

Customer Bulletin

Commercial Products

June 16, 2022

Engine Shuts Down After 3 Minutes

Pro Force[™] Debris Blower

Bulletin Type	Information Only		
Status	Final Release		
Affected Units	Model Number(s)	Serial Number(s)	
	44552	315000001 and Up	
	44552TE	400000000 and Up	
	44553	315000001 and Up	
	44554	315000001 and Up	
Distribution Situation	For Distributor and Customer Bulletin only Important Information		
	Toro has received reports that the engine is shutting down without operator input after a few minutes; after the engine shuts down, it can be restarted without issue but only runs for another few minutes before it shuts down again. This situation can be caused when the Toro TEC controller loses, or never establishes, an oil pressure signal from the Kohler [®] engine oil pressure switch.		
	After 3 minutes of running, the TEC controller starts checking the oil pressure signal from the engine; if the oil pressure signal is lost or never found, the TEC will remove power from the fuel solenoid, causing the engine to shutdown as a precaution to prevent engine damage. This may be due to a faulty engine oil pressure switch.		

Corrective Action Fix as Fail

Parts

Use an ohm meter and the wiring schematic to test the oil pressure switch. When the engine is not running, the oil pressure switch should show an open circuit to ground; when the engine is running, the oil pressure switch should have continuity to ground (assuming there is good oil pressure).

If the above test indicates a missing sensor signal, the oil pressure switch may need to be replaced, or the engine may have low oil pressure.

Inspect for possible low oil pressure as directed in the Kohler[®] Engine Service Manual; if the oil pressure is found to be good, the wiring from the oil switch to the TEC is found to be good, and the oil pressure switch is not producing a proper path to ground, it is likely that the oil pressure switch needs to be replaced; replace it with a new Kohler engine oil pressure switch with new rubber boot to help deter water entry into the switch.

Safety Awareness Follow reasonable and customary safety precautions.

Currently available

Kohler Part No.	Part Description	Quantity
	Kohler engine oil pressure switch kit*	1

*Must be obtained from your local Kohler dealer

Special Tools Required

Tool Description

Kohler Command CH730 Service Manual

References

Find the latest operator's manuals, service manuals, schematics, parts catalogs, and customer bulletins at www.Toro.com.

Resource	Search Term
Operator's Manual	Model and serial number for the machine.
Engine Owner's Manual	N/A

Service Instructions

Testing and Replacing the Engine Oil Pressure Switch

- 1. Move the machine to a level surface.
- 2. Shut off the machine, remove the key, wait for all moving parts to stop, and wait for all parts to cool before servicing the machine.
- 3. Inspect for possible low oil pressure as directed in the Kohler Engine *Service Manual*; follow the diagnostic steps as directed in the Kohler Service Manual.

Important: Detailed information on engine troubleshooting, testing, disassembly, and assembly is given in the Kohler Command Pro CH740 Service Manual; contact your local Kohler Engine Dealer or visit http://kohlerengines.com to obtain a copy of the engine Service Manual.

4. If the diagnostic steps point to an issue with the engine oil pressure switch, replace it with a new Kohler engine oil pressure switch with a new rubber boot to help deter water entry into the switch.

Refer to the Kohler Command CH730 *Service Manual* for more detailed instructions.

- A. Disconnect the negative battery cable from the battery terminal. Position the disconnected negative cable away from the negative battery terminal.
- B. Disconnect the wire lead extending from the oil pressure switch and remove the switch from the engine.

Note: Note how this wire is connected for later installation.

- C. Install the new engine oil pressure switch to the location shown in Figure 1; apply and torque the switch to 40 in-lbs ($4.5 \text{ N} \cdot \text{m}$).
- D. Connect the wire lead on the new oil pressure switch to the engine as it was connected in step B.



1. Engine oil pressure switch location