

Issue 211

**PS**

1970 Series

June

THE  
PREVENTIVE  
MAINTENANCE  
MONTHLY

HEY, SARGE...  
WHEN'S THE  
RAINY  
SEASON  
OUT  
HERE?

GENERALLY  
STARTS THE DAY  
**BEFORE** YOU  
BEGIN YOUR  
WET WEATHER  
**PM!**

Will Eisner

BE YOUR OWN INSPECTOR...

# MECHANICAL MULE



With your mighty M274-series mechanical mule, it's the little things that count. And these can make or break you, too.

Your only insurance is good PM care.

With this policy, your 1/2-ton, 4x4 platform utility truck can go just about anywhere, do almost anything—then be ready for more.

First, you gotta know the items that can go haywire fast—like the operating controls, their cables and some engine parts.

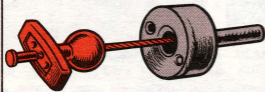
Use common (mule) sense and eyeball this inspection guide. The real serious faults are printed in bold face type.

Be sure you fix them before you hit the trail together.

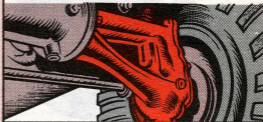
## THE UP-FRONT CHECK

**OVERALL LOOKS** — Dirty, rust spots, dents. **Split seams.**

**STARTER HANDLE AND CABLE**—Broken, kinked, rusty, **worn.** (Pull straight out, hold onto handle until retracted.)



**FRONT AXLE** — Unusual noises; lube leaks, loose studs, nuts, casting seepage.





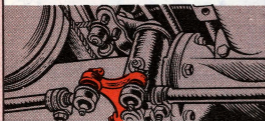
A  
LITTLE  
**PM**  
MAKES A  
BIG  
DIFFERENCE  
IN PERFORMANCE.

TOO BAD —  
I WAS THINKING  
OF RE-UPPING!

FORGET  
IT... THE  
ONLY THING  
THAT'LL BEAT  
THAT CRITTER  
IS BUM  
**PM!**



**BELLCRANK** — Loose in mount. Safety pin parts missing.



**FOOT REST ANCHOR BOLT** — Missing, broken. (Should be hand tightened.)

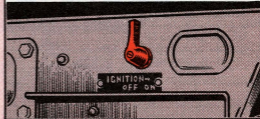


**FOOT RAIL** — Bent, loose, missing.

**RAIN DEFLECTOR AND PRECLEANER** — Missing, loose, bent, clogged, broken or missing chain.



**IGNITION SWITCH** — Loose, broken. (Check wire terminal.)

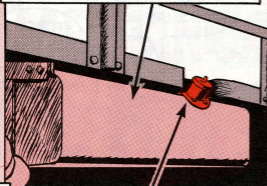


**DATA PLATES** — Not readable, painted over (these rust easily). Loose rivets.



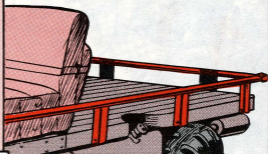


**GAS TANK** — Leaking, rattling, loose.

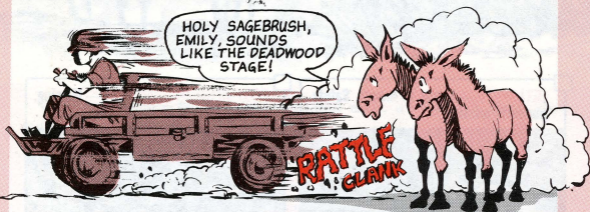


**FILLER CAP AND GAGE** — Leaks. Valve closed. Gage rod bent. (May not vent in vented position), check gasket.

**HAND RAILS** — Missing, loose, bent, unpainted. Loose rivet.



**SEAT** — Loose mountings; cushions worn, torn, frayed.



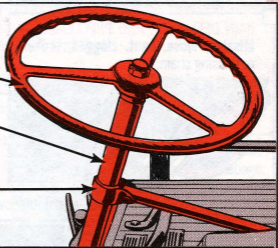
### CHECK ON THE CONTROLS

**STEERING WHEEL** — Bent, loose, too much free play, binding; doesn't move forward.

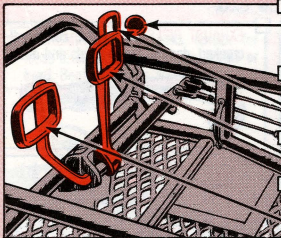
**STEERING COLUMN** — Dented, bent.

