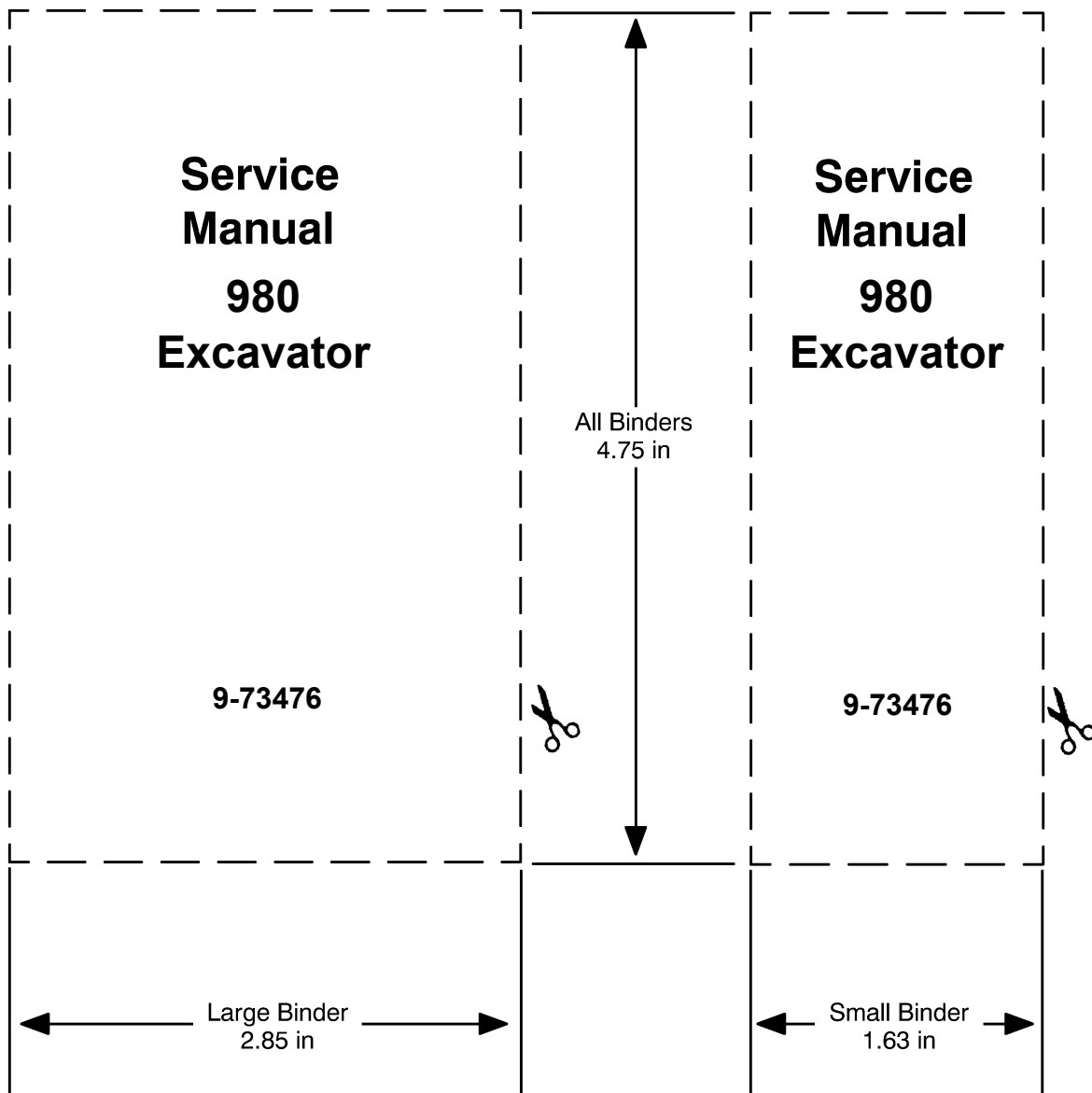




980 EXCAVATOR

TABLE OF CONTENTS

SERIES/SECTION	SECTION NO.	FORM NO.
10 SERIES - GENERAL		
General Information	10	
General Engine Specifications	1010	9-75906
Detailed Specifications	1020	9-76875
20 SERIES - ENGINE		
Engine Diagnosis	2001	9-76365
Engine Tuneup	2002	9-76379
Cylinder Head, Valve Train and Camshaft	2015	9-76166
Cylinder Block, Sleeves, Pistons and Rods	2025	9-76176
Crankshaft, Main Bearings, Flywheel and Oil Seals	2035	9-76187
Lubrication System, Oil Pump, Heat Exchanger and Oil Flow Diagrams	2046	9-76805
Cooling System, Water Manifolds, Water Pump and Thermostats	2055	9-76337
Turbocharger Failure Analysis	2565	9-78235
30 SERIES - FUEL SYSTEM		
Fuel System and Filters	3010	9-75297
Robert Bosch Fuel Injection Pump	3012	9-74937
Roosa Master Fuel Injectors	3013	9-74959
40 SERIES - HYDRAULICS		
Hydraulic Specifications, Diagram, Trouble Shooting, and Adjustments	42	9-73475
Hydraulic Pump and Motors	43	9-73475
Hydraulic Control Valves, Relief Valves, Check Valves and Swivel	44	9-73475
Hydraulic Cylinders	46	9-73475
50 SERIES - TRACK AND SUSPENSION		
Track and Suspension	50	9-73475
60 SERIES - POWER TRAIN		
Final Drive Transmission	64	9-73475
Swing Reducer and Brake	65	9-73475
Turntable Bearing	66	9-73475
70 SERIES - BRAKES		
Track Drive Brake	71	9-73475
80 SERIES - ELECTRICAL		
Electrical	81	9-73475

SECTION

10

GENERAL INFORMATION

TABLE OF CONTENTS

Engine Specifications	2
Overall Unit Dimensions	3
Track Dimensions	4-5
Boom and Dipper Dimensions	5
Electrical System	6
Hydraulic Valves Pressure Settings	6
Scheduled Maintenance Chart	7-9
Lubricants and Fluids Charts	10
Pictorial Listing of Lubrication Fittings	11-17
Checking Engine Oil	18
Changing Engine Oil and Filter	18-19
Diesel Fuel System	19-20

ENGINE SPECIFICATIONS

GENERAL

Make and Model	Case 504BDT
Type	.6 cylinder, 4 stroke cycle, valve-in-head turbo charged
Horsepower	
Maximum Gross (See Note 1)	165 H.P. @ 2200 RPM
*SAE net flywheel (See Note 2)	150 H.P. @ 2200 RPM
