

HTG Basic Troubleshooting Quick Reference Guide

General Cautions

Caution: Do not pressure wash the transmission to remove debris. Use a power blower to remove built up debris.

Caution: Use of Foam/ Liquid filled tires is not recommended.

<u>Problem/ Symptom</u>	<u>What to Check/ Look For/ Look At</u>	<u>Potential Repair Fix</u>	<u>Dealer Fix</u>	<u>If In Warranty Replace Transmission</u>
Fluid Leakage NOTE: Identify fluid leak location NOTE: Refer to owners manual for proper transmission fluid and fill volume.	Expansion tank overfilled	Refer to OEM owners manual - Remove fluid and adjust to proper level	X	
	Expansion tank overflowing (tank at normal level when cold, but completely filled when transmission is running)	Check for broken fan blades, debris build up, contaminated oil/ milky oil, excessive load or dragging brakes	X	
	Shaft seal leaking (Trunnion, Input, Motor Output Seal)	Replace shaft seal	X	
	Filter leak- Check proper torque, inspect for seal damage, inspect for cap damage	If loose, torque to proper torque specification, if seal damage replace filter assembly, if cap cracked replace filter assembly	X	
	Static seals leaking (Side/ bottom cover)	Remove covers, install new seal, re-torque to proper torque spec	X	
	Motor static seals leaking (motor section seals, motor top housing interface seals)	Dis-assemble transmission, remove pump section from motor, replace seals as necessary		X
	Drain plug is leaking	Torque to proper spec. If leak continues, remove drain plug, install new plug and washer, torque to proper spec, refill oil	X	
	SAE plug/ hose barb leaking	Check torque of fitting, if leak continues replace fitting assembly	X	
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No Power NOTE: Verify Engine is running / operation properly NOTE: Refer to owners manual for proper transmission fluid and fill volume.	1. Proper fluid level	Refer to OEM owners manual - Check transmission fluid level, adjust as necessary	X	
	2. Bypass lever position	Ensure lever is in the proper operating position	X	
	3. Drive belt broken or lack of proper tension	Inspect belt and tensioner pulley and spring, repair as necessary	X	
	4. Trunnion lever/ control linkage disconnected/ damaged	Inspect linkage and repair as necessary	X	
	5. Internal components of transmission are damaged	Remove transmission, dis-assemble, repair/ replace as necessary		X
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Low Power NOTE: Verify operating conditions (BELOW) - Mowing? Heavy grass/ normal grass conditions - Towing? Trailer/ logs/ field maintenance equipment NOTE: Refer to owners manual for proper transmission fluid and fill volume.	1. Excessive load	Verify mower use conditions, reduce weight of load or towing amount	X	
	2. Low fluid level	Refer to OEM owners manual - check and fill as necessary	X	
	3. Belt tension	Refer to OEM owners manual - adjust belt tension to proper specification	X	
	4. Transmissions over heat	Check fan for broken blades, check for debris wrapped around pulley shaft	X	
	5. Engine speed low	Refer to OEM owners manual - Check RPM of engine to ensure proper operation	X	
	6. Control lever doesn't have full range of motion	Check linkage for interference or damage	X	
	7. Brake Drag	Refer to OEM owners manual - for proper specified brake adjustment	X	
	8. Pulley Loose- can spin on shaft	Verify proper nut torque for fan/ pulley, tighten as necessary	X	
	9. Pulley Alignment (transmission to engine)	Verify pulley alignment with clutch/ engine, transmission pulley installed correctly	X	
	10. Contaminated fluid/ filter clog	Drain fluid, install new filter, re-fill oil	X	
	11. Worn internal components	Remove transmission, dis-assemble, repair/ replace as necessary		X

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Lack of control/jerky control NOTE: Refer to owners manual for proper transmission fluid and fill volume.	1. Proper tire pressure	<i>Refer to OEM owners manual</i> - Verify proper tire inflation, adjust as necessary	X	
	2. Inspect control linkage dampeners	Inspect dampener for smooth and proper range of motion, replace as necessary	X	
	3. Loose control lever/ linkage	Verify linkage connections, repair as necessary	X	
	4. RTN function	Verify RTN bolt torque, RTN adjustment, repair as necessary	X	
	5. Belt tension	<i>Refer to OEM owners manual</i> - verify proper tension, adjust as necessary	X	
	6. Proper engine governor speed control (fluctuating RPM)	<i>Refer to OEM owners manual</i> - verify RPM, adjust as necessary	X	
	7. Brake Drag	<i>Refer to OEM owners manual</i> - for proper specified brake adjustment	X	
	8. Loose lug nuts	<i>Refer to OEM owners manual</i> - for proper torque specification	X	
	9. Output axel shaft castle nut is loose	Inspect shaft, threads, and hub for damage, repair as necessary, and re-torque to proper torque specification	X	
	10. Internal components of transmission are damaged	Remove transmission, dis-assemble, repair/ replace as necessary		X
<u>Problem/ Symptom</u>	<u>What to Check/ Look For/ Look At</u>	<u>Potential Repair Fix</u>	Dealer Fix	If In Warranty Replace Transmission
Noisy Unit NOTE: Verify location of the noise- engine/ deck/ transmission NOTE: Refer to owners manual for proper transmission fluid and fill volume.	1. Excessive load	Verify mower use conditions, reduce weight of load or towing amount	X	
	2. Low fluid level	<i>Refer to OEM owners manual</i> - Check and fill as necessary	X	
	3. Contaminated fluid/ filter clog	Drain fluid, install new filter, re-fill oil	X	
	4. Internal components of transmission are damaged	Remove transmission, dis-assemble, repair/ replace as necessary		X
<u>Problem/ Symptom</u>	<u>What to Check/ Look For/ Look At</u>	<u>Potential Repair Fix</u>	Dealer Fix	If In Warranty Replace Transmission
Miscellaneous	Lack of brake holding power	<i>Refer to OEM owners manual</i> - for proper specified brake adjustment	X	