

ENGINEERING BULLETIN

Ref Document No.	EB24002	Issue No.	1		
Subject	Driftrunner Service Sheets Update				
Release Date	3 rd of December 2024				

Purpose – Advise DRIFTRUNNER owners and operators of updated mechanical service sheets for maintenance of the DRIFTRUNNER.

Applicability - All in service DRIFTRUNNER'S with MDR090376DES & MDR083991TBS-2

Information

PPKME are continually looking to improve and tailor our OEM service sheets to include necessary tasks and inspections for our equipment.

The following Documents have been updated to new Documents:

OLD DOCUMENT NO.	NEW DOCUMENT NO.	DESCRIPTION
OPER-15018-1	DW-FRM-0104	Daily Inspection / Code A
OPER-15018-2	DW-FRM-0105	50 Hour Service / Code B
OPER-15018-3	DW-FRM-0106	250 Hour Service / Code C
OPER-15018-4	DW-FRM-0107	500 Hour Service / Code C1
OPER-15018-5	DW-FRM-0108	1000 Hour Service / Code C2
OPER-15018-6	DW-FRM-0109	(Shiftly) Pre-Start Inspection

Information added to service sheets in general:

- Maintenance safety information section added on the first sheets
- Additional checks for the door interlock valves and alignment checks, etc.

Recommendations

PPK recommend reviewing maintenance procedures against those recommended in the attached service sheets.

Engineering Department

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DAILY INSPECTION - DRIFTRUNNER 'G' & 'F' SERIES

MDR090376DES & MDR083991TBS-2

PLANT NUMBER	SERIAL NUMBER	DATE	MACHINE HOURS	OPERATOR / TECHN.

THIS DOCUMENT FORMS PART OF A REGIME TO ENSURE THE PIECE OF PLANT INVOLVED IS MAINTAINED AS PER THE REQUIREMENTS OF AS3584.3
2012. THE MAINTENANCE REGIME COMPRISES OF PRESTART, DAILY, 50HRS, 250HRS, 500HRS, 1000HRS AND FULL CODE D MAINTENANCE PLANS.
THIS DOCUMENT IS TO BE USED SPECIFICALLY IN CONJUCTION WITH THE PRESTART INSPECTION RECORDS AND THE RELEVANT SERVICE MANUAL.
THE SEQUENCE NUMBERS INDICATE THE RECOMMENDED PROCESS FLOW

WARNING: ENSURE THE DES HAS BEEN TAGGED WITH ISOLATION AND DANGER TAGS IN ACCORDANCE WITH OEM RECOMMENDATIONS AND MINE ISOLATION AND SAFETY PROCEDURES TO PREVENT THE VEHICLE FROM BEING STARTED OR ANY UNPLANNED MOVEMENT DURING THE DAILY INSPECTION. IF ANY DEFECTS OR HAZARDS ARE FOUND DURING THE DAILY INSPECTION THEY MUST BE REPORTED TO A SUPERVISOR AS SOON AS POSSIBLE, AS PER MANAGER'S RULES.

_				POSSIBLE, AS PER	(1)
SEQUENCE	SERVICE ITEM DESCRIPTION	OK	ADJUST	COMMENTS (RECORD ADDITIONAL NOTES ON THE REVERSE SIDE OF THIS DOCUMENT)	
	GENERAL MACHINE				
1	Visually inspect cabins, door, bonnets, windscreen and tanks – report damage / defects				
2	Check rims, tyres and wheel nut condition (Tighten to 430Nm)				
3	Check axles for leaks				
4	Check both front axle and rear axle hub reservoirs oil level (if fitted)				
5	Check drive shafts for damage				
6	Check fire suppression system charge and for visual damage (If fitted)				
7	Check fire extinguisher charge and security				
8	Check seats and seatbelt condition and operation				
26	Check operator station floor is clear of foreign materials				
27	Check operation of all gauges and controls etc.				
31	Check lights for correct operation and visual damage				
	COOLING SYSTEM				
9	Check and clean radiator core				
10	Check security of radiator and shroud				
11	Check header tank and cap condition				
12	Check coolant level and add inhibitor if required				
	ENGINE				
13	Check drive belt and tension				
14	o o				
15	Check the intake of the air cleaner pre-cleaner is clear				
16	Check intake hose condition and clamps (visual)				
11 7	Check engine oil level and top up as required (15W/40 grade engine oil)				
32	Check for oil leaks				
	AIR SYSTEM				
19	Drain condensation from air receivers				
20	Inspect air receivers for external damage				
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SEQUENCE	SERVICE ITEM DESCRIPTION	УО	ADJUST	COMMENTS (RECORD ADDITIONAL NOTES ON THE REVERSE SIDE OF THIS DOCUMENT)
	FUEL SYSTEM			
21	Check operation of the Main Isolation Tap			
22	Check fuel Level and top up			
23	Check the filler assembly			
24	Drain any water from the primary fuel filter			
35	Check for leaks around injectors, pump, lines, hoses and fittings			
	TRANSMISSION			
25	Check transmission oil level (C4-30 grade transmission oil)			
30	Confirm drive isolation by brake drive through test			
31	Check transmission for leaks			
	HYDRAULICS			
18	Check oil level in main tank (68 grade hydraulic oil)			
32	Check for leaks or damage			
33	Check hydraulic cylinders condition – steer cylinder (HIAB if fitted)			
34	Check for leaks and the operation of control valves			
	SCRUBBER AND MAKE UP TANK SYSTEM			
36	Check all joints and gaskets for leaks and bolt tension (visual)			
37	Check all hoses for leaks and external condition			
	SHUTDOWN SYSTEM			
38	Check hoses and fittings for leaks			
39	Test coolant loss shutdown			_
40	Test low engine oil shutdown			
41	Test scrubber tank low water shutdown (test floats individually)			
42	Drain the scrubber tank and flush			
	BRAKE TEST			
28	Check operation of door/park brake interlock			
29	Park/Emergency brake activates on engine shut-off			

INSPECTED BY	SIGNATURE	DATE	SUPERVISOR	SIGNATURE	DATE



DAILY INSPECTION - DRIFTRUNNER 'G' & 'F' SERIES

ADDITIONAL COMMENTS	



MDR090376DES & MDR083991TBS-2

	KIT PART NUMBER 9-04291201								
PLANT NUMBER	SERIAL NUMBER	DATE	MACHINE HOURS	SERVICE COMPLETED BY	JOB NUMBER	SITE			

THIS DOCUMENT FORMS PART OF A REGIME TO ENSURE THE PIECE OF PLANT INVOLVED IS MAINTAINED AS PER THE REQUIREMENTS OF AS3584.3 2012. THE MAINTENANCE REGIME COMPRISES OF PRESTART, DAILY, 50HRS, 250HRS, 500HRS, 1000HRS AND FULL CODE D MAINTENANCE PLANS.

