

317 Hydrostatic Tractor



TECHNICAL MANUAL

317 Hydrostatic Tractor

TM1208 (01OCT81) English

John Deere Lawn & Grounds Care Division TM1208 (01OCT81)

> LITHO IN U.S.A. ENGLISH





INTRODUCTION

This technical manual contains service and maintenance information for the John Deere 317 Hydrostatic Tractor.

The manual is divided into sections. Each section pertains to a certain component or operational system of the tractor. The information is divided into groups within each section.

All sections of this technical manual should be carefully studied by the service technician. Much basic information such as the principles of 4-cycle engine operation, carburetion and ignition have been omitted. Such information can be found in any good library and is recommended reading for the new service technician before consulting this manual for service procedures.

Emphasis is placed on diagnosing malfunctions, analysis and testing. Diagnosing malfunctions lists possible troubles, their causes and how to correct them. Under specific components these troubles are analyzed to help the service technician understand what is causing the problem so it can be corrected rather than just replace parts and have the same problem keep recurring.

Specifications are found at the end of each Section for easy reference.



This safety alert symbol identifies important safety messages in this manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

Metric equivalents have been included, where applicable, throughout this technical manual.

Vertical lines appear in the margins of many of the pages. These lines identify new material and revised information that affects specifications, procedures, and other important instructions.

Thanks very much for your reading,

Want to get more information,

Please click here, Then get the complete
manual



NOTE:

If there is no response to click on the link above, please download the PDF document first, and then click on it.

Have any questions please write to me: admin@servicemanualperfect.com

JOHN DEERE 317 HYDROSTATIC TRACTOR

Technical Manual TM-1208 (Oct-81)

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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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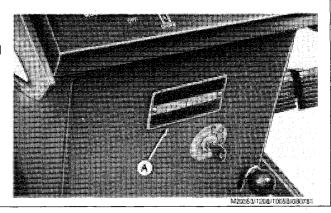
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Group 05 TRACTOR IDENTIFICATION

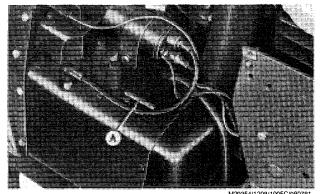
TRACTOR SERIAL NUMBER

The tractor serial number plate (A) is located on the pedestal just above the key switch.



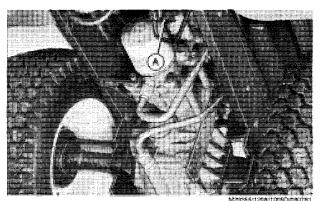
ENGINE SERIAL NUMBER

The engine serial number plate (A) is located on top of the blower housing.



TRANSMISSION SERIAL NUMBER

The transmission serial number (A) is located above the oil filter on the front of the transmission.



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GENERAL

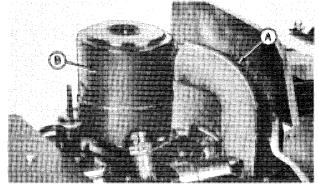
The material in this group will aid in identifying the machine by serial number. This information will assist in using the proper Section or Group when performing service on the machine. Tractor Serial Numbers -156,000) are identified by Engine Serial Number.

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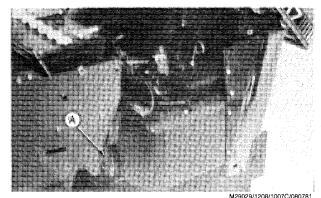
TRACTOR SERIAL NO. (**ENGINE SERIAL NO. (**

-156,000) -10,135,763)

1. Engines in this Serial No. range can be identified by use of an air intake hose (A) on air canister (B).

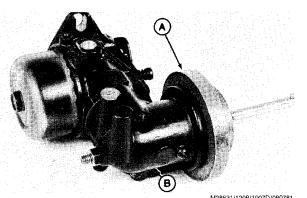


2. Engines in this serial no. range used a flywheel screen (A).



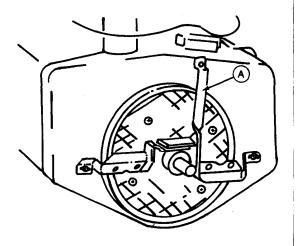
3. Some engines in this Serial No. range may have been modified to include a carburetor adapter (A) mounted on elbow (B).

NOTE: Some adapters are a permanent part of elbow (B) while other adapters are loose with a gasket between adapter (A) and elbow (B).



