



Allis Chalmers

Service Manual

D-14

Service Manual

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ALLIS CHALMERS

MANUAL PREVIEW

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GENERAL SPECIFICATIONS (Cont'd)

DISTRIBUTOR

Make	Delco-Remy
Type	Automotive
Rotation	Clockwise
Advance	30° automatic
Point gap	.020"

DIFFERENTIAL

Backlash (pinion and gear)	.007" to .012"
Ratio	6.1 to 1

DIMENSIONS

Over-all height	79-9/16" to top of muffler
Over-all length	129" to end of drawbar
Over-all length	123-1/2" from front to rear of tires
Over-all height	55" to top of radiator and hood
Drawbar height	13-3/4"
Lift arms-center to center	30"

DRAWBAR

Type	Swinging or rigid, quick detachable
Height	13-3/4" approximately

FUEL SYSTEM

Capacity	14-1/2 gallon U. S.
Fuel filter	Felt strainer and sediment bowl
Fuel gauge	Dial and float type

GOVERNOR GEAR

Gear hub diameter	1.748" to 1.749"
Bushing diameter	1.751" to 1.752"
Clearance	.002" to .004"

GOVERNOR

Type	Mechanical, fly weight, variable speed
Speed	Controlled by operator (throttle position)

GENERATOR

Make	Delco Remy - Auto lite
Type	Two brush, heavy duty, air cooled
Lubrication	Oilers, front and rear bearings
Capacity	30 ampers
Charging rate	controlled by voltage regulator

LUBRICATION

Engine crankcase	
Capacity (with filter change)	5 qt. U. S.
Temperature above 90°F.	S. A. E. 30
Temperature above 32°F.	S. A. E. 20
Temperature below 10°F.	S. A. E. 10W

HYDRAULIC PUMP

Capacity	9 qt. U. S.
Temperature above 45°F.	S. A. E. 20W
Temperature below 45°F.	S. A. E. 10W

CLUTCH (Transmission)

Capacity	10 qt.
Temperature above 45°F.	S. A. E. 20W
Temperature below 45°F.	S. A. E. 10W

FRONT SUPPORT

Capacity (manual steering)	2.5 qt.
Capacity (power steering)	4 qt.

FINAL DRIVES

Capacity	1.25 pt. each
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TRANSMISSION

Capacity	16 qt. E. P. 80
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OIL PUMP

Type	Vane
Pressure	5 to 15 lbs. normal
Location	rear of engine block
Drive	end of camshaft
Rotor end clearance	.002"
Rotor side clearance	.002" to .004"

PISTONS

Material	Aluminum
Type	Cam ground
Cam	.012"
Skirt diameter large	3.497"
Skirt diameter small	3.485"
Measure to be made at bottom of skirt	

PISTON PIN

Type	Clamped in rod
Pin diameter	.8133" to .8135"
Pin length	3-1/8"
Pin bore	.8139"
Pin clearance	.0004" to .0006" at 70°F.

HOOD ASSEMBLY

REMOVAL

The hood consists of three separate assemblies. The right hand hood assembly, the left hand hood assembly and the center channel assembly that supports the two side assemblies.

