

ROADTEC RX-60B MILLING MACHINE



FOR THE
RX-60B
MILLING
MACHINE

P.N. 200501
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RX-60B OPERATION AND SERVICE

1.2 MACHINE DESCRIPTION

THE ROADTEC RX-60B IS A RELIABLE QUALITY MILLING MACHINE DESIGNED FOR EASE OF OPERATION AND SERVICE. THE RX-60B MILLS AND PLANES ANY PAVEMENT MATERIAL WITH VARIOUS CUTTING WIDTHS, USING A BOLT IN CUTTER HOUSING.

THE 900 H.P. /671 Kw DIESEL ENGINE POWERS A VARIABLE WIDTH BELT-DRIVEN CUTTER DEEP. THE CUTTER LOADS MATERIAL ONTO A 42" WIDE (1067 mm) PRIMARY CONVEYOR WHICH TRANSFERS TO A 42" WIDE (1067 mm) SECONDARY CONVEYOR CAPABLE OF PIVOTING 50 DEGREES LEFT AND RIGHT OF CENTER. COMPLETE SYSTEMS DESCRIPTIONS ARE AS FOLLOWS:

B. DRIVE SYSTEM

MECHANICAL V-BELT DRIVE TO CUTTER DRUM PLANETARY GEARBOX. HYDROSTATIC DRIVE PROPULSION AND CONVEYOR SYSTEM.

A. ENGINE

CUMMINS QSK-19C, 800 HP (596 kW) @ 2,100 RPM IS STANDARD EQUIPPED WITH EMERGENCY SHUTDOWN SYSTEM. ONE YEAR/2,000 HOUR WARRANTY. CONSULT ENGINE MANUAL INCLUDED WITH THE RX-60B LITERATURE PACKAGE.

RX-60B OPERATION AND SERVICE

1.2 MACHINE DESCRIPTION (CONTINUED)

C. SUSPENSION

THREE POINT SUSPENSION SYSTEM. HYDRAULIC CYLINDERS INSIDE EACH LEG TUBE ADJUSTS BY ELECTRIC CONTROL ON CONSOLE OR AUTOMATICALLY BY THE USE OF GRADE CONTROLS. (SEE "G" BELOW)

D. STEERING

10' - 3" (3.12 m) TURNING RADIUS WITH THREE TRACK STEERING. 34' - 4" (10.46 m) TURNING RADIUS WITH TWO TRACK STEERING. AUTOMATIC REAR-CENTERING DEVICE ALIGNS REAR TRACK. RED POINTER INDICATES REAR POSITION. ALL THREE TRACKS STEERING PROVIDES CRAB STEERING WITH COORIDINATED STEERING SYSTEM.

E. WATER

SPRAY BARS LOCATED ON THE FRONT AND BACK OF THE CUTTER HOUSING AND ON BOTH PRIMARY AND SECONDARY CONVEYORS PROVIDE COOLING WATER TO CUTTER DRUM. WATER IS PROVIDED FOR WASHDOWN BY USE OF THE WASHDOWN HOSE. WASHDOWN HOSE IS STORED ON THE HOSE REEL AT THE FRONT OF THE MACHINE.

F. CONVEYOR

TWO PIECE FRONT DISCHARGE. 42" (1067 mm) WIDE PICK-UP (PRIMARY) AND 42" (1067 mm) LOADOUT (SECONDARY) CONVEYOR WITH ENDLESS CLEATED BELTS. LOADOUT CONVEYOR SWINGS 50 DEGREES TO EITHER SIDE.

G. GRADE CONTROLS

GRADE CONTROL SYSTEMS ON EACH SIDE OF THE MACHINE AUTOMATICALLY MAINTAIN THE DESIRED DEPTH. A VALVE ON EITHER SIDE ALLOWS THE GRADE CONTROLS TO BE ACTIVATED FROM GROUND LEVEL.

H. CUTTER DRUM

MULTIPLE CUTTING WITDHS WITH BOLT IN-CUTTER HOUSING. WIDTHS OF 7'-2" -TO-TIP DIAMETER QUICK CHANGE TOOTH CUTTER

DRUM ROTATES AT 94.7 FPM AT FULL THROTTLE. CUTTER DRUM IS TURNED BY BELT-DRIVEN

PLANETARY GEARBOX.

