



Allis Chalmers

Operator's Manual

TL-16

TracLoader

Gas & Kerosene

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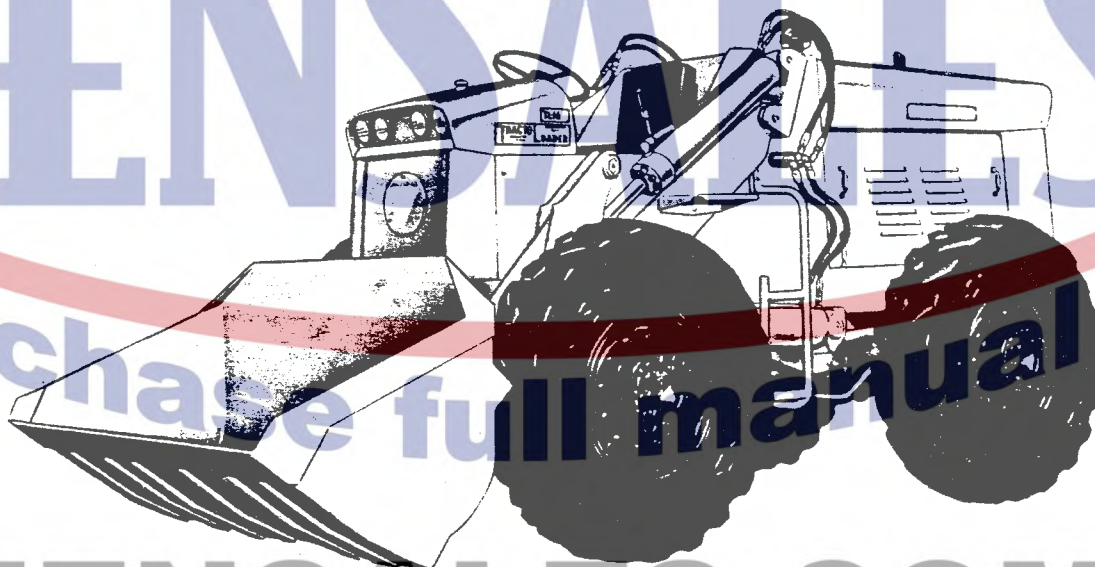
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Operator's Manual

AC-O-TL16

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**OPERATORS MANUAL
FOR
MODEL TL-16 (GASOLINE)
(KEROSENE)
TRACTO LOADER**



