

ZAHN[®] R300

 **Ditch Witch[®]**



POWER UTILITY

ZAHN® R300 POWER UTILITY



2

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

1

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

12

Robust, 30-hp (22.4-kW) Kohler® engine maximizes front-end productivity.

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.

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.

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



- 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.

ZAHN® R300 TOOL CARRIER



- 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 |
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| 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.

| | U.S. | METRIC |
|---------------------------------|----------|----------|
| DIMENSIONS | | |
| 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 | | |
| 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

| | 4-WHEEL DRIVE | | HEADSHAFT AUGER | | INDEPENDENT AUGER | |
|-------------------------------------|--------------------------------------|------------|----------------------------------|------------|--------------------------------------|------------|
| HEADSHAFT SPEEDS @ 3,600 RPM ENGINE | 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 | Single open end auger | | Single open end auger | | Single open end auger | |
| 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 |
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| 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 |
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| POWER | | |
| Engine | Kohler® CH750S | |
| Fuel | Gasoline | |
| Cooling medium | Air | |
| Number of cylinders | 2 | |
| Displacement | 45.6 in³ | 747 cm³ |
| Bore | 3.3 in | 83 mm |
| Stroke | 2.7 in | 69 mm |
| Manufacturer's power rating | 30 hp | 22.4 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 | N/A | |
| Tire assembly mass | 36 lb | 16.33 kg |
| Urethane filled 20 x 10-8, ply, bar lug | N/A | |
| 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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