Maintenance safety information

- · Ensure that all safety information is read and understood before maintenance or repair task is performed
- PPKME recommends this service work to be completed by a RIIDES trained competent person and that the work is managed and approved by a RIIDES trained responsible person.
- 1. Ensure a control risk management (take 5) is completed
- 2. Ensure machine is cleaned before servicing!
- 3. PPE: Appropriate PPE must be worn including hi visibility clothing, safety glasses, protective footwear, hand protection (as required) hearing protection (as required), hard hat (as required), dust masks (as required).
- **4. Isolation locks**: danger tags and out of service tags must be used in accordance with site requirements and machine specific isolation procedure.
- 5. All lifting gear: must have current inspection tag, be suitably rated for item being lifted, and be in good condition.
- 6. Lifts requiring mechanical aids: must only be conducted by trained and competent personnel.
- 7. When lifting objects with mechanical aid: keep clear of all potential crush or pinch points.
- 8. Keep clear of suspended loads: Use safety line to control load when required.
- 9. Manual handling: Do not lift or move objects by hand that are too heavy to do so. When manual handling objects use correct manual handling techniques.
- 10. Pinch points: Keep all body parts clear of pinch points. Ensure hands and feet are clear when lifting and lowering objects
- 11. Machine support stands: Ensure machine support stands are of suitable capacity and in serviceable condition.
- 12. Slips, trips, falls: Ensure work area is clear of objects that could cause a slip, trip, fall hazard.
- 13. Warning / prohibition / information & service labels on machine must be observed











- 14. Climbing on top of machine: Always maintain 3-point contact when climbing on top of machine.
- 15. Hot surfaces: Be aware of hot surfaces when machine has been running.
- 16. Hot fluids: Be aware hot pressurised fluids. This includes engine coolant, hydraulic oil, transmission oil, diesel fuel.
- 17. Chemical injuries: ensure that material safety data sheets are available and understood for all fluids used on machine.
- **18. Stored energy**: Ensure all stored energy has been depleted and raised cylinders supported before conducting repairs or maintenance.
- 19. Falling objects: Do not work under unsupported roof or in area where there is risk of falling objects.
- 20. Live testing: live testing must only be done after a task specific risk assessment (take 5 or similar) and in accordance with site requirements. The person operating the machine during live testing must be competent to operate the machine.
- 21. **Hydraulic injection**: ensure that all stored hydraulic energy has been depleted before disconnecting hydraulic hose or fitting.

 Do not use your hand to find a hydraulic leak. Use a piece of cardboard or similar to check for leaks. In the event of a suspected hydraulic injection refer to site specific procedure for fluid injection
- 22. Compressed air: ensure air receiver has been isolated before conducting repairs on air system. If working on air receiver the air receiver must be depressurised before commencing work. Note: the accumulator on the transmission declutches valve will maintain a small volume of compressed air. Follow instructions on how to remove air accumulator pressure (behind gauge panel) to discharge.
- 23. Current information: ensure current information is available prior to commencing maintenance or repair task.
- 24. Guards: ensure all guards and covers removed during maintenance or repairs are replaced prior to starting machine.
- 25. Ventilation: ensure adequate ventilation when testing machine
- 26. Electric welding: Do not conduct on machine unless the alternator disconnected by competent and authorised person.
- 27. Stay clear: of rotating parts
- 28. Always use tools that are in good serviceable condition
- 29. Take care: to not damage wiring, hydraulic or air lines during repairs and maintenance.
- 30. Ensure: all electrical cables are placed in positions away from any possible mechanical damage and away from fuel lines.
- **31. Gas struts**: (used on covers) contain compressed gas even when fully extended. Before removing, check for damage. Damage may cause an uncontrolled release of energy or exploding parts when removing strut.

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SERVICE ITEM	ОК	ADJ	SPECIFICATION/COMMENTS
SAFETY SYSTEM			
Test neutral start valve function			
Test horn			
Test horn (Rear cab)			
Test Park brake dump valves (individually via test buttons)			
Test rear cab park brake e-stop			
Test low engine oil pressure shut down valve			
Test coolant loss shutdown valve			
Test exhaust conditioner low water shutdown (test floats individually)			
Check/change thermal sensors (Overtemp sentinels) (Complete			May have to refer to site
paperwork)			requirements
Test emergency shutdown (Strangler Valve)			-
Clean & Lubricate External Moving Parts with Penetrant (CRC/WD40)			
Soapy water test hoses and fittings for leaks			
Inspect safety circuit pressure (Adjust if required)			30psi
FLUIDS			
Change front axle hub oils – inspect and clean magnetic drain plug			LSX90
Check front axle diff centre oil – top up as required			LSX90
ADD 200 – 300ML OF OIL ADDITIVE IN 211 AXLE ONLY if oil is			
changed			5-13100601
Change rear axle hub oils – inspect and clean magnetic drain plug			LSX90
Check rear axle diff centre oil – top up as required			LSX90
ADD 200 – 300ML OF OIL ADDITIVE IN 111 AXLE ONLY if oil is			5 42400504
changed			5-13100601
Fill oil lubricator (if fitted)			
UNDERBODY INSPECTION			
Check engine for oil leaks			
Check transmission for oil leaks			
Check security of sump guard			
Check engine mounts for condition and security			
Check transmission mounts for condition and security			
Check front driveshaft assembly for visual damage			
Check front driveshaft flange bolts			
Check front driveshaft slip joint movement			
Inspect spider assembly front			
Check rear driveshaft assembly for visual damage			
Check rear driveshaft flange bolts			
Check rear driveshaft slip joint movement			
Inspect spider assembly rear			
Check suspension components for condition and security			
Check A-Frame Mounting Cross Member bolts for tension			
Check A frame for condition and security			
Check all hoses and pipes for condition and security			
Inspect air receivers for external damage and corrosion			
Grease drive shafts 3 points each	-		
Cusasa sandinal shaft isint (ifli-l-)		ì	İ
Grease cardinal shaft joints (if applicable)			
AXLES AXLES			



MDR090376DES & MDR083991TBS-2

SERVICE ITEM	ОК	ADJ	SPECIFICATION/COMMENTS
Check steering cylinder for leaks			
Check cardinal joints for movement			
Check steering tie rods for movement			
Check front wheel bearings for excessive movement			
Check rear wheel bearings for excessive movement			
Adjust brakes (278 & 171 axles only)			
Inspect for brake wear			
ENGINE & TRANSMISSION			
Check hydraulic oil level – top up as required			ISO68
Check transmission oil level – top up as required			
Check condition of transmission control valves			
Adjust transmission linkages (if required)			
Check transmission breather			
Clean pre-cleaner (intake air cleaner)			
Replace air cleaner element			9-00110107
Check air filter indicator			
Check intake hose condition and clamps			
Check security of starter motor			
Check orbital steering valve for leaks and operation			
Check fan belt tension / condition / FRAS (Replace if required)			9-04100109
Check fan hub and bearings for damage / cracks			3 0 1200200
Check fan blades for damage (Replace fan if required)			
Check all radiator hoses and connections (Replace if required)			
Check security of radiator			
Check fuel shut off valve for leaks and operation			
Check fuel shut off cylinder operation			
Remove the compressor discharge hose and intake filter – check for			
evidence of oil &/ or carbon build up			(DTEE base)
If build up is found compressor must be repaired / replaced &			(PTFE hose)
discharge hose must be replaced			
Clean engine breather			
Change compressor filter (Filter Suction Element)			9-04120110
Check engine oil level – top up as required			
Check radiator header tank and cap condition			
Check coolant level – top up as required			
Check all hoses and pipes for condition and security			
Grease bonnet hinges			
Grease gear select and linkage points			
SYSTEMS SERVICE			
Check scrubber inspection plate gaskets for leaks			
Flush and clean scrubber internals			
Check shutdown valves and float (Replace viton seals if required)			
Check all hoses for leaks and blockages			
Check scrubber make-up valve and float operation			
Clean scrubber supply line strainer			
Check / top up make-up tank (With potable water only)			
Add conditioner to make-up tank (if applicable)			Refer to site specific specifications
Drain air receiver condensation			



