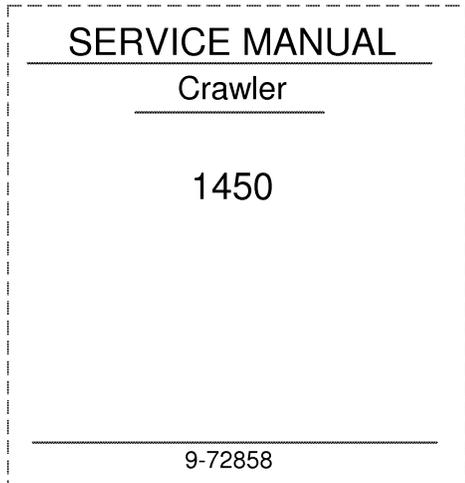
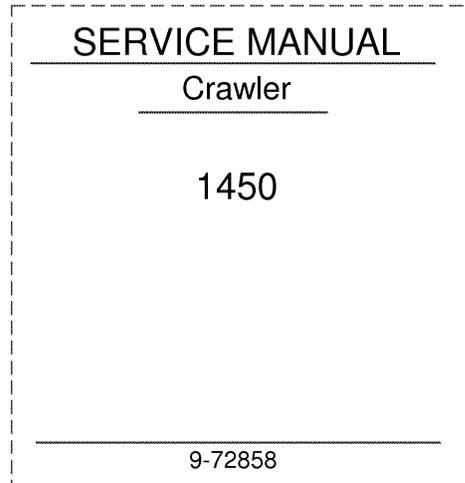


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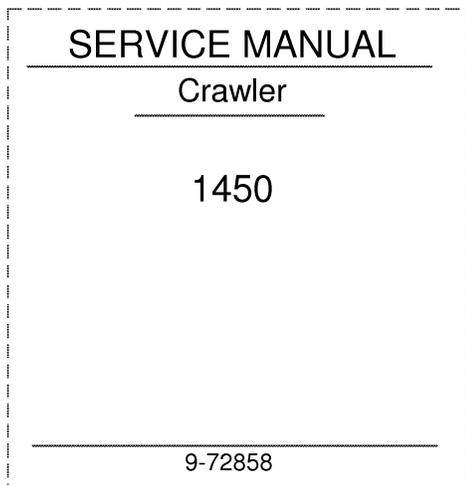
1. Trim along dashed line.
2. Slide into pocket on Binder Spine.

TYPE 1-4



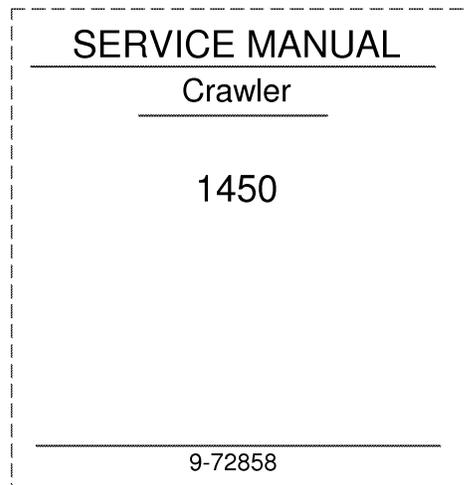
1. Trim along dashed line.
2. Slide into pocket on Binder Spine.

TYPE 1-4



1. Trim along dashed line.
2. Slide into pocket on Binder Spine.

TYPE 1-4



1. Trim along dashed line.
2. Slide into pocket on Binder Spine.

TYPE 1-4

# 1450 CRAWLER

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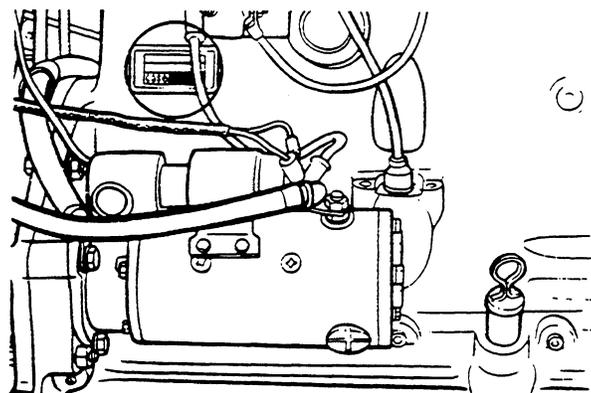
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# Section 1010

## GENERAL ENGINE SPECIFICATIONS 1450 CRAWLER LOADER AND DOZER

### 504BDT DIESEL ENGINES

THE ENGINE MODEL AND SERIAL NUMBER IS STAMPED ON A PLATE LOCATED ON THE SIDE OF THE ENGINE ABOVE THE CRANKING MOTOR.