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**ALLIS-CHALMERS MFG. CO.
MILWAUKEE, WISCONSIN, U. S. A.**

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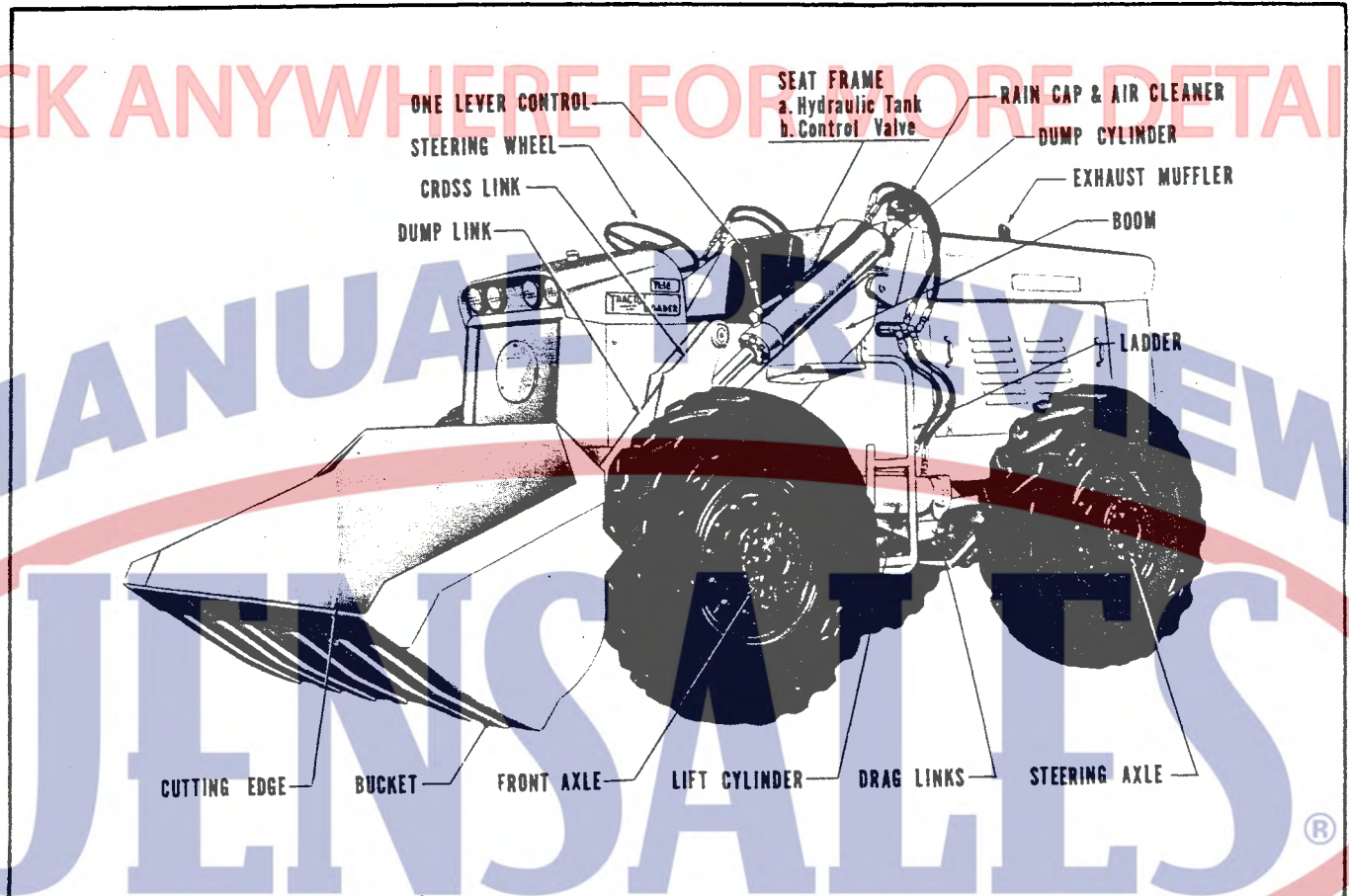
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— GENERAL DESCRIPTION —



MODEL TL-16 TRACTOLOADER

The Model TL-16 Gasoline Wheel Loader is a 16,050 pound (less bucket), four wheel drive, wheel-loader unit powered by a 6 cylinder gasoline engine.

Power from the engine is transmitted directly to the single stage type torque converter by means of a Universal Joint. The torque ratio in the converter is increased 3.5 to 1, then transmitted to the full-power-shift transmission. A power train in the transmission serves the hydraulic system pump whenever the engine is running. Forward or reverse direction of the shift lever into any speed range transmits power from the transmission through the universal drive shafts to both front and rear differentials and axles.

The transmission provides 3 forward speeds and 3 reverse speeds ranging from 0-4.0 M.P.H. in low gear to 0-27.0 M.P.H. in high gear, at the rated engine speed of 2200 R.P.M.

(governed full load). Control of the loader is accomplished hydraulically by the transmission mounted hydraulic pump, control valve with two control levers, two lift cylinders, two dump cylinders, and the necessary hydraulic lines.

There are no exposed hoses or fittings around the operator's compartment. The hydraulic tank, located behind the operator's seat, provides mounting of the control valve and levers, piping and safety valves. Short, external piping on each side of the operator's seat directs the oil to the left side and the right side lift and dump cylinders.

The loader design provides top visibility, strength, and servicing accessibility. The loader side frames are mounted to the axle housings with heat-treated pins. The rear stabilizer shroud and heavy steel seat frame assembly are bolted together with the side

GENERAL DESCRIPTION – CONTINUED

brace assemblies to provide a rigid box construction for mounting the boom, hydraulic cylinders, and other loader linkage. The heavy steel plate boom assures a long life of heavy-duty work.

Levers, pedals, gauges, etc. are so well situated in the operator's compartment that full control of the loader can be maintained at all times.

