

Excavator

Preventative Maintenance Inspection Checklist



InspectorsName		Date	
Machine Make/Model	Serial Number	Plant Number	SMR

Item	Service Interval				Comment
	Daily	Weekly	Monthly	Quarterly	
Machine Inspection					
• Machine Pivot Points					
o Check for wear/movement in boom foot pin	☐	☐	☐		
o Check for wear/movement in dipper arm pivot pin	☐	☐	☐		
o Check for wear/movement in dog bone pins	☐	☐	☐		
o Check for wear/movement in quick hitch (if fitted)	☐	☐	☐		
o Check for wear/movement in titling hitch (if fitted)	☐	☐	☐		
• Buckets/Attachments					
o Inspect buckets for uneven wear (cutting edge wear)	☐	☐			

o Inspect bucket pins/ears (width/alignment)	☐	☐	☐		
o Check for wear/movement in tilt bucket pins	☐	☐	☐		

Hydraulics– for automatic excavator systems

• Check hoses dry, free of oil leaks			☐	☐	
• Check hydraulic hoses for wear			☐	☐	
• Check hydraulic operation and tune if required			☐	☐	

Mounting Brackets

• Check all sensor mounting brackets are secure (especially dog bone if using hammer)	☐	☐	☐		
• Check sensor guard and bracket on tilt bucket/hitch (if fitted)	☐	☐	☐		
• Check strain relief for cable fixings	☐	☐	☐		
• Check GPS antenna mounting poles (Bent/cracked/loose)	☐	☐	☐		
• Check control box screen mounting bracket (Loose/cracked)	☐	☐	☐		

• Check tightness of ram ball mount? Will it support a control box when tracking around?	☐	☐	☐		
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Cables					
• Inspect sensor cables for wear/tear/rub marks at pivot points	☐	☐	☐		
• Inspect tilt bucket cables for wear/tear/rub marks at pivot points/clear of debris (if fitted)	☐	☐	☐		
• Check that all connectors are clean and tight (spray with contact cleaner)	☐	☐	☐		
• Inspect GPS cables for wear/tear (connector pins not too far out/in)	☐	☐			
• Check that all connectors are clean and tight	☐	☐	☐		
• Check fuse holder is secure and no corrosion			☐	☐	
• Check earth wire is secure and no corrosion			☐	☐	

3D Components					
• Inspect GPS antennas/prism for damage/corrosion	☐	☐			
• Check UHF & Network connectors into rover box & modem (clean & tight)	☐	☐			

• Inspect control box & screen protector		☐	☐	☐	
• Check UHF, Network antenna and Mag bases (corrosion, loose fittings, cable frayed)			☐	☐	
• Inspect rover box mounting rubbers and magnets (loose/missing/torn)		☐	☐	☐	
• Inspect modem & rover box magnets are secure (if fitted)		☐	☐	☐	

2D Operation

- 2D Sensor's operation checked (all sensors online)

o Check IMU sensor operation (Body, Boom, Dipper Arm, Hitch/Dogbone)	☐	☐	☐	☐	
o Check Tilt sensor operation (Tilting hitch/Tilt Bucket)	☐	☐	☐	☐	

3D Operation

- 3D operation checked (system initialised)

o Check if correct machine file has been selected	☐	☐	☐	☐	
o Check if Base Station correction is configured correctly (UHF/Network)	☐	☐	☐	☐	
o Check if correct project file & design surface has been selected	☐	☐	☐	☐	

Machine Accuracy

• 2D calibration check (machine image moving/matching real-time machine movement)	☐	☐			
• 3D position check (Benchmarking/referencing machine to point on jobsite)	☐	☐			
• Check/recalibrate all buckets/attachments	☐	☐			
• Machine capable of final trim operations	☐	☐			

Operator Familiarisation

• Adjusting customised views for operator preference			☐	☐	
• Adjusting text display on the screen for operator preference			☐	☐	
• Adjusting background colour for operator preference			☐	☐	
• Familiarise operator on customised joystick button configurations (if auto excavator system is fitted)			☐	☐	
• Discuss/demonstrate existing features the operator is not currently using or unaware of			☐	☐	
• Familiarising operator on new features of software			☐	☐	

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

• GPS Firmware				☐	
• Radio Firmware				☐	
• Controller Board Firmware				☐	
• 3DMC Version Updated				☐	
• Geoid & Projection files updated (MGA2020 capable)				☐	
• Tokara Agent Version (If applicable)				☐	