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MANUAL PREVIEW

Oliver
Operator's Manual
1650

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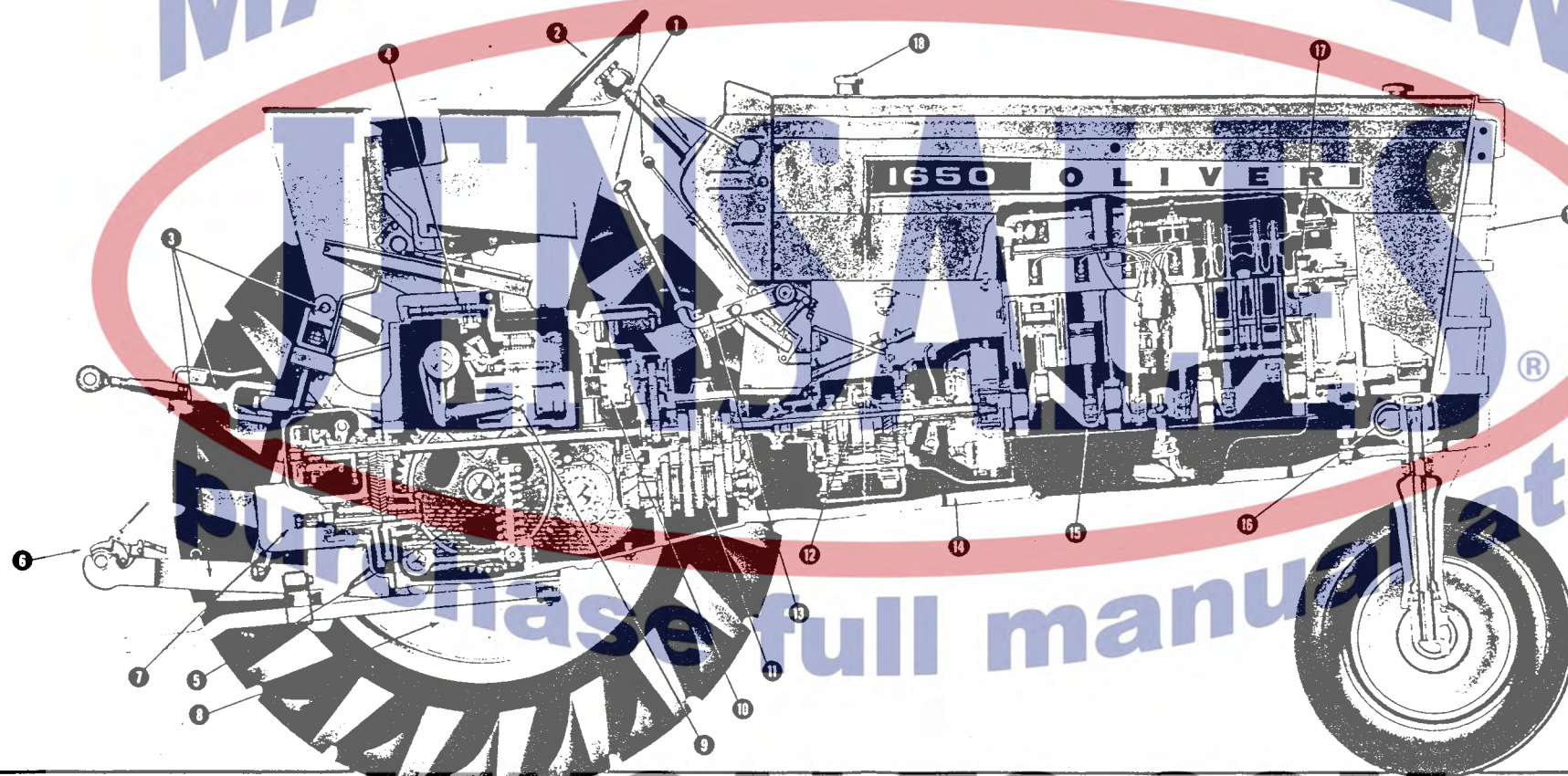
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OL-O-1650

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ADVANCED OLIVER DESIGN ALL THE WAY THROUGH



- 1 Easy-to-reach controls: safety-key starting; self-centering shift lever; friction throttle; Hydra-Power Drive lever.
- 2 Tilt-o-Scope steering column, adjustable to three positions.
- 3 Flexible 3-point hitch with lower-link draft sensitivity and position control lock—takes Category I and II implements.
- 4 Double-feed-back hydraulics prevent over-action of draft control, avoid deep-to-shallow variations.

