



Safety & Maintenance Inspection: Motor Graders

SAFETY.CAT.COMTM

Operator/Inspector _____ Date _____ Time _____

What are you inspecting?	<input checked="" type="checkbox"/> What are you looking for?	<input checked="" type="checkbox"/> Evaluator Comments
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FROM THE GROUND

Steps And Handholds	Condition and cleanliness	
Tires, Lug Nuts, Brakes	Inflation, damage, stem covers	
Tandem housings	Trash, dirt buildup, leaks	
Articulation area	Trash or dirt buildup	
Air reservoir	Drain water and sediment	
Transmission	Leaks	
Underneath Of Machine	Differential and tandem leaks	
Hydraulic Oil Tank	Fluid level, damage, leaks	
Covers and guards	Damage, secured	
Batteries & Hold Downs	Cleanliness, loose bolts & nuts	
Fuel Tank	Fuel level, damage, leaks; drain water and sediment	
Hydraulic cylinders, tubes, hoses and fittings	Damage, leaks	
Circle drive	Leaks	
Front wheel spindle bearings	Leaks	
All wheel drive motors	Damage, leaks	
Blade linkage	Damage, loose or missing bolts	
Blade and end bits	Excessive wear or damage	
Overall Machine	Loose or missing nuts & bolts, Loose guards, cleanliness	

ENGINE COMPARTMENT

Engine Oil	Fluid level	
Engine Coolant	Fluid level	
Engine Precleaner	Dirt buildup	
Air Filter	Restriction indicator	
Radiator	Fin blockage, leaks	
All Hoses	Cracks, wear spots, leaks	
All Belts	Tightness, wear, cracks	
Overall Engine Compartment	Trash or dirt buildup, leaks	

ON THE MACHINE, OUTSIDE THE CAB

Lights, lenses	Damage, cleanliness	
Mirrors, windows	Damage, cleanliness	
Windshield Wipers & Washers	Wear, damage, fluid level	

INSIDE THE CAB

ROPS	Damage	
Seat	Adjustment, pedal travel	
Seat Belt & Mounting	Damage, wear, adjustment	
Fire Extinguisher	Charge, damage	
Horn, backup alarm, lights	Proper Function	
Controls, gauge lenses	Damage, cleanliness, operational	
Overall Cab Interior	Cleanliness	



Start-Up and Shut Down Procedures – Motor Graders

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Operator/Inspector _____ Date _____ Time _____

Was procedure step completed properly?	✓	Evaluator Comments
Always read and understand the OMM before operating		

STARTING THE MACHINE...

Turn the battery disconnect switch to ON		
Fasten seat belt		
Make sure all implements are grounded		
Engage the parking brake		
Move the attachment control levers into HOLD		
Make sure all personnel are clear of the machine		
Turn the key start switch to ON		
Perform start-up test on EMS		
Turn the key start switch to START...Crank engine		

MACHINE WARM-UP...

Allow machine to warm-up for 5 minutes as low idle		
Engage and disengage attachment controls		
Cycle all controls to allow warm oil to circulate through all cylinders and lines		
Check gauges and action lights frequently		
Perform second part of EMS start-up test		

MOVING THE MACHINE...

Make sure are is clear of personnel and obstructions		
Raise all lowered implements		
Depress service brake pedal		
Release parking brake		
Move transmission control to desired direction and gear		
Release service brake pedal, Check for proper operation		
Release transmission modulator pedal		
Push down on accelerator		

MAHCINE SHUT DOWN...

Park machine on smooth, level area		
Set the parking brake		
Lower and lock all hydraulic implements		
Allow engine to run at LOW IDLE for 5 minutes		
Turn key start switch to OFF and remove key		
Dismount machine using 3-point contact		
Conduct post-operation walk around inspection		
Turn battery disconnect switch to OFF		

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