.

When you go on the valve for a valve—in the engine—check your spark plug rubber line. The rubber casing on a lot of those plug cables is running up with tiny pin-holes in it. The pin holes are almost invisible, but they let the spark jump there to the ground inside the shield and cause the misfire.



2

END OF ONE RUBBER HOSE AND HOLES IN IT.



3

SEE THE HOSE END IN A HOLE IN THE SHIELD IN THIS IS THE PROBLEM.



4

IF YOU SEE THE HOSE END IN A HOLE IN THE SHIELD, THE HOSE SHOULD BE REPLACED. ... IT'S A BAD HOSE ... THERE'S NO HOLES IN THE HOSE ... IT'S GOOD TO KNOW THE HOSE IS GOOD.

KEY POINT

1

GET A HOLE IN YOUR HOSE WITH YOUR FINGER OR NAIL.



GET A HOLE THROUGH THE RUBBER.

You may have to replace the silicone bushings (10004-7520949), pins (10004-7510240), sleeve (10004-7510950), and compression spring (10004-7510961).

Check your 5-coummer's 40

It's not necessary to clean and oil your 5-coummer's wick-jaw clutch at 1000-mile intervals like it says in EO 9-8034. This is a clever built-in wick-jaw with exposed clutches. The new models have the clutch located in the gear case and are oil-filled by the gear-case label.

Change the capacity of some by double-oil tank to read "40 gallons." Item No. 14 on back under Special.

Leave a note about this to the store guy who knows.

Try forking

Help us to drill a 3/16-inch hole in 5/16-inch rod like TB Ord 541 said! You'll never make a wash crank speeder wear-gaps that way.

Instead of the 3/16-inch rod, use one that's 1/8 inch in diameter, standard from Ord Stock No. 3000-2411000, and you'll have it made. You'll see this done in a new version of TB Ord 545.

Explosion discharges

When your vehicle's killing a hole faster than normal and its engine won't like it's got the wrong-year hole, it could be required in the vacuum-pump discharge. Added to this rough life,



you'll probably find it using too much oil and see it that's used puff like smoke out of its rear end.

But it makes sure it's not something like a loose crankcase venting valve or such, disconnect the vacuum line between the pump and engine and see if there's any oil in the pipe. If there is, cut the engine room smoother with the line off—you've had it.

Ordinance has the kit you need to rebuild your pump. All you gotta do is turn in the one you've got for another and they'll take care of the rest.

Paupers

A Jeep with a loose belt is soon caught with its pants down. Unless its fan belts are tight enough, the Jeep's generator and water pump aren't going to put the necessary oomph into their jobs.



And checking those belts are tight isn't good, either. That puts a strain on the bearings of both these units and that'll cause leaks as well as a rebuild job for the water pump—costs cut your water off.

The 1939 and '41 have a deep V in the pulley system, and could stand lower fan belts than a system more tightly packed. But get it too loose and the belts soon get frayed and glazed and soon blow. Minney speaks from miles the head will be your wanting to drive in your belt.

Keep your eyes and ears open for loose belts. Especially on vehicles like the M36 and '41, with a matched pair of fan belts. When either happens it that when one belt goes bad, soon change it for a new one without changing the other. Then, when belts stretch, you soon have one tighter than the other.

Whenever you have a vehicle with double belts, replace them both at the same time if you can.



And stick to the adjustments called for in the TFC's—check deflection on the M36 and M41 and on the M36A1 (Fig. 1). With it, these parts should be going around together for a long time.

The name's the same

Some people have been looking at their assumed Infantry vehicles, M37's (T80E), sitting side-by-side, and wonder-

ing, what the heck—what's the name-vehicle at all. The name's the same, but that's about as far as it goes. You're not just seeing things, either, so relax.

These carriers, made by International Harvester and Ford Machinery Corporation, got a plant-size change during production. All the vehicles were made 'em completely different vehicles-at-most.

For the most part, the big change was made starting with IHC Vehicle Serial No. 177, and FORD Vehicle Serial No. F1527.

So don't flip if you find that your particular buggy got some of its changes before those serial number break-points. Take the gas tanks, for instance: The new gas tanks on the earlier jobs were replaced by new, larger gas tanks on the later models . . . but . . . you'll find that some IHC's before Serial No. 177 jumped the gun and came out of production with the single gas tank. That's the way it goes.

A new Ded 7 50L for these M37's is in the works and will identify parts by vehicle serial number. It oughta straighten out the whole forced-up-situation for you. In the meanwhile, if you got questions on 'em, write to Hall-Blair.



HYDRA-MATIC TRANSMISSIONS

WHY BEAT THE DRUM

IF THE BAND'S GOTTA TUNE



— Even the brass band in your GMC automatic transmission gets itself accustomed to the drum, it's going to need an adjustment check—often.

This is mighty important to the life of the transmission. Here's how you do the latest check and adjustment.

You make the first check and adjustment to meet as you receive a new truck.

The second is after you put 200 miles in the buggy and is just as important as the first. The next is at 500 miles. Following that first 500 miles the band and

drum are going thru the rub-in and seating period.

The third . . . after 1000 miles of operation you again check the band and adjust if it needs it. It's a good idea to repeat the procedure from time to time, depending on operating conditions. Do it at least after every 1000 miles of operation. TB 5-4194-1 (9 July 52) gives you the official dope.

What procedure? Band on and you'll get the low-down on in any shop—but like you know tub—mighty important.



Under the shift-arm mounting supports, on the left side of the transmission, there's a plug and adjusting-screw. These are the factors that put that band in its place.

Clean the indicator-pin plug and all the surface around it. Then run the engine at idling speed, with the over-ride in P-1 HIGH RANGE position, parking brakes or wheels blocked for safety.