Standard equipment includes: a 1-3/4 cubic yard general purpose bucket (with tip-back); lift and dump cylinders with chrome plated piston rods; cast cowl and steel plates around operator; heavy-duty bumper; drawbar; torque

converter and full-power-shift transmission; power booster hydraulic brakes and parking brake; power booster steering; electric starter, lights and horn; oil bath air cleaner; oil filter, and muffler.

Optional equipment includes: a heater; operator's cab; special tire equipment; long boom, and hour meter.

Special equipment includes: a 2-1/2 cubic yard light materials bucket (with tip-back); TRACTOFORK; TRACTOCRANEHOOK; TRACTODOZER Blade; bucket teeth and TRACTOHOE.

LOADER SERIAL NUMBER



Fig. 1

ENGINE SERIAL NUMBER

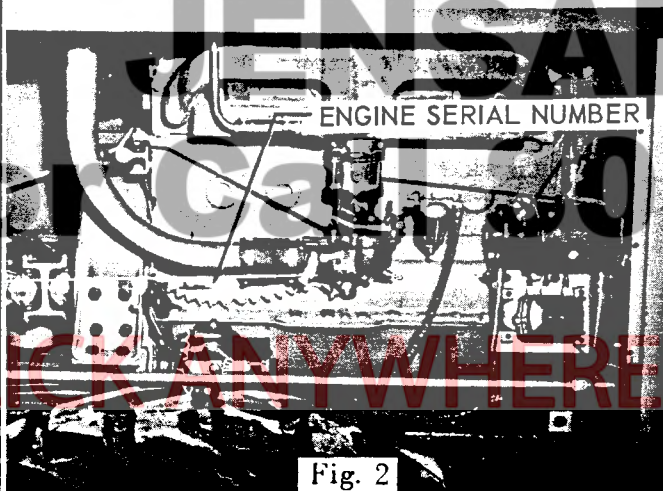


Fig. 2

TRANSMISSION SERIAL NUMBER

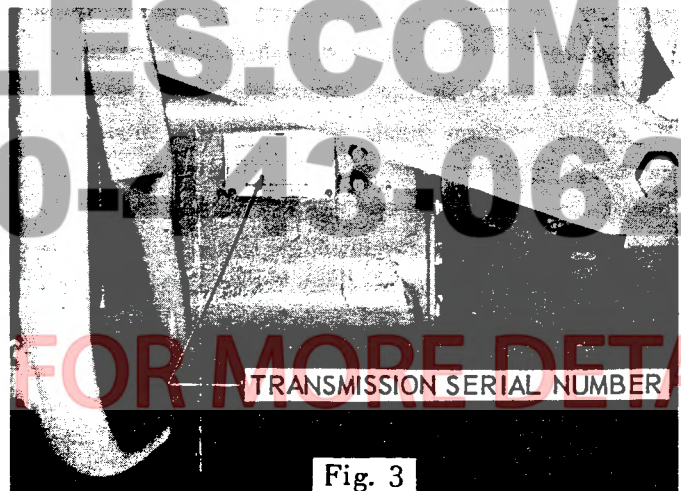


Fig. 3

SPECIFICATIONS

ENGINE

Make and Model	Hercules 6GO-339
Number of Cylinders	6
Max. Horsepower at governed RPM	109
Fuel	Gasoline
Bore and Stroke	4" x 4-1/2"
Firing Order	1-5-3-6-2-4
Piston Displacement (cu. in)	339
Governed Speed (RPM)	2200
Air Cleaner	Oil Bath
Lube Oil Filter	Full Flow
Electrical System	12 Volt

WEIGHTS (Bucket at 14" Carry)

Front Wheels (lbs.)	8,500
Rear Wheels (lbs.)	9,000
Shipping Weight (lbs.) (approx.)	17,500

<u>SPEEDS</u>	1st	2nd	3rd
Forward	0-4.0	0-10.7	0-27.0
Reverse	0-4.0	0-10.7	0-27.0

BUCKET

Overall Width	7' 6"
Lifting Time	8.2 Sec.
Lowering Time	6.0 Sec.

