Service Manual

Wheeled Loading Shovel - 418S

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Section 2 - Operator's Manual

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Section B - Body and Framework

Section C - Electrics

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Section F - Transmission

Section G - Brakes

Section H - Hydraulic Steering

Section K - Engine



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Description		Length		
		418S Std Arms	418S HL Arms	418S SHL Arms
L	Crowd angle at full height	43°	43°	43°
M	Dump height	2,728mm	2,934mm	3,581mm
Unladen weight		9,560kg	9,627kg	10,164kg

Weights

Standard Arm

Table 1.

Brand	Tyre Size	Operating Weight kg
Michelin	XHA 17.5R25	9,576kg
	XTLA 17.5R25	9,504kg
	XSNOPLUS 17.5R25	9,540kg
	XMCL 500/70R24	9,388kg
	XM27 620/70R26	9,560kg
	MEGA XBIB 620/75R26	9,740kg
	MEGA XBIB 750/50R26	9,876kg
	CERE XBIB 620/70R26	9,632kg
Nokian	L GRIP 17.5R25	9,469.2kg

High Lift (HL) Arm

Table 2.

Brand	Tyre Size	Operating Weight kg
Michelin	XHA 17.5R25	9,643kg
	XTLA 17.5R25	9,571kg
	XSNOPLUS 17.5R25	9,607kg
	XMCL 500/70R24	9,455kg
	XM27 620/70R26	9,627kg
	MEGA XBIB 620/75R26	9,807kg
	MEGA XBIB 750/50R26	9,943kg
	CERE XBIB 620/70R26	9,699kg
Nokian	L GRIP 17.5R25	9,536.2kg

Super High Lift (SHL) Arm

Table 3.

Brand	Tyre Size	Operating Weight kg
Michelin	XHA 17.5R25	10,180kg
	XTLA 17.5R25	10,108kg
	XSNOPLUS 17.5R25	10,144kg
	XMCL 500/70R24	9,992kg
	XM27 620/70R26	10,164kg
	MEGA XBIB 620/75R26	10,344kg
	MEGA XBIB 750/50R26	10,480kg
	CERE XBIB 620/70R26	10,236kg
Nokian	L GRIP 17.5R25	10,073.2kg

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Harness Data

Wire and Harness Number Identification

TC-693_2

Introduction

This section details the allocation of wire numbers and the identification of wires in the wiring harness.

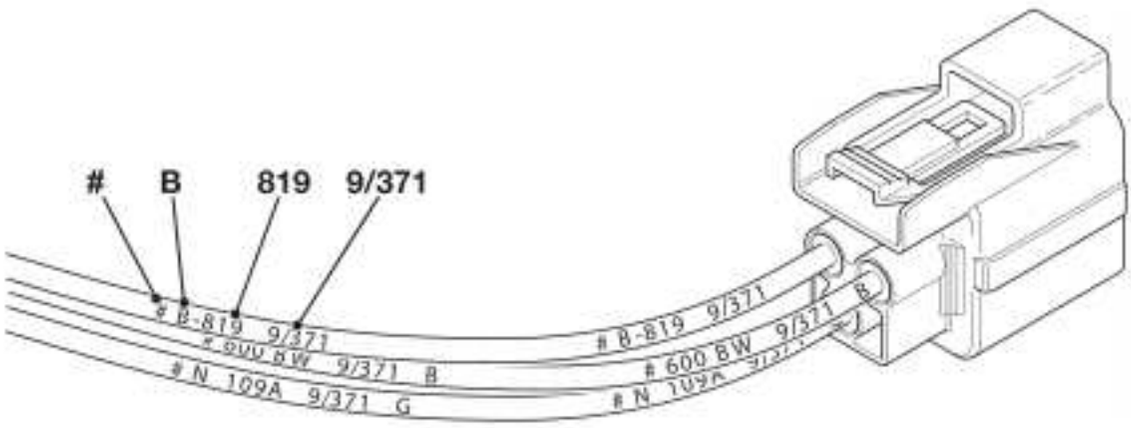


Fig 38. Typical Wire and Harness Number

⇨ *Fig 38. (C-47)*. The illustration shows a typical connector and wires. Each wire has an individual identification number permanently marked on it, at regular intervals along it's length.

