John Deere
Service Manual
MC, 40C, 420C, 430C, 4401C & 4401CD

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JD-MCREPRO
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### Paint Codes

- **Location:** MFG Color Name
- **Wheels & Rims:** CLASSIC YELLOW
- **Body:** CLASSIC GREEN

### Year Beginning Serial Number

- **1947:** 10001
- **1948:** 13734
- **1949:** 25604
- **1950:** 10001
- **1951:** 11630
- **1952:** 13630

### Year Beginning Serial Number

- **1949:** 10001
- **1950:** 11630
- **1951:** 13630
- **1952:** 16309

### Year Beginning Serial Number

- **1949:** 10001
- **1950:** 11630
- **1951:** 13630
- **1952:** 16309

### Year Beginning Serial Number

- **1949:** 10001
- **1950:** 11630
- **1951:** 13630
- **1952:** 16309
# Service Manual

## John Deere Crawler

### Models MC-40C-420C-430C-440IC-440ICD

Tractor serial number is stamped on a plate which is affixed to the bottom of the instrument panel on MC and 440ICD models and to the left side of center frame or clutch housing on 40C, 420C, 430C and 440IC models.

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Model: 40C, 420C, 430C, 440IC, 440ICD

Serial Number: See plate affixed to tractor.
### Condensed Service Data

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<td>Stroke - Inches</td>
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<td>113.3</td>
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<td>Compression Ratio</td>
<td>6.3:1</td>
<td>7.0:1 (2)</td>
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### Tune-Up

| Engine Rated Horsepower | 113.3 | 113.3 | 113.3 |
| Forward Belt Pulley High Idle - RPM | 1376 (3) | 1850 (3) | 1975 |
| Engine High Idle - RPM | 1850 (3) | 2025 (4) | 1975 |
| Engine Mounted Speeds | 1246 (3) | 1270 (4) | 1356 |
| Belt Pulley High Idle - RPM | 1246 (3) | 1270 (4) | 1356 |
| Power Shaft High Idle - RPM | 612 (4) | 597 | 597 |
| Power Shaft Rated Speed - RPM | 560 (4) | 560 | 560 |

### Sizes - Capacities - Clearances

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### Tightening Torques (Ft.-Lbs.)

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### Notes

1. Compression ratio of 440IC after serial number 448,000 is 7.3:1.
2. Applies to MC only, 40C same as 420C.
3. Applies to 40C model as 40C, same as 420C.
4. Applies to 448IC prior to serial number 448,000; speeds for models after 448,000 are: Engine high idle, 2.200 rpm, rated rpm, 2.000, belt pulley high idle rpm, 1,510, rated rpm, 1,375; power take-off high idle rpm, 685, rated rpm, 605.
5. Applies to MC only, 40C same as 420C.
6. Applies to 440IC prior to serial number 448,001. All-fuel attachment discontinued after serial number 448,000.
7. Compression gauge pounds for 440IC after serial number 448,000 is 145 psi.
8. Compression check made with engine running at 600 rpm.
Model 40C (Ser. No. 62,264 and Up)-420C-430C

20. R&R AND OVERHAUL. To remove the front idler and brackets assembly, proceed as follows: Remove track as outlined in paragraph 11 and on 40C models remove the tension lock nuts (Fig. 31) from tension bolts. Slide entire front idler and brackets assembly from track carrier frame. Tension bolt and spring assemblies will be removed with front idler and brackets on all models.

Disassemble and overhaul the front idler and bracket assembly as follows: Refer to Fig. 32 and remove grease fitting from end of idler shaft. Remove the nut and washer from end of idler shaft. Remove the nut and washer from spacer bolt at aft end of bracket. Loosen jam nut and set screw which positions shaft in brackets and pull idler bracket and oil seal from shaft as shown in Fig. 33. Remove the other bracket on opposite side of front idler wheel, then remove the four socket head screws from hub of front idler wheel and pull the thrust plate (11—Fig. 34) and shims (12) from the idler shaft (13). The idler shaft can now be removed. Remove thrust plate and shims from opposite hub of idler wheel.

Refer to paragraph 22 for dimensional specifications of shafts and bushings and proceed as follows: Inspect bushings (16) in front idler for excessive scoring and wear and if renewal is required, press out old bushing using John Deere tool number 9. Oil seal 11. Thrust plate 16. Spacer bolt

Fig. 31 — View of tension bolt lock nut and adjusting nut on 40C models, serial number 62,264 and up. 420C and 430C models are similar except that tension bolt is reversed.

Fig. 32 — View showing the set screw which must be removed before right hand bracket can be removed from idler shaft.

Fig. 33—Partially disassembled front idler assembly. Oil seal is dowelled in bracket.

Fig. 34—Exploded view of the front idler, roller assembly and sprocket used on 40C model tractors serial number 62,264 and up. Models 420C and 430C are the same.
282. OVERHAUL. To disassemble the unit, remove oil lines and end cap (11—Fig. 361). Remove stop valve (7) and bleed valve (5) by pushing stop rod (1) completely into cylinder. Withdraw stop valve from bleed valve, being careful not to lose the small ball (3). Remove nut from piston rod, being careful not to distort the rod, and remove piston and rod. Push stop rod (1) all the way into cylinder and drift our Groove pin (19). Remove piston rod guide (27).

Examine all parts for being excessively worn and renew all seals. Wiper seal (30) should be installed with sealing lip toward outer end of bore. Install stop rod ("V" seal assembly) (20, 21, 22 & 26) with sealing edge toward cylinder. Complete the assembly by reversing the disassembly procedure and tighten the end cap bolts to a torque of 85 Ft.-Lbs. Install the piston rod stop as outlined in paragraph 255.

283. OVERRIDE CONVERSION. Hydraulic stop type remote cylinders can be adjusted to provide a maximum working stroke of 8 inches. Normally, the stop can be located so 6½ inches of stroke is obtained and then an additional ½ inches of slow movement is obtained by means of the "override" feature.

If, in some applications, the override feature is found to be undesirable, the cylinder can be converted to a non-override cylinder by removing the AA5731R stop valve and installing an A5295R valve. To do so, remove the cylinder end cap (11—Fig. 361) and withdraw spring (8) and valve (7). Be careful not to lose ball (3). Install new stop valve A5295R, old spring (8) and cylinder cap. Tighten the end cap bolts to a torque of 85 Ft.-Lbs.

Check sealing of new valve as follows: Apply pressure to cylinder rod and check for piston movement as the stop is released. If a positive stop is not reached, remove cylinder cap and lap the valve to its seat until a perfect seal is obtained.
Tractor serial number is stamped on a plate which is affixed to the bottom of the instrument panel on MC and 440ICD models and to the left side of center frame or clutch housing on 40C, 420C, 430C and 440IC models.