SERVICE ITEM	ОК	ADJ	SPECIFICATION/COMMENTS
Check brake air receiver age. Receiver must be replaced when			
approaching 2 years in service life. This is determined from the			
vehicle in-service date.			
PARTICULATE FILTER SYSTEM			
Check hosing (Replace if required)			
Check condition of outlet pipe couplings			
Check mounting and security valves			
Check for loose fasteners			
Check for exhaust leaks			
Check for air leaks on control lines			
Check for damage to housings/components			
Replace exhaust particulate filters			Note! Replace filters as per site specific procedure – only approved filter elements to be fitted.
COMMISSIONING			
Check compressor governor unloader pressure			125psi
Check safety valve manual operation			
Test 2wd / 4wd actuator (Disengages when 3 rd gear is selected)			
Check reverse alarm filter and operation			
Check Park brake release pressure			278 / 171 – 350psi 211 / 111 – 400psi
Check for leaks around injectors and fuel system			
Check fuel lines and fittings for leaks			
Check fuel injector pump for damage, loose parts & security			
Check pneumatic system for leaks			
Check general body condition			
Check frame visually for cracks and corrosion			
Check operation of door and hinge condition			Lubricate with penetrant
Check alignment of door interlock valve plunger/roller.			Ensure plunger is central in front cab cutout.
Check seat belts – condition and operation			
Check seat condition			
Check stretcher brackets and mounts			
Check rims / tyres & wheel nut tension			430Nm (318Ft/Lbs)
Check tyres for damage and record condition and % of thread remaining			DSF: ODSF: DSR: ODSR:
Check tyre pressure if filled with air			Note! Always refer to tyre manufacturers for specific tyres pressures. Always follow site requirements for tyre inspections.
Check fire extinguisher serviceability, security and in date			
Check fire suppression system for damage and condition of bottle, lines and nozzles			
Check fire suppression system is tagged and in date			
Check safety triangles			
Check wheel chocks			



SERVICE ITEM	SERVICE ITEM		ADJ	SPECIFICATION/COMMENT			
RAW GAS TEST (IF DUE)							
Engine RPM				СО ррт	NOx ppm	CO₂ % NSW	HCHO ppm QLD
Low idle no load							,
High idle							
High idle - stall 3rd gear							
				1100 Max	750NSW 900QLD Max	>6	50 Max
FINAL COMMISIONING							
Test coolant loss shutdown	Repeat Test 3 time	es					
Test low engine oil pressure shutdown	Repeat Test 3 time	es					
Check thermal sensor (sentinel) shutdown	Repeat Test 3 time						
(Crack supply line) Test exhaust conditioner low water shutdown (test floats individually) Repeat Test 3 times		es					
Test emergency shutdown (Strangler Valve)							
Carry out brake drive through test – FWD & 2 nd gear with service and park brake applied							
Check operation of park brake	Check operation of park brake						
Check operation of door interlocks							
Service completed by	Signature				Date		
Supervisor acceptance	Signature				Date		
Comments:							







MDR090376DES & MDR083991TBS-2

					KIT PART NUM	BER 9-04291202
PLANT NUMBER	SERIAL NUMBER	DATE	MACHINE HOURS	SERVICE COMPLETED BY	JOB NUMBER	SITE

THIS DOCUMENT FORMS PART OF A REGIME TO ENSURE THE PIECE OF PLANT INVOLVED IS MAINTAINED AS PER THE REQUIREMENTS OF AS3584.3 2012. THE MAINTENANCE REGIME COMPRISES OF PRESTART, DAILY, 50HRS, 250HRS, 500HRS, 1000HRS AND FULL CODE D MAINTENANCE PLANS.

Maintenance safety information

- Ensure that all safety information is read and understood before maintenance or repair task is performed
- PPKME recommends this service work to be completed by a RIIDES trained competent person and that the work is managed and approved by a RIIDES trained responsible person.
- 1. Ensure a control risk management (take 5) is completed
- Ensure machine is cleaned before servicing! 2.
- 3. PPE: Appropriate PPE must be worn including hi visibility clothing, safety glasses, protective footwear, hand protection (as required) hearing protection (as required), hard hat (as required), dust masks (as required).
- 4. Isolation locks: danger tags and out of service tags must be used in accordance with site requirements and machine specific isolation procedure.
- 5. All lifting gear: must have current inspection tag, be suitably rated for item being lifted, and be in good condition.
- 6 Lifts requiring mechanical aids: must only be conducted by trained and competent personnel.
- 7. When lifting objects with mechanical aid: keep clear of all potential crush or pinch points.
- 8. Keep clear of suspended loads: Use safety line to control load when required.
- 9. Manual handling: Do not lift or move objects by hand that are too heavy to do so. When manual handling objects use correct manual handling techniques.
- 10. Pinch points: Keep all body parts clear of pinch points. Ensure hands and feet are clear when lifting and lowering objects
- 11. Machine support stands: Ensure machine support stands are of suitable capacity and in serviceable condition.
- Slips, trips, falls: Ensure work area is clear of objects that could cause a slip, trip, fall hazard. 12.
- 13. Warning / prohibition / information & service labels on machine must be observed











- 14. Climbing on top of machine: Always maintain 3-point contact when climbing on top of machine.
- Hot surfaces: Be aware of hot surfaces when machine has been running.
- 16. Hot fluids: Be aware hot pressurised fluids. This includes engine coolant, hydraulic oil, transmission oil, diesel fuel.
- 17 Chemical injuries: ensure that material safety data sheets are available and understood for all fluids used on machine.
- 18. Stored energy: Ensure all stored energy has been depleted and raised cylinders supported before conducting repairs or maintenance.
- 19. Falling objects: Do not work under unsupported roof or in area where there is risk of falling objects.
- 20. Live testing: live testing must only be done after a task specific risk assessment (take 5 or similar) and in accordance with site requirements. The person operating the machine during live testing must be competent to operate the machine.
- Hydraulic injection: ensure that all stored hydraulic energy has been depleted before disconnecting hydraulic hose or fitting. Do not use your hand to find a hydraulic leak. Use a piece of cardboard or similar to check for leaks. In the event of a suspected hydraulic injection refer to site specific procedure for fluid injection
- 22. Compressed air: ensure air receiver has been isolated before conducting repairs on air system. If working on air receiver the air receiver must be depressurised before commencing work. Note: the accumulator on the transmission declutches valve will maintain a small volume of compressed air. Follow instructions on how to remove air accumulator pressure (behind gauge panel) to
- 23. Current information: ensure current information is available prior to commencing maintenance or repair task.
- 24. Guards: ensure all guards and covers removed during maintenance or repairs are replaced prior to starting machine.
- 25. Ventilation: ensure adequate ventilation when testing machine
- 26. Electric welding: Do not conduct on machine unless the alternator disconnected by competent and authorised person.
- 27. Stay clear: of rotating parts
- 28. Always use tools that are in good serviceable condition
- 29. Take care: to not damage wiring, hydraulic or air lines during repairs and maintenance.
- 30. Ensure: all electrical cables are placed in positions away from any possible mechanical damage and away from fuel lines.
- Gas struts: (used on covers) contain compressed gas even when fully extended. Before removing, check for damage. Damage may cause an uncontrolled release of energy or exploding parts when removing strut.