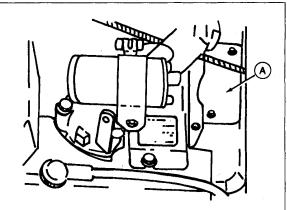
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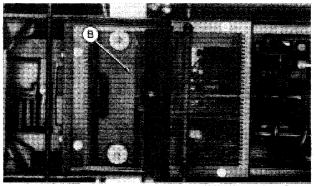
4. Some engines in this Serial No. range may have been modified to include a flywheel scraper (A).



M29030/1208/1007E/080781

5. Because the flywheel screen and scraper are no longer available, some engines in this Serial No. range may have had the flywheel screen, flywheel scraper and air intake hose removed. In this case the engine can be identified by the use of engine shroud cover (A) where the air intake hose went into the engine shroud. The tractor then uses bottom screen (B) to replace the flywheel screen.

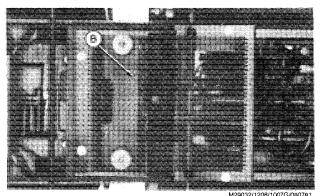




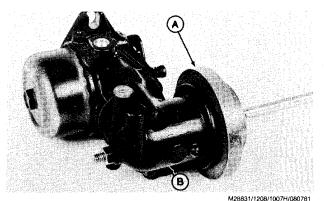
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TRACTOR SERIAL NO. (-156,000) ENGINE SERIAL NO. (10,135,763-11,052,801)

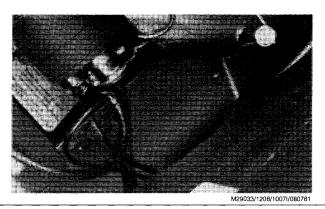
1. Engines in this Serial No. range are replacement engines. They use bottom screen (B).



2. Engines in this Serial No. range used carburetor adapter (A) permanently fixed to elbow (B).

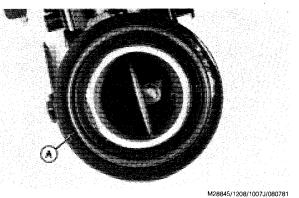


3. Engines in this Serial No. range can be further identified by the lack of a hole in the engine shroud where the air intake hose used to go.

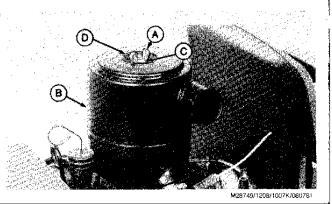


TRACTOR SERIAL NO. (-1 ENGINE SERIAL NO. (11,052,802--156,000)

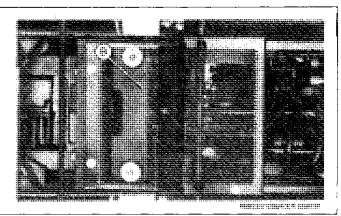
1. These engines can be identified by the use of O-ring (A) in carburetor elbow. This elbow is a one piece adapter and elbow.



2. The air cleaner assembly (B) uses wing nut (A) washer (C) and sealing washer (D).

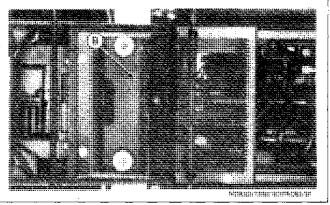


3. The tractor is equipped with bottom screen (B).

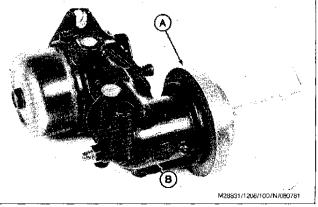


TRACTOR SERIAL NO. (156,001-160,062)

1. Tractors in this Serial No. range use bottom screen (B).

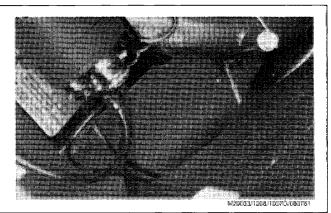


2. The carburetors used adapter (A) permanently fixed to elbow (B).



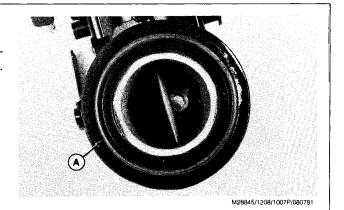
10-07-04

3. The engine shroud does not have a hole in it where the air intake hose used to go.

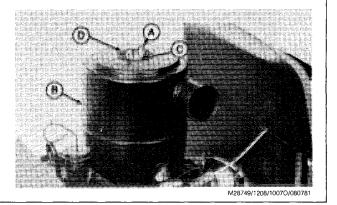


TRACTOR SERIAL NO. (160,063-

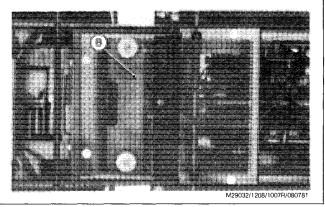
1. Tractors in this Serial No. range use O-ring (A) in carburetor elbow. The elbow is a one piece adapter and elbow.