- 5 Variable-rate draft control spring automatically compensates for soil-condition changes.
- 6 Snap-couplers, controlled from the tractor seat, make implement hook-up easy.
- 7 Independent pto: 540 or 1000 rpm, or dual-speed for both 540 and 1000 rpm.
- 8 Choice of pressed steel or cast-iron wheels; Power-juster rims available.
- 9 Internal hydraulic cylinder controls 3-point hitch system.
- 10 Big-capacity internal hydraulic pump powers all external units.

- 11 Transmission with six forward speeds has carburized, crown-shaven, constant-mesh helical gears and top quality bearings.
- 12 Water-cooled Hydra-Power Drive doubles number of forward speeds, provides extra pull and smooth speed reduction on-the-go, without interrupting power.
- 13 Non-fade double-disc brakes with long-life molded linings, top-pivot pedals.
- 14 Massive, one-piece cast-iron main frame adds weight and balance, cradles and protects the engine.

- 15 Forged, heat-treated, dynamically balanced crankshaft.
- 16 Fully hydraulic power steering provides effortless, positive control.
- 17 Pressurized, rear-to-front coolant circulation; wet sleeves and by-pass thermostat eliminate "hot spots."
- 18 Large 27 1/2-gallon fuel tank with offset filler neck. 250-pound cast-iron grille adds weight, can't be dented or damaged.

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INTRODUCTION

This Operator's Manual is presented to furnish you with necessary information for operating and maintaining your tractor. Its primary purpose is to assist you in lubricating and adjusting the tractor for daily and seasonal operation. We especially wish to call your attention to the many safety slogans listed in this manual. Although your tractor is designed with the safety of operation in mind, possibilities of accidents cannot be completely eliminated until you understand and practice all safety precautions.

Timely service saves costly repairs and valuable time lost because of breakdowns. Whenever it becomes necessary to make REPAIRS or REPLACEMENTS on your tractor, be sure to insist on GENUINE PARTS. These parts are designed specifically for your tractor under controlled specifications to give satisfaction and long lasting service to which you are entitled. YOUR DEALER CAN SUPPLY YOU WITH PARTS YOU REQUIRE. For additional information consult your dealer.

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ENGINE CRANKCASE

Lubricant

Refer to Engine Oil specifications in Section I for lubricant recommendations.

Checking Lubricant Level

With tractor on level ground, check oil level daily or every 10 hours of operation and replenish, if necessary, to maintain level between *FULL-LOW* marks on dip stick. To remove dip stick on gasoline and diesel models, turn handle counterclockwise and remove. Check oil level when engine is stopped. If engine has been in operation, be sure to allow sufficient time for oil to drain into pan before checking level. Dip stick oil filler opening is on left side of engine except on LP gas tractors where dip stick is on left side of engine and oil filler opening is on right side.

Changing Lubricant

Crankcase oil change frequency depends heavily upon working conditions. Under normal operating conditions, drain gasoline or diesel engine oil every 100 hours of operation and LP gas engine oil every 150 hours of operation. Change oil more often when tractor is operated during winter months or in extreme dust conditions.

Remove drain plug and drain oil while engine is warm so that it will flow freely. Reinstall drain plug and refill crankcase with recommended lubricant.



ENGINE OIL FILTER

Gasoline and LP Gas

Remove and discard gasoline or LP gas engine oil filter element every second oil change. Remove element from base by turning counterclockwise. Lubricate rubber gasket on new element, part number 155 618-A, with heavy oil or grease prior to installation. Thread element onto base, turning clockwise no more than one-half turn after gasket first contacts base. Check and replenish engine oil level after initial operation whenever an element is replaced and check for leakage.