MINING EQUIPMENT	01/	451	CDECUEICATION /CONTACTOR
SERVICE ITEM	OK	ADJ	SPECIFICATION/COMMENTS
SAFETY SYSTEM			
Test neutral start valve function			
Test horn			
Test horn (Rear cab)			
Test park brake dump valves (individually via test buttons)			
Test rear cab park brake e-stop			
Replace methane sensor inlet filter (if fitted)			
Test low engine oil pressure shut down valve			
Test coolant loss shutdown valve			
Test exhaust conditioner low water shutdown (test floats individually)			
Check/change thermal sensors (Overtemp sentinals) (Complete			May have to refer to site
paperwork)			requirements
Test emergency shutdown (Strangler Valve)			
Clean & Lubricate External Moving Parts with Penetrant (CRC/WD40)			
Soapy water check all flameproof joints and injector seals			
Soapy water test hoses and fittings for leaks			
Inspect safety circuit pressure (Adjust if required)			30psi
FLUIDS			
Change engine oil – inspect and clean magnetic drain plug			
Change engine oil filters			2654403
Change transmission oil – inspect and clean magnetic drain plug			
Change front axle hub oils – inspect and clean magnetic drain plug			LSX90
Change front axle diff centre oil – inspect and clean magnetic drain			LSX90
plug			23//30
ADD 200 – 300ML OF OIL ADDITIVE IN 211 AXLE ONLY			5-13100601
Change rear axle hub oils – inspect and clean magnetic drain plug			LSX90
Change rear axle diff centre oil – inspect and clean magnetic drain			LSX90
plug			
ADD 200 – 300ML OF OIL ADDITIVE IN 111 AXLE ONLY			5-13100601
Check hydraulic oil level – top up as required			ISO68
Fill oil lubricator (if fitted)			
UNDERBODY INSPECTION			
Check engine for oil leaks			
Check transmission for oil leaks			
Check security of sump guard			
Check engine mounts for condition and security			
Check transmission mounts for condition and security			
Check front driveshaft assembly for visual damage			
Check front driveshaft flange bolts			
Check front driveshaft slip joint movement			
Inspect spider assembly front			
Check rear driveshaft assembly for visual damage			
Check rear driveshaft flange bolts			
Check rear driveshaft slip joint movement		1	
Inspect spider assembly rear		1	
Check suspension components for condition and security		1	
Check A-Frame Mounting Cross Member bolts for tension		-	
Check A frame for condition and security			
Check all hoses and pipes for condition and security		1	
Inspect air receivers for external damage and corrosion			
Remove and visually inspect brake air receiver check valve – check			
operation and lubricate with penetrant			
Grease drive shafts 3 points each			



MDR090376DES & MDR083991TBS-2

MINING EQUIPMENT	011		
SERVICE ITEM	ОК	ADJ	SPECIFICATION/COMMENTS
Grease cardinal shaft joints (if applicable)			
AXLES			
Check axles for oil leaks and damaged hoses			
Check steering cylinder for leaks			
Check cardinal joints for movement			
Check steering tie rods for movement			
Check front wheel bearings for excessive movement			
Check rear wheel bearings for excessive movement			
Adjust brakes (278 & 171 axles only)			
Inspect for brake wear			
ENGINE & TRANSMISSION			
Change transmission oil filter			9-00120101
Change hydraulic return filter			9-04200104
Check condition of transmission control valves			
Adjust transmission linkages (if required)			
Check transmission breather			
Clean pre-cleaner (intake air cleaner)			
Replace air cleaner element			9-00110107
Check air filter indicator			
Check intake hose condition and clamps			
Clean flametrap element			5-05100107 (Gasket)
Check security of starter motor			
Check orbital steering valve for leaks and operation			
Check fan belt tension / condition / FRAS (Replace if required)			9-04100109
Check fan hub and bearings for damage / cracks			
Check fan blades for damage (Replace fan if required)			
Check all radiator hoses and connections (Replace if required)			
Check security of radiator			
Check fuel shut off valve for leaks and operation			
Check fuel shut off cylinder operation			
Change fuel filters			26560145 - 265601143
Remove the compressor discharge hose and intake filter – check for			
evidence of oil &/ or carbon build up			(DTEE base)
If build up is found compressor must be repaired / replaced &			(PTFE hose)
discharge hose must be replaced			
Change compressor filter			9-04120110
Clean engine breather			
Check radiator header tank and cap condition			
Check coolant level – top up as required			
Check all hoses and pipes for condition and security			
Grease bonnet hinges			
Grease gear select and linkage points			
SYSTEMS SERVICE			
Check scrubber inspection plate gaskets for leaks			
Flush and clean scrubber internals			
Check shutdown valves and float (Replace viton seals if required)			
Check all hoses for leaks and blockages			
Check scrubber make-up valve and float operation			
Clean scrubber supply line strainer			
Check scrubber static water and low water levels			
Check / top up make-up tank (With potable water only)			
Add conditioner to make-up tank (if applicable)			Refer to site specific specifications
Drain air receiver condensation			



MDR090376DES & MDR083991TBS-2

Check fire extinguisher serviceability, security and in date Check fire suppression system for damage and condition of bottle, lines and nozzles Check fire suppression system is tagged and in date Check safety triangles Check wheel chocks RAW GAS TEST (IF DUE) OK ADJ Engine RPM Low idle no load High idle High idle - stall 3rd gear	SERVICE ITEM	ОК	ADJ	SPECII	ICATIO	N/COMN	MENTS
vehicle in-service date. PARTICULATE FILTER SYSTEM	Check brake air receiver age. Receiver must be replaced when						
Check hosing (Replace if required) Check condition of outlet pipe couplings Check mounting and security valves Check for or in leaks on control lines Check for air leaks on control lines Check compressor governor unloader pressure Check compressor governor unloader pressure Check safety valve manual operation Test 2wd / Awd actuator (Disengages when 3'd gear is selected) Test hydrails steer standby pressure Test hydrails full compensator pressure Check reverse alarm filter and operation Check For leaks around injectors and fuel system Check for leaks around injectors and fuel system Check full lines and fittings for leaks Check full lines and fittings for leaks Check full injector pump for damage, loose parts & security Check peneral body condition Check peneral body condition Check fund suitally for cracks and corrosion Check full general body condition Check full general body condition Check full general full condition and operation Check full general full condition and operation Check a belts — condition and operation Check steetcher brackets and mounts Check steetcher brackets and mounts Check steetcher brackets and mounts Check full general full condition and soft thread remaining Check streetcher brackets and mounts Check fire suppression system for damage and condition of bottle, lines and nozizes Check fire suppression system for damage and condition of bottle, lines and nozizes Check fire suppression system for damage and condition of bottle, lines and nozizes Check fire suppression system for damage and condition of bottle, lines and nozizes Check fire suppression system is tagged and in date Check fire suppression system is tagged and in date Check fire suppression system i	approaching 2 years in service life. This is determined from the						
Check condition of outlet pipe couplings Check condition of outlet pipe couplings Check mounting and security valves Check for Ioose fasteners Check for Ioose fasteners Check for damage to housings/components Check and the season control lines Check for damage to housings/components COMMISSIONING Check compressor governor unloader pressure Check safety valve manual operation Check compressor governor unloader pressure Check safety valve manual operation Test thydraulic steer standby pressure Test hydraulic full compensator pres	vehicle in-service date.						
Check condition of outlet pipe couplings Check mounting and security valves Check for lock of setseners Check for exhaust leaks Check for exhaust leaks Check for air leaks on control lines Check for air leaks on control lines Replace exhaust particulate filters as perspective only approved filter elements to fitted. COMMISSIONING Check compressor governor unloader pressure 125psi 125psi 125psi 125psi 126psi 126psi 127est ydraulic steer standby pressure 128psi 128psi 128psi 129psi 129psi 129psi 120psi 120p	PARTICULATE FILTER SYSTEM						
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				Max		70	50 Max



MDR090376DES & MDR083991TBS-2

SERVICE ITEM			ОК	ADJ	SPECIF	ICATION/	COMMENTS
FINAL COMMISIONING							
Test coolant loss shutdown	Repeat Test 3						
	times						
Test low engine oil pressure shutdown	Repeat Test 3						
Check thermal sensor (sentinel) shutdown	times Repeat Test 3						
(Crack supply line)	times						
Test exhaust conditioner low water shutdown	Repeat Test 3						
(test floats individually)	times						
Test emergency shutdown (Strangler Valve)							
Carry out brake drive through test – FWD & 2 nd ge	ear with service an	nd					
park brake applied							
Check operation of park brake Check operation of door interlocks							
Check operation of door interfocks							
ADDITIONAL COMMENTS							
Service completed by	Signature					Date	
Supervisor acceptance	Signature					Date	
Comments:							
	-						·



VEHICLE BRAKE TESTING

Print & completed Brake Test Report MDG39 BT SMV and attach to this document.







