



Power Take-Off Solenoid

TROUBLESHOOTING GUIDE

Condition	Likely Cause	Correction
PTO will not engage- FA, FR, CS10/11, CS20/21, CS41, CS6/8, GA, GM Series	Electric over air models. Insufficient air pressure.	Check air pressure at PTO. Confirm plumbing per installation diagram.
	Electric over hydraulic models. Insufficient hydraulic pressure.	Check hydraulic pressure at PTO. Compare to pressure requirement as stated in PTO installation manual. Confirm plumbing per installation diagram.
	Bent solenoid cartridge. PTO mounted with solenoid too close to a solid object.	Replace solenoid assembly. Check for clearance.
	Insufficient voltage to solenoid. Minimum 10.2-Maximum 14 vdc required.	Test with DVOM Confirm proper grounding.
	Open circuit (high resistance) in solenoid coil.	Test with DVOM for resistance of 8.5-10Ω. Replace if necessary.
Blown 10A fuse	Short circuit (low resistance) in solenoid coil.	Replace fuse. Test with DVOM for resistance of 8.5-0Ω. Replace if necessary. Test coil with DVOM for amperage draw between 1.2- 1.4A.
Blown 40A fuse (TG series with Lectra-Shift option)	Short circuit (low resistance) in solenoid coil. (The Lectra-Shift solenoid contains <u>two</u> coils, an ENGAGE coil and a HOLD coil.)	Check ENGAGE coil resistance with DVOM from solenoid white wire to solenoid ground. A good coil will read between 0.3 and 0.5Ω. Check HOLD coil with DVOM from solenoid red wire to solenoid ground. A good coil will read between 4.7 and 5.9Ω. The Ohm reading between red and white wires will be the sum of the Engage and Hold readings. Replace if necessary.
PTO will not disengage	Debris in solenoid or screen fitting.	Remove debris and flush hoses.
	Bent solenoid cartridge. PTO mounted with solenoid too close to a solid object.	Replace solenoid assembly. Check for clearance.
Any or all of the above.	Poor connections, rubs, breaks, pinches, bare wires.	Repair as necessary to ensure that all wiring is secured and routed away from sharp edges, high heat, and moving components.