2. Air cleaner assembly (B) uses wing nut (A), washer (C) and sealing washer (D).



3. The tractor is equipped with bottom screen (B).



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TRACTOR SPECIFICATIONS Engine Travel Speeds Engine Model Number KT17QS Forward......Variable 0.5 to 6.5 mph (0.8 km/h to 10.5 km/h) Cylinder..... Two Cycle..... Four (0.8 km/h to 5.6 km/h) Hydraulics Control Valve......2-Spool (open-center) Speeds High (No load) 3400 to 3600 rpm Tire Size *Horsepower rating is established by engine manu-facturer in accordance with Standard International Rear 23 x 10.50-12 High-Flotation Combustion Institute procedure. It is corrected to 60°F and 29.92 hg barometer. Laboratory test engines are Tire Inflation* equipped with air cleaner and muffler. Front 6 to 16 psi (41 to 110 kPa) Rear 5 to 10 psi (34 to 69 kPa) Electrical System Battery, John Deere Wheel Tread (Center of Tires) (AM31186)..... Category II, 12-Volt BCI Group 22F, 260 cold cranking amps at 0°F (17.7°C), 50 minute reserve Rear (wheels in) 30-1/2 in. (774.70 mm) capacity at 25 amps Charging Capacity 15 amps System Polarity Negative Ground Dimensions

*Inflation will vary with attachment used.

Wheelbase..... 46 in. (1.168 m)

Over-all Length 69 in. (1.753 m)

Approximate Curb Weight 760 lbs. (344.5 kg)

Power Train

Hydrostatic Transmission
Sundstrand 15 Series (U-Type)
Differential Dana
Brakes Individual Rear Wheel (Drum-Type)

Starter 12-Volt Motor, Key and Solenoid

Spark Plug** Champion RBL15Y

Timing Index

**In Canada, compliance with radio interference regulations certified. Replace spark plug with resistor type spark plug only.

1208/1010A/080781

SERVICE INTERVALS

Crankcase (Oil Change) Break-in
Regular Every 25 hours
Dusty Conditions Every 8 hours
Transmission Oil Change
Oil Filter Change
NOTE: Oil filter is positioned under transmission. Fill new filter with oil prior to installing it to prevent an air lock in the system.
Tractor Grease Fittings Every 25 hours

1208/1015F/090781

CHECK TRANSMISSION FLUID LEVEL

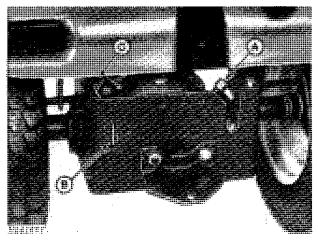
NOTE: DO NOT run tractor engine when checking or adding fluid.

Fluid level in sight tube (B) should be 1/4 to 1-1/4-inches (5 to 30 mm) above bottom of slot in frame when tractor engine is stopped.

IMPORTANT: The 1/16-inch diameter hole in outside wall of accumulator-vent (C) must be positioned at an upward angle to prevent fluid leakage and insure proper venting.

If fluid level is low, remove fill tube cap (A) and add necessary amount of fluid until it is 1/4 to 1-1/4 inches (5 to 30 mm) above bottom of slot in frame.

IMPORTANT: Do not overfill.



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FUEL



CAUTION: Do not fill gas tank when engine is running or hot. Do not smoke when filling gas tank.

Wipe dust and dirt from around filler cap (A) before removing it. Place cap in a clean area,

IMPORTANT: Do not permit dirt or other foreign matter to enter the fuel system. This may cause hard starting, poor performance and engine damage. Always use clean gasoline storage cans and funnels.

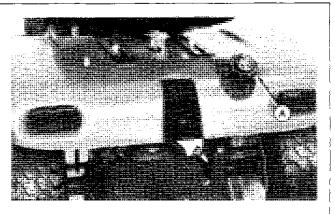
Fill the gas tank with fresh, clean "regular" grade gasoline. We recommend non-leaded gasoline because it reduces cylinder head deposits. Low-lead or leaded "regular" grades are acceptable.

DO NOT use premium, ethyl or white gasoline.

The use of gasohol is not recommended.

Never use special additives such as carburetor cleaners, de-icers, or moisture-removing liquids in your gasoline.

IMPORTANT: Do not mix oil with gasoline.



M29356/1015A/090781