Unscrew the indicator-pin plug and check to see if the indicator-pin is flush with the machined surface around the hole. You can use a straight edge or your finger to get the feel.



If the pin isn't flush, loosen the adjusting-screw lock-wal. Turn the adjusting-screw until the indicator-pin is flush with the machined surface of the case.



Now that you've got the band adjusted, you hold on to the adjusting-screw and tighten the lock-wal, the way you hold that screw tight or you might have to wear an another adjustment.



You've got the lock-wal tight. Check the pin again. If it's still flush, put the plug back over the pin—that's it.

And as any time that shifts don't work like it says in Table VIII, page 219, TM 9-815A, the front-band adjustment should be checked. Of course, if front-band adjustment doesn't give you the right shift, then you'll have to go to Table IX, page 303, of the same TM to see you straight. The rear-band adjustment, by the way, is something you don't have to touch—it's automatic.

BT BATTERIES MAY HAVE THEIR CELLS BAZZACKWARDS



Don't somebody mixed their shot.

It seems that a whole string of the BT batteries (used in the old M48 tank which may have one or more of the cells assembled backwards.

Trouble is, since these batteries were made and shipped dry-charged, nothing will show up until the battery goes in service.

So, if you're gun guy, check 'em. You do see, for the guy who puts the

electrolyte in) can find the trouble some soon.

Here's what to look for—look at the cell number which has the code stamped on it (Fig. 1). The top figure is the shipping date, month by number and year by last digit. (01 is August, 1955). The next figure is the date of manufacture, month by number, day by letter, year by last digit (441 is June 8, 1955). And the first letter on the third line tells what plant made it.



All the batteries you have to check were shipped between January 1953 and December 1955 (13 thru 123) and were made at plant A.

(Fig. 1)



Here's how you can check the polarity of a cell. Take chalk or a piece of lead, and marking at the positive post, mark the proper polarity on each end of each cell. Positive-negative, positive-negative, etc. all the way through to the negative post (Fig. 25).



Then, take your voltmeter and check each cell to be sure that the actual polarity agrees with your chalk marks. Remember to touch the leads to each

end of the cell. If the polarity is reversed, one or more of the cells will swing your voltmeter the wrong way. Instead of making new cells, it will try to get off the scale before zero (Fig. 25). And while there is no positive proof that the cells were assembled wrong, it does mean that the polarity is reversed and you might burn in the battery for a new one, anyway.

Be real careful in using the voltmeter so you'll always get the positive lead on what's supposed to be the positive end of the cell or you will get the wrong answer.

When you do find a defective battery that hasn't been put into service yet, all you can do is fill out a GEB. (DA Form 458) and turn the battery in for a new one.

All the known defective batteries of this type are in the group made under contract No. DA 20-114-Sub-7002 on the sheet mentioned. The contract number is usually found on the box the battery's shipped in. You can check the polarity of your voltmeter by trying it on a known good battery.



FOR ALL TRUCKS AND TRUCKS

A NEW SWITCH FOR A BRIGHT FUTURE!

To get more light on the subject, to save more money, and to make them easier to install, the double-connection light switches on all Dodge vehicles (trucks and trucks) are on their last legs. In their place you'll be using the single-connection switch.

Up to now the D's have all had two bundles of wires coming up to the light switch on the dashboard. And that switch had connectors on two sides to take the wires from each bundle. But there's been some changes made. The latest vehicles are coming out with only one bundle of wires, and the latest switches have connectors on only a single side.

So the double-connection switches are no longer manufactured. Which is OK for the latest vehicles. But when you ask for a double, all you'll be able to get is a single-connection switch (Dodge Book No. DT42-7503000). This switch, which has its circuit breaker on the battery box, is due for replacement by another single-connection that contains the circuit breaker . . . It's Dodge Book No. DT41-7503701.

How to hook a single-connection to an older D-vehicle with the two bundles of wires is the problem. But you'll find no trouble making all ends meet by splicing circuits as indicated in Fig. 1.

This method is also followed when using British, Dodge Book No. DT42-750702, as replacements.

There's one thing more. When you receive the single switch on many of the older vehicles, you'll notice that Line 24 can be connected to a fuse connector already installed as an extra outlet on Line 26. Without the coupling, all you can do is to splice the two lines together. When you do that, be sure the lines are properly joined and taped.

You'll be using a lot of it, so you may as well get acquainted with the new set-up now.







WELL, DOCTOR, WHAT'S YOUR DIAGNOSIS?

A CLEAR CASE OF ADVANCED FRUSTRATION... A SICKENING CASE OF ICE WATER... AND BUT WE'VE THESE NEW RECORDS?



LET'S START AT THE BEGINNING, WHEN DID YOU FIRST HATE YOUR DUMPFREACH?

WHEN THE MACHINE-GUN MAN BLEW OFF FOR THE THIRD TIME?



WELL, MY DECISION TO HAVE MY WAY DOWN THAT YOUR VEHICLE HAS HAD THE BEST OF ENGINEERS, A LOT HAPPENS TO IT IN THE FIELD, IT'S YOUR RECORDS... YOUR RECORDS... ON RECORD THAT MAKE THE NEXT VEHICLE YOU GET BETTER?



I'VE GOT LONGER CREAM, BUT WHO'LL LISTEN TO ME? A MACHINE-GUNNER? PLEASE?

WHY HATE THE MACHINE-GUN LEVEL OF THE ARMY WILL LISTEN, THAT'S WHY THE MACHINE-GUN MAN WAS BLOWN AWAY? NOW LET'S TALK ABOUT THE...

FIRST

HOW MANY RECORDS?

RECORDS ON THE RECORDS OF THE RECORDS...