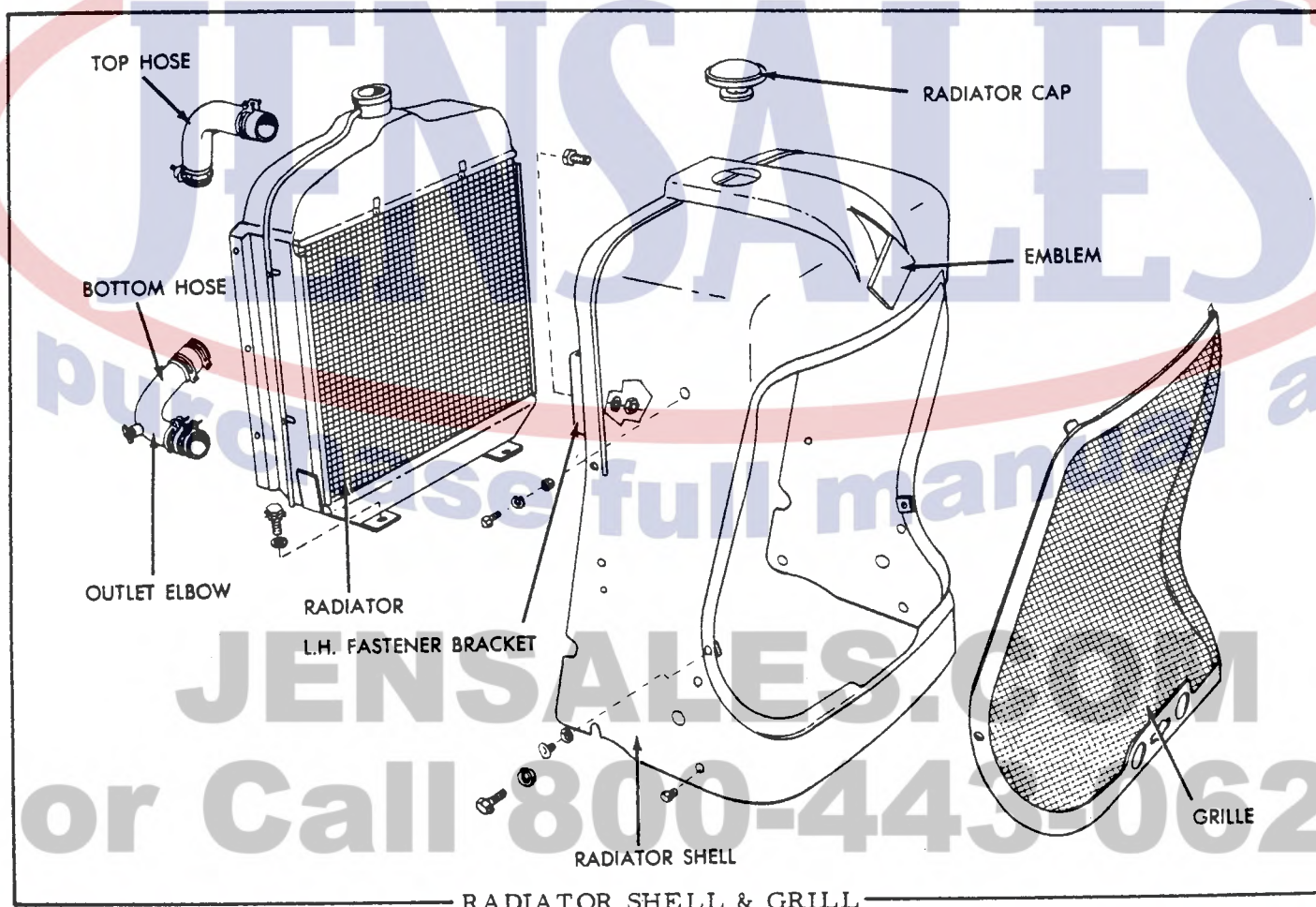
To remove the right hand hood assembly, unlatch both front and rear fasteners at bottom of hood and lift hood assembly straight upward until free of tractor. To remove the left hand hood assembly, remove the air cleaner stack cap, unlatch the fasteners and remove in the same manner, lifting high enough to clear muffler.

To remove the hood support channel at center, remove the two capscrews attaching the front of the support channel at top of radiator shell.



Remove the two capscrews attaching the support channel to the battery tray bracket at front of fuel tank and remove the center support channel. To install, reverse the above instructions.