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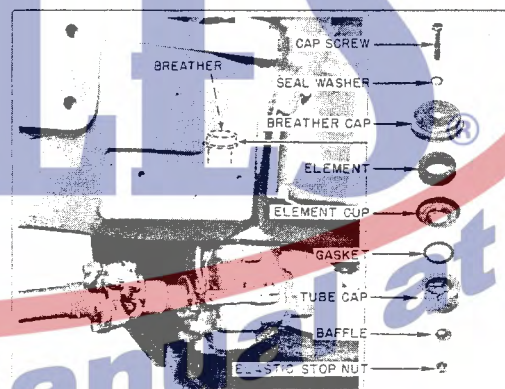
Changing Lubricant

Remove drain plug and drain transfer drive case yearly or every 1000 hours of operation. Drain lubricant when warm from operation. Reinstall drain plug and refill compartment.



4WD TRANSFER DRIVE CASE BREATHER

Replace four-wheel drive transfer drive case breather element, part number 104 792-A, yearly or every 1000 hours of operation. Replace element more frequently under extreme dust conditions. Reinstall baffle with center taper pointing upward. Tighten breather retaining cap screw until breather cap begins to give under pressure.



4WD FRONT AXLE DIFFERENTIAL

Lubricant

Use SAE 80 multi-purpose gear lubricant year around. SAE 90 multi-purpose gear lubricant may be used if temperatures normally remain above plus 32 degrees Fahrenheit. Both lubricants must conform to Military Specification MIL-L-2105.

Checking Lubricant Level

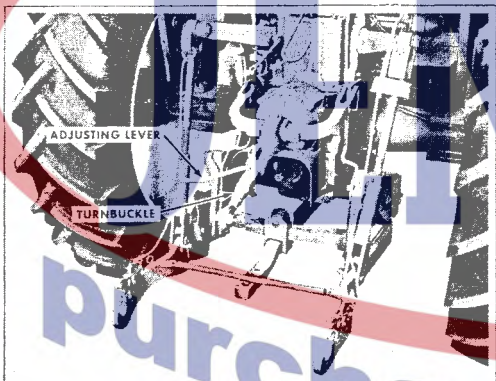
Remove filler-test plug and check lubricant level weekly or every 50 hours of operation. Add required lubricant to raise level to lower edge of filler-test plug opening. Reinstall filler-test plug.





Leveling Adjustment

Push leveling gear crank downward and turn crank to level or tilt implement. Pull crank upward to lock it in position when desired adjustment has been obtained. Detach left lifting link from lower link and screw clevis in or out if further leveling adjustment is required. **AVOID EXCESSIVE LENGTHENING OF LINKS. NO MORE THAN EIGHT INCHES OF THREADS ON LEVELING GEAR SHAFT SHOULD BE SHOWING WHEN IMPLEMENT IS MOUNTED ON THREE-POINT HITCH.**



Upper Link Adjustment

Attach three-point hitch upper link to upper link support in the position which provides most desirable pitch or inclination of implement. For very heavy tools, select position which allows upper link to be most nearly parallel with lower links when lower links are horizontal or parallel with ground line. Exact upper link adjustments can be made by rotating upper link turnbuckle.

EXTERNAL CYLINDERS

Connecting Hoses (Hydra-Lectric-Stop and Depth-Stop, Internal Valve)



To couple a double-acting cylinder to unit, connect hose from base end of cylinder to base port and hose from rod end of cylinder to rod port. If single-acting cylinder is to be used, plug rod port and connect cylinder hose to base port. Ports are located on both sides of unit. On Hydra-Lectric-Stop units, base ports are diagonally opposite each other as are rod ports. On Depth-Stop, internal valve units these ports are directly opposite each other. All base ports are located directly beneath restrictor valve adjusting screws. Be sure hydraulic lines are properly arranged when couplings are used in unit-to-cylinder hoses. **IMPORTANT: See Adjustments and Use of Single-Acting Cylinders.**

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