DESCRIPTION OF EQUIPMENT	DATE OF RECORD	RECORD NUMBER
RECORDS ON THE RECORDS OF THE RECORDS...		
RECORDS ON THE RECORDS OF THE RECORDS...		
RECORDS ON THE RECORDS OF THE RECORDS...		
RECORDS ON THE RECORDS OF THE RECORDS...		

OR



DO YOU HAVE ANY MORE RECORDS?

YES, I HAVE A MACHINE-GUN...

RECORDS ON THE RECORDS OF THE RECORDS...

LOOKING AT THIS FORM, YOU CAN SEE HOW EASY IT IS TO FILL OUT.



IT'S SO EASY TO FILL OUT THAT YOU CAN DO IT IN A FEW MINUTES.



NAME OF COMPANY		YOUR NAME
INTERNATIONAL BUSINESS CO.		JOHN DOE
STREET ADDRESS	CITY AND STATE	
123 MAIN ST.	NEW YORK, N.Y.	
NAME OF COMPANY		YOUR NAME
INTERNATIONAL BUSINESS CO.		JOHN DOE



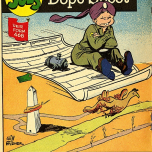
NAME OF COMPANY		YOUR NAME
INTERNATIONAL BUSINESS CO.		JOHN DOE
STREET ADDRESS		
123 MAIN ST.		
CITY AND STATE		
NEW YORK, N.Y.		
NAME OF COMPANY		YOUR NAME
INTERNATIONAL BUSINESS CO.		JOHN DOE



NAME OF COMPANY		YOUR NAME
INTERNATIONAL BUSINESS CO.		JOHN DOE
STREET ADDRESS		
123 MAIN ST.		
CITY AND STATE		
NEW YORK, N.Y.		
NAME OF COMPANY		YOUR NAME
INTERNATIONAL BUSINESS CO.		JOHN DOE



Dope Sheet



WE HAVE THE WORLD'S BEST EO

This is magic I know, cried out the...
On this form four-six-eight you may show
All your problems and trouble...
They will fly on the double
To the Pentagon, telling your woe.



EQUIPMENT... Take care of it



1	2	3	4
5	6	7	8
9	10	11	12

Wanted: **High school**, **High school**, **High school** and **High school**. **Center of attention** (4/10/10)

I ONLY WANTED TO GET SOME PHOTOS... IT'S A GOOD IDEA TO GET A FEEL OF THE FEEL BEFORE YOU GET IT... I AM... COME TO MIND!



With all of all the time you... There are some time you... Plus other things by the way... Let's see if you can get it all done.

Let's see if you can get it all done... The picture is just before the water flows... It's a good idea to get a feel of the feel before you get it... I AM... COME TO MIND!



Detailed investigations. Found traces of heroin and opium in the oil and fuel lines. Also found traces of carbon and lead and small quantities in the atmosphere and the oil and fuel.

Henry is that generous fellow in the company who found on the spot that this was the chief cause of the engine and system. Arrival of the tractor vehicle flew the engine and the main lines and as a New York the engine.



OH, I GIVE IT TO YOU PROBABLY NOW, RIGHT?



WELL, I'LL TALK TO YOU ABOUT THAT. YOU'VE TALKED THE CHILD INTO IT. YOU'VE BEEN OFFICIAL ABOUT THE PLACE?

Manufacturer's representatives are coming to the office this morning.

Engineer will also be accompanied and joined from the manufacturer and engineer and the... (text is partially obscured)



HERE'S A CHECK TO YOU A LITTLE BACKING... AND TELL ME HOW YOU'VE BEEN IT... (text is partially obscured)

ACTUALLY WE NEED THIS VEHICLE AS A... (text is partially obscured)



WELL, I'LL TALK TO YOU ABOUT THAT. YOU'VE TALKED THE CHILD INTO IT. YOU'VE BEEN OFFICIAL ABOUT THE PLACE?

SEE, I'M TRYING TO FEEL MY OLD FASHIONED HUMAN SELF... (text is partially obscured)



Those 5-tonners —

NEW BRAKE-WHEEL CYLINDERS



Take an extra look at the brake-wheel cylinders on your face, 5th, 6th, 8th-year trucks when you're making a replacement. Some of these trucks come off the line with larger brake cylinders on the rear wheels—and many of 'em are getting the bigger back-brake-braggers now.

The larger cylinders have a 2-inch diameter body—the wheel has a 1-3/4-inch diameter body. The larger cylin-



der is back only if the cylinder has a hole in the end which is not wearing the piston of the other cylinder. If it's the smaller 1-3/4", if the wheel is 1-3/4", the bracket is 1". If it's the 2" one, the wheel has the same hole and the bracket hole is 2" wide. You can see the hole in the wheel.

der being on the rear wheel, only. There isn't enough load-pedal travel on that 5-ton bar bar to make larger wheel cylinders all the way around, so the smaller (1-3/4-inch) cylinder stays on the front wheel.

You'll find that larger cylinder on the rear wheel will make your braking easier, especially with a full payload. They'll do a little more of the work for you. But don't count on the supply window (since the 2-inch cylinder assemblies aren't available in stock yet).

Your problem is being sure that what you've got now doesn't get all switched around. If you already have the 2-inch cylinders on the rear wheel, you might have to get a 1-3/4-inch assembly (Over Stock No. G482-0201768) for a replacement. If you do, take care of both ends of the axle. On the same side, you want the same size cylinder on the left as you've got on the right, else you might feel yourself sliding into the nearest ditch when you stomp the brakes. You want the 2-inch jobs on the back if you can get 'em, too.

And if at any time you feel uneven braking on your air wheels, lower pull off the wheels and check to see if someone else didn't mix the cylinders already. You can tell the difference by their outside diameter.



