Plant History

Model: CAT972M Loader **Serial No:** CAT0972MKEDW0886

Registration No: 99471C **Plant No:** LD709

Date/Hours	Description
14-15.09.21	ACES – fit out machine to civil specs. Install isolators, UHF, door alarm, Navman and e-stops. Tested all operations.
15.09.21	Spec machine, paint guards, remove bucket, fabricate e-stop brackets. Refit bucket to machine. Sort edge.
15-17.09.21	Heavy Duty Welding – gouge off weld-on cutting edge off bucket. Grind up underside for new bolt-on edge. Organise for tooling and holes to be drilled. Drill and oxy cut bolt holes for new edge. Install chock block on lip and cheeks.
17.09.21	Full wash and detail. Pre hire inspection completed. Setup for HDW to drill holes in bucket lip.
18.09.21	Check over assist boilermaker with bucket repairs.
23.09.21 3563hrs	SmartTech – supply and fit Loadrite
29.09.21	Remove and replace flashing light assembly. Inspect bonnet.
29.10.21 3737hrs	Remove and replace cutting edge.
29.11.21 3839hrs	Fault codes found injector 1 and 2. Injector fault current below normal. Carried out fuel system verification, checked – okay. Test wires from ECM to injector harness, checked – okay.
29.11.21	ACES – inspect fault with injectors. Carried out testing. Inspected wiring harness from out ECU to engine plug. Test injectors, all okay. Fault would not activate again.
09.12.21	Found pins on front not being greased
15.12.21 3875hrs	Change out 4 x cutting edge bolts
01.02.22	found all cutting edge bolts loose removed, all bolts replaced with new ones.

09.02.22 **2000hr service**	Carried out 2000hr service as per service sheet.
10.02.22	Finish off service, fix front washers found broken check valve, temporary fix, rear windscreen wiper found missing relay, found rear washers not working needs new washer motor.
18.03.22	Found right hand drum sensor unserviceable remove ram.
22.03.22	Fit steer cylinder and plumb up, test operations.
12.04.22	Complete off hire inspection.
19.04.22	Remove and replace 2x washer motors, change out edge, remove and straighten rear step. Pre hire inspection completed, found machine still dirty.
20.04.22	Full wash and detail. Pre hire inspection completed.
30.05.22	Hastings – transmission 1 not responding to command. Found position sensor not functioning correctly. Remove side covers for access, install articulations lock. Remove synchroniser position sensors, install new updated position sensor for synchroniser. Update flash file, check and top up transmission oil. Machine wont start. Magnetic switch failed. Check voltage, power at fuses and power at magnetic switch. Remove and replace, return wiring to oem. Install the panel at the rear of the operator cab, install panel on the platform outside of cab.
22.06.22	Prep counter weight for paint.
23.06.22	Aces – carry out tests on ignition system. Found that ignition solenoid has failed due to water in cab. Water in cab due to blocked air conditioner. Clean out and test. Refit and modify wiring to suit new solenoid. Refit panels and test.
23.06.22	Paint rear bumper. Fabricate bracket for wheel chocks and bolt to machine. Fit reflective tape, fit burst protection to hoses in engine bay.
24.06.22	Customise fire extinguisher bracket to suit and paint. Fit and tension stainless cable ties to burst protection. Check over machine and made a list of removing tasks to be completed for mine spec.
25.06.22	Finish off burst protection. Fabricate bracket for fire suppression. Prep and paint. Weld and fit fire suppression bottle bracket, prep and paint. Started fitting exhaust blanket to dpf. Prep and paint call sign and fit beacon.
26.06.22	DMS Fire – carried out installation of a Qtec F3 fluorine free loss of pressure system.