RADIATOR AND SHELL



REMOVAL

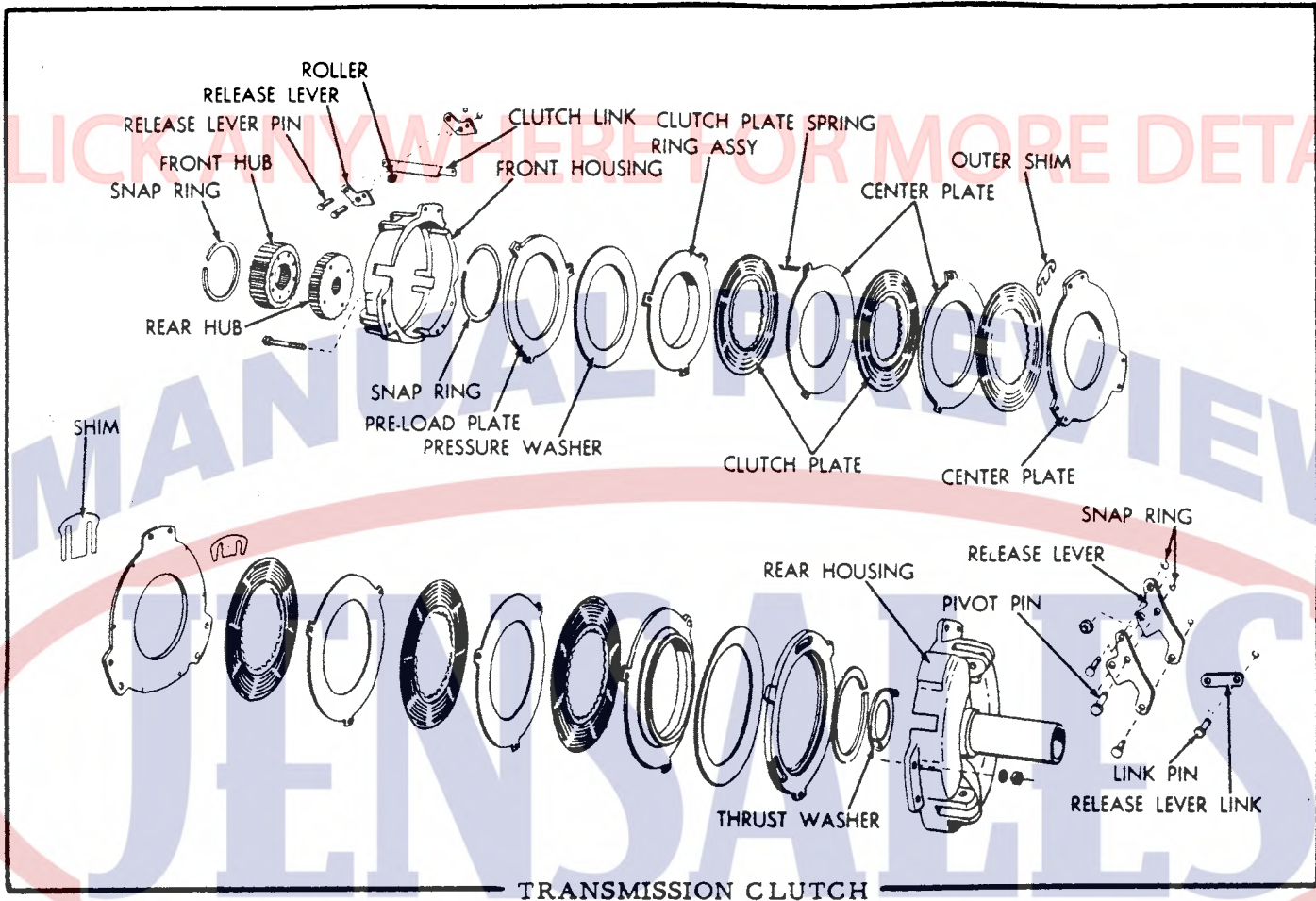
Remove radiator cap and drain cooling system at radiator and engine block. Remove hood assembly. Remove screws attaching the front grill section to shell and remove grill.

Disconnect the light wire (orange) from the junction terminal located inside radiator shell

near the left hand head lamp. Remove the right hand lamp wire from clips at top of radiator.

Remove screws attaching shell at sides of radiator and capscrews attaching shell to the front support housing. Remove shell from radiator, the head lamps are attached to, and may be removed with shell.

POWER DIRECTOR TRANSMISSION CLUTCH



TRANSMISSION CLUTCH

REMOVAL

Drain oil from clutch compartment. Remove snap coupler bell assembly. Remove platforms. Disconnect brake rods. Remove hydraulic oil lines. Remove side cover and remove setscrew from shifter fork. Remove hand lever and shaft from housing. Support tractor.

Remove capscrews attaching transmission to torque housing and separate the two housings far enough to remove clutch assembly from end of transmission main shaft. Remove the snap ring at front of clutch. Remove front and rear splined clutch hubs at front of clutch. Remove snap ring retaining clutch assembly to end of transmission main shaft and pull clutch assembly from shaft.

DISASSEMBLY

Place clutch on bench for disassembly or adjustment. Due to the fact clutches are balanced each ear should be marked prior to disassembly so all parts can be reinstalled in their original position.

Remove the three links connecting the front and rear release levers. Remove the six capscrews attaching front and rear housings together. Separate the two halves of clutch at center plates.

The two center plates are separated with a .035" shim stack (1-.015" and 2-.010") and .085" shim stacks (5-.015" and 1.010") are used between the center plate and the front and rear housing. Keep track of these shim stacks so they may be reinstalled in their original positions.

Remove the center plate, the three release springs and the clutch plates. There are five plates to each half of clutch, two plain and three splined plate assemblies, used alternately. Remove the preload plate assembly from housings.