SCREW-TOP CARS NEEDED

Dear Half-Mast,

I've never got my mind off my screw-top cars. You gotta punch or cut a hole in the car to get at it.



Lots of them are here all left over after servicing our guns. We've always had to keep the left-over oil in a good tight clean can so it doesn't get contaminated. Don't know how we're going to do it if we don't have screw-top cans like the old ones to come in. What would you suggest?

M. J.

Dear M. J.,

You're darned right. You need a clean can with a screw top for that extra oil. You can't afford to be taking chances when it comes to screw oil.

You may not be authorized to order out of SNL F-142, but there's a general inventory oil-filling can (Code Book No. F142/211214) listed in it that'll do the job.

Fill out a special requisition giving complete justification as to why you need the can. Give the description and stock number. Turn this requisition in to Ordnance and you'll have a good chance of getting it.

Half-Mast

328.....1953

Dear Half-Mast,

I've been ordering parts for my M11 fire-control system out of a T11 system listing. There's a lot of the parts are exactly the same but there's one catch: what about the parts that aren't?



When I send out for a just using the number stamped on the M11 system just—whatever, it either comes back unshipped with a T30 part which doesn't fit or does not or corrected because it can't be identified.

Can you help?

FONG A. B. B.

Dear Mr. A. B. B.,

New Del 7 and Del 8 catalogs for the M11 system should be hitting the field before many weeks. But you should get an information copy now. They'll be supplied to the M11 dealerships before the official copy is printed.

Try this system in getting your parts: Give all the data you can about the item to be replaced (bearing number, etc), then add this notation to your requisition: "This unit is for M11, Serial No.—, and is not to be replaced by Item No.— as used in T30."

This way you won't get the piece stamped with T30 parts you can't use.

Half-Mast

MY DUMPY DOME ALL RIGHT

Dear Half-Mast,

It's average only 2.1 miles per gallon of gas on our M11 GMC dumps and has to pour a quart of oil in the engine every 200 miles. Being an old ex-military truck driver, this seems like too much.

I would also like to know whether there's a TR for the M11 and what its number is.

Agg N. G. P.

Dear Agg N. G. P.,

Don't let that gas mileage worry you—don't shoot averages for truck-type trucks. If you can get more out of it, you yourself is the good-driver class.

The new GMC's were a little hard on oil. Later models have a new-type seal oil-ring in the piston arrangement which is cutting down on oil used.

How about having the valve guides checked for looseness. Have the vent system checked to see if it's working right. Both of these babies will see oil if they're not in appropriate order.



I've been told that a version of TM 54-154, now in process, is supposed to give you the latest info on the M11 hydraulic dump system. That version is to be released as TM 5-6161. On the heavy vehicle you can use the same TR's and BR's that we used for the M11.

Half-Mast

DOEN IT?

Dear Half-Mast,

A question has come up on the installation of new pressure on vehicles. In the past we've checked the correct tire pressure on the dash and above each wheel including the spare. I understand

Most Chrysler inspectors no longer require this since the correct pressure is marked on the dash at the factory. What have you got on this?

CFO J. E. T.

Dear Mr. J. E. T.,

Most of your Chrysler vehicles have the tire pressure stamped in a decal on the dash, so checking them isn't required.

But, if you drive across state vehicles that don't have the pressure stamped on this plate, check the vehicle TM for the right pressure. Then by all means call your local customer service office the tire pressure where the driver can't take it.



Some tire pressures might be changed before long. Keep a sharp ear and the ol' weather eye open for this. It's Magazine will give you the news when that happens, and then mail 'em on.

Half-Mast

ONE FOR THE BOOK

Dear Half-Mast,

The governor that puts the valves on my 3500 member's car-which, needs replacing. But I don't know what to ask for. Could you give me its stock number?

Pat G. B.

Dear Pat G. B.,

You probably haven't seen Oed 9 59E G-744, dated January 1966, on who's what for your 3500's which and beam. It's out with the latest supply info.



While Oed 9 of that 59E, for regular 1966 maintenance in to the works, it'll take a little while until you see it in print. Meanwhile, get the governor you need by asking for Valve, governor, use the power divider, Oed Truck No. G744-817440.

Half-Mast

HEARD (HEARD)

Dear Half-Mast,

To have the 3500's flywheel's changing out of its hole is a novel idea. But why not try it near the flywheel in most of its main compartment?

There's a 1/2 inch hole in the 1/2 inch frame near the flywheel bearing that can be made to hold it. Just tapping the hole with a pipe plug will make it satisfactory. And if you screw the hole on the frame is all the way what's what and where, everybody'd be on. It's handy that way.

Pat L. J. J.

Dear Pcs L. L. J.,

When you say that his point, but what about the guy who doesn't have and looks like the plug in the map area, pavement? He'd probably have up a new one before looking under the vehicle. (And once your kids when he finds the one you wanted away.) And unless the threads are protected right, the plug could run in its tracks. Pipe plugs run really and could set so tight you'd wish you'd let it alone.

Half-Short

TOWARD BOON

Dear Half-Short,

The people in the face from trying to tell their parents' heads not to dash their vehicles into the storage house on the 117-ton M-100 trailers.

It does no good—so we get forward down. For thought about putting a bar around the door, but they would only find that too. In what do you think about moving the door around to either side (Fig. 1)?

HCC L. L. H.



Dear HCC L. L. H.,

Sounds like a good idea to move them back to the side, but first be sure to get an OK from your Customer office before you do. He'll buy any good idea if it's gonna save Uncle some dough.

The boys had better take care of those boxes, 'cause even the supply's gone, that's in. This box is not being made any more, according to TD 1-1775A-2 (14 Mar 54).



ARMAMENT



WHAT THE H... ON SUBMACHINE GUN?

