

John Deere

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MODEL:

**125 Skid Steer
Loader**

**SERVICE
MANUAL**



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JD-S-TM1167

Bob's 75.00

125 SKID-STEER LOADER
Technical Manual
TM-1167 (Nov-76)

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(All information, illustrations, and specifications contained in this technical manual are based on the latest information available at the time of publication. The right is reserved to make changes at any time without notice.)

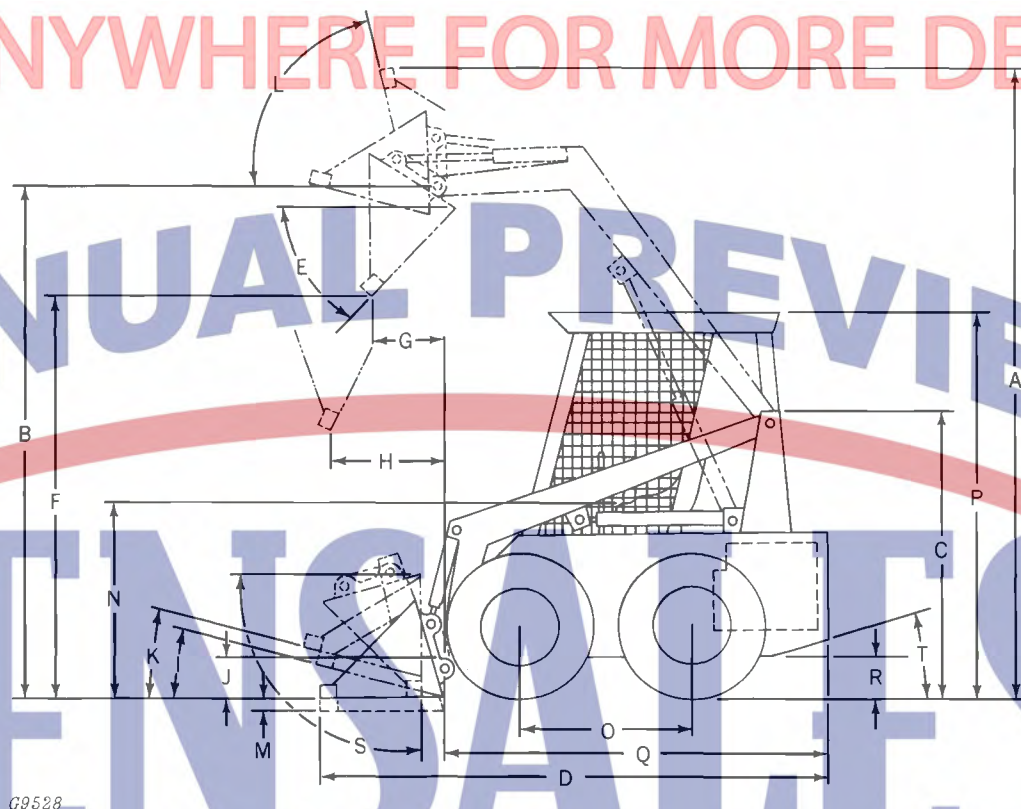
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Specifications are in accordance with IEMC standards. Dimensions are with the Quik-Tatch 10 cu. ft. heaped (0.28 m³) Earth and Foundry Bucket and 10 x 16.5 Steel Cap Tires

A—Overall height - lift arms raised	143.25-in. (3640 mm)
B—Height to hinge pin (Maximum)	143.25-in. (3640 mm)
C—Overall height	110-in. (2795 mm)
D—Overall length - with bucket	64.5-in. (1638 mm)
E—Dump angle	37°
F—Dump height	84-in. (2135 mm)
G—Reach of maximum height	16.25-in. (415 mm)
H—Reach bucket on ground	48.25-in. (1225 mm)
I—Maximum rollback at ground	31°
J—Carry position	10-in. (255 mm)
K—Maximum rollback at carry position	32°
L—Maximum rollback - full raised	107°
M—Digging depth	0
N—Height to seat	42-in. (1070 mm)
O—Wheel base	35-in. (889 mm)
P—Overall height with Roll-guard	84.75-in. (2155 mm)
Q—Overall length - less bucket	85-in. (2160 mm)
R—Ground clearance	7.50-in. (190 mm)
S—Maximum grading angle	93°
T—Angle of departure	23°