MDR090376DES & MDR083991TBS-2

					KIT PART NUM	BER 9-04291203
KIT PART NUMBER	SERIAL NUMBER	DATE	MACHINE HOURS	SERVICE COMPLETED BY	JOB NUMBER	SITE

THIS DOCUMENT FORMS PART OF A REGIME TO ENSURE THE PIECE OF PLANT INVOLVED IS MAINTAINED AS PER THE REQUIREMENTS OF AS3584.3 2012. THE MAINTENANCE REGIME COMPRISES OF PRESTART, DAILY, 50HRS, 250HRS, **500HRS**, 1000HRS AND FULL CODE D MAINTENANCE PLANS.

Maintenance safety information

- Ensure that all safety information is read and understood before maintenance or repair task is performed
- PPKME recommends this service work to be completed by a RIIDES trained competent person and that the work is managed and approved by a RIIDES trained responsible person.
- 1. Ensure a control risk management (take 5) is completed
- 2. Ensure machine is cleaned before servicing!
- 3. PPE: Appropriate PPE must be worn including hi visibility clothing, safety glasses, protective footwear, hand protection (as required) hearing protection (as required), hard hat (as required), dust masks (as required).
- 4. Isolation locks: danger tags and out of service tags must be used in accordance with site requirements and machine specific isolation procedure.
- 5. All lifting gear: must have current inspection tag, be suitably rated for item being lifted, and be in good condition.
- 6. Lifts requiring mechanical aids: must only be conducted by trained and competent personnel.
- 7 When lifting objects with mechanical aid: keep clear of all potential crush or pinch points.
- 8. Keep clear of suspended loads: Use safety line to control load when required.
- 9. Manual handling: Do not lift or move objects by hand that are too heavy to do so. When manual handling objects use correct manual handling techniques.
- 10. Pinch points: Keep all body parts clear of pinch points. Ensure hands and feet are clear when lifting and lowering objects
- 11. Machine support stands: Ensure machine support stands are of suitable capacity and in serviceable condition.
- Slips, trips, falls: Ensure work area is clear of objects that could cause a slip, trip, fall hazard. 12.
- Warning / prohibition / information & service labels on machine must be observed











- 14. Climbing on top of machine: Always maintain 3-point contact when climbing on top of machine.
- 15 Hot surfaces: Be aware of hot surfaces when machine has been running.
- 16. Hot fluids: Be aware hot pressurised fluids. This includes engine coolant, hydraulic oil, transmission oil, diesel fuel.
- 17. Chemical injuries: ensure that material safety data sheets are available and understood for all fluids used on machine.
- 18. Stored energy: Ensure all stored energy has been depleted and raised cylinders supported before conducting repairs or maintenance.
- 19. Falling objects: Do not work under unsupported roof or in area where there is risk of falling objects.
- 20. Live testing: live testing must only be done after a task specific risk assessment (take 5 or similar) and in accordance with site requirements. The person operating the machine during live testing must be competent to operate the machine.
- 21. Hydraulic injection: ensure that all stored hydraulic energy has been depleted before disconnecting hydraulic hose or fitting. Do not use your hand to find a hydraulic leak. Use a piece of cardboard or similar to check for leaks. In the event of a suspected hydraulic injection refer to site specific procedure for fluid injection
- 22. Compressed air: ensure air receiver has been isolated before conducting repairs on air system. If working on air receiver the air receiver must be depressurised before commencing work. Note: the accumulator on the transmission declutches valve will maintain a small volume of compressed air. Follow instructions on how to remove air accumulator pressure (behind gauge panel) to discharge.
- 23. Current information: ensure current information is available prior to commencing maintenance or repair task.
- Guards: ensure all guards and covers removed during maintenance or repairs are replaced prior to starting machine.
- Ventilation: ensure adequate ventilation when testing machine
- 26. Electric welding: Do not conduct on machine unless the alternator disconnected by competent and authorised person.
- 27. Stay clear: of rotating parts
- 28. Always use tools that are in good serviceable condition
- 29. Take care: to not damage wiring, hydraulic or air lines during repairs and maintenance.
- 30. Ensure: all electrical cables are placed in positions away from any possible mechanical damage and away from fuel lines.
- 31. Gas struts: (used on covers) contain compressed gas even when fully extended. Before removing, check for damage. Damage may cause an uncontrolled release of energy or exploding parts when removing strut.



MDR090376DES & MDR083991TBS-2

MINING EQUIPMENT		•	
SERVICE ITEM	ОК	ADJ	SPECIFICATION/COMMENTS
SAFETY SYSTEM			
Test neutral start valve function			
Test horn			
Test horn (Rear cab)			
Test park brake dump valves (individually via test buttons)			
Test rear cab park brake e-stop			
Test low engine oil pressure shut down valve			
Test coolant loss shutdown valve			
Test exhaust conditioner low water shutdown (test floats individually)			
Check/change thermal sensors (Overtemp sentinals) (Complete			May have to refer to site
paperwork)			requirements
Test emergency shutdown (Strangler Valve)			
Clean & Lubricate External Moving Parts with Penetrant (CRC/WD40)			
Soapy water check all flameproof joints and injector seals			
Soapy water test hoses and fittings for leaks			
Inspect safety circuit pressure (Adjust if required)			30psi
FLUIDS			
Change engine oil – inspect and clean magnetic drain plug			
Change engine oil filters			2654403
Change transmission oil – inspect and clean magnetic drain plug			
Change front axle hub oils – inspect and clean magnetic drain plug			LSX90
Change front axle diff centre oil – inspect & clean magnetic drain plug			LSX90
ADD 200 – 300ML OF OIL ADDITIVE IN 211 AXLE ONLY			5-13100601
Change rear axle hub oils – inspect and clean magnetic drain plug			LSX90
Change rear axle diff centre oil – inspect and clean magnetic drain			ESASO
plug			LSX90
ADD 200 – 300ML OF OIL ADDITIVE IN 111 AXLE ONLY			5-13100601
Change hydraulic oil (only if showing signs of contamination or burnt)			ISO68
Flush cooling system and replace coolant			15000
Fill oil lubricator (if fitted)			
UNDERBODY INSPECTION			
Check engine for oil leaks			
Check transmission for oil leaks			
Remove bell housing cover plate & inspect for leaks & flexplate			
security			
Check security of sump guard			
Check engine mounts for condition and security			
Check transmission mounts for condition and security			
Check front driveshaft assembly for visual damage			
Check front driveshaft flange bolts			
Check front driveshaft slip joint movement			
Inspect spider assembly front Chack roar drives beforesembly for visual damage.			
Check rear driveshaft assembly for visual damage		-	
Check rear driveshaft flange bolts		1	
Check rear driveshaft slip joint movement		1	
Inspect spider assembly rear		1	
Check suspension components for condition and security		1	
Check A-Frame Mounting Cross Member bolts for tension		-	
Check A frame for condition and security		-	
Check all hoses and pipes for condition and security			
Inspect main air receivers for external damage and corrosion			
Remove and visually inspect brake air receiver check valve – check			
operation and lubricate with penetrant		1	
Grease drive shafts 3 points each		1	
Grease cardinal shaft joints (if applicable)			