Do ya' wanna hear a hard tale? There was a soldier who took his pop gun in hand. It wouldn't pop. Why? It was too soft. How could he tell? There was no *H* stamped on his sliding mechanism like M1919-Cox J45-705 (12 Sept 51) says the hole in every M1 and M1A1 .41 cal. submachine gun should have (Fig 11).

The soldier picked up his gun and looked at the barrel very 'soft. There was an *M* and he knew it wasn't the hard type. So he simply turned in the hole for a new one.

The new one should read but there's more . . . the new one in gun still didn't have the *M*. Big question was . . . is it hard or not?

Now what did he do? He could have turned that hole in pronto . . . kept on trying for one with an *M*, but did he do it? No. He started thinking—maybe those holes are being made now without the *H* stamped on them. Well, he would find out. He picked up his little file and tried to make a dent at the rear notch (Fig 12). Do you think he did? He did not. He had a hard hole.

Now if he'd had an all-type soft metal hole he could have made a dent in it with his little file.

The moral to this story is: If yours is hard, keep it and use it—there's a hard file in that thing regardless of the *H*. Just wait.



KEEP YOUR TEETH CLEAN

The teeth that hold the legs right on your machine gun and machine rifle tripods need care. Loosening the leg enough to let the teeth pull away from one another (Fig. 13) when you're making an adjustment does the trick. If you move the leg with the teeth biting one another, you'll hurt them. Chances are your gun'll repeat to you when you need 'em more.



CLEANING MATERIALS AND LUBES

When and where to use

ON SMALL AIDS

	ON SMALL AIDS						Reference Code Numbers
	1	2	3	4	5	6	
 Water	A	A	A	A	A	A	
 Dry Soap	A	A	A	A	A	A	
 Wet Soap	A	A	A	A	A	A	1-A-100-000 1/2 gal. 1-A-100-000 1/4 gal. 1-A-100-000 1/2 gal. 1-A-100-000 1/4 gal.
 Suds	A	A	A	A	A	A	1-A-100-000 1/2 gal. 1-A-100-000 1/4 gal. 1-A-100-000 1/2 gal. 1-A-100-000 1/4 gal.
 Wax	A	A	A	A	A	A	1-A-100-000 1/2 gal. 1-A-100-000 1/4 gal. 1-A-100-000 1/2 gal. 1-A-100-000 1/4 gal.
 Solvent	A	A	A	A	A	A	1-A-100-000
 Wash in Wash	A	A	A	A	A	A	1-A-100-000
 Wash in Wash							1-A-100-000
 Wash in Wash							1-A-100-000
 Wash in Wash							1-A-100-000

A-In clean state
 B-In clean container (before this time)
 C-In solution
 D-Systematic clean agent
 1/2 gal. of oil for above 30°F and salt water
 1/4 gal. oil for the below 30°F
 E-In clean after change

*Small 100% is used only for the common application and equipment application.



FOR BETTER CONTROL OF YOUR

FIRE CONTROL

POISON FUMES



With everything going right, the incident involving the year 2000 fire-control system may not occur.

But if you have a fire, or another incident that the incident leaves in its wake, do.

When this incident occurs, the fire might get off the ground due to the smoke-detection system.



Don't breathe these fumes, because the incident components thoroughly follow the fire in the fire-control system.

When the fire starts, don't breathe the damaged system, and don't. The fire-control system is designed to be used through the fire-control system in the system. Or, if you have a fire, you should be able to breathe the fire-control system.



IT'S ONE OUT OF FOUR

The 2000 fire-control system uses a hydraulic-hold pump with its hydraulic-actuation system in the incident-control system.

There's a drain plug on the lower side of the pump (fig. 1) that should be removed—if it hasn't been.



If this plug is left in, fluid will collect around the wiring inside the pump and plug back in ground.

The other three plugs may not.

Never check that open hydraulic-hold pump or remove time and remove the drain plug.

M-33



KEEP THE DEEP PURPLE GLOWING



When cold weather starts to creep in, keep an eye on those M33 recycler tubes in your M33 decontamination system.

To keep those tubes on the road side in warm weather a blower was added to the low-voltage power supplies to draw air on the M33's. It's a good job in the summer heat, when the air gets cold, the blower might cool 'em down too much at the rear and get 'em too warm up.

When you turn power on, keep an eye on those tubes. If the color in the tube is a deep purple, you've got a mild tube.



Get a piece of cardboard and use it as a deflector (Fig. 17) at the blower motor. That'll cut the air off the tubes and let 'em warm up.

Watch the tubes. When they get to glowing a fiery blue, take the cardboard away from the blower. You've got to be careful here. If you let that cardboard deflect the cold air too long those tubes can get hot enough to melt.

The reason you worry about getting that tube to the proper warmth is this:

The tubes got to be warm enough to regulate the mercury in it and get it off the tube diameter. If the mercury stays on the tube diameter, and the tube gets into operation, there will be an arc-over. This arc-over will either blow or seriously damage the tube.

IF CAN DO WITHOUT IT

Keep yourself insured as a hazard.

That means thing you can't count on your M33's personal blower motor doesn't have to be replaced.

The motor has sealed bearings that don't need your greases.

SUPPLY & DIRECTIVES



WHEN YOU GOTTA GO . . .

. . . and the temperature's low . . .

Be sure your vehicle's ready to take you.

Be prepared for Old Man Winter with cold-weather equipment. Now's the time to check on that personal heater kit, prescription heater kit, and hand-

leg gloves kit. If you need 'em and can 'em, get 'em.

Just to make it easier for you—you'll find the Duplicates stock number of kits for the more popular vehicles listed below. And SE 9-13 tells you when and where you can get 'em.

