

506-36, 507-42, 509-42, 510-56

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General Information

Service Manual - 506-36, 507-42, 509-42, 510-56

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Applications

Introduction

This manual contains topics that relate to some or all JCB Loadall machines in the 5C group. There are several machine model codes in the family.	Machine Group	Model Code	Model Name
	5C	D	506-36
	5C	E	507-42
	5C	F	509-42
	5C	G	510-55
Machine variants: There are different machine variants within the same model name. This happens because of market requirements, or when the machine specification changes after a period of time.			
Use the applications tables to see which topics relate to which machine models and variants.			
Important: The machine model names are NOT referred to in the topics. You must refer to the applications tables for the applicable machine models			

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Tables

Section 1 - General Information

Topic Ref	Title	Variant	Machine models		
			506-36 5CD	507-42 5CE 509-42 5CF	510-55 5CG
1-2	<i>Introduction to the Manual</i>		All Machines		
1-3	<i>Machine Identification</i>		All Machines		
1-4	<i>Torque Settings</i>		All Machines		
1-5	<i>Service Tools</i>		All Machines		
1-6	<i>Service Consumables</i>		All Machines		
1-7	<i>Fuel</i>		All Machines		

Section 2 - Care and Safety

Topic Ref	Title	Variant	Machine models		
			506-36 5CD	507-42 5CE 509-42 5CF	510-55 5CG
2-1	<i>Safety Notices</i>		All Machines		
2-2	<i>General Procedures</i>		All Machines		

Section 3 - Routine Maintenance

Topic Ref	Title	Variant	Machine models		
			506-36 5CD	507-42 5CE 509-42 5CF	510-55 5CG
3-1	<i>Maintenance</i>		All Machines		

Section B - Body and Framework

Topic Ref	Title	VARIANT	Machine models		
			506-36 5CD	507-42 5CE 509-42 5CF	510-55 5CG
B1	<i>Cab Heating and Ventilation SYSTEM</i>		●	●	●
B2	<i>Cab Air Conditioning SYSTEM</i>		●	●	●
B3	<i>Cab</i>		●	●	●
B4	<i>Air Conditioning Condenser</i>		●	●	●
B5	<i>Cab HV and HVAC Unit</i>		●	●	●
B6	<i>Air Conditioning Binary Switch</i>		●	●	●
B7	<i>Heater Valve</i>		●	●	●
B8	<i>Fuel Tank</i>		●	●	●
B9	<i>Engine Cover</i>		●	●	●
B10	<i>Stabilisers</i>				●
B11	<i>RAS SYSTEM</i>			●	●
B12	<i>Interlock SYSTEM</i>			●	●
B13	<i>Boom</i>		●	●	●
B14	<i>RAS ECU</i>			●	●



Section C - Electrics

Topic Ref	Title	VARIANT	Machine models		
			506-36 5CD	507-42 5CE 509-42 5CF	510-55 5CG
C1	<i>Fuses and Relays</i>		●	●	●
C2	<i>Schematics</i>		●	●	●
C3	<i>Electrical Harness SYSTEM</i>		●	●	●
C4	<i>Battery Charging SYSTEM</i>		●	●	●
C5	<i>Alternator</i>		●	●	●
C6	<i>Battery</i>		●	●	●

Section E - Hydraulics

Topic Ref	Title	VARIANT	Machine models		
			506-36 5CD	507-42 5CE 509-42 5CF	510-55 5CG
E1	<i>Systems and Schematics</i>		●	●	●
E2	<i>Flowshare Hydraulic SYSTEM</i>		●	●	●
E3	<i>Parallel Hydraulic SYSTEM</i>		●	●	●
E4	<i>Flowshare Control Valve</i>		●	●	●
E5	<i>Parallel Control Valve - 2 Section</i>		●	●	
E6	<i>Parallel Control Valve - 5 Section</i>				●
E7	<i>Servo Control Valves</i>		●	●	●
E8	<i>Pilot Pressure Supply Valve</i>		●	●	●
E9	<i>Main Pump</i>	110 L/min	●	●	●
E10	<i>Cooling Fan Motor</i>		●	●	●
E11	<i>Extension Ram</i>		●	●	●
E12	<i>Lift Rams</i>		●	●	●
E13	<i>Tilt Ram</i>		●	●	●
E14	<i>Displacement Ram</i>		●	●	●
E15	<i>Sway Ram</i>		●	●	●
E16	<i>Stabiliser Rams</i>				●
E17	<i>RAS Rams</i>			●	●
E18	<i>Ram Maintenance</i>		●	●	●

Section F - Transmission

Topic Ref	Title	VARIANT	Machine models		
			506-36 5CD	507-42 5CE 509-42 5CF	510-55 5CG
F1	<i>Configuration</i>		●	●	●
F2	<i>Wheels and Tyres</i>		●	●	●
F3	<i>Front Axles</i>	SD80 3 Piece Steer Drive Axle		●	●
		SD70 3 Piece Steer Drive Axle	●		
F4	<i>Rear Axles</i>	SD80 3 Piece Steer Drive Axle		●	●
		SD55 1 Piece Steer Drive Axle	●		
F5	<i>PS750 Gearbox SYSTEM</i>		●	●	●
F6	<i>PS750 Mk4 Gearbox SYSTEM</i>		●	●	●
F7	<i>Bevel Gearbox</i>		●	●	●
F8	<i>Torque Converter</i>		●	●	●
F9	<i>Transmission Oil Cooler - Liquid to Liquid</i>		●	●	●
F10	<i>PS750 Gearbox</i>		●	●	●
F11	<i>PS750 Mk4 Gearbox</i>		●	●	●
F12	<i>Propshafts</i>		●	●	●
F13	<i>Speed Sensors</i>			●	●



Section G - Brakes

Topic Ref	Title	VARIANT	Machine models		
			506-36 5CD	507-42 5CE 509-42 5CF	510-55 5CG
G1	Single Axle Service Brakes SYSTEM		●		
G2	Twin Axle Service Brakes SYSTEM			●	●
G3	External Park Brake SYSTEM		●	●	●
G4	Park Brake Calliper		●	●	●
G5	Park Brake Disc		●	●	●
G6	Park Brake Switch		●	●	●
G7	Servo Exhauster Unit		●	●	●
G8	Servo Unit - Single Axle Brakes		●		
G9	Servo Unit - Twin Axle Brakes			●	●



Section H - Steering

Topic Ref	Title	VARIANT	Machine models		
			506-36 5CD	507-42 5CE 509-42 5CF	510-55 5CG
H1	Steering SYSTEM		●	●	●
H2	Hydraulic Steering Unit		●	●	●
H3	Priority Valve		●	●	●
H4	Steer Mode Valve		●	●	●
H5	Steer Rams		●	●	●
H6	Steering Column		●	●	●

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