**STEERING COLUMN BRACE** — Missing, doesn't hold. (Tighten knob firmly.)

**TWO-TO-FOUR-WHEEL STEER PIN** — Broken, rusted, cracked (all late models except M274A5). Check for broken and/or lost safety chain.







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

**ACCELERATOR** — Sticks, loose, binding, kinked cable. (Lubricate.)

**BRAKE PEDAL** — Not adjusted, bent.

**CLUTCH PEDAL** — Too much free play (should travel free 3/4 inch, grabs, chatters, slips, binds. Do not ride pedal.

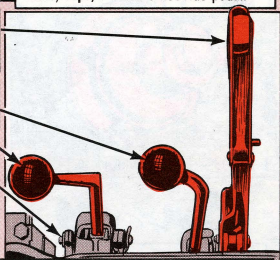
**HANDBRAKE** — Bad cable adjustment, won't hold; cable rusty, worn, bent cable anchor bracket.

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

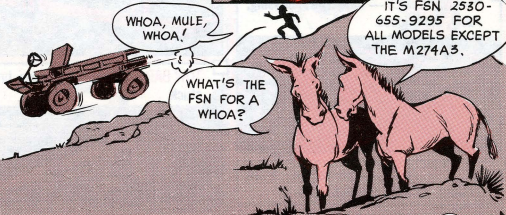
**TRANSMISSION SHIFT LEVER** — Stuck, loose, bent, knob missing. Bent shift rod. Replace brackets if sprung.

**ACCELERATOR LINKAGE** — Bent, sticks.

**HAND BRAKE CABLES** — Rusty, worn, loose, kinked. To replace hand brake cable use FSN 2530-655-9295 for all models except M274A3 (FSN 2530-711-8369). Clamp or yoke (FSN 5340-865-9496).

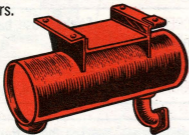


**CHOKE** — Handle missing, bracket loose, screws missing.



## TO THE REAR CHECK

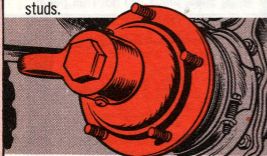
**MUFFLER** — Holes, noisy. Exhaust pipe connections loose. Loose bracket fasteners.



**EXHAUST PIPES** — Clogged, collapsed, cracked, dented. Loose studs and nuts.



**WHEEL HUBS** — Lube leaking. Loose studs.



**STUDS** — Broken, bent, loose.

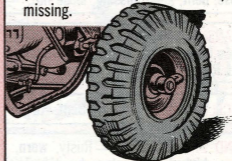


**RIM AND AXLE FLANGE WASHER AND NUTS** — Missing, loose, rims dented.

**PUBLICATIONS BAG** — Worn, dirty, missing pubs.



**TIRES** — Tread worn smooth, fabric cuts, uneven wear. Incorrect pressure (should Be 12 PSI). Valves bent, caps missing.



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

**BODY BOLTS AND MOUNTINGS** — Missing, loose, cracked. Cracked welds.

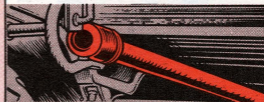


**ENGINE GUARD** — Capscrews missing, rusty, bent, loose.



**HOURMETER** — Disconnected, wires broken. Internal damage (Gears).

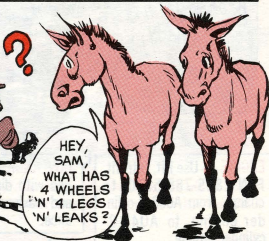
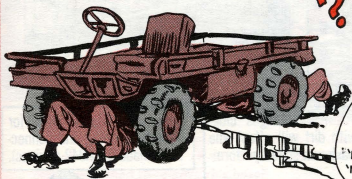
**TOW BAR** — Support clip loose, broken, stuck.