SE Series No.	VEHICLE	PERSONAL HEATER KIT	POWER PLANT HEATER KIT	HEATER FOR COPIES KIT
		Ord. Kit. No.	Ord. Kit. No.	Ord. Kit. No.
800	1 1/2 ton, 4x4, 2000 lbs	204-050-02	204-050-03	204-050-01
800B	1 1/2 ton, 4x4, 2000 lbs	204-050-02	204-050-03	204-050-01 204-050-04 Green Heater Kit (this includes the heater)
801 Series	1 1/2 ton, 4x4, 2000 lbs	204-050-02	204-050-03	204-050-01
802 Series (802A, 802B)	1 1/2 ton, 4x4, 2000 lbs	204-050-04	204-050-05	204-050-04
803 Series (803A, 803B, 803C)	1 1/2 ton, 4x4, 2000 lbs	204-050-04	204-050-05	204-050-04
804 Series (804A, 804B)	1 1/2 ton, 4x4, 2000 lbs (804A) 2000 lbs (804B)	204-050-04	204-050-05	204-050-04 204-050-05

M. Number No.	VEHICLE	PERSONNEL HEATER KIT	POWER PLANT HEATER KIT	SAFETY EQUIPMENT KIT
		Kit No. No.	Kit No. No.	Kit No. No.
W10 and W10C	21 Crew, 400, Sup Tnc, 1000 (See Manual for -07). Kit good when installed in conjunction with W10C-010000	W10-010100	-----	-----
W11 (See W11, W11, W11, W11)	1 Tnc, 400, Sup Tnc	W11-010100	W11-010100	W11-010100
W12	Crew, 400	W12-010100	-----	W12-010100 (See Assembly 0177)
W13	Crew, 400	W13-010100	W13-010100	-----



*As this kit is not readily
to store or for control steps

**Assembly 01-010100 at

1. Safety harness cable
2. Safety harness belt
3. Bags and cables
4. Saw and tools
5. Bucket assembly

KIT FOR AIRSPEED TYPE VEHICLES

M. Number No.	VEHICLE	NAVIGATOR/SPACE KIT	PERSONNEL KIT
		Kit No. No.	Kit No. No.
W14	1-400, 400, 1000	W14-010100	W14-010100
W15 (See W15)	2-400, 400, 1000	W15-010100	W15-010100
W16 (See W16)	2-400, 400, 1000	W16-010100	W16-010100
W17 (See W17)	2-400, 400, 1000	W17-010100	W17-010100
W18 (See W18)	1-400, 400, 1000	W18-010100	W18-010100

If the kit you need isn't listed above, your writer on flight deck must need for it. If
the department you're working with doesn't have it, the writer will contact the



ENGINEERS



MORE POWER TO AIR TOOLS

Whenever your pneumatic tool runs dry, you can help it do better—if you remember that there's a precious drop of 3-pounds-for-every-50-foot length of hose latched on to the air compressor.

Need a better punch, spray, cut, drill, dry (or whatever-your job, make sure all unwanted lengths of hose are uncoiled before flipping the switch on your pneumatic tool.

YOUR BODY'S HOSE

The high-pressure hoses used to move the hydraulic cylinders and the oil pipes of a hydraulic clamp take an awful lot of punishment. They're made to handle high pressures and all the twisting, turning and stretching that come from following the motions of the blade.

And one of the most important things needed to help this tough hose stand up under that rugged work is proper stan-

and insulation. A hose that's too short suffers quick damage from added strain and bending, and a hose that's too long wears when it sag and interferes with other working parts.

To make sure hose replacements on your clamp are the right length, check the clamp's manual.

Proper assembly of the hose is just as important as using the right length. To eliminate all unnecessary bending, twisting and stretching, the hose has got to be free and unstrained when the attaching nuts are tightened.

KNOW YOUR 28

Change 1 on BR 310.30.28 dated 15 May 1954 (your new "Index to Engineer Supply Manual") is out . . . so get yourself a copy. The 28 itself is dated 15 February 1954, and reproduces Part II, Part III, and Part IV of your Eng 1 catalog. The only part of Eng 1 that's still good is Part I, the "Introduction".



TRACKS IN

A FEW TRICKS TO AVOID



WHEN WORKING



DO NOT USE SHARP TOOLS... USE THE ONE



DO NOT WORK WITH THE
SHARP... USE THE ONE

HOW TO GET



DO NOT WORK WITH



DO NOT WORK WITH
DO NOT WORK WITH THE
SHARP... USE THE ONE



DO NOT WORK
DO NOT WORK
DO NOT WORK

HOW TO GET THE BEST



DO NOT WORK
DO NOT WORK

DO NOT WORK

DO NOT WORK
DO NOT WORK

THE

MUD



MUCK 'N' FUSSE!

STRANGE COUNTRY

DOPE... ..BESST!



THE 1... THE 2... THE 3... THE 4...



THE 5... THE 6... THE 7...

OUT... EASY-LIKE

IF ALL THE MUD, THE MUCK 'N' FUSSE...
CAN'T MOVE... GO TO... (SOMEWHERE...)



THE 1... THE 2... THE 3...

THE 4... THE 5... THE 6... THE 7... THE 8... THE 9... THE 10...



HILL ON SLOPE

WITH YOUR... IT'S... (SOMEWHERE...)

WITH YOUR... IT'S... (SOMEWHERE...)





DE-PICKLING CHORES

Your first duty is equipment that comes to you first. Your Equipment Supply Depot is a work-a-week with Big Boys 1955—the form that gives a complete run-down on the preservation and the equipment's bed, and what must be done in the way of pulling off the wraps and servicing, before the equipment's put to work.