MINING EQUIPMENT	OK	451	CDECIFICATION (COMMATNIT)
SERVICE ITEM	OK	ADJ	SPECIFICATION/COMMENTS
Charle syles for all leaks and damaged bases			
Check axles for oil leaks and damaged hoses			
Check steering cylinder for leaks			
Check cardinal joints for movement			
Check steering tie rods for movement			
Check front wheel bearings for excessive movement			
Check rear wheel bearings for excessive movement			
Adjust brakes (278 & 171 axles only)			
Inspect for brake wear			
ENGINE & TRANSMISSION			
Change transmission oil filter			9-00120101
Change hydraulic tank return filter			9-04200104
Check condition of transmission control valves			
Adjust transmission linkages (if required)			
Check transmission breather			
Clean pre-cleaner (intake air cleaner)			
Replace air cleaner element			9-00110107
Check air filter indicator			
Check intake hose condition and clamps			
Clean flametrap element			5-05100107 (Gasket)
Check security of starter motor			
Check orbital steering valve for leaks and operation			
Check fan belt tension / condition / FRAS (Replace if required)			9-04100109
Check fan hub and bearings for damage / cracks			
Check fan blades for damage (Replace fan if required)			
Check all radiator hoses and connections (Replace if required)			
Check security of radiator			
Check fuel shut off valve for leaks and operation			
Check fuel shut off cylinder operation			
Change fuel filters			26560145 - 265601143
Remove the compressor discharge hose and intake filter – check for			
evidence of oil &/ or carbon build up			(DTEE)
If build up is found compressor must be repaired / replaced &			(PTFE hose)
discharge hose must be replaced			
Change compressor filter			9-04120110
Clean engine breather			
Check radiator header tank and cap condition			
Check all hoses and pipes for condition and security			
Grease bonnet hinges			
Grease gear select and linkage points			
SYSTEMS SERVICE			
Check scrubber inspection plate gaskets for leaks			
Flush and clean scrubber internals			
Check shutdown valves and float (Replace Viton seals if required)			
Check all hoses for leaks and blockages			
Check scrubber make-up valve and float operation			
Clean scrubber supply line strainer			
Check scrubber static water and low water levels			
Check / top up make-up tank (With potable water only)			
			Refer to site specific
Add conditioner to make-up tank (if applicable)			specifications
Drain main air receiver condensate			
Check brake air receiver age. Receiver must be replaced when			
approaching 2 years in service life. This is determined from the			
vehicle in-service date.		<u> </u>	



SERVICE ITEM	ОК	ADJ	SPECII	FICATIO	N/COMN	/IENTS
PARTICULATE FILTER SYSTEM						
Check hosing (Replace if required)						
Check condition of outlet pipe couplings						
Check mounting and security valves						
Check for loose fasteners						
Check for exhaust leaks						
Check for air leaks on control lines						
Check for damage to housings/components						
Replace exhaust particulate filters			specific	procedu	ters as pe re – only lements t	
COMMISSIONING						
Check compressor governor unloader pressure			125psi			
Check pneumatic safety valve manual operation						
Test 2wd / 4wd actuator (Disengages when 3 rd gear is selected)						
Test hydraulic steer standby pressure			350psi			
Test hydraulic full compensator pressure			1600ps	si		
Check reverse alarm filter and operation						
Check park brake release pressure				.71 – 350 .11 – 400		
Check for leaks around injectors and fuel system						
Check fuel lines and fittings for leaks						
Check fuel injector pump for damage, loose parts & security						
Check pneumatic system for leaks						
Check general body condition						
Check frame visually for cracks and corrosion						
Check operation of door and hinge condition			Lubrica	ate with	penetra	nt
Check alignment of door interlock valve plunger/roller.			Ensure p	olunger is o	entral in fr	ont cab
Check seat belts – condition and operation						
Check seat condition						
Check stretcher brackets and mounts						
Check rims / tyres & wheel nut tension				n (318Ft _/	-	
Check tyres for damage and record condition and % of thread			DSF:			
remaining			DSR:_	ODS		
Check tyre pressure if filled with air			Note! Always refer to tyre manufacturers for specific tyres pressures. Always follow site requirements for tyre inspections.			
Check fire extinguisher serviceability and security						
Check fire suppression system for damage and condition of bottle,						
lines and nozzles						
Check fire suppression system is tagged and in date						
Check safety triangles						
Check wheel chocks						
RAW GAS TEST (IF DUE)	ОК	ADJ				
Engine RPM			СО ррт	NOx ppm	Co² % NSW	HCHO ppm QLD
Low idle no load						
High idle						
High idle - stall 3rd gear						
			1100 Max	750NSW 900QLD Max	>6	50 Max



MDR090376DES & MDR083991TBS-2

FINAL COMMISIONING							
Test coolant loss shutdow	n	Repeat Test 3 times					
Test low engine oil pressu		Repeat Test 3 times					
Check thermal sensor (ser (Crack supply line)		Repeat Test 3 times					
Test exhaust conditioner I (test floats individually)		Repeat Test 3 times					
Test emergency shutdowr	(Strangler Valve)						
Carry out brake drive thro park brake applied	ugh test – FWD & 2 nd gea	r with service ar	nd				
Check operation of park b	rake						
Check operation of door in	nterlocks						
ADDITIONAL COMMENTS							
Service completed by		Signature				Date	
Supervisor acceptance		Signature				Date	
Comments:							
		<u>VEHICI</u>	E BRA	KE TE	STIN	I <mark>G</mark>	



Print & completed Brake Test Report MDG39 BT SMV and attach to this document.







MDR090376DES & MDR083991TBS-2

					KIT PART MUN	MBER 9-0429103
PLANT NUMBER	SERIAL NUMBER	DATE	MACHINE HOURS	SERVICE COMPLETED BY	JOB NUMBER	SITE

THIS DOCUMENT FORMS PART OF A REGIME TO ENSURE THE PIECE OF PLANT INVOLVED IS MAINTAINED AS PER THE REQUIREMENTS OF AS3584.3 2012. THE MAINTENANCE REGIME COMPRISES OF PRESTART, DAILY, 50HRS, 250HRS, 500HRS, 1000HRS AND FULL CODE D MAINTENANCE PLANS.

Maintenance safety information

- Ensure that all safety information is read and understood before maintenance or repair task is performed
- PPKME recommends this service work to be completed by a RIIDES trained competent person and that the work is managed and approved by a RIIDES trained responsible person.
- 1. Ensure a control risk management (take 5) is completed
- 2. Ensure machine is cleaned before servicing!
- 3. PPE: Appropriate PPE must be worn including hi visibility clothing, safety glasses, protective footwear, hand protection (as required) hearing protection (as required), hard hat (as required), dust masks (as required).
- Isolation locks: danger tags and out of service tags must be used in accordance with site requirements and machine specific isolation procedure.
- 5. All lifting gear: must have current inspection tag, be suitably rated for item being lifted, and be in good condition.
- 6. Lifts requiring mechanical aids: must only be conducted by trained and competent personnel.
- 7. When lifting objects with mechanical aid: keep clear of all potential crush or pinch points.
- 8. Keep clear of suspended loads: Use safety line to control load when required.
- 9. Manual handling: Do not lift or move objects by hand that are too heavy to do so. When manual handling objects use correct manual handling techniques.
- 10. Pinch points: Keep all body parts clear of pinch points. Ensure hands and feet are clear when lifting and lowering objects
- 11. Machine support stands: Ensure machine support stands are of suitable capacity and in serviceable condition.
- 12. Slips, trips, falls: Ensure work area is clear of objects that could cause a slip, trip, fall hazard.
- 13. Warning / prohibition / information & service labels on machine must be observed