27.06.22	Wrap turbo dump pipe and EGR pipe. Check over site inspection list.
28.06.22 4404hrs	Remove and replace header tank. Top up coolant and run up machine. Remove rear steps. Extend steps and fit. Fabricate handrail for rear steps to maintain 3 points of contact. Finish fitting exhaust blanket to DPF, finish fitting exhaust wrap to stack.
29.06.22	Fit wheel nut indicators.
31.07.22	ASG Diesel – investigate smashed front glass. Check crowed cylinder for bend.
01.08.22 4463hrs	ASG – Accident, damage inspection. Check bucket, cab and hydraulics for damage.
06.08.22	ASG Diesel - inspect steering fault harness issues possibly
07.08.22	ASG Diesel - electric fold in primary signal supply voltage on steering spool
08.08.22 **500hr Service**	ASG Diesel - 500 hour service and inspection steering fault
10.08.22 4488hrs.	Bucket inspection found crowd pin walked out.
11.08.22 4489hrs.	Bucket pin retainer bolt thread damages. M20 tap. Repaired thread and fitted new bolt and shim. Tested ok.
13.08.22	ASG Diesel – Adjust loose retaining bolt.
16.08.22 4524hrs	ASG Diesel - Rerun and fit new UHF aerial.
17.08.22	ASG Diesel - repair transmission oil leak at filter housing
25.08.22	ASG Diesel - charge suppression low system pressure check for leaks
08.09.22	ASG Diesel – has level 3 steering faults, primary steer valve spool signal voltage high, steering faults, 8vdc supply voltage low. Cylinder 6 injector faults.
10.09.22	ASG Diesel – inspected steering cylinders and sensors, 4 steering related faults on ET. Steering spool position sensor not working. Did a cylinder cut out test all okay. Preformed a fuel verification test and found cylinder 6 injector not ok (mechanical internal failure suspected) right hand steer cylinder internal sensor has faults and leaking oil.
11.09.22	ASG Diesel - investigate steering fault, fit steering spool fit panels back to machine and test. Steering fault still alarming. Test wiring to steer cylinders, both getting 8 volts right hand side stair cylinder sensor damaged, remove cylinders

11.09.22	ASG Diesel – remove steer spool sensor, fitted new oring and new bolts, tested machine on ET and operated machine for 15min, no faults present. L3 steering cylinder faults, checked 8 volts supply from ECM to cylinder sensory wiring, found wiring had been repaired before in cylinder, removed cylinder RH to have sensor ordered.
13.09.22	ASG Diesel -disassemble hydraulic cylinder makeup tool for gland nut
14.09.22	ASG Diesel - re seal, replace sensor and reassemble steel cylinder fit to machine run up and test calibrate steering rotate outside bucket teeth
20.09.22	ASG Diesel – removed side panels to access engine bay, removed nob injector and quil tube, cleaned parts and fitted new injector. Torqued up injector and quil tube reassembled all parts. Preformed fuel verification and all injectors all okay.
21.09.22	ASG Diesel – lift linkage position sensor has failed.
23.09.22	ASG Diesel - investigate steering follow. Plug et on old fault not active
24.09.22	ASG Diesel – inspected apparent steering faults. Found only 1 steering fault 8 hours previous.
03.10.22	ASG Diesel – steering fault, right hand sensor failure. Remove and attempt to repair, refit and test.
11.10.22	ASG diesel – remove right hand steer cylinder, strip down and replace senior, re fit. Run up and clear faults, new low voltage fault, investigate fault.
13.10.22	ASG Diesel – repair right hand steer cylinder low voltage fault. Calibrate steering, run up and test.
18.12.22 **1000HR Service 4976hrs**	1000hr service completed.
09.01.23 5029hrs	ASG Diesel – Rotate worn bucket teeth. Inspect seat air leak. Carry out temporary repair. Heavy Maintenance – Carry out general machine inspection and check fluids. Temporarily repair airline under seat.
20.01.23 5051hrs	ASG Diesel – Inspect steering fault. Voltage above normal. Fault code. Wiggle test harness. Find and repair rubbed wire. Run and test machine.
21.01.23 5054hrs	DMS Fire Services – carry out fire suppression service. ASG Diesel – Change out worn bucket teeth. Continue to check steering faults. Unable to fault – monitor.