RX-60B OPERATION AND SERVICE

1.2 MACHINE DESCRIPTION (CONTINUED)

I. SAFETY FEATURES

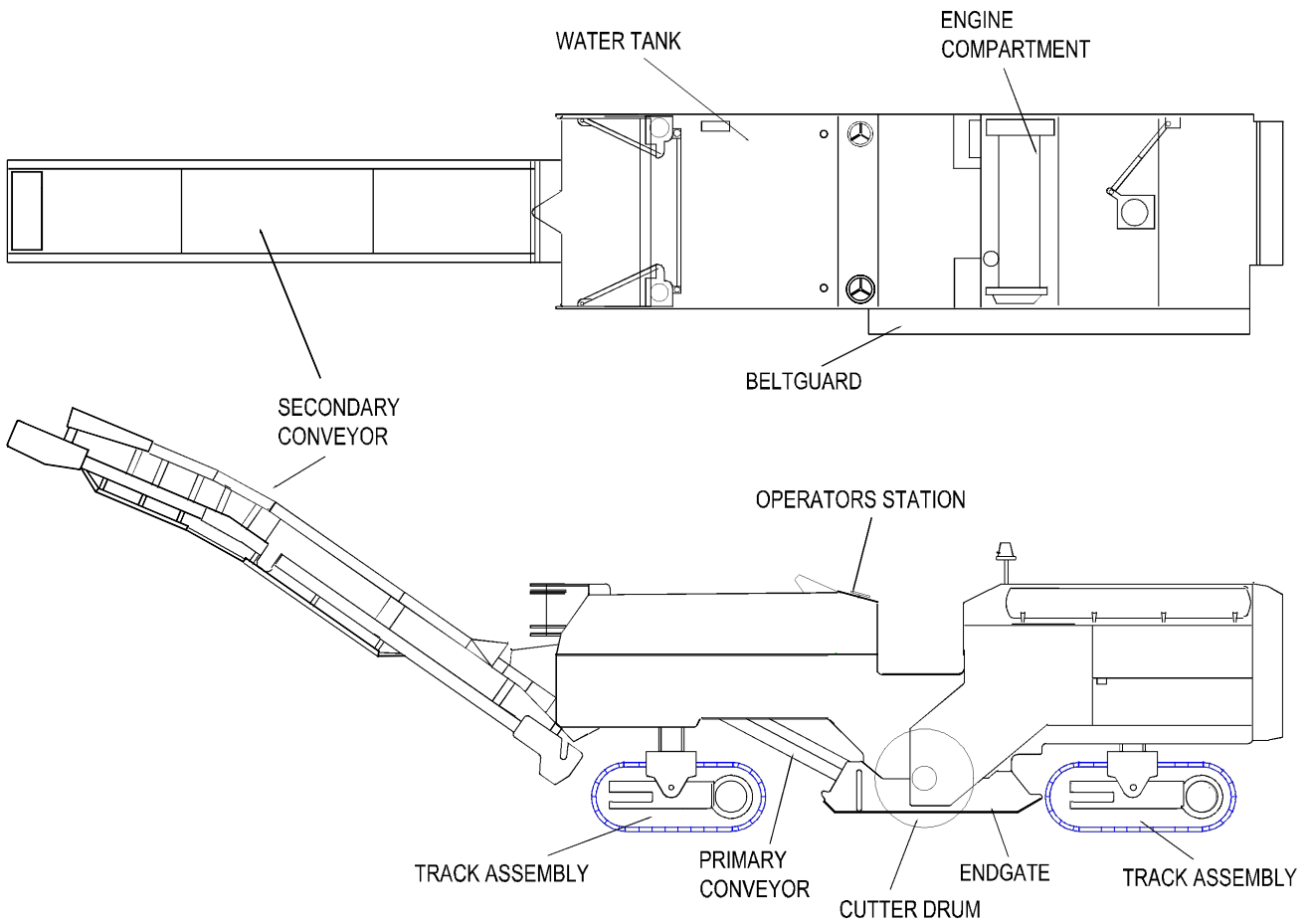
- ENGINE WILL START ONLY WHEN PRESTART CONDITIONS ARE MET. REFER TO “STARTING THE ENGINE” ARTICLE 3.4, SECTION 3 OF THIS MANUAL.
- ENGINE WILL NOT START WITH THE MACHINE IN AN UNSAFE CONDITION.
- ENGINE WILL NOT RUN WHEN WATER OVERHEATS OR OIL PRESSURE IS LOW.
- CUTTER DRUM STOPS WHEN A HARD, UNMILLABLE OBJECT IS ENCOUNTERED.

THE CONTROL PANEL AND ELECTRONIC INSTRUMENTATION HAS BEEN DESIGNED FOR SIMPLICITY, YET PROVIDES ADEQUATE, AND VISUALLY DISPLAYED INFORMATION FOR THE OPERATOR TO BE CONTINUALLY AWARE OF MACHINE OPERATION AND SYSTEMS.

J. OPTIONAL EQUIPMENT

- ELECTRONIC GRADE JACKS
- ELECTRONIC GRADE CONTROLS
- FEET OR METER PER MINUTE INDICATOR
- OPERATOR’S SEAT
- OPERATOR’S CANOPY
- REAR CONSOLE TRAVEL CONTROLS

RX-60B OPERATION AND SERVICE
UNIT NOMENCLATURE



RX-60B OPERATION AND SERVICE

1.3 MACHINE SPECIFICATIONS (CONTINUED)

B. ENGINE

1. TYPE: CUMMINS QSK-19
2. FUEL: DIESEL
3. HORSEPOWER AT 2,100 RPM 800 H.P. (596 kW)

C. MAIN DRIVE SYSTEM

THREE SPEED HYDROSTATIC MOTOR

D. SPEED RANGES

1. OPERATING RANGE: 0 - 120 FEET/MIN
0 – 36.5 METERS/MIN
2. HIGH OPERATING RANGE: 0 - 155 FEET/MIN
0 – 47.2 METERS/MIN
3. TRAVEL RANGE: 0 – 3.5 MPH
0 – 5.6 KPH

E. WEIGHTS (DRY)

1. BASIC MACHINE W/ 86” DRUM - 78,000 LBS (35,380 kg)
2. MAXIMUM OPERATING WEIGHT/147” DRUM - 91,920 LBS (41,640 kg)

F. SERVICE CAPACITY

1. FUEL - 412 GALLONS (1,560 LITERS)
2. WATER – 1,200 GALLONS (4,542 LITERS)
3. HYDRAULIC - 100 GALLONS (379 LITERS) - 100% CAPACITY *
90 GALLONS (340 LITERS) - 90% CAPACITY *
4. COOLING – 42 GALLONS (159 LITERS)
5. AIR COMPRESSOR – 120 GALLONS (454 LITERS)

* TANK FLUID CAPACITY OF 90% IS THE RECOMMENDED AMOUNT OF HYDRAULIC OIL TO REFILL THE HYDRAULIC OIL TANK. IF TANK IS REFILLED 100%, TANK WOULD OVERFLOW DUE TO FLUID EXPANSION WHEN THE HYDRAULIC OIL BECOMES HOT.