Bore and Stroke	4-5/8" (117.5 mm) x 5" (127 mm)
Piston Displacement	504 cubic inches (8.26 liters)
Firing Order	1-5-3-6-2-4
Compression Ratio	15.8 to 1
Engine Speeds	
No load governed speed	2330-2370 RPM
Full load rated	2200 RPM
Engine idling speed	750-800 RPM
Exhaust Valve Rotators	Positive Type
Torque, Pounds-Feet, SAE	445 @ 1500 RPM
*Valve Tappet Clearance (Exhaust) (Hot)	.020" (0.508 mm)
(Cold)	.025" (0.635 mm)
(Intake) (Hot & Cold)	.015" (0.381 mm)

*Hot Settings are made after the engine has operated at thermostat controlled temperatures

PISTON AND CONNECTING RODS

Rings per piston	3
Number of Compression rings	2
Number of Oil rings	1
Type Pins	Full floating type
Type Bearing	Replaceable Precision, Steel back, Copper-Lead or Aluminum Alloy Liners

MAIN BEARINGS

Number of Bearings	7
Type of Bearings	Replaceable Precision Steel back, Copper-Lead or Aluminum Alloy Liners

ENGINE LUBRICATING SYSTEM

Crankcase Capacity (W/O Filter Change)	15 Quarts
With Filter Change	17 Quarts
Oil Pressure	45 to 60 PSI with Engine Warm and Operating at Rated Engine Speed
Type System	Pressure and Spray Circulation
Oil Pump	Gear Type
Oil Filter	Full Flow Spin on Type

FUEL SYSTEM

Pump Timing	.30° BTC Static
Recommended Fuel	No. 2 Diesel
Fuel Pressure @ Injection Pump	25 PSI (1.75 Kg/cm ²)
Nozzel Opening Pressure	3150 to 3250 PSI
Fuel Tank	75 gals (283.87L)
Radiator Pressure Cap	7 P.S.I. (.49 Kg/cm ²)
Engine Oil Pressure	45 to 60 PSI (3.16 kg/cm ² to 3.87 Kgs/cm ²)

NOTE1

Manufacturer's rating of maximum engine horsepower at flywheel without accessories. Fuel set at maximum quantity for this application.

NOTE2

SAE net flywheel horsepower of engine as applied to this vehicle when equipped with all accessories.

Thank you so much for reading.
Please click the “Buy Now!”
button below to download the
complete manual.



After you pay.

You can download the most
perfect and complete manual in
the world immediately.

Our support email:

ebooklibonline@outlook.com