

RATED CAPACITY

Lywhsel H. P. (net) * .....	73	
N. A. C. C. rating - for tax purposes .....	33.75	
Drawbar pull, pounds.....	First .....	24,000 max. **
(See Graph)	Second .....	15,700 **
	Third .....	10,750
	Fourth .....	6,100

† : \* - Based on manufacturing tests.  
 \*\* - With adequate weight and traction.

SPEEDS

Tractor speeds - M. P. H.:	<u>FORWARD:</u>	
(Torque converter automatically adjusts drawbar pull to load)	First .....	0 - 1.45
	Second .....	0 - 2.37
	Third .....	0 - 3.53
	Fourth .....	0 - 8.23
	<u>REVERSE:</u>	
	First .....	0 - 1.47
	Second .....	0 - 2.40
	Third .....	0 - 3.58
	Fourth .....	0 - 8.37

POWER TRAIN

<u>Engine</u>		Hercules Diesel D-298-H
Make and model .....		
Bore and stroke, inches .....		3-3/4 x 4-1/2
Number of cylinders .....		6
R. P. M. at governed speed (full load) .....		1900
Piston displacement, cu. inches .....		298
Crankcase oil capacity, gallons .....		2
Cooling system capacity, gallons .....		6
Fan diameter, inches .....		21
Fuel tank capacity, gallons .....		46
Ignition .....		Compression
Crankshaft diameter, inches .....		2-7/8
Number of main bearings .....		7
Air cleaner .....		Oil bath
Lubrication .....		Forced feed
Cranking motor voltage .....		12
Battery .....	Heavy duty,	200 AMP - hr.

<u>Converter</u>	
Type .....	Single stage, single phase, with accessory pump drives on back of housing.
Standard equipment .....	Yes
Max. torque ratio .....	3.10:1
Cooler .....	Concentric tube type mounted in radiator bottom tank.
Filter .....	High pressured, full flow, pleated paper, conveniently mounted for service under seat.

Transmission type..... 4 speed forward, (4 alternate (10) speeds forward possible), 4 speed reverse. Power shift 1st. to 2nd. (alt. 1st. to alt. 2nd.) 3rd. to 4th. (alt. 3rd. to alt. 4th.) and power shift quick reverse.

Sump..... 11 gallons required for 40° operation, also serves converter system. One dipstick and one fill point required.

Case..... Cast steel

Gears..... Straight shaved spur and bevel. Alloy steel. Heat treated.

Trans. adjustments..... None required.

Control valve..... Conveniently mounted under the seat.

Transmission & converter pump.. Gear-type, constant-running, mounted on converter housing.

Steering type..... Power steering. Includes:-  
 (1) Gradual turn, hand controlled  
 (2) Power turn (1.31:1 ratio), hand controlled.  
 (3) Counter-rotation, (track sprockets counter rotating), hand controlled.  
 (4) Spot turn, foot controlled.

Brakes..... Expanding shoe, externally mounted. Hydraulically controlled for steering. Armored-cable controlled for parking.

Brake shoe adjustment..... Automatic

Drum diameter, in..... 10-1/2

Lining area, each brake, sq.in. 33

Turning clearance radius -.....  
 Spot turn..... 7° 4"  
 Counter rotation..... 5° 7"

FINAL DRIVES

Case ..... Cast steel, one piece.

Gears..... Straight shaved spur.

Sprockets..... Cast steel, skip-tooth, flange-mounted, dowel-driven, 25 teeth.

Oil capacity..... 9 quarts (each).

TRACK AND TRACK FRAME

Gauge - center to center of tracks, inches..... 62

Track frame shaft diameter, inches..... 3-1/2

Number of lower track wheels, each frame..... 5

Track shoe width, standard, inches..... 14

Special track shoe widths available, inches..... 16, 18, 20

Number of shoes per track..... 35

Length of track on ground, inches ..... 75-5/16

Total ground contact area, sq. in..... 1958

Track links..... New, forged, alloy steel, heat-treated.  
 Top rail "dubbed-off" at ends for  
 increased wheel and link life.

Pin size..... 1.413 dia. x 7.375 lgr  
 Bushing size ..... 1.446 I.D. x 2.062 O.D. x 4.8125 Lg.

MAIN FRAME AND SUSPENSION

Main frame..... Fabricated from heavy, steel plates, dowelled and  
 bolted to transmission case and final drive.

Guards..... Full-length, three-piece, heavy crankcase and  
 drive-line guard standard equipment. Cast steel  
 radiator guard with removable grille standard.

Suspension..... Longitudinal, semi-elliptic springs.

OPERATORS DEC AND CONTROLS

Deck..... Wide, flat, non-skid, flush with fenders.

