

CX50, CX60, CX70, CX80, CX90 and CX100 Tractors

Service Manual Don 7-71427

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Section 1

GENERAL

How it Works

GENERAL OVERVIEW

The CX Series tractors are built in the Case factory at Doncaster, England. These machines are marketed in Europe, North America and in all other export markets served by the company. The tractors are available with two types of safety cabs, the delux cab or the low profile cab.

The range begins with the CX 50 which delivers 50 h.p. (37 Kw) and extends to the CX100 delivering 100 h.p. (74 KW).

Engines

The engines used in these tractors are Case 900 and 1000 Series which are produced in England. The CX50 and CX60 tractors use the three cylinder 900 Series and the CX70, CX80, CX90 and CX100 use the four cylinder 1000 Series engines.

The engines in the CX60 and CX80 are turbocharged, the engines in the CX90 and CX100 have Wastegate turbochargers.

MODELS	CX50	CX60	CX70	CX80	CX90	CX100
No. of Cyl	3	3	4	4	4	4
Max Power PS/KW	50/37	60/44	70/52	80/59	90/66	100/74
Intake Aspiration	Naturally Aspirated	Turbo	Naturally Aspirated	Turbo	Wastegate Turbo	Wastegate Turbo
Rated Speed	2250	2250	2200	2200	2200	2200
Max Torque Nm/rpm	177/1200	222/1400	271/1400	325/1400	355/1400	402/1400
Torque Rise %	13	19	21	27	24	25
Optimum Fuel Consumption g/kw/h	214	216	214	217	216	210
Fuel Tank Capacity Ltr	155	155	155	155	155	155

Transmission

The fully synchromesh transmission used in these tractors has sixteen forward and eight reverse gears with a forward and reverse synchromesh shuttle and a two speed powershift. In addition the transmission is available as 30 or 40 Kph maximum speed and two or four wheel drive.

A dry single plate diaphragm clutch is used on all models.

PTO

The rear PTO drive is independent from the transmission drive and incorporates a hydraulically operated multiplate wet clutch. This clutch has the facility to feather the engagement of drive for smooth power take up.

The PTO options are single or double output shafts at 540/1000 rpm 6/21 splines or a shifttable single shaft 540/750 or 540/1000 rpm with 6 spline only.

Hydraulics

An engine driven steering pump supplies the steering, the transmission control circuits and the transmission pressure lubrication circuits. A large capacity pump supplies the hitch and auxiliary remote valves.

Up to three remote valves are available plus a power beyond facility.

The new top link sensing electronic hitch (EHC), features many of the features found on the Maxxum MX Series and Magnum tractors to give improved hitch performance.

Brakes

The tractors incorporate inboard wet disc brakes which are hydraulically operated and self adjusting.

A trailer brake valve is standard on some models and available as an option on all other models in the range.

Safety Cabs

The low profile cab provides a low height whilst retaining the comfort and similar specification to the delux version. Special features may include opening front windscreen and a roof window.

The delux cab which is available on all CX models is by design a luxury cab with many built in features. These include low noise down to 73dba on some models, free flow heating and ventilation, air conditioning (optional) and digital instrumentation.

LUBRICANTS AND CAPACITIES

Engine

Oil Type Case No.1 Engine Oil

Oil Capacity

CX50, CX60 -

Without Filter Change 6.75 Litres (1.78 US GAL)

With Filter Change 7.5 Litres (1.98 US GAL)

CX70, CX80, CX90, CX100 -

Without Filter Change 7.4 Litres (1.95 US GAL)

With Filter Change (With Turbo Charger) 8.5 Litres (2.25 US GAL)

With Filter Change (Without Turbo Charger) 8.2 Litres (2.16 US GAL)

NOTE: The oil level dipstick is ONLY a guide, when you fill the engine crankcase with oil. Always measure the amount of oil you install.

Cooling System

Coolant Mix Solution of 55% Water and 45% Ethylene Glycol

Coolant Capacity

CX50, CX60 11.4 Litres (3.01 US GAL)

CX70, CX80, CX90, CX100 13.7 Litres (3.62 US GAL)

Fuel Tank

Fuel Type No.2 Diesel Fuel

Fuel Tank Capacity 155 Litres (41 US GAL)

Transmission/Hydraulic System

Oil Type Case HY-TRAN PLUS ®

Refill Capacity

2WD approximately 34.5 Litres (9.11 US GAL)

MFD approximately 37.0 Litres (9.77 US GAL)

MFD Axle

Oil Type Case SAE 85W - 140 EP Gear Oil to API GL-5
or MIL-L-2105D Specification (MS 1316)

Axle Differential Capacity 5.0 Litres (1.32 US GAL)

Axle Planetary Capacity (EACH) 0.6 Litres (0.16 US GAL)

Front PTO

Oil Type Case HY-TRAN PLUS ®

Capacity 0.65 Litres (0.17 US GAL)

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