- 14. Climbing on top of machine: Always maintain 3-point contact when climbing on top of machine.
- 15. Hot surfaces: Be aware of hot surfaces when machine has been running.
- **16. Hot fluids**: Be aware hot pressurised fluids. This includes engine coolant, hydraulic oil, transmission oil, diesel fuel.
- 17. Chemical injuries: ensure that material safety data sheets are available and understood for all fluids used on machine.
- **18. Stored energy**: Ensure all stored energy has been depleted and raised cylinders supported before conducting repairs or maintenance.
- 19. Falling objects: Do not work under unsupported roof or in area where there is risk of falling objects.
- **20. Live testing**: live testing must only be done after a task specific risk assessment (take 5 or similar) and in accordance with site requirements. The person operating the machine during live testing must be competent to operate the machine.
- 21. **Hydraulic injection**: ensure that all stored hydraulic energy has been depleted before disconnecting hydraulic hose or fitting. Do not use your hand to find a hydraulic leak. Use a piece of cardboard or similar to check for leaks. In the event of a suspected hydraulic injection refer to site specific procedure for fluid injection
- 22. Compressed air: ensure air receiver has been isolated before conducting repairs on air system. If working on air receiver the air receiver must be depressurised before commencing work. Note: the accumulator on the transmission declutches valve will maintain a small volume of compressed air. Follow instructions on how to remove air accumulator pressure (behind gauge panel) to discharge.
- 23. Current information: ensure current information is available prior to commencing maintenance or repair task.
- 24. Guards: ensure all guards and covers removed during maintenance or repairs are replaced prior to starting machine.
- 25. Ventilation: ensure adequate ventilation when testing machine
- 26. Electric welding: Do not conduct on machine unless the alternator disconnected by competent and authorised person.
- 27. Stay clear: of rotating parts
- 28. Always use tools that are in good serviceable condition
- 29. Take care: to not damage wiring, hydraulic or air lines during repairs and maintenance.
- 30. Ensure: all electrical cables are placed in positions away from any possible mechanical damage and away from fuel lines.
- **31. Gas struts**: (used on covers) contain compressed gas even when fully extended. Before removing, check for damage. Damage may cause an uncontrolled release of energy or exploding parts when removing strut.



MDR090376DES & MDR083991TBS-2

SERVICE ITEM	Serviceable/ Completed	Component Replaced	Specification/comments
SAFETY SYSTEM	Completed		
Test neutral start valve function	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Test horn	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Test horn (Rear cab)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Test park brake dump valves (individually via test			
buttons)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Test rear cab park brake e-stop	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Test low engine oil pressure shut down valve	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Test coolant loss shutdown valve	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Test exhaust conditioner low water shutdown (test floats individually)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check/change thermal sensors (Overtemp sentinals) (Complete paperwork)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	May have to refer to site requirements
Test emergency shutdown (Strangler Valve)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Clean & Lubricate External Moving Parts of the strangler valve with Penetrant (CRC/WD40)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Soapy water check all flameproof joints and injector seals	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Soapy water test hoses and fittings for leaks	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Inspect safety circuit pressure (Adjust if required)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	30psi
FLUIDS			
Change engine oil – inspect and clean magnetic drain plug	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Change engine oil filters	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	2654403
Change transmission oil – inspect and clean magnetic drain plug	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Change front axle hub oils – inspect and clean magnetic drain plug	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	LSX90
Change front axle diff centre oil – inspect and clean magnetic drain plug	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	LSX90
ADD 200 – 300ML OF OIL ADDITIVE IN 211 AXLE ONLY		☐ Yes, ☐ No, ☐N/A	5-13100601
Change rear axle hub oils – inspect and clean magnetic drain plug	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	LSX90
Change rear axle diff centre oil – inspect and clean magnetic drain plug	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	LSX90
ADD 200 – 300ML OF OIL ADDITIVE IN 111 AXLE ONLY	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	5-13100601
Change hydraulic oil (only if showing signs of contamination or burnt)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	ISO68
Change suction filter	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	9-01200101
Flush cooling system and replace coolant	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Fill oil lubricator (if fitted)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
UNDERBODY INSPECTION			
Check engine for oil leaks	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check transmission for oil leaks	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Remove bell housing cover plate & inspect for leaks &	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
flexplate security Check security of supplement			
Check security of sump guard	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check engine mounts for condition and security	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check transmission mounts for condition and security	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check front driveshaft assembly for visual damage	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	



SERVICE ITEM	Serviceable/ Completed	Component Replaced	Specification/comments
Check front driveshaft flange bolts	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check front driveshaft slip joint movement	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Inspect spider assembly front	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check rear driveshaft assembly for visual damage	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check rear driveshaft flange bolts	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check rear driveshaft slip joint movement	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Inspect spider assembly rear	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check suspension components for condition and security	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check A-Frame Mounting Cross Member bolts for tension	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check A frame for condition and security	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check all hoses and pipes for condition and security	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Inspect air receivers for external damage and corrosion	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Remove and visually inspect brake air receiver check valve – check operation and lubricate with penetrant	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Grease drive shafts 3 points each	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Grease cardinal shaft joints (if applicable)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
AXLES			
Check axles for oil leaks and damaged hoses	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check steering cylinder for leaks	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check cardinal joints for movement	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check steering tie rods for movement	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check front wheel bearings for excessive movement	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check rear wheel bearings for excessive movement	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Adjust brakes (278 & 171 axles only)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Inspect for brake wear	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
ENGINE & TRANSMISSION			
Change transmission oil filter	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	9-00120101
Change hydraulic tank return filter	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	9-04200104
Check condition of transmission control valves	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Adjust transmission linkages (if required)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check transmission breather	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Clean pre-cleaner (intake air cleaner)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Replace air cleaner element	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	9-00110107
Check air filter indicator	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check intake hose condition and clamps	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Remove / inspect and clean strangler valve	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Clean flametrap element	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	5-05100107 (Gasket)
Check security of starter motor	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check orbital steering valve for leaks and operation	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check fan belt tension / condition / FRAS (Replace if required)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	9-04100109
Check fan hub and bearings for damage / cracks	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check fan blades for damage (Replace fan if required)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check all radiator hoses and connections (Replace if required)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check security of radiator	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	



SERVICE ITEM	Serviceable/ Completed	Component Replaced	Specification/comments
Check fuel shut off valve for leaks and operation	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check fuel shut off cylinder operation	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Change fuel filters	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	26560145 - 265601143
Remove the compressor discharge hose and intake filter – check for evidence of oil &/ or carbon build up If build up is found compressor must be repaired / replaced & discharge hose must be replaced	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	(PTFE hose)
Change compressor filter	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	9-04120110
Clean engine breather	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check radiator header tank and cap condition	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check all hoses and pipes for condition and security	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Grease bonnet hinges	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Grease gear select and linkage points	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
SYSTEMS SERVICE			
Check scrubber inspection plate gaskets for leaks	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Flush and clean scrubber internals	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check shutdown valves and float (Replace viton seals if required)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check all hoses for leaks and blockages	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check scrubber make-up valve and float operation	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Clean scrubber supply line strainer	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check scrubber static water and low water levels	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check / top up make-up tank (With potable water only)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Add conditioner to make-up tank (if applicable)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	Refer to site specific specifications
Drain main air and service brake receiver condensate	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check brake air receiver age. Receiver must be replaced when approaching 2 years in service life. This is determined from the vehicle in-service date.	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Replace both main air inlet filters	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Set engine valve clearance	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	Inlet 0.2mm Exhaust 0.45mm
PARTICULATE FILTER SYSTEM			
Check hosing (Replace if required)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check condition of outlet pipe couplings	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check mounting and security valves	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check for loose fasteners	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check for exhaust leaks	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check for air leaks on control lines	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check for damage to housings/components	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Repair/Replace waste gate valve	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Replace exhaust particulate filters	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	Note! Replace filters as per site specific procedure – only approved filter elements to be fitted.



