Service Manual

JS130W, JS145W, JS160W, JS175W

Section 1 - General Information

Section 2 - Care & Safety

Section 3 - Maintenance

Section B - Body & Framework

Section C - Electrics

Section D - Controls

Section E - Hydraulics

Section F - Transmission

Section K - Engine



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Table 3. Error Code 3 - Blower Potentiometer Error (User Interface / Control Panel)

Effect	Causes	Remedy
The Blower motor speed is irregular in Auto mode.The Blower motor speed is fixed or cannot be changed in manual mode.	Wiring Error (open or short-circuit).	Check for 24V at blower motor.
		Check the continuity from blower motor earth to Pin 7 on PWM.
	There is no blower speed signal from the user interface to the ATC Control Module.	Check the continuity from pin C15 on user interface to pin 28 on ATC control module. (Expected reading on Pin 28 0.5V to 3.0 V).
	There is no signal from the ATC control module to the PWM.	Check the continuity from Pin 5 on ATC control module to Pin 6 on PWM unit.
	Bad earth on blower motor / PWM.	Check for good earth as shown on schematic.
	Defective potentiometer.	Replace user interface / control panel.

Table 4. Error Code 4 - Water Valve Potentiometer Error (User Interface / Control Panel)

Effect	Causes	Remedy
The temperature shown on the display cycles between 22 degrees and error code 4.There is no temperature change There is no fan speed in Manual Mode.There is no temperature change / the fan speed operates correctly in Auto mode.	There is no temperature signal from the user interface to the ATC control module.	Check the continuity from Pin D1 on the user interface to pin 29 on ATC control Module. (Expected reading on Pin 29 - 0.5V to 3.0 V).
	There is no temperature signal from the ATC control module to the PWM.	Check the continuity from Pin 3 on ATC control module to Pin D on water valve.
		Check the continuity from Pin A on water valve to Pin 5 on PWM.
	There is a bad earth on water valve / PWM.	Check for good earth as shown on schematic.
	Defective potentiometer.	Replace user interface / control panel.

Table 5. Error Code 7 - Cab Air Sensor Error (Air Inlet Temperature Sensor)

Effect	Causes	Remedy
The unit cannot cool the cab. The compressor disengages.The Demist mode does not work / The Recirculation Mode is O.K.There is no temperature change / the fan speed operates correctly in Auto mode. The temperature changes on LCD display. The cab temperature does not correspond.	There is no temperature signal from the sensor to the ATC control module.	Check the continuity between pin1 on the cab temperature sensor to pin 21 on ATC control module.
	There is a bad earth on the cab air sensor.	Check for good earth as shown on schematic.
	There is a defective sensor.	Replace the cab air sensor.