DIMENSIONS

Overall Height, top of Seat Frame	6' 9"
Overall Width, Wheel Hubs	7' 6"
Wheel Base	7' 6"
Ground Clearance	15"
Drawbar Height	2' 2"
Height to Hinge Pin Center Line (Max. Raise)	11' 6"
Max. Angle of Bucket, dumped (max. raise) ..	48°
Angle of Cutting Edge at 14" to Bucket Hinge Pin	45°

TURNING RADIUS

Tip of Bucket (at 14" to Hinge Pin)	20' 1"
Outer Steering Wheel (Hub)	20' 11"
Inner Front Wheel (Hub)	12' 3"

TIRE AND TREAD

Tread - Front and Rear Wheels	5' 10-1/2"
Tires (Tubeless) (8 Ply)	14:00-24

TIRE PRESSURE

Front and Rear	40 P.S.I.
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CAPACITIES

Cooling System (quarts)	25
Crankcase (quarts)	7
Transmission and Converter (gallons)	9
Hydraulic System (gallons)	32
Fuel Tank (gallons)	35
Differentials (gallons each)	2-1/2
Planetary Hubs (pints each)	5
Steering Gears (lbs.)	1
Hydraulic Brake System (pints)	2

STANDARD EQUIPMENT

Electric starter, generator, horn, front quadri-lights, dash lights, stop and tail light, muffler, heavy-duty drawbar, four-wheel power booster hydraulic brakes, oil bath air cleaner, rain cap, rear axle disconnect, six-way adjustable seat, hood side plates, power steering, engine oil filter, transmission and converter temperature gauge, transmission oil pressure gauge, fuel level gauge, engine water temperature gauge, engine oil pressure gauge, ammeter, hi traction differential, hour meter, and bucket level indicator.

NOTE: The Allis-Chalmers Manufacturing Company reserves the right to make changes in the above specifications or to add improvements at any time without notice or obligation.

— STARTING AND STOPPING THE ENGINE —

A. STARTING ENGINE

Place the power shift lever and bucket control levers in the neutral position. Turn ignition switch to "on" position. Depress foot throttle pedal as far down as it will go. Turn ignition key to "start" position and hold until engine starts (if weather is cool, pull out choke control located at lower front side of operator's compartment - when engine has turned over two compression strokes, push in choke control) release the key and reduce accelerator pedal to half speed until water temperature reaches 160° to 180° F. and transmission oil is warm before placing load on engine.

For positions of levers, pedals, gauges, etc. see Figure 5.

IMPORTANT: *Converter oil temperature must not exceed 250° F. Check temperature gauge at regular intervals. See page 47 for further instructions.*

When engine is started, observe the engine lubricating oil pressure indicated by the gauge. With engine running at full speed and with the engine coolant at normal operating temperature (160° to 180° F.) the oil pressure should be

between 30 and 45 P.S.I. If the oil is cold, no pressure may be indicated by the gauge for 15 seconds after the engine starts, but if the pressure does not then rise to normal or above, the engine must be stopped immediately and the cause determined and corrected.

B. STOPPING ENGINE

Release foot throttle pedal and turn ignition key to "off" position and remove key. The engine will now have no possible means of starting.

NOTE: *Always allow engine to idle at least 2 minutes, so that engine may cool gradually and uniformly.*

Be sure that the ignition key is turned to the "off" position before leaving the operator's compartment. Because of the constant flow of electricity to the gauges on the instrument panel, the battery may be drained if key is left on.

Cover the exhaust pipe at the end of each days operation to prevent rain from entering while engine is idle.

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TRANSMISSION OIL PRESSURE

HOUR METER

ENGINE OIL PRESSURE

ENGINE WATER TEMPERATURE

TRANSMISSION

AUXILIARY LIGHT SWITCH

CLICK ANYWHERE FOR MORE DETAILS



BEFORE STARTING THE ENGINE, MAKE SURE THERE IS SUFFICIENT OIL IN THE LOADER HYDRAULIC SYSTEM AND TRANS.

MISSION HYDRAULIC SYSTEM.
It is important that the operator familiarize

Fig. 5). Although many of these controls are similar to other loaders, there are important differences, and it is not wise, regardless of

The Full-Power-Shift Transmission is controlled by a single lever which allows the oper-

previous experiences, to operate the loader before fully understanding the purpose of each control and instrument.

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