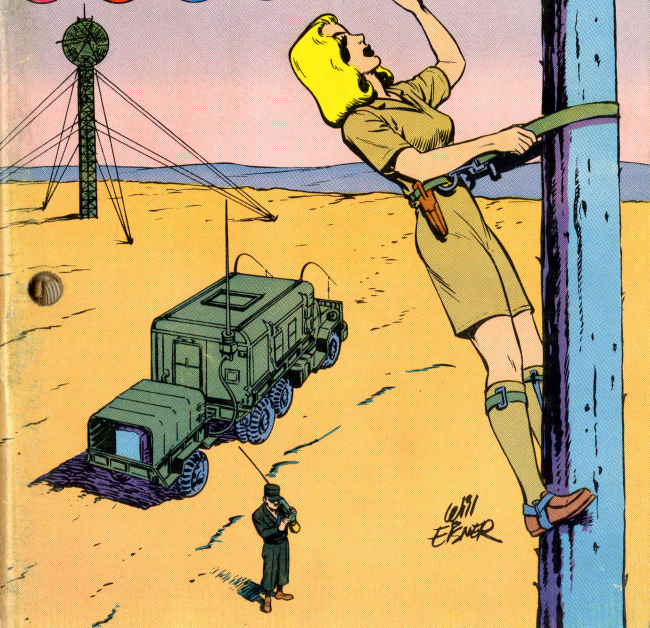


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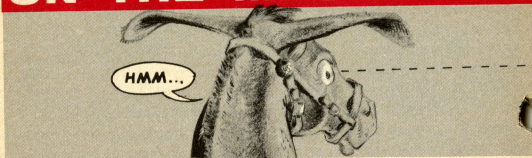
# PS

1958 Series

## THE PREVENTIVE MAINTENANCE MONTHLY



# ON THE MECHANICAL

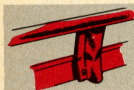


Your M274 ½-ton carrier, light weapons, infantry (Mechanical Mule) can do a lot of things for you, and all it asks is good care. A little primping now and then, and it'll do most anything you ask.

The guide below is for you—to help you keep the Mule in the kind of shape it needs to be in. When using this guide, focus these up outta your mind in big type:

Deficiencies that make the vehicle unsafe to operate or which can lead to real bad damage are the major ones—the ones that must be fixed before taking the vehicle on the road. In the guide below, these are shown in bold face type.

Awright, now—**BE YOUR OWN INSPECTOR.**



**GENERAL VEHICLE APPEARANCE**—Dirty, rust spots, dents. Split seams (welds must be intact).

**STARTER CABLE**—Broken, kinked. Doesn't operate freely.

**FRONT AND REAR AXLE DROP GEAR HOUSINGS**—Flange bolts loose.



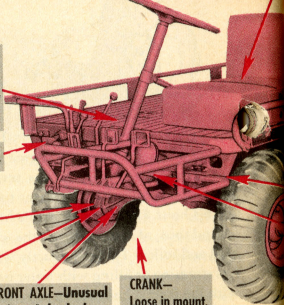
**FRONT AXLE HOUSING**—Rusty, badly scored. Flange bolts loose.

**FRONT AXLE**—Unusual noises. Lube leaks.

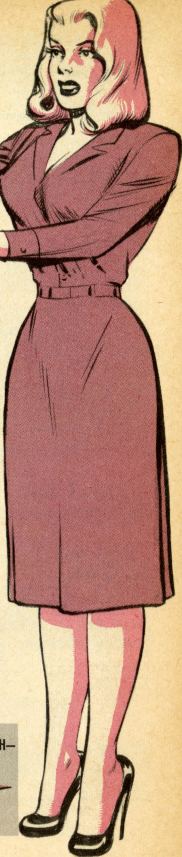
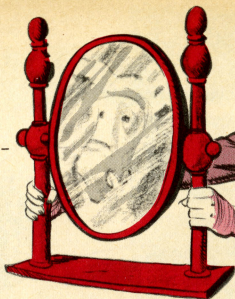


**CRANK**—Loose in mount.

## FRONT VIEW



# MULE



**SEAT**—Loose mountings.  
Cushions worn, torn, frayed.

**RAILS**—Missing,  
bent, loose.



## OF VEHICLE

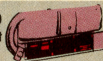
**GAS TANK FILLER CAP AND GAGE**—Gas leak-  
ing (check gasket). Dirt and junk around filler  
hole. Gage rod bent, marks battered.

**GAS TANK**—Tank leaking.  
Tank loose in mountings



**FUEL LINE**—Leaking.

**NAME, DATA, CAUTION AND  
INSTRUCTION PLATES**—Not  
readable, painted.



**RAIN DEFLECTOR AND PRE-  
CLEANER**—Missing, loose,  
bent, clogged.



**FOOT RAIL**—  
Missing, bent, loose.

**FOOT REST ANCHOR  
BOLT**—Loose.



**IGNITION SWITCH**—  
Loose, broken.







**MUFFLERS**—Holes in muffler, cracked. Loose.



**EXHAUST PIPES**—Clogged, collapsed, cracked. Dented. Clamps loose.



**WHEEL HUBS**—Lube leaking.



**STUDS**—Broken. Bent.

**TIRES**—Tread worn smooth (time for recapping); cut to fabric; uneven wear. Incorrect tire pressure (correct pressure: 12-PSI). Valves bent. Valve caps missing.

