

ZAHN[®] R300

 **Ditch Witch[®]**



POWER UTILITY

ZAHN® R300 POWER UTILITY



12 Robust, 27-hp (20.1-kW) Kohler® engine maximizes front-end productivity.

1 Ground speed of up to twice that of any walk-behind trencher and faster than any mini skid steer on the market.

2 Soft-touch, color-coded, ergonomic controls are easy to grip, easy to learn and provide smooth, easy operation.

3 Standard cruise control, which locks in operating speeds, reduces operator fatigue and increases productivity.

4 Fully hydraulic, articulated steering provides unmatched maneuverability, enabling you to easily trench a curve.

5 9-gallon (34.06-L) fuel tank enables you to work hours without having to refuel.

11 High-flotation tires distribute weight evenly to minimize impact on lawns and other delicate turf; optional tracks increase stability and performance.

10 Traction-assist feature provides extra drawbar on demand, so you can push more, pull more and traverse soft ground with minimal tire slippage.

9 Compact size, so it can get in, out and around tight jobsites with ease.

8 Unique InterChange™ connection enables the front end to perform like a dedicated unit.

7 Convenient cargo tray for storing water bottle, work gloves, cell phone, or assorted tools.

6 Roomy, ride-on platform absorbs shock, reduces fatigue and keeps you out of dirt, mud and debris.



The Ditch Witch® Zahn® R300 is the best compact trencher ever made—and also the best backhoe, tool carrier and vibratory plow. With an ordinary machine with attachments, you expect to give up a little performance. But the Zahn R300 is nowhere near ordinary. With its unique InterChange™ connection, the front end becomes the machine and performs like a dedicated unit. With the Zahn R300 you get more power, more speed and, best of all, more productivity.

WE'RE IN THIS TOGETHER.



ZAHN® R300 BACKHOE



ZAHN® R300 TOOL CARRIER



- Integrated backfill blade and stabilizers provide outstanding stability and simplify jobsite restoration.
- Color-coded hose connections make it easy to attach the front end to the power unit, for greater convenience and productivity.
- Exclusive traction-assist feature provides extra drawbar on demand, enabling you to push more, pull more and traverse soft ground with minimal tire slippage.
- 9-gallon (34.06-L) fuel tank enables you to work long hours without having to refuel; the tank's molded-in sight glass allows you to keep an eye on fuel consumption.
- Standard cruise control, which locks in operating speeds, reduces operator fatigue and increases productivity.
- Soft-touch, color-coded, ergonomic controls are easy to grip, easy to learn and provide smooth, easy operation.
- Multiple tire options—18-inch (457-mm) air-filled tires; 18-inch (457-mm) urethane-filled, flat-proof tires; or 20-inch (508-mm) urethane-filled, flat-proof tires; all provide heavy-duty performance, stability and minimal tire deflection under load.
- Optional quad tracks for maximum stability and performance.

	U.S.	METRIC
DIMENSIONS		
Mobile length	110 in	2.79 m
Tie-down length	110 in	2.79 m
Length, max	116.5 in	2.96 m
Reach, max	97.5 in	2.48 m
Mobile height	75.5 in	1.92 in
Tie-down height	72.5 in	1.84 m
Attachment height, max	91.5 in	2.32 m
Attachment clearance	24.3 in	617 mm
Depth	65 in	1.66 m
2-ft flat bottom depth	61 in	1.55 m
Width	36 in	914 mm
Width, max	60.3 in	1.53 m
Attachment width	35.5 in	902 m
Angle of departure	25°	
Angle of approach	36°	
Bucket rotation	176°	
Unit mass	2,218 lb	1006 kg
Attachment mass	928 lb	421 kg
GENERAL		
Swing arc	170°	

Specifications are general and subject to change without notice. If exact measurements are required, equipment should be weighed and measured. Due to selected options, delivered equipment may not necessarily match that shown.

