

[Click here to get the complete manual](#)

CX290D

Crawler Excavator

SERVICE MANUAL

Part number 48155069

English

February 2018

© 2018 CNH Industrial Italia S.p.A. All Rights Reserved.

CASE
CONSTRUCTION



SERVICE MANUAL

CX290D Crawler excavators LC Material Handling (TIER4 FINAL) - EU Market
CX290D Crawler excavators LC Scrap Loader (TIER4 FINAL) - EU Market

Contents

INTRODUCTION

Engine.....	10
[10.001] Engine and crankcase	10.1
[10.102] Pan and covers	10.2
[10.106] Valve drive and gears	10.3
[10.101] Cylinder heads	10.4
[10.105] Connecting rods and pistons.....	10.5
[10.103] Crankshaft and flywheel.....	10.6
[10.216] Fuel tanks	10.7
[10.206] Fuel filters	10.8
[10.218] Fuel injection system.....	10.9
[10.202] Air cleaners and lines	10.10
[10.250] Turbocharger and lines.....	10.11
[10.254] Intake and exhaust manifolds and muffler	10.12
[10.500] Selective Catalytic Reduction (SCR) exhaust treatment.....	10.13
[10.501] Exhaust Gas Recirculation (EGR) exhaust treatment.....	10.14
[10.400] Engine cooling system	10.15
[10.414] Fan and drive	10.16
[10.310] Aftercooler.....	10.17
[10.304] Engine lubrication system.....	10.18
Hydraulic systems.....	35
[35.000] Hydraulic systems.....	35.1
[35.300] Reservoir, cooler, and filters.....	35.2
[35.106] Variable displacement pump	35.3
[35.102] Pump control valves.....	35.4
[35.359] Main control valve.....	35.5
[35.357] Pilot system	35.6

[35.355] Hydraulic hand control	35.7
[35.356] Hydraulic foot control.....	35.8
[35.352] Hydraulic swing system	35.9
[35.353] Hydraulic travel system	35.10
[35.354] Hydraulic central joint	35.11
[35.736] Boom hydraulic system	35.12
[35.737] Dipper hydraulic system.....	35.13
[35.738] Excavator and backhoe bucket hydraulic system.....	35.14
[35.360] Hammer and rotating bucket hydraulic system	35.15
[35.100] Main lift system.....	35.16
Frames and ballasting	39
[39.140] Ballasts and supports	39.1
Tracks and track suspension	48
[48.130] Track frame and driving wheels.....	48.1
[48.100] Tracks	48.2
[48.134] Track tension units	48.3
[48.138] Track rollers	48.4
Cab climate control	50
[50.100] Heating	50.1
[50.200] Air conditioning.....	50.2
Electrical systems	55
[55.000] Electrical system	55.1
[55.100] Harnesses and connectors.....	55.2
[55.525] Cab engine controls.....	55.3
[55.015] Engine control system.....	55.4
[55.201] Engine starting system.....	55.5
[55.301] Alternator.....	55.6
[55.302] Battery.....	55.7

[55.202] Cold start aid	55.8
[55.011] Fuel tank system	55.9
[55.010] Fuel injection system.....	55.10
[55.014] Engine intake and exhaust system.....	55.11
[55.988] Selective Catalytic Reduction (SCR) electrical system	55.12
[55.989] Exhaust Gas Recirculation (EGR) electrical system	55.13
[55.012] Engine cooling system	55.14
[55.013] Engine oil system	55.15
[55.640] Electronic modules	55.16
[55.512] Cab controls.....	55.17
[55.036] Hydraulic system control	55.18
[55.051] Cab Heating, Ventilation, and Air-Conditioning (HVAC) controls.....	55.19
[55.050] Heating, Ventilation, and Air-Conditioning (HVAC) control system.....	55.20
[55.524] Cab controls (Lift arm, Boom, Dipper, Bucket).....	55.21
[55.416] Swing control system	55.22
[55.417] Travel control system	55.23
[55.530] Camera.....	55.24
[55.518] Wiper and washer system.....	55.25
[55.054] Cab interference prevention system	55.26
[55.404] External lighting	55.27
[55.514] Cab lighting	55.28
[55.408] Warning indicators, alarms, and instruments	55.29
[55.992] Anti-theft system	55.30
[55.DTC] FAULT CODES.....	55.31
Booms, dippers, and buckets	84
[84.910] Boom	84.1
[84.912] Dipper arm	84.2
[84.100] Bucket.....	84.3