**RIM AND AXLE FLANGE NUTS**—Missing, loose. Rims dented.



**OPERATING CONTROLS**

**HAND THROTTLE**—Knob missing. Hard to operate.

**ACCELERATOR**—Sticks, loose.

**BRAKE PEDAL**—Improper adjustment.

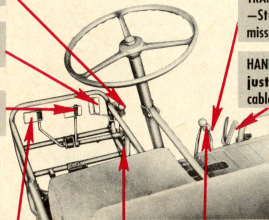
**CLUTCH PEDAL**—Improper free play (should travel free 1/2 to 1 inch), grabs, chatters, slips.

**ACCELERATOR LINKAGE**—Bent, stuck.

**TRANSFER GEARSHIFT LEVER**—Stuck, loose, bent, knob missing.

**HANDBRAKE**—Incorrect adjustment. Doesn't hold, cable busted.

**TRANSMISSION SHIFT LEVER**—Stuck, loose, bent, knob missing.



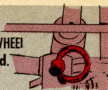


## OF VEHICLE

STEERING WHEEL—Bent, loose, too much free play.



TWO- TO FOUR-WHEEL STEER PIN—Rusted.



STEERING COLUMN—Dented.



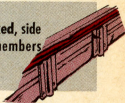
STEERING COLUMN BRACE—Missing, doesn't hold steering column.



BODY BOLTS AND MOUNTINGS—Missing, loose, broken.



FRAME—Bent, cracked, side rails and cross members loose.



## UNDERNEATH THE VEHICLE

TOW BAR—Missing, bent, loose.



TRANSMISSION—Leaky drain plug (check for looseness). Bolts loose. Whine or howl.



OIL SEAL—Leaks.



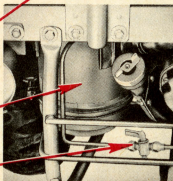
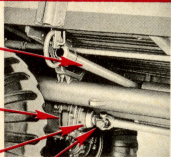
UNIVERSAL JOINTS—Loose. (Grease fittings on each shaft should face the same direction).



AIR CLEANER—Oil level low (must be up to level mark).



FUEL SHUT-OFF VALVE—Leaks. Doesn't operate freely.



## ENGINE

**SPARK PLUGS**—Cracked, loose, dirty. Grommets split, missing.



**SHROUD**—Loose.

**MANIFOLDS**—Leaking, connections loose.



**IGNITION WIRING**—Cracked, shield broken open, threads crossed.



**BLOWER**—Bolts missing, loose. Clamps loose, broken.



**CARBURETOR**—Engine idling too fast or too slow.



**OIL COOLER**—Clogged.

**IDLE PULLEY**—Loose, worn badly.



**VALVE COVERS**—Leaks.



**BLOWER BELT**—Belt cracked, dangerously frayed or shredded. Incorrect adjustment (correct adjustment: 1/4-in deflection).

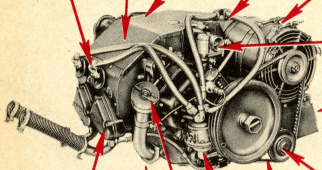


**OIL PAN**—Gasket leaking, plug leaking, bolts loose.



**CRANKCASE OIL**—Level too low (no lower than 1/2 inch below top full mark); too high (no higher than 1/8 inch above top full mark). Cap missing, gasket damaged or missing.

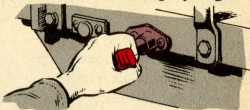
**FUEL PUMP**—Leaks, broken, loose.



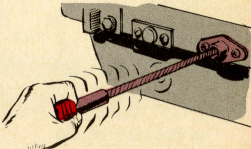
# STARTER MAGIC FOR MULETEERS

A talking mule's entertaining, but a balking mule's downright exasperating, especially if it's the M274 Mechanical Mule. If she won't start when you want her to, no amount of cussin' will clear up the situation. But, like any mule, she can be coaxed to behave if you treat her right.

Next time you go to start the critter, go easy on the starter rope. Just give it



a couple of short tugs, until the dog engages, so when you're ready for the long pull, you won't tear things up.

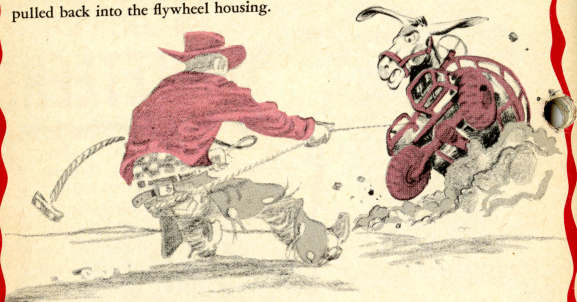


When you're ready to give the final pull, make it steady—not jerky—and remember to keep the pull within arm's length, so the rope can rewind easy-like.





Another tip is to keep hold of the rope when it's rewinding—keep just enough tension on it so it won't kink up, or slip free of the quick-disconnect and get pulled back into the flywheel housing.



If you find it does kink enough so you can't pull it again, all you have to do is uncouple the two snap clamps near the quick-disconnect at the rear of the vehicle, reach in, and "unkink" it by hand.

To keep your rope in tiptop shape, always be sure the air cover is in place—this'll keep dirt and dust from getting at it. You can take a look-see when you're doing your other before-operation checks.

Every so often, like whenever the engine's pulled for maintenance, give the rope a shot of powdered graphite to keep it moving freely. You can order graphite by using this nomenclature: Graphite, dry: Lubricating, powdered (MIL-G-6711)...

FSN 9620-261-5792 (Ord)	3/4-oz
FSN 9620-251-7823 (Ord)	1 1/2-oz
FSN 9620-233-6711 (Ord)	1-lb



Keep your eye peeled for wear, too, especially at the front end of the vehicle where the rope rubs against the metal. When you see any fraying, order a new starter rope by asking for Rope, starter, engine, FSN 2990-698-6937.