SERVICE ITEM	Serviceable/ Completed	Component Replaced	Specification/comments
 Test exhaust back pressure calibration using the following guidelines: remove plug from bottom of the purifier pipe and fit test gauge via hose from calibration kit operate machine at idle and gradually fully cover the particulate filter housing outlet using a steel plate/conveyer rubber or something similar monitor gauge reading to ensure that the waste gate, visual and audible indicators operate at approximately 10kPa 	□ Yes, □ No	□ Yes, □ No, □N/A	
COMMISSIONING			
Check compressor governor unloader pressure	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	125psi
Check pneumatic system safety valve manual operation	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Test 2wd / 4wd actuator (Disengages when 3 rd gear is selected)	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Test hydraulic steer standby pressure	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	350psi
Test hydraulic full compensator pressure	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	1600psi
Check reverse alarm filter and operation	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check park brake release pressure	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	278 / 171 – 350psi 211 / 111 – 400psi
Check for leaks around injectors and fuel system	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check fuel lines and fittings for leaks	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check fuel injector pump for damage, loose parts & security	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check pneumatic system for leaks	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check general body condition	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check frame visually for cracks and corrosion	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check operation of door and hinge condition	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	Lubricate with penetrant
Check alignment of door interlock valve plunger/roller.	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	Ensure plunger is central in front cab cutout
Check seat belts – condition and operation	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check seat condition	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check stretcher brackets and mounts	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check rims / tyres & wheel nut tension	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	430Nm (318Ft/Lbs)
Check tyres for damage and record condition and % of thread remaining	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	DSF: ODSF: DSR: ODSR:
Check tyre pressure if filled with air	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	Note! Always refer to tyre manufacturers for specific tyres pressures. Always follow site requirements for tyre inspections.
Check fire extinguisher serviceability and security	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check fire suppression system for damage and condition of bottle, lines and nozzles	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check fire suppression system is tagged and in date	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check safety triangles	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
Check wheel chocks	☐ Yes, ☐ No	☐ Yes, ☐ No, ☐N/A	
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MDR090376DES & MDR083991TBS-2

RAW GAS TEST (IF DUE)		Serviceable	/ Completed						
Engine RPM					СО ррт	NOx ppm	Co² % NSW	HCHO ppm QLD	
Low idle no load		☐ Ye	☐ Yes, ☐ No						
High idle		☐ Ye	☐ Yes, ☐ No						
High idle - stall 3rd gear		☐ Ye	s, 🗖 No						
Specification					1100 Max	750NSW 900QLD Max	>6	50 Max	
FINAL COMMISIONING			Serviceable/ Completed						
Test coolant loss shutdown Repeat Test 3 times		☐ Ye	s, 🗖 No						
Test low engine oil press shutdown		Repeat Test 3 times	☐ Ye	s, 🗖 No					
Check thermal sensor (se shutdown (Crack su	entinel) ipply line)	Repeat Test 3 times	☐ Ye	s, 🗖 No					
Test exhaust conditioner shutdown (test floats inc		Repeat Test 3 times	☐ Ye	s, 🗖 No					
Test emergency shutdov	vn (Strangler \	/alve)	☐ Ye	s, 🗖 No					
Carry out brake drive through test – FWD & 2 nd gear with service and park brake applied		☐ Ye	s, 🗖 No						
Check operation of park	brake		☐ Yes, ☐ No						
Check operation of door	interlocks		☐ Ye	s, 🗖 No					
Service completed by			Signature				Date		
Supervisor acceptance			Signature	Date					
Comments:									



VEHICLE BRAKE TESTING

Print & completed Brake Test Report MDG39 BT SMV and attach to this document.



(SHIFTLY) PRE-START INSPECTION - DRIFTRUNNER 'G' & 'F' SERIES

MDR090376DES & MDR083991TBS-2

PLANT NUMBER	SERIAL NUMBER	DATE	MACHINE HOURS	OPERATOR

THIS DOCUMENT FORMS PART OF A REGIME TO ENSURE THE PIECE OF PLANT INVOLVED IS MAINTAINED AS PER THE REQUIREMENTS OF AS3584.3 2012. THE MAINTENANCE REGIME COMPRISES OF PRESTART, DAILY, 50HRS, 250HRS, 500HRS, 1000HRS AND FULL CODE D MAINTENANCE PLANS. THIS DOCUMENT IS TO BE USED IN CONJUNCTION WITH THE RELEVANT SERVICE MANUAL. THE SEQUENCE NUMBERS LISTED INDICATE THE RECOMMENDED PROCESS FLOW.

WARNING: ENSURE THE DES HAS BEEN TAGGED WITH ISOLATION AND DANGER TAGS IN ACCORDANCE WITH OEM RECOMMENDATIONS AND MINE ISOLATION AND SAFETY PROCEDURES TO PREVENT THE VEHICLE FROM BEING STARTED OR ANY UNPLANNED MOVEMENT DURING THE PRE-START INSPECTION. IT IS RECOMMENDED THAT THIS CHECK IS COMPLETED AT THE START OF EVERY SHIFT OR WHENEVER THE PIECE OF PLANT IS TAKEN OVER BY A NEW OPERATOR

IF ANY DEFECTS OR HAZARDS ARE FOUND DURING THE PRE-START INSPECTION THEY MUST BE REPORTED TO A SUPERVISOR AS SOON AS POSSIBLE, AS

PER MANAGERS RUI ES.

PER MANAGERS RULES.								
SEQUENCE	SERVICI	E ITEM DESCRIPTI	ION	ок	ADJ	COMMENTS		
	GENERAL MACHINE							
1	Visually inspect cabins, of		dscreen and					
	tanks – report damage /	defects						
2	Check tyre condition							
3	Check axles for leaks							
4	Check fire suppression s							
5	Check fire extinguisher of							
13	Check operation of all ga	auges and controls	etc.					
17	Check lights for correct	operation and visua	ıl damage					
	COOLING SYSTEM							
6	Check and clean radiato	r core						
7	Check security of radiate	or						
8	Check coolant level and	add inhibitor if req	uired					
	ENGINE							
9	Check drive belt - Visual							
11	Check the intake of the	air cleaner pre-clea	ner is clear					
18	Check for oil leaks							
10	AIR SYSTEM	<u> </u>						
10	Drain condensation from	n air receiver						
12	FUEL SYSTEM							
12 19	Check fuel Level and top Check for leaks around i		Llines					
20	Check all hoses and fitting		rinics					
20	TRANSMISSION	ings for leaks						
14	Confirm drive isolation b	ov brake drive throu	ugh test					
15	Check transmission for I		<u> </u>					
	SHUTDOWN SYSTEM							
21	Check hoses and fittings							
22	Test scrubber tank low water shutdown (test floats individually)							
23	Drain scrubber tank and	flush						
	BRAKE TEST							
16	Check operation of door	r/park brake interlo	ck					
сом	MENTS							
INSPE	CTED BY	SIGNATURE	DATE	SUPERV	ISOR	SIGNATURE DATE		