The number stamped on the wire identifies the following:

Table 17. Wire and Harness Number Identification

Ident. No.	Description
#	The **#** indicates the start of the identification number. It is always printed to the left of the identification number.
B	If applicable - The colour of the flying lead that the harness wire should mate with. For instance, if wire **819** from harness 719/37100 mated with a flying lead coloured black (colour code **B**) then the number printed on the wire would be **B**-819 9/371.
819	The wire's unique identification number. The wire functions and numbers allocated to them are consistent through out the JCB range of products. ⇨ *Wire Numbers and Functions (C-48)*.
9/371	If applicable - The part number of the harness that the wire originates from. If the harness part number is 719/37100, the number printed on the harness wires will be **9/371** (71 and 00 are common numbers and therefore deleted).

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Troubleshooting

Possible faults

Stop the engine immediately when:

- The engine RPMs suddenly increase and decrease
- A sudden and unusual noise is heard
- The colour of the exhaust fumes suddenly darkens
- The oil pressure indicator light comes on while the engine is running

Table 1.

Fault	Possible Cause
The engine does not start	No fuel
	Discharged battery
	Cable connections are uncertain or incorrect
	Tank cap vent hole is clogged
	Fuel filter is clogged
	Air or water leaks in the fuel system
	Blocked fuel line
	Defective fuel feeding pump
	Defective starting motor
	Defective glow plugs
	Burnt fuse on the pre-heating glow plugs
	Defective glow plug control relay
	Defective starting switch
	Broken or loose supplementary start-up spring
	Incorrect tuning of the injection components
	Governor linkage is incorrectly set
	Binding of the injection pump control rod
	Rings are worn or sticking
	Incorrectly sealed intake valve
	Worn cylinder

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C105080-1

Fig 78.

If during setup, the choice is made to increase the recorded hours, you must accept a warning message before the value is changed.



C105080-2

Fig 79.

If there is a need to reduce the stored hours value, the third page of the tool can be used which is locked until an unlock code from JCB Service is entered.

To unlock the page, the challenge code must be emailed to JCB Service.

JCB will then respond with an unlock code which allows that particular computer to reduce the stored hours value for a limited time.

Once this time limit has expired the tool is locked again and the procedure has to be repeated.



C105080-3

Fig 80.