- 73-inch (1.85-m) hinge pin height provides the flexibility to perform an extensive range of tasks.
- Roomy, ride-on platform absorbs shock, reduces fatigue and keeps you out of dirt, mud and debris.
- Dual-element remote air cleaner provides outstanding filtration even in dusty conditions.
- Optional self-leveling kit—an exclusive feature—ensures that the attachment is level, so work can be more accurate and efficient.
- Kickstand for quick and easy attachment to and removal from the power unit.
- Exclusive traction-assist feature provides extra drawbar on demand, enabling you to push more, pull more and traverse soft ground with minimal tire slippage.
- 4-bar linkage on bucket curl increases rollback and dump angles so you can move materials more efficiently.
- Standard attachment plate provides maximum versatility; accepts more than 40 quick-change attachments.

	U.S.	METRIC
DIMENSIONS		
Mobile length	91.5 in	2.32 m
Tie-down length	29.8 in	757 mm
Length, max	91.5 in	2.32 m
Attachment length	45.7 in	1.16 m
Mobile height	53.5 in	1.36 m
Tie-down height	46.1 in	1.17 m
Attachment height, max	81.8 in	2.08 m
Bucket height, max	96 in	2.44 m
Hinge pin height	73 in	1.85 m
Dump clearance	55.5 in	1.41 m
Width	36 in	914 mm
Attachment width	23 in	584 mm
Angle of departure	25°	
Dump angle	53°	
Rollback angle	18°	
Unit mass	1,889 lb	856.8 kg
Attachment mass	373 lb	169 kg
Tipping capacity	864 lb	391.9 kg
Rated operating capacity (50% of tipping capacity)	432 lb	196 kg

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ZAHN® R300 VIBRATORY PLOW



- Variable blade pitch allows operator to change the angle of the leading edge of the blade to be more or less aggressive, to match soil conditions.
- Accepts standard Ditch Witch® vibratory plow blades, eliminating the need to purchase new blades.
- Optional reel carrier provides efficient installation of cable with minimal jobsite restoration.
- Optional sod cutter and skid shoes provide greater versatility and minimize restoration.
- Ergonomically designed operator's station features soft-touch, color-coded controls that are easy to learn and provide smooth, easy operation.
- 9-gallon (34.06-L) fuel tank enables you to work long hours without having to refuel; the tank's molded-in sight glass allows you to keep an eye on fuel consumption.
- Convenient cargo tray is large enough to store a water bottle, work gloves, cell phone, or assorted tools.
- Optional quad tracks for maximum stability and performance.

DIMENSIONS

	U.S.	METRIC
Mobile length	104.8 in	2.66 m
Tie-down length	101.8 in	2.59 m
Attachment length	55.5 in	1.41 m
Mobile height	56 in	1.42 m
Tie-down height	43 in	1.09 m
Attachment height, max	56 in	1.41 m
Operating depth	20 in	508 mm
Cover depth	18 in	457 mm
Width	36 in	914 mm
Attachment width	18 in	457 mm
Angle of departure	25°	
Angle of approach	30°	
Unit mass	1,839 lb	834.2 kg
Attachment mass w/blade	348 lb	157.9 kg

OPERATION

	U.S.	METRIC
Plow vibrator force @ 1,600 rpm	4,600 lb	20.46 kN
Material diameter, max		
Pulled	3 in	76 mm
Fed	1 in	25 mm

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ZAHN® R300 TRENCHER



- Accepts two types of trencher front ends, both of which concentrate weight on the digging chain so it can penetrate the ground easier.
- Hydraulic auger that runs independent of the headshaft (patent-pending feature) is standard on 4WD trenchers, optional on 2WD models; this feature reduces the amount of carryover, increasing productivity.
- Hydraulic drive eliminates maintenance of chains, belts and linkages, and allows the use of a reversible digging chain that dislodges rocks and other debris without manual assistance.