## UNDERNEATH CHECK-UP

**TRANSMISSION** — Leaks (check for loose drain plug). Bolts loose. **Whine or howl.** Bent shift rods and hangers.

**OIL SEALS** — Leaks. (Use special tools for installation of components.)

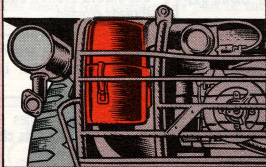
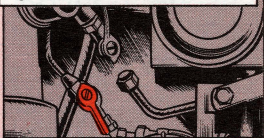


HEY, SAM, WHAT HAS 4 WHEELS 'N' 4 LEGS 'N' LEAKS?

**UNIVERSAL JOINTS** — Loose, worn. No lube.

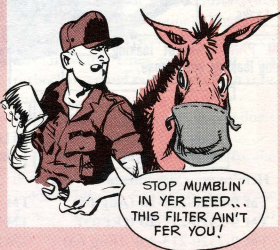
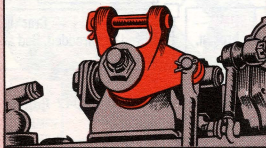
**FUEL SHUT-OFF VALVE** — Leaks, clogged.

**AIR CLEANER** — Clamps loose or busted. (Replace element every 50 hours.) Service as required.



**BRAKEDRUM** — Loose, leaks, rusty (faulty M274A3 brakeband). Disconnect retainer springs.

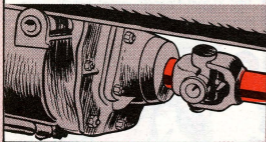
**TOW BAR BELLCRANK** — Sticks, bolt rusty, nut and safety pin missing.



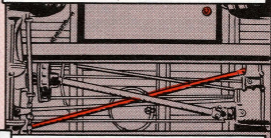
STOP MUMBLIN' IN YER FEED... THIS FILTER AIN'T FER YOU!



**PROPELLER SHAFT**—Noise, whip, backlash. (Lubricate) Broken Snap ring.



**STEERING CONNECTING ROD** — Bent.



**FUEL TANK DRAIN PLUG** — Leaking.

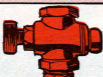
### THE ENGINE CHECK

**ENGINE** — Use Kit, retrofit, FSN 2805-788-5110, to change from A053 4-cylinder engine to A042 2-cylinder engine.

**GOVERNOR** — Linkages clogged with dirt will affect idle and maximum speed performance.

**FUEL LINES**—Leaks (check for defective tubing and connections made for A042 engines).

**BREATHER VALVE** — Plugged.



**FUEL FILTER** — Dirty, loose.



**SHROUD** — Loose, dirty, damaged, screws missing.

**MANIFOLD** — Leaking, connections loose. **Blown gaskets.**

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

**SPARK PLUGS** — Cracked, fouled, dirty. (Gap should be 0.030.)

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

**VALVE COVERS** — Leaks.

**CARBURETOR** — Idles too fast or too slow. **Jets clogged.** Dirt and grime.

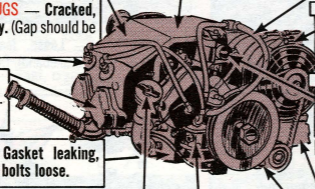
**OIL PAN** — Gasket leaking, plug leaking, bolts loose.

**OIL COOLER** — Clogged. (Clean fins.)

**CRANKCASE OIL** — Level too low. (2-1/2 qts in M274A2 thru M274A5.) Cap missing, gasket damaged or missing.

**FUEL PUMP** — Leaks, broken, loose.

**BLOWER BELT** — Cracked, frayed or shredded. Bad adjustment.



Here're your organizational TM's:

TM 9-2320-213-10 (Aug 65)

TM 5-2805-213-14 (Jul 69), AO42 Engine

TM 9-2320-213-20 (Oct 65)

TM 9-2320-246-10 (Apr 67)

TM 9-2320-213-20P (Aug 63)

TM 9-2320-246-20 (Jul 67)