Service Manual

WLS 430ZX

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Specific Gravity Testing

The specific gravity of the electrolyte gives an idea of the state of charge of the battery. Readings should be taken using a hydrometer, when the electrolyte temperature is 15°C (60°F). If the battery has recently been on charge, wait approximately one hour (or slightly discharge the battery) to dissipate the surface charge before testing.

Readings should be as tabulated and should not vary between cells by more than 0.04. A greater variation indicates an internal fault on that particular cell.

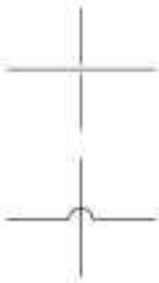
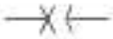
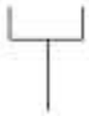
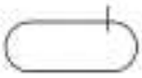
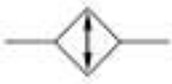
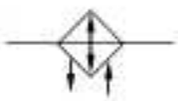
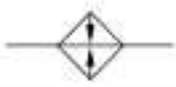
If the electrolyte temperature is other than 15°C (60°F) a 'correction factor' must be applied to the reading obtained. Add 0.07 per 10°C (18°F) if the temperature is higher than 15°C (60°F) and subtract the same if the temperature is lower.

Table 2. Specific Gravity at 15°C (60°F)

	Fully Charged	Half Discharged	Fully Discharged
Ambient temperature up to 27°C (80°F)	1.270 - 1.290	1.190 - 1.210	1.110 - 1.130
Ambient temperature above 27°C (80°F)	1.240 - 1.260	1.170 - 1.190	1.090 - 1.110

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Table 6. Energy Transmissions and Conditioning

	Working line, return or feed
	Pilot control
	Drain lines
	Flexible pipe
	Line junction
	Crossing lines
	Air bleed
	Line plugged, also pressure test point
	Line plugged with take off line
	Quick release couplings - connected
	Quick release couplings - disconnected
	Reservoir - return line above fluid level
	Reservoir - return line below fluid level
	Header tank
	Pressure sealed tank
	Accumulator
	Filter or strainer
	Water trap
	Cooler - with no indication of coolant flow
	Cooler - indicating direction of coolant flow
	Heater

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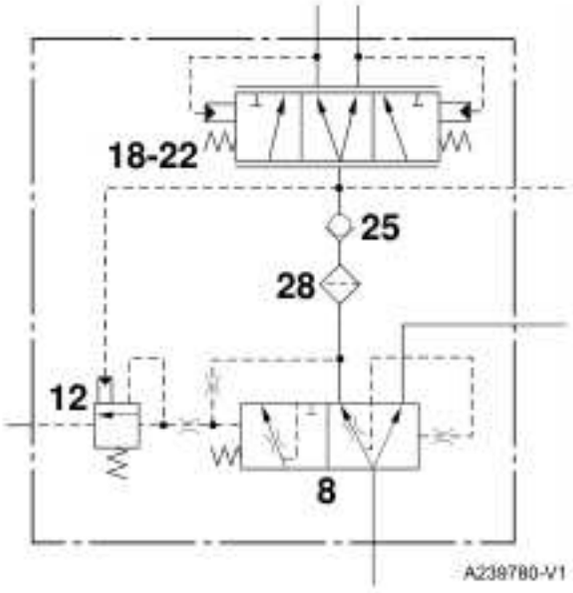


Fig 8.

Dismantling

1 Remove nuts **1** and bolts **2**.

2 Remove cover plate **3** along with 'O' rings **4** and **5**. Remove and discard the 'O' rings.

3 Remove plug **6** along with 'O' ring **7**. Remove and discard the 'O' ring.

4 Carefully withdraw spool/damping orifice assembly **8** and spring **9** from the valve body.

5 Remove spring seat **10** along with 'O' ring **11**. Remove and discard the 'O' ring.

6 Remove the complete relief valve assembly **12** using a 'C' spanner. Remove and discard 'O' rings **13**, **14**, and **17** and backing rings **14** and **16**.

7 Remove check valve assembly **18** from valve body. Remove 'O' rings **19** and **20** and discard.

8 Carefully withdraw pushrod **21** from its bore.

9 Remove check valve assemblies **22** and **25** from valve body. Remove all 'O' rings and discard.

10 Remove and discard filter **28**.

Note: *A new filter is supplied as part of the seal kit.*

Inspection

1 Thoroughly wash all components. Apply hydraulic oil immediately to prevent moisture collecting.

2 Inspect all bores and 'O' ring grooves and make sure that they are free from burrs.

Assembly

1 Make sure all components are thoroughly clean prior to assembly. Renew all 'O' rings and coat with JCB HP Grease on assembly.

2 Fit 'O' rings **26** and **27** to check valve assembly **25** making sure that 'O' rings fit correctly in grooves. Insert filter **28** into recess of check valve. Locate assembly into valve body making sure the filter locates in its seat in the body without undue force. Tighten to the correct torque.

3 Fit new 'O' rings **23** and **24** to check valve assembly **22**. Locate assembly and torque tighten.

4 Locate pushrod **21** in its bore. Fit new 'O' rings **19** and **20**, to check valve **18**. Locate assembly and torque tighten.

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Pneumatic torque gun.(Make sure that O- ring is present in the VR plug)



D625139

Fig 84.



D625138

Fig 85.



D625140

Fig 86.



D625170

Fig 87.

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JCB Standard Torque Settings

B.S.P. Port Connection (Colour Coded)

Note: *All adapters, elbows and hoses should be tightened to JCB standard torque settings unless stated otherwise.*



Fig 4.

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