DEPRECIATION IN USE			
EQUIPMENT IDENTIFICATION			
<p>This document and the equipment are placed in evidence and available for inspection by the owner, the lessee, the manufacturer, the distributor, the dealer, the repair shop, the insurance company, the government, the courts, and the public. The equipment is identified by the manufacturer's name, model, and serial number. The equipment is identified by the owner's name, address, and telephone number. The equipment is identified by the dealer's name, address, and telephone number. The equipment is identified by the manufacturer's name, model, and serial number. The equipment is identified by the owner's name, address, and telephone number. The equipment is identified by the dealer's name, address, and telephone number.</p>			
EQUIPMENT IDENTIFICATION		EQUIPMENT IDENTIFICATION	
1. MAKE AND MODEL	2. SERIAL NUMBER	3. MANUFACTURER'S NAME	4. MANUFACTURER'S ADDRESS
5. OWNER'S NAME	6. OWNER'S ADDRESS	7. OWNER'S TELEPHONE NUMBER	8. OWNER'S BUSINESS
9. DEALER'S NAME	10. DEALER'S ADDRESS	11. DEALER'S TELEPHONE NUMBER	12. DEALER'S BUSINESS
13. DATE OF PURCHASE	14. DATE OF DELIVERY	15. DATE OF INSPECTION	16. DATE OF SERVICE
17. NAME OF INSPECTOR	18. NAME OF SERVICE PERSON	19. SIGNATURE OF INSPECTOR	20. SIGNATURE OF SERVICE PERSON
21. NAME OF MANUFACTURER	22. NAME OF DISTRIBUTOR	23. NAME OF DEALER	24. NAME OF OWNER
25. NAME OF INSURER	26. NAME OF LESSEE	27. NAME OF FINANCER	28. NAME OF OTHER PARTY
29. NAME OF COURT	30. NAME OF JUDGE	31. NAME OF COUNSEL	32. NAME OF WITNESS
33. NAME OF APPRAISER	34. NAME OF APPRAISER'S FIRM	35. NAME OF APPRAISER'S ADDRESS	36. NAME OF APPRAISER'S TELEPHONE NUMBER
37. NAME OF APPRAISER'S BUSINESS	38. NAME OF APPRAISER'S LICENSE NUMBER	39. NAME OF APPRAISER'S EXPIRATION DATE	40. NAME OF APPRAISER'S STATE
41. NAME OF APPRAISER'S CITY	42. NAME OF APPRAISER'S COUNTY	43. NAME OF APPRAISER'S ZIP CODE	44. NAME OF APPRAISER'S COUNTRY
45. NAME OF APPRAISER'S STATE	46. NAME OF APPRAISER'S CITY	47. NAME OF APPRAISER'S COUNTY	48. NAME OF APPRAISER'S ZIP CODE
49. NAME OF APPRAISER'S COUNTRY	50. NAME OF APPRAISER'S CITY	51. NAME OF APPRAISER'S COUNTY	52. NAME OF APPRAISER'S ZIP CODE
53. NAME OF APPRAISER'S STATE	54. NAME OF APPRAISER'S CITY	55. NAME OF APPRAISER'S COUNTY	56. NAME OF APPRAISER'S ZIP CODE
57. NAME OF APPRAISER'S COUNTRY	58. NAME OF APPRAISER'S CITY	59. NAME OF APPRAISER'S COUNTY	60. NAME OF APPRAISER'S ZIP CODE

You'll find Form 1815 in a waterproof container marked "Depreciation Guide", attached to some easy-to-use literature on the equipment. And you won't need a second look to tell you why the chores listed must be done with regular care: if your equipment's to have the right start in life.

Lack of proper depreciation buys you both immediate trouble and premature failure of parts, assemblies and maybe even the entire item.

Close your shovel's yep; a sure way to keep your **BOTTOMS UP**

The way you make your dipper hold its own is as important as rapping down its legs that night. And to do that, you gotta keep its back in working order. If you don't, it'll drop its load all over the place.

What usually gives, when a dipper's back is shippy, is that the bar and back-keeper's levers are rounded from wear. It takes a sharp corner on each to clamp the shovel closed until you're ready for stipping.

To come up with a 90° angle on the levers, drive it from the back-keeper and here is how. You can set the dipper back ways for four different right angles. Which makes one lever last a long time. Then, when you're worn out all angles, replace it with a new one.

As soon you post the keeper's top and bottom around the lever to hold it rightly in place,



Now fix the back bar. To get your life from the bar's worn tip, grind it down about 1/4 inch to the shape shown by the dashed lines in Fig. 1. And when it gets too short to hold, lower the bar further into the keeper by adjusting the fulcrum bolt.

On the Easy-as-Pie dipper, the full custom washers which can be moved from the back-keeper's top side to its lower side until you get the adjustment you want. The best adjustment is where the bar drops into the keeper less than 1/4 inch. This much hold will allow you to clip the heaviest dipper load quick and easy like.

With good washing habits, you'll find dipper keep well loaded with bottom up.



CONTRIBUTIONS



QUICK CHECK METHOD

Dear Editor,

Here is a means for determining electric air-gage accuracy and can be used including pressure on all vehicles with air equipment.

Make up a test gage using Coupling (half), air brake, cap. (HW-212961) with a reducer and an air gage of 150- to 120-PSI capacity (Fig. 1).

By snapping this on the right rear truck under (opening the valve, of course) the above mentioned components can be quickly checked.

Mr. E. Thompson
GEMA, West Point, New York

(Ed Note—Your suggestion works fine. However, a more good at Ft. Belvoir has come up with an even easier way to do it. They take the engine compression



gage from the second cylinder fit and shove it into the brake line coupling, turn on the valve and read the gage. Only difference is that this method does not involve any special things and does not tie up one brake line coupling. Since you have a rubber cone on the compression gage (bring into the rubber number on the brake coupling, you don't lose any air pressure.)



