

By EMB Manufacturing



TechBook Parts and Service Reference

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(A) **OPERATION**

- 1) Please read both equipment and engine owner/operators manuals before using
- 2) Manual clutch models must be engaged with engine running at idle
- 3) Chipping must be done at full engine rpm
- 4) The CR70 uses a fluid coupler, which is protected from overheating by a fusible (melt-out) plug which will release the fluid. Excessive melt-out can be cause by:
 - a) Incorrect fluid or level
 - b) Rotor jamming or having excessive drag on it
 - c) Running engine at partial throttle
 - d) Running to close to a large heat source
 - e) Lack of ventilation
 - f) Incorrect pulley alignment and belt tentsion
 - g) Too many starts & stops in quick succession, without allowing the clutch to cool

(B) INTELLIFEED SYSTEM

- 1) The intellifeed system will allow reverse feed as long as there is hydraulic fluid flow and voltage to shift the forward/reverse solenoid. However, it will not allow forward feed until the control module senses that the rotor has reached the programmed start RPM (1375)
- 2) The intellifeed module is user-programmable. To suit user preferences. Please see your Owner's Manual for the procedure
- 3) The common cause of failure to read rotor RPM is a loose, misadjusted, damaged or failed speed sensor, or the wiring connection between the sensor and the module. A loose or misadjusted rotor will show erratic rotor RPM readings on the module.

(C) MAINTENANCE

- 1) Please read both equipment and engine owner/operator manuals for specific maintenance instructions
- 2) Maximimum chipping efficiency is attained with sharp knives and properly set knife clearance
- 3) Knife life will vary depending on material and condition of material being run through
- 4) Rotor knives can be sharpened and reversed. Knives can be sharpened until the traling edge of the bevel is flush with the rotor. A maximum of 1/4 " (6.5mm) can be taken off each side.
- 5) Ledger knives have 4 useable edges, they can be flipped/reversed 3 times.
- 6) The average ratio of rotor knife to ledger knive is 15:1
- 7) Overgreasing bearings will ruin them. It will push out the seals allowing foreign material in, as well as prevent bearing balls from rolling properly. The same can be said for using an air grease gun

CR70 Series

Engine Specifications

Model	Engine Make/Model	Fuel	Claimed HP	Claimed Torque ft/lbs	Spec Number	RPM Idle/Maximum
CR70	Kohler CH980	Gasoline	35	60.7	CH980-002	1200/3700
CR70D	Kubota V1505	Diesel	35	67.8	E3B	900/3200
CR70TD	Kubota V1505-T	Diesel	44	87.7	E3B	950/3200

Driveline Specifications

Model	Clutch Type	Specification	Fluid Type	Engagement RPM	Engagement Torque Adj.	Capacity @ level	Thermal Protection °C
CP70	TRANSFLUID	K-9	AW32	Full	N/A	1.95L @ X	198 (Z49303-1)
CR/0	ROTOFLUID	30 K	AW22	Full	N/A	45° (218mm)	180 (Z49304-2)
CR70D/TD	Manual Disk	HE 6.5"	N/A	Idle	50-58 ft/lb	N/A	N/A

Hydraulic System Specifications

Hydraulic Pump		Relief Setting	Hydraulic Fliud	Hydraulic Fliud Capacity	Hydraulic I	Filter Types
Pressure PSI	Flow USGPM	PSI (all)	гуре		Suction	Return
3600	4.8	3000	Dexron 3/4 ATF	35 L	Cleanable	Spin-on

Hydraulic System Service Parts

	Seal Kits	Filt	ters	
Pump	Motors	Valves	Suction	Return
SKPL20-S/D-49	SKMLHP-U/D'E	N/A	Z55101	Z55301

Intellifeed Specifications

Start RPM	Upper flow	Lower RPM	Lower Flow	Feed Switch Type	Speed Sensor Clearance
1375	75%	900	35%	Proximity	5/32"

Engine Service Parts

Model	Air Filer Inner/ Outer	Fuel Filter	Oil Filter	Oil	Spark Plug OEM/NGK
CR70	25 08301-S 25 08304-S	2405013-S	52 05002-S	2.7 L 20W50	92 13204-S BKR5ES
CR70D	125010004945	15521-43160	HH160-32093	6.0 L 15W40	N/A
CR70TD	125010007434	15521-43160	HH160-32093	6.7 L 15w40	N/A

Knives

Rotor Knives			Ladgan Knifa	Cleanance
Part Number	Quantity	Туре	Leuger Kinte	Clearance
1053M303	4	Split Offset	102M204 QTY 1	1/32" – 1/16"



CR70 LOGIC WIRING HARNESS INSTALLATION



CR100 Series

Engine Specifications

Engine Make/Model	Fuel	Claimed HP	Claimed Torque ft/lbs	Spec Number	RPM Idle/Maximum
Kubota V3600T	Diesel	95.7	219.8	E3B	800/2800

Intellifeed Specifications

Start RPM	Upper flow	Lower RPM	Lower Flow	Feed Switch Type	Speed Sensor Clearance
1375	75%	900	35%	Proximity	5/32"

Driveline Specifications

Clutch Type	Specification	Fluid Type	Engagement RPM	Engagement Torque Adj.	Capacity @ level	Thermal Protection
Manual Disc	HE 11.5"	N/A	Idle	50-58 ft/lb	N/A	N/A

Hydraulic System Specifications: CR100, CR100B

Hydraulic Pump		Relief Setting	Hydraulic Fliud	Hydraulic Fliud	Hydraulic 1	Filter Types
Pressure PSI	Flow USGPM	PSI (all)	Туре	Capacity	Suction	Return
3600	8.0	3000	Dexron 3/4 ATF	35 L	Screen	Spin-on

Pump Specifications: CR100H, CR100HW, CR100BH, CR100BHW

Pump Section	Pressure PSI	Flow USGPM	Notes
PRIMARY	3600	6.0	These models use a tandem style pump.
SECONDARY	3600	5.1	The primary section runs the feed, the secondary runs the accessories.

Hydraulic System Service Parts: CR100, CR100B

Seal	Kits	Filters		
Pump	Feed Motors	Suction	Return	
SKPL20-S/D-31	SKMLHR-U/D,R	Z55101	Z55301	

Hydraulic System Service Parts: CR100H, CR100HW, CR100BH, CR100BHW

Seal Kits				Filters	
Pump	Feed Motors	Winch Motor	Lift Cylinder	Suction	Suction
PL20/20-S/D-31/S7	SKMLHR-U/D,R	SKMLHP-U/D'E	SLK-1510AN	Z55101	Z55101

Engine Service Parts

Air Filter Inner Kubota/Donaldson	Air Filter Outer Kubota/Donaldson	Fuel Filter	Oil Fliter	Oil
107010001559 P828889	107010001560 P829333	106010101329	106010100546	13.2 L 15W40

Knives

Rotor Knives			Ladgan Unifa	Cleanance
Part Number	Quantity	Туре	Leuger Kinte	Clearance
1019M903	4	Split Offset	1019M904 QTY 1	1/32" – 1/16"

Hydraulics CR100, CR100B



Hydraulics CR100H, CR100HW, CR100BH, CR100BHW



CR100 LOGIC WIRING HARNESS INSTALLATION