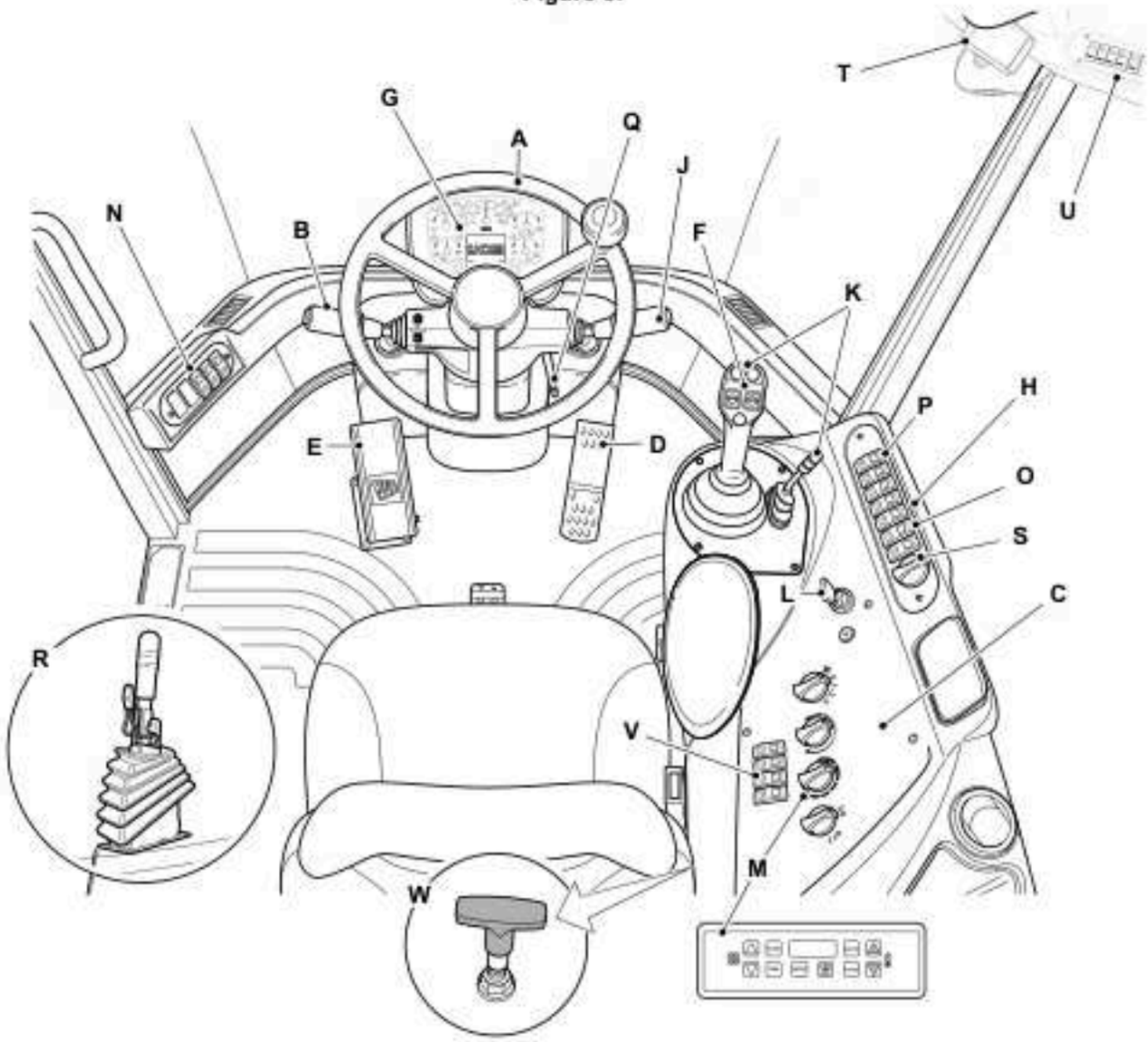
Select 'Unlock Fields' **A** from the 'Utilities' menu.

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Operator Station

Component Locations

Figure 8.



A	Steering wheelRefer to: About the Machine > Drive Controls > Steering Wheel (Page 33).
B	TransmissionRefer to: About the Machine > Drive Controls > Forward, Neutral and Reverse Switch (Page 34).
C	Power outletRefer to: About the Machine > Power Sockets > Auxiliary Power Socket (Page 46).
D	Accelerator pedalRefer to: About the Machine > Drive Controls > Accelerator Pedal (Page 34).
E	Service brake pedalRefer to: About the Machine > Drive Controls > Service Brake Pedal (Page 36).
F	Drive controls, switches and instruments (Depending on machine specification)Refer to: About the Machine > Drive Controls (Page 32).
G	Instrument clusterRefer to: About the Machine > Instruments (Page 47).
H	Right console switchesRefer to: About the Machine > Console Switches (Page 39).
J	Multi purpose steering column switchRefer to: About the Machine > Drive Controls > Steering Column (Page 33).
K	Operating leversRefer to: About the Machine > Operating Levers/Pedals (Page 61).
L	Starter switchRefer to: About the Machine > Interior Switches > Ignition Switch (Page 43).
M	Heater / Air conditioning operationRefer to: About the Machine > Heating, Ventilating and Air-Conditioning (HVAC) (Page 57).
N	Left console switchesRefer to: About the Machine > Console Switches (Page 39).

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