24.01.23 5082hrs	Heavy Maintenance – Inspect steering fault. Repair damaged wire. Inspect steering fault. Found hose worn. Repair and secure.
29.01.23 5120hrs	ASG Diesel – Swap out bucket teeth. Investigate steering fault. Investigate engine and transmission fault. Change bucket teeth around as outside teeth are worn. Checking steering faults. Machine was needed by operator.
30.01.23 5124hrs	ASG Diesel – Investigate only active fault. Exhaust manifold flow balance valve solenoid fault.
01.02.23 5124hrs	ASG Diesel – Fit exhaust flow solenoid. Inspect transmission slippage fault. Pull complete transmission calibration and TC calibration and inching pedal. Run and test. Check lock up b trans pressures. Check clutch pressure all within spec.
03.02.23 5134hrs	ASG Diesel - Diagnose and repair wiring fault with steering Trace wires to steering displacement.
05.02.23 5150hrs	Heavy Maintenance – Further diagnose intermittent steering fault. Repair more wiring. ASG Diesel – Investigate steering fault.
14.02.23	ASG Diesel – Fit new steer spool displacement solenoid. Fit new LH and RH primary spool and solenoids. Clear codes. Test ok.
21.02.23 5206hrs	Heavy Maintenance – Remove and replace bucket teeth. Pin tensions and clean plugs for steering valve block. Inspect steering fault. Retention pins and repair ribbed wire in RH side.
25.02.23 5235hrs	ASG Diesel – Investigate steering system malfunction.
01.03.23 5235hrs	ASG Diesel - Fit primary on off solenoid. Check active faults. Non active.
02.03.23	ASG Diesel – Stay with loader to see if anything would fault.
07.03.23 5262hrs	Heavy Maintenance – Carry out general machine inspection. Check fluid levels.
10.03.23	ASG Diesel - Investigate engine hood not going up.
20.04.23	Dyce Energy – diagnose steering fault
01.05.23 5282hrs	Dyce Energy – re-seal RHS steer cylinder, fit new steer sensor internal to cylinder. Re-mount and grease mount cylinder covers, codes still active, no oil leaks, top up hydraulic oil.
02.05.23	Dyce Energy – remove cylinder covers, check all harnesses, found 1 x broken / squashed wire. Cut and soldered new tail, secured, tested, cleared faults and retest – okay.

08.05.23 5283hrs	ASG Diesel – Weld up bucket. Fit bucket segments. Fit bucket heel segments.
14.05.23	Heavy Maintenance – exterior clean of machine
16.05.23	Heavy Maintenance – continue cleaning machine
06.06.23	Chubb – 12 month fire suppression service ASG Diesel – carry out pre-hire inspection, detail cab, wash down machine.
17.06.23 5322hrs	Clean pin holes. Remove cutting edge, clean and refit.
21.06.23	ACES – Fit and wire up e-stop in cab and test operations.
14.09.23 5520hrs **500hr Service**	e-stop inside cab faulty only working intermittently. Replaced first aid kit. Replace pre start book. Top up coolant 2 way aerial broken. Drop box input seal weeping. 2x inner front top cab light not working. Movement in steer cylinder rod end pins. Inspect/repair artic cylinder fault #6. Carry out and complete 500hr service. Carry out pre hire inspection.
18.09.23	ACES – Inspect injector fault. Carried out tests on all wiring and injectors, all okay. Carried out tests with computer and cabin brake injector. Modified wiring for e-stop and wire into ecu shutdown. Repaired am/FM antenna. Fit new antenna for uhf and repaired wiring.
12.10.23	ACES – Inspect starting fault. Found batteries unserviceable. Remove panels to access. Fit and test.
30.10.23	LMS – remove RH steering cylinder. Strip and assess fault and diagnose fault.
31.10.23	LMS – remove LH steering cylinder. Degrease cylinder. Clean, degrease bores on machine for line boring. Connect ET and investigate related codes. Check all harnesses while steering cylinders were removed.
3.11.23	Leading Mechanical Solutions – Reseal RH steering cylinder. Install sensor and repair grub screw that locates sensor in barrel. Assemble as per SIS.
6.11.23	Leading Mechanical Solutions – Paint cylinder head gland. Install bushes - would not fit. Order new bushes.
8.11.23	Leading Mechanical Solutions – Install bearings into cylinders. Freeze and install bushes into neefs. Install cylinders, grease bearings & test system.
14.11.23	LMS – spec up and fabricate cab pressuriser bracket and paint. Heavy Duty Welding – Cut and fabricate bracket for cab

	pressuriser. Cut and drill pressuriser bracket. Hard face bucket lip.
15.11.23	LMS – Continue install of cab pressuriser, install ducting hose
16.11.23	LMS – sand and paint counterweight, install tooth bucket onto machine.
21.11.23 5640hrs	Rectify steering fault – removed right hand cylinder and stripped to access position sensor. Found oring damaged and wire broken. On further inspection found grub screw not holding sensor into position. Replaced grub screw. Resealed cylinder and reassembled. Installed upgraded steering bearing and bushes and installed cylinder. Grease and test application, test ok. Install cabin pressuriser, carry out bma compliance. Wash detail and grease machine. Carry out and complete pre hire inspection.
01.12.23	Black Diesel Services carry out brake testing on machine.
27.3.24	Full wash and detail, 2000hr service
28.03.24 6040hrs	2000hr Service
3.4.24	Carry out pre hire inspection