

Troubleshooting Guide

Symptom: Clutch is Not Engaging



PROBLEM	POSSIBLE CAUSE	SOLUTION
Low voltage supply (Less than 13.2 VDC at the clutch)	<ul style="list-style-type: none"> Frayed wiring or bad connector(s) Defective PTO switch Defective charging system Low coil resistance 	<ul style="list-style-type: none"> Repair or Replace. Clean Connectors Repair or Replace Repair Engine Replace with new Xtreme clutch
No power at the clutch connection	<ul style="list-style-type: none"> Short in wiring or bad connector(s) Defective PTO switch Blown Fuse 	<ul style="list-style-type: none"> Repair or Replace Repair or Replace Look for frayed wire and repair
Incorrect coil resistance	<ul style="list-style-type: none"> Defective clutch coil 	<ul style="list-style-type: none"> Replace with new Xtreme clutch
Power at the clutch connector, but the clutch does not engage	<ul style="list-style-type: none"> Rotor/armature airgap too large (greater than .125"/3.18mm). End of useful life Bad clutch coil 	<ul style="list-style-type: none"> Replace with new Xtreme clutch Replace with new Xtreme clutch

Symptom: Clutch is Slipping

PROBLEM	POSSIBLE CAUSE	SOLUTION
Contaminated clutch friction surfaces	<ul style="list-style-type: none"> Engine oil leaking on the clutch 	<ul style="list-style-type: none"> Repair oil leak. Disassemble clutch, clean armature, rotor, and brake
Overloaded clutch (overheating)	<ul style="list-style-type: none"> Deck is clogged with grass Bad blade spindle bearing or idler pulley bearings 	<ul style="list-style-type: none"> Remove excess grass from deck Replace spindle(s) and or idler pulley(s). Replace belt
Low voltage supply (less than 13.2 VDC at clutch)	<ul style="list-style-type: none"> Defective battery Defective wiring or connectors Defective PTO switch Defective charging system Defective clutch lead wire 	<ul style="list-style-type: none"> Load test battery – replace battery Repair or replace Replace PTO switch Repair engine Repair or replace with new Xtreme Clutch
Oil on the V-belt	<ul style="list-style-type: none"> Hydraulic or engine oil leak 	<ul style="list-style-type: none"> Repair lead and replace belt (once oil soaks into a belt it is ruined)



If the clutch has broken rivets they COULD separate and cause risk of personal injury

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Symptom: Noisy Clutch and/or Vibration



PROBLEM	POSSIBLE CAUSE	SOLUTION
Clutch is loose on the crankshaft	<ul style="list-style-type: none"> The mounting bolt is too long and bottoms out on the engine crankshaft before clamping clutch The mounting washer is too thin and deforms when the bolt is tightened Loose mounting bolt (the bolt is not torqued properly) The crankshaft is bottomed on the D-Spacer. The D-Spacer should never touch the crankshaft. 	<ul style="list-style-type: none"> Replace with the correct length and grade bolt. Inspect clutch bearings Replace with the correct grade 5 washer. ¼" thick minimum. Do not use standard washers Replace bolt and torque to specifications Replace the bolt and use the proper spacer (1/4" thick minimum). Do not use standard washers
Clutch not mounted square	<ul style="list-style-type: none"> The D-Spacer mounting shoulder is not square Incorrect or no chamfer on D-Spacer Bad clutch bearings 	<ul style="list-style-type: none"> Replace D-Spacer and bolt Increase chamfer on D-Spacer or replace. Replace the bolt Replace with new Xtreme clutch
Clutch bearing failure	<ul style="list-style-type: none"> Loose mounting (bolt not torqued properly) Over torqued mounting bolt. (bolt too tight) Clutch body movement restricted The engine overheated and melted the bearing grease 	<ul style="list-style-type: none"> Replace with new Xtreme clutch and bolt Replace with new Xtreme clutch and bolt Repair or replace anti-rotation device and replace clutch and bolt Replace with new Xtreme clutch and bolt. Repair engines overheat problem
Clutch rattles against the anti-rotation device	<ul style="list-style-type: none"> A little noise is normal on some mowers Damaged anti-rotation device 	<ul style="list-style-type: none"> If noise is excessive, repair or replace anti-rotation device (follow OEM's specs) Repair and replace
Clutch wobbles	<ul style="list-style-type: none"> Bent crankshaft Bad clutch bearings 	<ul style="list-style-type: none"> Replace crankshaft, clutch, and bolt Replace with new Xtreme clutch and bolt

Symptom: Clutch Brake is Not Stopping Blades within 6-8 Seconds

PROBLEM	POSSIBLE CAUSE	SOLUTION
Contaminated clutch friction surfaces	<ul style="list-style-type: none"> Engine oil leaking on the clutch 	<ul style="list-style-type: none"> Repair oil leak. Disassemble clutch, clean armature, rotor, and brake
Clutch armature/brake poles wore out	<ul style="list-style-type: none"> End of usable life 	<ul style="list-style-type: none"> Replace with new Xtreme clutch
Clutch is always powered up	<ul style="list-style-type: none"> PTO switch defective Short in electrical system Clutch bearing failure (severe) 	<ul style="list-style-type: none"> Replace PTO switch Repair Replace with new Xtreme clutch and bolt