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DIESEL ENGINE

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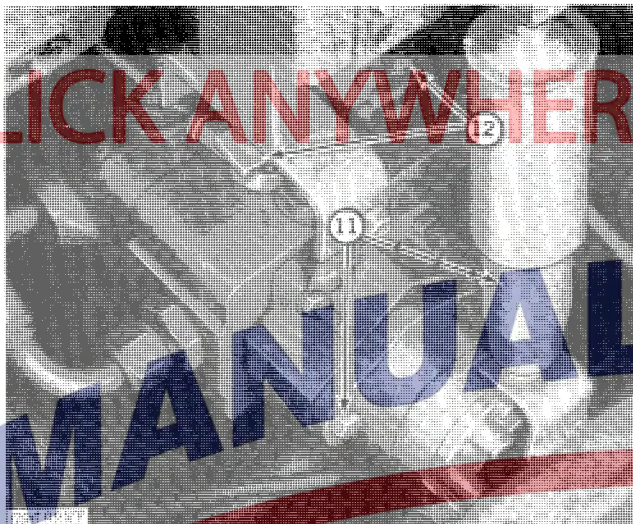


Fig. 3-Disconnecting Pump

10. (Not illustrated) Remove console and rear floor panels.

11. Remove bolts that mount hydraulic pump to hydrostatic pump.

12. Remove hydrostatic linkage from T-Bar.



Fig. 4-Removing Fuel Lines

13. Remove both fuel lines from each fuel tank.

14. Remove engine oil pressure line from gauge.

15. Disconnect throttle linkage.



Fig. 5-Removing Belly Pan

16. Remove center belly pan.

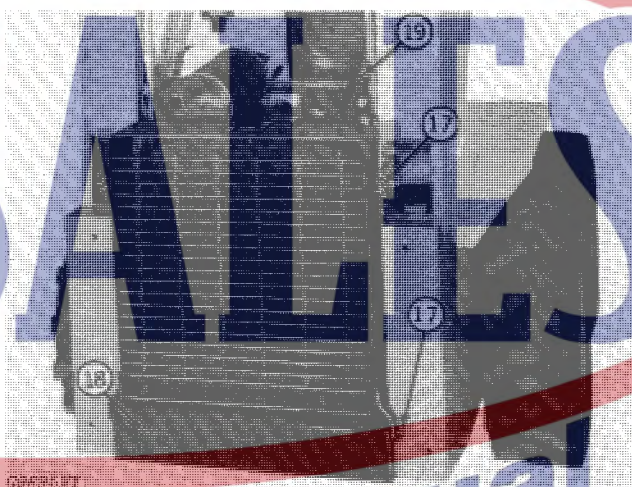


Fig. 6-Removing Grill

17. Unfasten grill straps and remove cap screw to remove grill.

18. Remove rear guard.

19. Remove air intake hose from engine, and two radiator braces.

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Group 20

CAMSHAFT AND VALVE ACTUATING MEANS

GENERAL INFORMATION

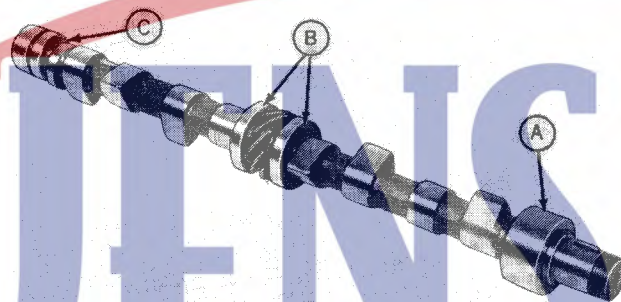
The camshaft is driven at one-half engine speed by the crankshaft gear.

REMOVAL

Refer to pages 10-1 through 10-6 for removal.

REPAIR

Camshaft



A—Front (Fan End)
B—Center

C—Rear

Fig. 1-Camshaft

Check camshaft for wear or damage.