Seat ..... Well upholstered with padded arm rests.

Controls..... Steering and transmission levers, low-effort,  
 neatly grouped, short-travel. Steering brake  
 pedals may be operated simultaneously with one  
 foot to stop tractor. Foot control for engine  
 inter-connected with usual hand friction throttle.  
 Adjustable over-center parking brake lever located  
 at R.H. side. Space provided for built-in controls  
 for allied equipment.

Instrument panel= pivoted for easy accessibility..... Individually  
 mounted instruments include converter oil  
 temperature, engine oil pressure, generator  
 charging indicator, key-start switch, hourmeter,  
 Chevron cold-start aid, serial number plate.

Tool box ..... Located under L.H. arm rest.

DRAWBAR

Center of clevis to grouser tip, inches ..... 10-5/16  
 Width of drawbar opening, inches ..... 2-1/2  
 Lateral movement, right or left of center, inches..... 11  
 Drawbar pin diameter, inches ..... 1-3/8

DIMENSIONS

Length overall, inches..... 129-3/4  
 Width overall, inches ..... 79-1/4  
 Height overall (above grouser tip) excluding exhaust  
 stack, inches ..... 68-1/2  
 Clearance (above grouser tip) inches - at sod pan..... 13-1/16  
 - at drawbar support (front). 11-1/4

WEIGHT - (with std. track shoes)

Shipping weight, approx. lb. ....	12,000#
Operating weight, approx. lbs. ....	12,400#
Ground pressure, p.s.i. ....	6.34

SPECIAL EQUIPMENT

<u>Power Take-off (P.T.O.)</u>	<u>1st.</u>	<u>2nd.</u>	<u>3rd.</u>	<u>4th.</u>
P.T.O., R.P.M. @ full load gov. eng. speed (1900 rpm)	276	473	682	1170
P.T.O., R.P.M. @ no load gov. eng. speed (2090 rpm)	443	743	1072	1838
Connection size .....	1-3/8" - 6B			

R. F. Hana, Cleveland Plant  
2-17-60

OLIVER MODEL X-12 BULLDOZER AND ANGLEDOZER TENTATIVE SPECIFICATIONS

<u>DIMENSIONS - Tractor &amp; Equipment</u>	<u>X-12-A Angledozer</u>	<u>X-12-B Bulldozer</u>
Overall length - (blade straight) .....	12' - 10"	12' - 3/4"
Overall length - (blade angled) .....	15' - 5"	" - " - "
Width - (blade straight) .....	10' - 10"	8' - 0"
Width - (blade angled) .....	9' - 10"	" - " - "
Track shoe width - (standard) .....	14"	14"
Track shoe width - (maximum useable) .....	20"	20"

BLADE INFORMATION

Length .....	10' - 10"	8' - 0"
Height - (less spill board) .....	28-1/4"	32-3/4"
Height - (with spill board) .....	34"	38"
Maximum lift above ground - (blade straight) .....	33"	32-1/2"
Maximum lift - (blade angled - not tilted) .....	" - " - "	" - " - "
Maximum drop below ground - (blade straight) .....	16-3/4"	12"
Maximum blade angle .....	25°	" - " - "
Maximum tilting adjustment (RH or LH) .....	10"	10"
Maximum pitch adjustment .....	None	10°
Blade lift time (from ground level) .....	3-1/2 sec.	3-1/2 sec.
Blade lift time (total) .....	4-3/4 sec.	4-3/4 sec.
Center cutting edge (reversible) .....	5/8"x6"x91-3/8	5/8x6x60
End bits (reversible on bulldozer) .....	3/4"x8"x18	5/8x8x18
Moldboard .....	1/4" plate with box section reinforcements	

WEIGHT

Total shipping wt. (tractor w/20" shoes and blade) .....	15,500#	14,900#
Total operating wt. (tractor w/20" shoes and blade) .....	15,900#	15,300#
Shipping wt. (equipment only) .....	3,500#	2,900#
Ground pressure - p.s.i. (with 20" shoes) .....	5.28	5.08

HYDRAULIC SYSTEM

Hydraulic system common for both bulldozer and angledozer.

Cylinders - 2 required, double acting. Self-aligning bearings on both ends.  
Bore - 3-1/2"      Stroke - 28-11/16"      Rod. dia. - 1-3/4"

Pump - Gear type mounted on converter - Capacity 23 g. p. m. @ 2000 R.P.M. @ 1800 p.s.i.

Valve - 2 plunger - 4 position (raise, hold, lower and float). No option.

Capacity - Hydraulic system - 20-1/2 gal.; Reservoir - 18-1/2 gal.

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