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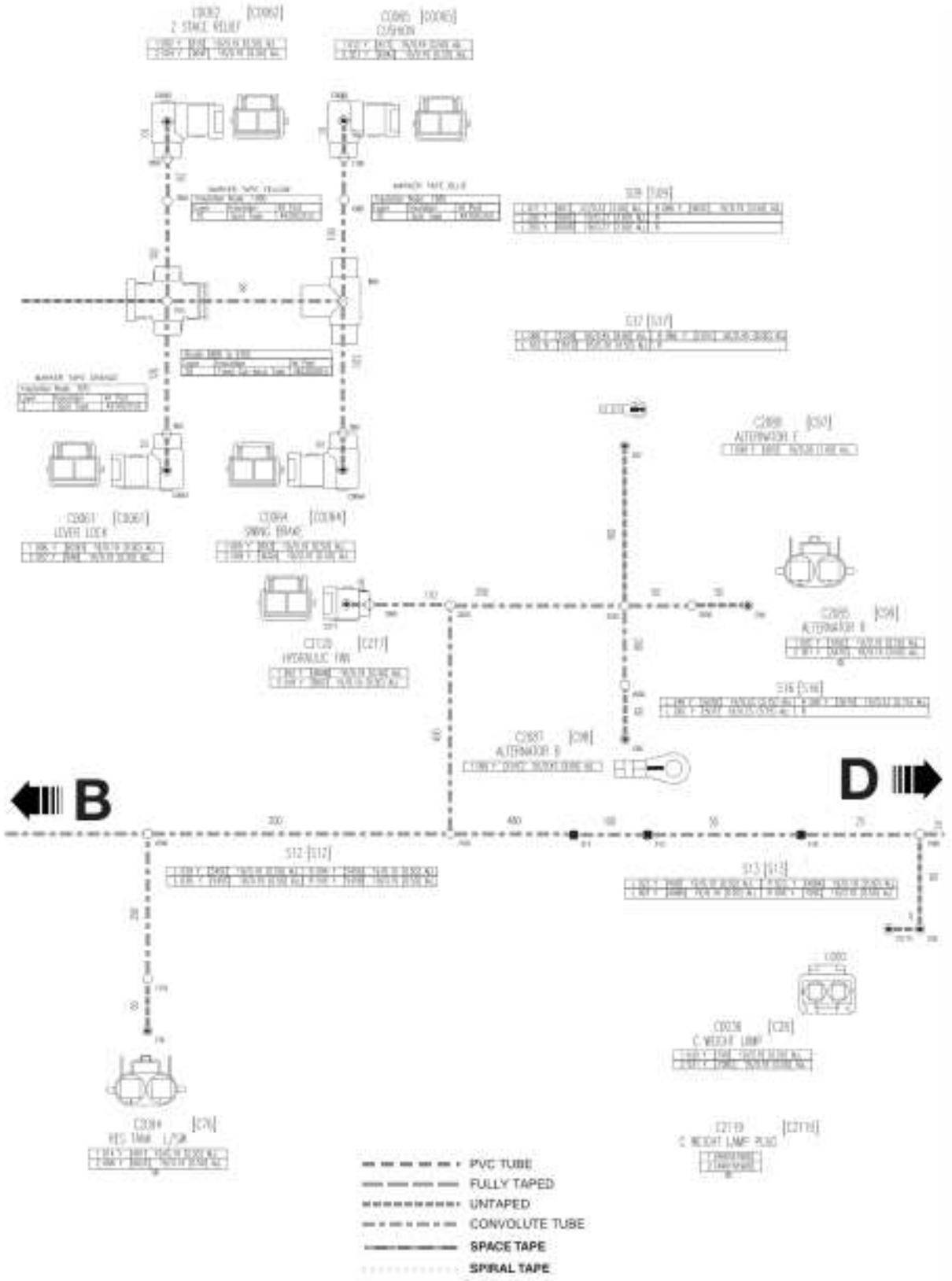


Fig 22. Main Harness 'C' 332/J3282 issue 3

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Technical Data

General Data

Hydraulic Pump

Table 1. JS130W - JS160W

	Axial Piston Pumps	Gear Pump	
Type	Twin variable displacement piston pump	Steering	Servo
Displacement volume	61 (cc/rev) x2	14 (cc/rev)	10 (cc/rev)
Rated Speed	2150 rpm	-	-
Pressure	343 bar (4975 lb/in²)	294 bar (4264 lb/in²)	39 bar (566 lb/in²)
Maximum flow rate	128 litre/min (28 UK gal) x2	29 litre/min (6.4 UK gal)	21 litre/min (4.6 UK gal)
Maximum input torque	340 Nm (251lbf ft)	-	-
Dry weight	112 kg (247 lb)	-	-

Table 2. JS175W

	Axial Piston Pumps	Gear Pump	
Type	Twin variable displacement piston pump	Steering	Servo
Displacement volume	77 (cc/rev) x2	14 (cc/rev)	10 (cc/rev)
Rated Speed	1950 rpm	-	-
Pressure	343 bar (4975 lb/in²)	195 bar (2828 lb/in²)	39 bar (565 lb/in²)
Maximum flow rate	154 litre/min (34 UK gal) x2	28 litre/min (6.2 UK gal)	20 litre/min (4.4 UK gal)
Maximum input torque	413 Nm (305 lbf ft)	-	-
Dry weight	81 kg (179 lb)	-	-

Main Control Valve

Table 3. JS130W - JS175W

Main Relief Setting Pressure	
Standard	314bar (4554 lb/in²) @ 91 litre/min (20 UK gal)
Pressure Raising	343 bar (4975 lb/in²) @ 83 litre/min (18.3 UK gal)
Overload Relief Setting Pressure	
Boom Raising, Dipper, Bucket Open/ closed	358 bar (5076 lb/in²) @ 30 litre/min (6.6 UK gal)
Boom Lowering Pressure	294 bar (4264 lb/in²) @ 30 litre/min (6.6 UK gal)
TAB/Dozer Raising/Lowering	250 bar (3625 lb/in²) @ 30 litre/min (6.6 UK gal)
Dry weight	104 kg (229 lb)

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Fig 1.