- High-performance, 30-hp (22.4-kW) Kohler® engine enables truly dedicated trenching performance.
- Two-wheel-drive models accept chains up to 8 inches (203 mm) wide; 4WD model accepts up to a 12-inch (305-mm) chain, so you can dig trenches for virtually any application.
- Multiple tire options—18-inch (457-mm) air-filled tires; 18-inch (457-mm) urethane-filled, flat-proof tires; or 20-inch (508-mm) urethane-filled, flat-proof tires; all provide heavy-duty performance, stability and minimal tire deflection under load.
- Optional quad tracks for maximum stability and performance.

DIMENSIONS	4-WHEEL DRIVE		HEADSHAFT AUGER		INDEPENDENT AUGER	
	U.S.	METRIC	U.S.	METRIC	U.S.	METRIC
Mobile length	126 in	3.2 m	90.5 in	2.3 m	90.5 in	2.3 m
Length, max	142.8 in	3.63 m	104.5 in	2.65 m	104.5 in	2.65 m
Attachment length	58.5 in	1.49 m	58.5 in	1.49 m	58.5 in	1.49 m
Wheelbase	34.2 in	869 mm	44.2 in	1.12 m	44.2 in	1.12 m
Mobile height	65 in	1.65 m	53.5 in	1.36 m	53.5 in	1.36 m
Tie-down height	30.5 in	775 mm	31.7 in	805 mm	31.7 in	805 mm
Attachment height, max	101 in	2.57 m	49.3 in	1.25 m	49.3 in	1.25 m
Operating depth, max	48 in	1.22 m	36 in	914 mm	36 in	914 mm
Width	36 in	915 mm	36 in	914 mm	36 in	914 mm
Cutting width	4-12 in	102-305 mm	4-8 in	102-203 mm	4-8 in	102-203 mm
Spoils width	16 in	406 mm	13.8 in	351 mm	16 in	406 mm
Centerline of trench, left	14 in	356 mm	18.5 in	470 mm	18.5 in	470 mm
Centerline of trench, right	22 in	560 mm	17.5 in	445 mm	17.5 in	445 mm
Attachment width	30.5 in	775 mm	34 in	864 mm	33 in	838 mm
Angle of departure	25°		25°		25°	
Attachment travel, down (recommended)	60°		60°		60°	
Attachment travel, up (recommended)	40°		50°		50°	
Unit mass	1,953 lb	885.9 kg	1,438 lb	652.3 kg	1,488 lb	674.9 kg
Attachment mass w/36-in boom and 8-in chain	462 lb	209.6 kg	420 lb	190.5 kg	440 lb	199.6 kg

NOTE: SPECIFICATIONS CONTINUED ON NEXT PAGE

ZAHN® TRENCHER SPECIFICATIONS CONTINUED

HEADSHAFT SPEEDS @ 3,600 RPM ENGINE	4-WHEEL DRIVE		HEADSHAFT AUGER		INDEPENDENT AUGER	
	U.S.	METRIC	U.S.	METRIC	U.S.	METRIC
Low speed/high torque	186 rpm		186 rpm		186 rpm	
Medium speed/medium torque	244 rpm		244 rpm		244 rpm	
High speed/low torque	282 rpm		282 rpm		282 rpm	
POWER TRAIN						
Digging chain drive	Hydraulic direct drive		Hydraulic direct drive		Hydraulic direct drive	
Digging chain	33,000 lb or 35,000 lb		33,000 lb or 35,000 lb		33,000 lb or 35,000 lb	
Spoils handling drive	Hydraulic, independent		Hydraulic, independent		Hydraulic, independent	
Chain drive sprocket	Forged and tempered		Forged and tempered		Forged and tempered	
OPERATION						
Digging chain speed						
Min	230 ft/min	70.1 m/min	290 ft/min	88.4 m/min	230 ft/min	70.1 m/min
Max	290 ft/min	88.4 m/min	364 ft/min	111 m/min	364 ft/min	111 m/min
Trench cleaner type, mechanical						
Min	4 in	102 mm	4 in	102 mm	4 in	102 mm
Max	12 in	305 mm	8 in	203 mm	8 in	203 mm
Spoils handling						
Auger size						
Auger size	6.18-in OD x 2-in ID x 17.25-in long		18-in OD x 2-in ID x 8.7-in long		6.18-in OD x 2-in ID x 17.25-in long	
TIRES/PRESSURE						
Urethane-filled trail wheel	N/A	N/A	16 x 6.5-8, ply, bar lug		16 x 6.5-8, ply, bar lug	
Tire assembly mass	N/A	N/A	18 lb	8.16 kg	18 lb	8.16 kg