EASY MARK

Dear Editor,

We've got an idea which will make starting the synchronization on military vehicles easier, quicker and safer.

On any track, turn over the engine by hand until the factory ignition timing marks are exactly aligned. (Doesn't matter if they are on the flywheel or on the crankshaft pulley.)

Now go to the crankshaft pulley, down in front of the track, and put a



thin white line on it. This line can be either straight down or straight across, depending on what you can find on that track. Continue the white line all the pulley over some hard part of the engine or frame (Fig 1).

Now for a quick timing check, you attach your timing light and run it down beside the engine and cut the lower beams. View the engine with the light connected to Pin 1 plug and hold the flash over the front pulley. If the white line appears straight and unbroken, your time setting is OK.

This method is quick, once the line is put on. It'll also keep your light and

beads out of a jam too. On flywheel timed engines, you don't have to remove the flywheel cover.

A. M. PERRY
In Beatty, North Carolina

Ed Note—[Quite right, Mr. Perry, and since timing by a mark is at best a sort of guide, this method will be accurate enough.]

LOOSE FOCUPTS CAUSE TROUBLE

Dear Editor,

The cross bows on the M16, 115-millimeter tanks don't go down into the make pockets very far and, to top it off, the pockets are open down one side.

When you use the camera over the bows, the weight of the camera tends to pull the bows toward the center of the wheel. With the bows pulling in these open pockets, the pockets spread apart and the bows wobble all over the place.

I got some metal about the same gage as that used on the bows and cut me pieces out of it about 1 1/2 inches wide and 2 1/2 inches long. I had the pieces welded over the open side of the pocket (Fig 1). With this reinforcement on the pockets we don't have a floppy-looking camera and we don't have to worry about straightening the pockets every time we use them.

EDWARD Paul J. Miller
APO 46, New York





Jump 7M switch

Here's the straight dope on Table II of *The V-Model* (July '57). The 1000-mile and 2000-mile services are a little confused. The first column should read "E" instead of "B" and "1000 miles or 4 months" instead of "1000 miles or 48 days." Then, the second column ought to say "1000 miles" instead of "6000 miles or 4 months." Then you can get up and fly right with your AOBAL. The revised TB will give the right dope.

Time's that axle

Been wondering how you get that axle for cleaning your bumper? Here y'are. Sodium Bicarbonate, technical grade, Chem. Stock No. 170046. You mix a half pound per gallon of water. You'll find it in *RE P'd. Also see RE Card 607* (24 Mar '56).

Breaker switch

Drop more, boys, or say it again! When putting any vehicle in the medium and light tank families, do not hold the breaker switch down for more than 20 seconds at a time. That breaker coil is designed to give with an awful snapping

for a short time, but it will burn up if you run it continuously.

Fast ball

Man-oh-man! How smart! How quick! Safety-going! That we told you about on page 114 in PG 20 sure found you a curve. It was really a hot tip—telling you to try from the MBE. What it meant to say was *WAF—AT—AT—AT—out all*.

Slip it in easy

Your A-61 tank power pack, that is. When you take the pack out, you leave the inlet elbows attached to the carburetors, and the air lines slip right off. Putting it back is a different story, and you'll save lots of grief and time if you take the elbows off the carburetors and slip them into the air lines first, then drop them back over the carburetor studs and lock up. Try it.

Keep the dirt outside

Oil in your M21 transmission has enough normal dirt and grit to screw up without causing more to its job. Wipe the cap and top of the filter tube with a clean rag before you pull out the dipstick. And watch where you lay that dipstick. If you

lays its dump in some oil, and clean oil that's in a clean condition.

A warning

A streaker took into ED P-802B (later J2) for the hydraulic dump-body repair on your John Deere M21 dump. When Page 15 meant to say use this "Weekly routine filter plug and screen. Backwash with oil to third mark from the top on the gage with the body down. ED P-802B (later J2) is being revised.

It's a load!

Here's one to keep on the tip of your tongue—when you're driving any of the heavy dump trucks, like the M200 or the M200, P2-100 5x8 Tractor. You gotta remember that the dump body and equipment is a real load. You need a grade to start the roller, so use second gear (high-range or lowest gear on the low of gear). And drop to low range if the going's tough—comes down.



Keep rattles

Here's a trick that'll keep your M200's load from rattling like a basket of balls. Remove the load-hinge pins (pinch both hinge surfaces together (very slightly). Then grease the pin and slip it home. If

the pin's in bad shape and can't be reused, get a new one (Ford Truck No. GF48-749748) from your John Deere support unit.

Look before draining

Check the pressureing log on your new truck. If it says the engine contains break-in oil, that's good for 500 miles. Check it but don't change it for the first 500 miles. Your engine needs that break-in period.



Play gets a face

A fender support brace has been added to the fender housing of the M21 and M20 2 1/2 tractors. When not handling the load it holds your fender housing from flexing in side loading. You'll find it on vehicles with serial number beginning at 127310.

On the way

If you've got one of those early M21 ambulances, with the driver's door hinged by the spare-wheel carrier, it's tight. An M20D is on the way to replace the carrier with a swinging carrier—like on the later ambulances. Keep in touch with your John Deere support unit about it.

An hourglass is the central focus of the advertisement, positioned on the left side. The top bulb is empty, while the bottom bulb is partially filled with sand. In the background, a car is visible, appearing to be in motion or parked on a road. The overall scene is set against a light, textured background.

TOO LATE?

MOST Vehicles Have a Manufacturer's Warranty

It's your guarantee
for trouble-free
operation.

USE IT BEFORE IT EXPIRES

The limit is generally one
year or 4000 miles,
whichever comes first.

A UER (DA FORM 468) Does the Trick

The Manufacturer exchanges defective
parts free during this period.
(See DA Form 468-10)