Bearing Journal:

Front . . . 1.8085-1.8095 inch (45.936-45.961 mm)
Center . . 1.7457-1.7465 inch (44.341-44.361 mm)
Rear . . . 1.2465-1.2475 inch (31.659-31.687 mm)

Bushing I.D.

Front . . . 1.8115-1.8125 inch (46.012-46.038 mm)
Center . . 1.7495-1.7502 inch (44.437-44.455 mm)
Rear . . . 1.2495-1.2505 inch (31.737-31.763 mm)

Clearance Limits 0.002-0.004 inch (0.051-0.102 mm)

End-Play 0.003-0.007 inch (0.076-0.179 mm)

Valve Springs

Inspect valve spring for proper specifications:

O.D. 0.968 inch (24.61 mm)

Length

Valve closed 1.703 inch (43.26 mm)

Valve open 1.422 inch (36.12 mm)

Load

Valve closed 47-53 lbs (21-24 kg)

Valve open 96-104 lbs (43-47 kg)

Limit

Valve closed 42 lbs (19 kg)

Valve open 86 lbs (39 kg)



Fig. 2-Timing Gear

Backlash of the gear must not exceed 0.0035 inch (0.089 mm).

When installing the gears, make sure the round timing mark on the crankshaft gear is between the two square timing marks on the camshaft gear.

Section 30 FUEL SYSTEM

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GENERAL INFORMATION

The steering of the loader is accomplished through the hydrostatic transmission. Refer to Section 50 for operation and service.

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Group 20

HYDRAULIC CYLINDERS

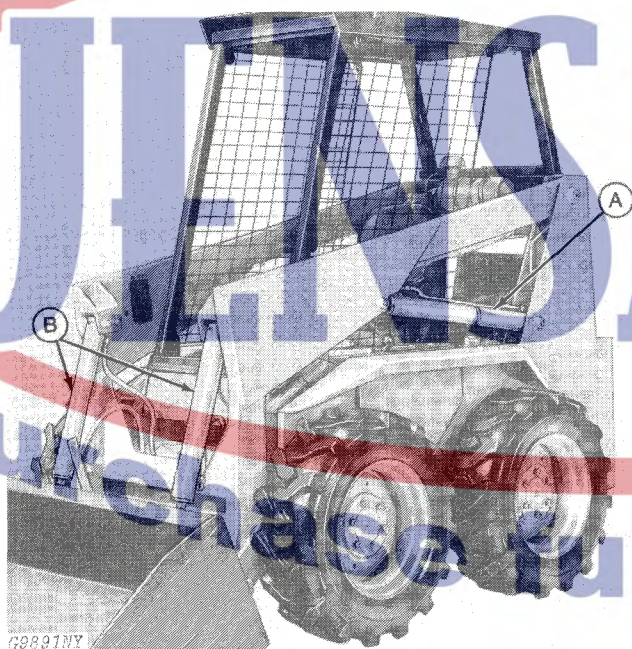
GENERAL INFORMATION

The hydraulic cylinders used on the loader are double acting and use wiper type seals on their pistons. Piston rods are heat treated, chrome plated and polished.



See "Hydraulic Cylinders" in FOS Manual - HYDRAULICS for additional information on cylinders and an explanation of the hydraulic cushion design.

REMOVAL



A—Lift Cylinder

B—Tilt Cylinder

Fig. 1-Removing Hydraulic Cylinders



CAUTION: Be sure the engine is stopped and the lift arms are down before attempting to remove cylinders.

Operate control valve pedals until all hydraulic pressure is relieved.



CAUTION: Escaping fluid under pressure can have sufficient force to penetrate the skin, causing serious bodily injury. Before disconnecting lines, be sure to relieve all pressure. Before applying pressure to the system, be sure all connections are tight and that lines, pipes and hoses are not damaged. Fluid escaping from a very small hole can be almost invisible. Use a piece of cardboard or wood, rather than hands, to search for suspected leaks.

If injured by escaping fluid, see a doctor at once. Serious infection or reaction can develop if proper medical treatment is not administered immediately. ®

Remove hoses and cap them to prevent dirt from entering the system. Remove the pins and retainer screws from each end of the cylinder and move the cylinder to a clean disassembly area.

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