Compress the preload plate and remove the large retaining snap rings. The pressure washer may now be removed. Remove pins, levers, rollers and linkages.

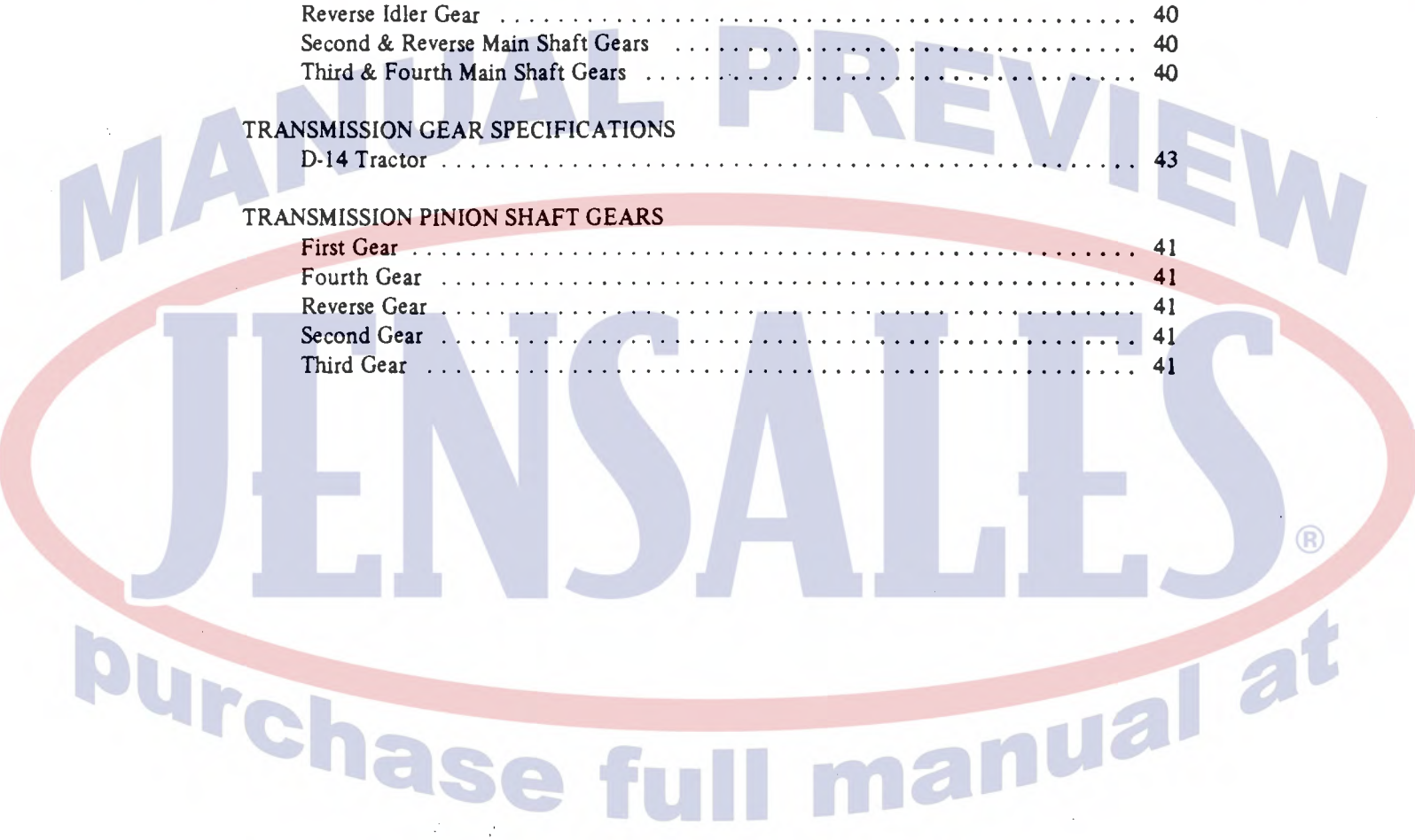
ASSEMBLY

Both halves of the clutch are assembled in the same manner. To assemble the rear half of clutch, place the ring and plate assembly on bench with the ring side upward. Place the pressure washer over the ring and plate assembly with the small diameter downward. Install the plate over the pressure washer, with the lugs on both plates in line with each other. Compress this assembly and install the large snap ring.

CLICK ANYWHERE FOR MORE DETAILS

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