ZAHN R300 POWER UTILITY SPECIFICATIONS

	U.S.	METRIC
DIMENSIONS		
Mobile length	70 in	1.78 m
Wheelbase	34.2 in	869 mm
Tractor back to rear axle	26.8 in	681 mm
Rear axle to attachment mounting	19.2 in	488 mm
Attachment mounting to front axle	15 in	381 mm
Mobile height	53.5 in	1.36 m
Ground clearance	5.3 in	135 mm
Platform height	10.7 in	272 mm
Width	36 in	914 mm
Angle of departure	25°	
Weight w/tires	1,290 lb	585 kg
Weight w/tracks	1,629 lb	738 kg
Mass	1,290 lb	585 kg
Vehicle clearance circle (SAE) wall to wall		
Right turn, 18 x 9.5-8 tires	11.3 ft	3.44 m
Left turn, 18 x 9.5-8 tires	10.5 ft	3.2 m
Right turn, tracks	15.8 ft	4.80 m
Left turn, tracks	16.7 ft	5.08 m
OPERATION		
Ground drive speed, forward/reverse		
Low	3.5 mph	5.6 km/h
High	5 mph	8 km/h
HYDRAULIC SYSTEM		
Auxiliary: gear pump		
Flow rate	12 gpm	46 l/min
Pressure	3,000 psi	207 bar
Ground drive: hydrostat		
Flow rate	19.3 gpm	73 l/min
Pressure	3,500 psi	241 bar
Ground pressure		
18x9.5-8 tires	10 psi	.7 bar
20x10-8 tires	9 psi	.6 bar
Tracks, averaged	3.11 psi	.21 bar

	U.S.	METRIC
POWER		
Engine	Kohler® CH750S	
Fuel	Gasoline	
Cooling medium	Air	
Number of cylinders	2	
Displacement	45.6 in ³	747 cm ³
Bore	3.3 in	83 mm
Stroke	2.7 in	69 mm
Manufacturer's power rating	27 hp	20.1 kW
Rated speed	3,600 rpm	
POWER TRAIN		
Parking brake	Mechanical, hand operated	
Service brake	Ground drive speed/direction control brakes machine hydraulically when moved to neutral position	
FLUID CAPACITIES		
Fuel tank	9 gal	34.06 L
Engine oil, w/filter	2 qt	1.9 L
Hydraulic reservoir	7.7 gal	29.1 L
Total hydraulic system volume	8.5 gal	32.2 L
TIRES/PRESSURE		
18 x 9.5-8, 2 ply, bar lug	12 psi	82.7 kPa
Tire assembly mass	22 lb	9.98 kg
Urethane filled 18 x 9.5-8, 2 ply, bar lug		
Tire assembly mass	36 lb	16.33 kg
Urethane filled 20 x 10-8, ply, bar lug		
Tire assembly mass	49 lb	22.23 kg
18 x 8.5-8, 2 ply, turf	22 psi	151.7 kPa
Tire assembly mass	20 lb	9.07 kg
BATTERY		
SAE reserve capacity rating	32 min	
SAE cold crank rating @ 0°F (-18°C)	200 amps	

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