



Motor Grader

Preventative Maintenance Inspection Checklist

Inspectors Name	Date
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Machine Make/Model	Serial Number	Plant Number	SMR
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Item	Service Interval				Comment
	Daily	Weekly	Monthly	Quarterly	
Machine Inspection					
<ul style="list-style-type: none"> Machine Wear Points 					
o Check for wear/movement in circle (Rotation)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
o Check for wear/movement in hose tray (hose tray rods bent/damaged)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
o Check for wear/movement in slides & rails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
o Check Knuckles, Pins, A-Frame Ball (wear/damaged/loose)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
o Check blade cutting edge wear (is it wearing uneven in the middle? Need replacing?)	<input type="checkbox"/>	<input type="checkbox"/>			

Hydraulics – for automatic operation					
• Check hydraulic hoses are dry & free of oil leaks	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
• Check hydraulic hoses for wear/tear	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
• Inspect valve bank & hoses for oil leaks (if fitted)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
• Check hydraulic response operation and tune if required (adjusting gains to suit)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Mounting Brackets					
• Check L-Bar mounting brackets are secured and in good condition	<input type="checkbox"/>	<input type="checkbox"/>			
• Check L-Bar is not bent/damaged	<input type="checkbox"/>	<input type="checkbox"/>			
• Check vibrate pole is not bent or damaged	<input type="checkbox"/>	<input type="checkbox"/>			
• Check vibrate pole mounting bushes for excessive wear/movement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
• Check slope sensor mounting bracket for cracks, bent, clean of debris	<input type="checkbox"/>	<input type="checkbox"/>			
• Check Control Box bracket is not loose, and handle is secure	<input type="checkbox"/>	<input type="checkbox"/>			
• Check twin antenna mounting bracket bushes for wear (if fitted)	<input type="checkbox"/>	<input type="checkbox"/>			

<ul style="list-style-type: none"> • Check tightness of ram ball mount? Will it support a control box when tracking around? 	<input type="checkbox"/>	<input type="checkbox"/>			
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Cables					
<ul style="list-style-type: none"> • Check GPS Coil Cable for wear/secured with strain relief (connector pins not too far out/in) 	<input type="checkbox"/>	<input type="checkbox"/>			
<ul style="list-style-type: none"> • Check MMGPS Coil Cable for wear/tear/secured with strain relief (if fitted) 	<input type="checkbox"/>	<input type="checkbox"/>			
<ul style="list-style-type: none"> • Inspect sensor cables for wear/tear/clean of debris/rub marks at pivot points 	<input type="checkbox"/>	<input type="checkbox"/>			
<ul style="list-style-type: none"> • Inspect strain relief anchor points are secured and not damaged 	<input type="checkbox"/>	<input type="checkbox"/>			
<ul style="list-style-type: none"> • Check that all connectors are clean and tight 	<input type="checkbox"/>	<input type="checkbox"/>			
<ul style="list-style-type: none"> • Check fuse holder is secure and no corrosion 			<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> • Check earth wire is secure and no corrosion 			<input type="checkbox"/>	<input type="checkbox"/>	

3D Components					
<ul style="list-style-type: none"> • Inspect GPS antennas/prism for damage/corrosion 	<input type="checkbox"/>	<input type="checkbox"/>			
<ul style="list-style-type: none"> • Check UHF & Network connectors into rover box & T-link (clean & tight) 	<input type="checkbox"/>	<input type="checkbox"/>			
<ul style="list-style-type: none"> • Inspect control box & screen protector 		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

<ul style="list-style-type: none"> • Check UHF, Network antenna and Mag bases (corrosion, loose fittings, cable frayed) 			<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> • Inspect MC-R3 mounting rubbers and magnets (loose/missing/torn) 		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> • Inspect T-Link & MC-i4 magnets are secure (if fitted) 		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

2D Operation					
<ul style="list-style-type: none"> • 2D Sensor's operation checked (all sensors online) 					
<ul style="list-style-type: none"> ○ Mainfall Sensor operation 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> ○ Rotation Sensor operation 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> ○ Slope Sensor operation 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> • MC² Sensor operation (if fitted) 					
<ul style="list-style-type: none"> ○ Inspect MC² Sensor (clean of debris) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> ○ Check MC² Sensor alignment 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> ○ Calibrate MC² Sensor 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> • Check if auto switch is operational (auto lights appear on screen) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

3D Operation					
<ul style="list-style-type: none"> • 3D operation checked (system initialised and all sensors online) 					

○ Check if correct machine file has been selected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
○ Check if Base Station correction is configured correctly (UHF/Network)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
○ Check if correct project file & design surface has been selected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Machine Accuracy					
• 2D calibration check (perform sensor calibration)	<input type="checkbox"/>	<input type="checkbox"/>			
• 3D position check (Benchmarking/referencing machine to point on jobsite)	<input type="checkbox"/>	<input type="checkbox"/>			
• Check/remeasure vibe pole position on blade in machine file (Above, Inside, Behind, Width)	<input type="checkbox"/>	<input type="checkbox"/>			
• Machine capable of final trim operations	<input type="checkbox"/>	<input type="checkbox"/>			

Operator Familiarisation					
• Adjusting customised views for operator preference			<input type="checkbox"/>	<input type="checkbox"/>	
• Adjusting text display on the screen for operator preference			<input type="checkbox"/>	<input type="checkbox"/>	
• Adjusting background colour for operator preference			<input type="checkbox"/>	<input type="checkbox"/>	
• Familiarise operator on elevation increment buttons on the joysticks (adjusting set points on screen)			<input type="checkbox"/>	<input type="checkbox"/>	

<ul style="list-style-type: none"> • Discuss/demonstrate existing features the operator is not currently using or unaware of 			<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> • Familiarising operator on new features of software 			<input type="checkbox"/>	<input type="checkbox"/>	

Software/Firmware Updated (Contact your local Position Partners Dealer for the latest updates)

<ul style="list-style-type: none"> • GPS Firmware 				<input type="checkbox"/>	
<ul style="list-style-type: none"> • Radio Firmware 				<input type="checkbox"/>	
<ul style="list-style-type: none"> • Controller Board Firmware 				<input type="checkbox"/>	
<ul style="list-style-type: none"> • 3DMC Version Updated 				<input type="checkbox"/>	
<ul style="list-style-type: none"> • Geoid & Projection files updated (MGA2020 capable) 				<input type="checkbox"/>	
<ul style="list-style-type: none"> • Tokara Agent Version (If applicable) 				<input type="checkbox"/>	