



Excavator

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					
• Machine Pivot Points					
○ Check for wear/movement in boom foot pin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
○ Check for wear/movement in dipper arm pivot pin	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
○ Check for wear/movement in dog bone pins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
○ Check for wear/movement in quick hitch (if fitted)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
○ Check for wear/movement in titling hitch (if fitted)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
• Buckets/Attachments					
○ Inspect buckets for uneven wear (cutting edge wear)	<input type="checkbox"/>	<input type="checkbox"/>			

○ Inspect bucket pins/ears (width/alignment)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
○ Check for wear/movement in tilt bucket pins	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Hydraulics – for automatic excavator systems					
• Check hoses dry, free of oil leaks			<input type="checkbox"/>	<input type="checkbox"/>	
• Check hydraulic hoses for wear			<input type="checkbox"/>	<input type="checkbox"/>	
• Check hydraulic operation and tune if required			<input type="checkbox"/>	<input type="checkbox"/>	

Mounting Brackets					
• Check all sensor mounting brackets are secure (especially dog bone if using hammer)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
• Check sensor guard and bracket on tilt bucket/hitch (if fitted)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
• Check strain relief for cable fixings	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
• Check GPS antenna mounting poles (Bent/cracked/loose)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
• Check control box screen mounting bracket (Loose/cracked)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
• Check tightness of ram ball mount? Will it support a control box when tracking around?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		

Cables

<ul style="list-style-type: none"> Inspect sensor cables for wear/tear/rub marks at pivot points 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<ul style="list-style-type: none"> Inspect tilt bucket cables for wear/tear/rub marks at pivot points/clear of debris (if fitted) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<ul style="list-style-type: none"> Check that all connectors are clean and tight (spray with contact cleaner) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>		
<ul style="list-style-type: none"> Inspect GPS cables for wear/tear (connector pins not too far out/in) 	<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"/>	<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 & modem (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 rover box mounting rubbers and magnets (loose/missing/torn) 		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> Inspect modem & rover box 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"> o Check IMU sensor operation (Body, Boom, Dipper Arm, Hitch/Dogbone) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> o Check Tilt sensor operation (Tilting hitch/Tilt Bucket) 	<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) 					
<ul style="list-style-type: none"> o Check if correct machine file has been selected 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> o Check if Base Station correction is configured correctly (UHF/Network) 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
<ul style="list-style-type: none"> o Check if correct project file & design surface has been selected 	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Machine Accuracy					
<ul style="list-style-type: none"> 2D calibration check (machine image moving/matching real-time machine movement) 	<input type="checkbox"/>	<input type="checkbox"/>			
<ul style="list-style-type: none"> 3D position check (Benchmarking/referencing machine to point on jobsite) 	<input type="checkbox"/>	<input type="checkbox"/>			

• Check/recalibrate all buckets/attachments	<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 customised joystick button configurations (if auto excavator system is fitted)			<input type="checkbox"/>	<input type="checkbox"/>	
• Discuss/demonstrate existing features the operator is not currently using or unaware of			<input type="checkbox"/>	<input type="checkbox"/>	
• 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)					
• GPS Firmware				<input type="checkbox"/>	
• Radio Firmware				<input type="checkbox"/>	
• Controller Board Firmware				<input type="checkbox"/>	

• 3DMC Version Updated				<input type="checkbox"/>	
• Geoid & Projection files updated (MGA2020 capable)				<input type="checkbox"/>	
• Tokara Agent Version (If applicable)				<input type="checkbox"/>	