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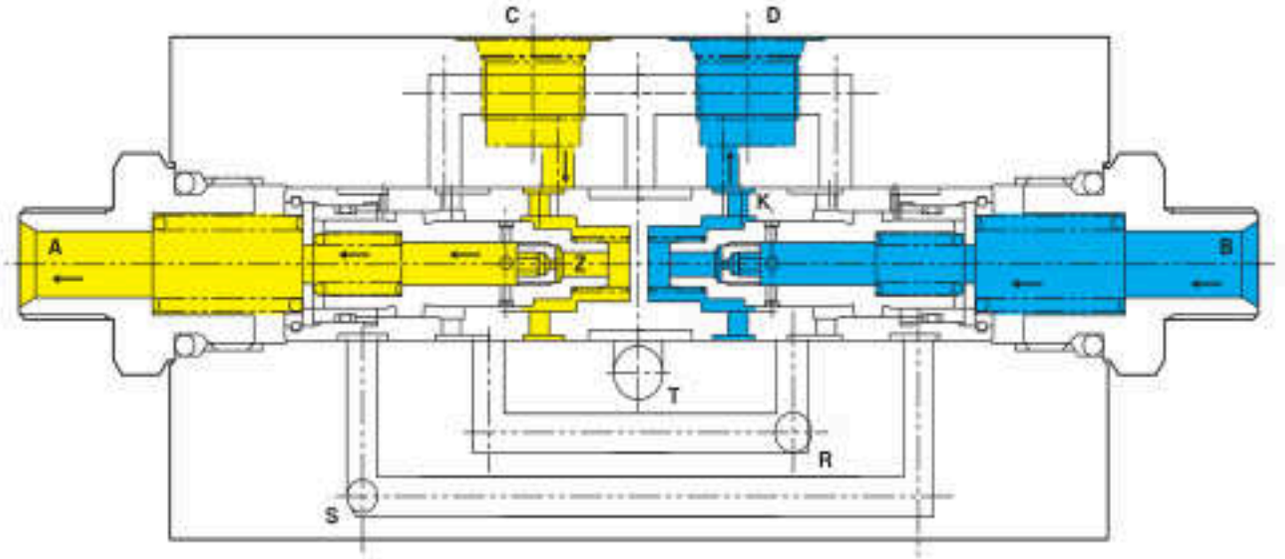


Fig 4. Cushioned Mode - Hand controller moved from dipper in to neutral

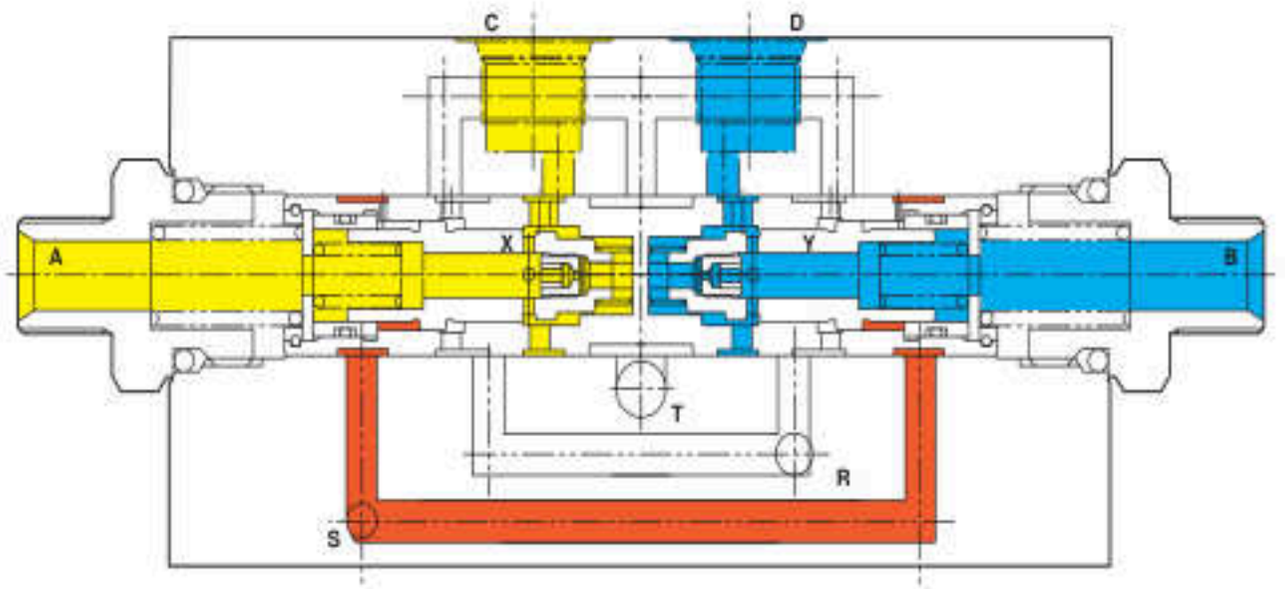


Fig 5. Cushion Control off

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