#### General

Type .....	6 Cylinder, 4 Stroke Cycle, Valve-in-Head Turbo-Charged
Firing Order .....	1-5-3-6-2-4
Bore .....	4-5/8 Inches
Stroke .....	5 Inches
Piston Displacement .....	504 Cubic Inches
Compression Ratio .....	15.8 to 1
No Load Governed Speed .....	2230-2270 RPM
Rated Engine Speed .....	2100 RPM
Engine Idling Speed .....	725 to 775 RPM
Exhaust Valve Rotators .....	Positive Type
*Valve Tappet Clearance (Exhaust) .....	(Hot) .020 Inch (Cold) .025 Inch
(Intake) .....	(Hot and Cold) .015 Inch

\*Hot Settings Are Made After the Engine Has Operated At Thermostat Controlled Temperature For At Least Fifteen Minutes.

## **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 Bearings .....	Replaceable Precision Steel Back, Copper-Lead or Aluminum Alloy Liners

## **Engine Lubricating System**

Crankcase Capacity .....	14 Quarts
with Filter Change .....	15 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**

Fuel Injection Pump .....	Robert Bosch, Type PES Multiple Plunger
Pump Timing .....	30 Degrees Before Top Dead Center (Port Closing)
Fuel Injectors .....	Pencil Type (Opening Pressure 3200 PSI)
Fuel Transfer Pump .....	Plunger Type, Integral Part of Injection Pump
Governor .....	Variable Speed, Fly-Weight Centrifugal Type, Integral Part of Injection Pump
1st Stage Fuel Filter .....	Full Flow Spin on Type
2nd Stage Fuel Filter .....	Full Flow Spin on Type

# Section 1020

## DETAILED SPECIFICATIONS 504BDT ENGINE

### FRACTION to DECIMAL to MILLIMETER CONVERSION TABLE

Fraction	Decimal	MM	Fraction	Decimal	MM	Fraction	Decimal	MM
1/64	.0156	0.397	23/64	.3593	9.128	45/64	.7031	17.859
1/32	.0312	0.794	3/8	.3750	9.525	23/32	.7187	18.256
3/64	.0468	1.191	25/64	.3906	9.922	47/64	.7343	18.653
1/16	.0625	1.587	13/32	.4062	10.319	3/4	.7500	19.050
5/64	.0781	1.984	27/64	.4218	10.716	49/64	.7656	19.447
3/32	.0937	2.381	7/16	.4375	11.113	25/32	.7812	19.844
7/64	.1093	2.778	29/64	.4531	11.509	51/64	.7968	20.240
1/8	.1250	3.175	15/32	.4687	11.906	13/16	.8125	20.637
9/64	.1406	3.572	31/64	.4843	12.303	53/64	.8281	21.034
5/32	.1562	3.969	1/2	.5000	12.700	27/32	.8437	21.431
11/64	.1718	4.366	33/64	.5156	13.097	55/64	.8593	21.828
3/16	.1875	4.762	17/32	.5312	13.494	7/8	.8750	22.225
13/64	.2031	5.159	35/64	.5468	13.890	57/64	.8906	22.622
7/32	.2187	5.556	9/16	.5625	14.287	29/32	.9062	23.019
15/64	.2343	5.953	37/64	.5781	14.684	59/64	.9218	23.415
1/4	.2500	6.350	19/32	.5937	15.081	15/16	.9375	23.812
17/64	.2656	6.747	39/64	.6093	15.478	61/64	.9531	24.209
9/32	.2812	7.144	5/8	.6250	15.875	31/32	.9687	24.606
19/64	.2968	7.541	41/64	.6406	16.272	63/64	.9843	25.003
5/16	.3125	7.937	21/32	.6562	16.669	1	1.0000	25.400
21/64	.3281	8.334	43/64	.6718	17.065			
11/32	.3437	8.731	11/16	.6875	17.462			

### INCH to MILLIMETER CONVERSION TABLE

Inch	MM	Inch	MM	Inch	MM	Inch	MM
1	25.400	6	152.000	10	254.000	60	1,524.000
2	50.800	7	177.800	20	508.000	70	1,778.000
3	76.200	8	203.200	30	762.000	80	2,032.000
4	101.600	9	228.600	40	1,016.000	90	2,286.000
5	127.000	10	254.000	50	1,270.000	100	2,540.000