

# PRODUCT SERVICE BULLETIN NO. OPSB 74-1

February 22, 1974

SPRING "TUNE-UP"

A profitable idea to consider is to feature a spring "tune-up" for your ELEC-TRAK tractor customers. Now is the time to mail to each customer an offer for a preventive maintenance plan prior to the spring mowing season. The plan should consist of the following checks:

Check over electrical controls for function. For instance, an E15 should have seven distinct drive motor speeds following throttle advance from neutral to full throttle position. If not, something is wrong -- worn throttle or throttle switches, inoperative 1A or 2A contactor, FW relay, Card 1 or Card 3. Similar tests should be given other model ELEC-TRAK tractors. Does the tractor shut off when leaving the seat? Is high power usage noticed on the Power Use Gage under low loads? Check over the tightness of mounting bolts, the drain plug, drive belts, and so on, as shown in Fig. 1. Also be sure to check brake pad wear and adjustment, and lubricate the brake pedal shaft with #30 weight oil if the pedal is "sticky."

Since the mowing season is fast approaching, it is advisable to examine your customer's mowers as part of the program. The entire pro-

cedure of mower motor inspection, disassembly, assembly, and so forth is completely spelled out in your Product Service Manual, Section 7, under the white tab entitled "Accessories." Particular attention should be given to the inspection of the lower bearing (blade end of the shaft) on older 3-3/8 inch diameter motors. As you are probably aware, we have experienced some difficulty with bearing grease washout on some older mower motors.

Greater customer satisfaction will be accomplished by repairing a faulty mower now rather than have the home owner stranded in high grass this summer because of equipment breakdown. Remember, a small repair bill now could save the owner a much larger bill later this spring, and would surely be well appreciated.

E20 TROUBLE-SHOOTING (MODEL AA-DA)
Product Service Bulletin No. 72-21, dated
June 22, 1972, explains a procedure for location
and correction of poor connections at Card #4.
Cleaning of the copper contact pads on the Card #4
is recommended in that bulletin. We have found
that replacing the Card #4 with one having solder
tinning on the contact pads is a more permanent
solution to the contact problem.

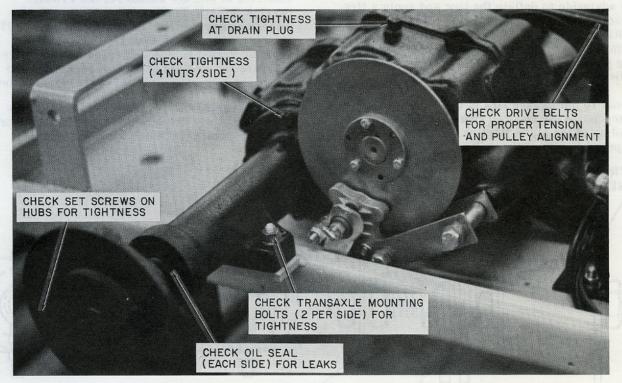


Figure 1

Send in your stock Card #4's with copper contact pads for free exchange with "tinned" cards, if you have not already done so.

It has been reported that some E20 tractors have developed overheated current sensing shunt plates (lower control panel). Indications are "chattering" of the FW relay or loss of the top three throttle speeds in the forward direction. In severely heated cases, the drive motor won't start in forward or reverse even though the controls can be heard to pick up in normal fashion. An examination of the shunt plate should be made for evidence of overheating. If "warping" or discoloration is evident, then replace the shunt.

A new Shunt Kit is available, as shown in Fig. 2. Use part number 247A7693G2 when ordering. This new kit assures a tighter, more reliable connection by using different lock washers and eliminating the use of the insulator threads for electrical connections. See Fig. 2.

Loose shunt connections at time of assembly or loosening from vibration at the threaded phenolic spacers will generate heat when current flows through the shunt. For this reason it is imperative that, when replacing the shunt plate, the wires at the shunt be examined and wire terminals replaced if overheated.

# E8M/E10M SERVICE HINTS

### Front Tires

Tires may go flat if tire air pressure is too low for the load on the front axle. Small tubeless tires have a greater tendency to leak air if tire pressure is low. Assuming the rim or valve stem is not leaking and the tire goes flat, it would be advisable to deflate the tire and apply a tire bead cement (obtained locally). The tire should be initially inflated to 40 psi overnight to set the cement, then lowered to the recommended operating pressure. It is also satisfactory to insert a tube as a repair.

In cold climates it is advisable to add an additional 10 psi to each tire in the winter. This will compensate for reduced tire pressure caused by cooling of the air in the tire and additional loading imposed if a snow thrower is used.

## Drive System

The E8M/E10M drive system should be checked for excessive belt wear. Slipping the clutch for long periods of time as a means of speed control causes the belt to heat up and prematurely stretch beyond the range that the idler pulley can maintain tight.

There have been a few reports of interference with full idler pulley engagement. On early models the heavy wire that trips the clutch switch may be bent and limit the idler arm travel by hitting the transaxle housing. If so, bend it forward to the correct position.

Be sure the motor sheave (pulley) is of cast iron, not a zinc casting sheave, for longer service life. This can be easily checked by touching a magnet to the pulley -- it will attract the magnet if it is iron.

## Heavy-Duty Mower Harness - E8M/E10M

Some cases have been reported of E8M and E10M mower wiring harness failures on extended heavy loading. For this reason a heavy-duty mower harness for 36-inch mowers (including the tractor portion) is now available. It consists of larger wire (12 AWG) and higher rated connector plugs and jacks.

The ordering number is 247A7728G1, Wiring Harness Replacement Kit.

#### BATTERIES IN INVENTORY

Those dealers having a quantity of "wet" batteries in storage should reread Product Service Bulletin 72-25 entitled "Power Pack Technical Information" dated September 8, 1972. If batteries are more than 120 days old their capacity should be checked. Charge the batteries, measure the specific gravity of each cell, and discharge test as spelled out in the above bulletin.

The purpose is to prevent customer complaints on newly delivered tractors having short range because of faulty or weak batteries.

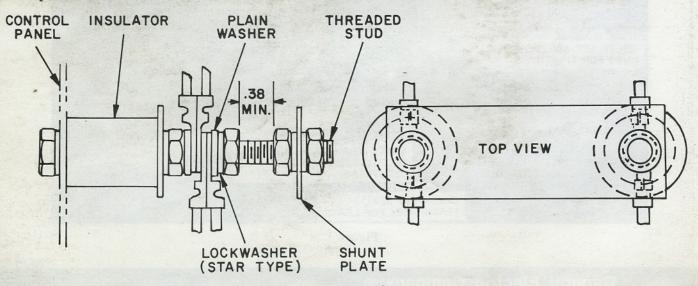


Figure 2