



HydroJect® 3010 Specifications*

HYDROJECT 3010 POWER TRAIN SYSTEM	
ENGINE	Kohler® CH740, 4-cycle, opposed twin, air cooled, 27 hp (20 kW) @ governed maximum 3600 rpm (gross). 44 cu. in. (725 cc) displacement. Electric start. Solid state electronic ignition. Heavy-duty air cleaner. 2 quart (1.9 liter) oil reservoir.
FUEL SYSTEM	10.5 gallon (39.7 liter) fuel capacity for over four hours of operation. Includes fuel shut off valve. Uses unleaded gasoline.
TIRES/WHEELS	Three interchangeable, smooth tread tires; 18 x 9.50-8, 2-ply, pneumatic, tubeless tires with drop center demountable rims.
TRACTION DRIVE	Hydrostatic variable volume pump and low speed, high torque, 24 cu. in/rev wheel motor. 5 quart (4.7 liter) reservoir and suction line with 25 micron filter. Traction to propel unit is through single drive/steer tire at tiller. Traction pump driven by continuously engaged belt.
TRACTION CONTROL	Traction control lever moves back and forth to control variable speed and traction direction.
TRANSPORT LIFT	12 volt linear screw actuator, 6" (15 cm) stroke; raises and lowers lift arm/transport tires and activates hole spacing.
GROUND SPEED & SPACING	Aerating speed: 0-2 mph (0-3.2 km/h) (both directions). Transport speed (capable only when up on all three tires): 0-4 mph (0-6.4 km/h) (both directions).
	Spacing in the Direction of Travel inches (cm)
	1.5" (3.8) 3.0" (7.6) 4.5" (11.4) 6.0" (15.2)
	Productivity (sq.ft./h) (sq.m./h)
	6,500 (604) 13,000 (1,208) 19,500 (1,812) 26,000 (2,415)
BRAKE	Drum and shoe type parking brake.
ELECTRICAL SYSTEM	12 volt, Group 28 battery with 525 cold cranking amps. 20 amp charging system with circuit breaker protection. Solid state potted electrical controller and sealed weather pack connections.
FRAME	Formed and welded steel construction.
CONTROLS/GAUGES	Engine panel: throttle, choke, key switch, hour meter, supply water pressure gauge, circuit breaker, roller wash control and spacing control lever. Steering handle: bidirectional traction lever, aeration start and stop buttons, transport/aerate lift toggle switch, and parking brake with buzzer.
AERATE WIDTH	33" (83.3 cm); with 11 nozzles spaced every 3" (7.6 cm).
OVERALL DIMENSIONS & WEIGHT (APPROX.)	Height 38.2" (97 cm)
	Length 96" (245 cm)
	Width 63" (160 cm)
	Wheelbase 53" (135 cm)
	Weight 1,120 lbs. (508 kg)

WATER INJECTION SYSTEM																			
WATER SUPPLY	Required water supply: 8 gpm @ 20-80 psi (30.3 liters/m @ 1.3-5.5 bars). A water pressure sensor disengages the water system if the water supply at machine drops below 20 psi (1.3 bars). Supply water filter with replaceable 5 micron element; P/N 86-8620. Quick connect water hose coupling for attaching to water hose supply.																		
PUMP	Toro exclusive stainless steel head, 3 piston type with forged crank shaft, stainless push rods. Nominal performance is 4 gpm @ 5000 psi (15 liters/m @ 344.8 bars). Pump is driven by two belts electromagnetically engaged.																		
ACCUMULATOR	Water energy storage device; nitrogen gas charged to a maximum of 2500 psi (172.4 bars).																		
CAM CASE	Cam actuates valve to release water to the manifold at 5.3 cycles per second (320 injection/m). Case also serves as a 4 quart (3.8 liters) oil reservoir. Cam gear electromagnetically engaged and driven through flexible coupling from engine.																		
VALVE	Valve housing provides high pressure water passage area. Pressure balanced valve spool with hardened stainless seat. Bleed valve in base allows bleed off of high pressure and drain down for cold weather storage. Bolted flanges and O-rings mate all components to valve body.																		
ROLLERS	Pivoting aluminum rollers reduce compactive ground pressure and uniformly smooth the surface. Adjustable flow spray wash system maintains clean rollers. Variable roller washing requires up to 4 gpm (15 liters/m) additional water flow.																		
PRESSURE RELIEF VALVE	Poppet type preset to 5000 psi (344.8 bars). Corrosion resistant stainless and brass materials.																		
MANIFOLD/NOZZLES	Stainless steel nozzle bodies with check valves and hardened stainless steel discharge orifices. Check valves may be reversed in housing to block unused nozzles. Optional sizes/diameters with staggered pattern available.																		
NOZZLE SIZE & DEPTH CHART	<table border="1"> <thead> <tr> <th>Drill Size</th> <th>Nozzle Size Inches</th> <th>Nozzle Size mm</th> <th>Approximate Depth**</th> <th>Maximum # of Nozzles in Use</th> </tr> </thead> <tbody> <tr> <td rowspan="3">Standard</td> <td>#53</td> <td>.0595</td> <td>4-6" (10-15 cm)</td> <td>11</td> </tr> <tr> <td>#46</td> <td>.0810</td> <td>5-7" (13-18 cm)</td> <td>6 (must block 5 nozzles)</td> </tr> <tr> <td>#56</td> <td>.0465</td> <td>3-4" (10-15 cm)</td> <td>6 (use w/ five #46 nozzles)</td> </tr> </tbody> </table>	Drill Size	Nozzle Size Inches	Nozzle Size mm	Approximate Depth**	Maximum # of Nozzles in Use	Standard	#53	.0595	4-6" (10-15 cm)	11	#46	.0810	5-7" (13-18 cm)	6 (must block 5 nozzles)	#56	.0465	3-4" (10-15 cm)	6 (use w/ five #46 nozzles)
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**Depths beyond 20" (51 cm) can be obtained using additional shots. See Operator's Manual for complete details.																			
OPTIONS	Wetting Agent; (2) 2.5 gallon (9.5 liter) jugs, P/N 86-8530. 25 Micron Pre-filter and Filter Body, P/N 80-9590 and 80-8600. Injection System (09830) allows metering of wetting agent into water supply. Lift Kit (09831) allows aeration to occur in the raised position.																		
WARRANTY	Two year or 500 hour limited warranty; 120 days for contract or rental use. Refer to the Operator's Manual for further details.																		

* Specifications and design subject to change without notice. Products depicted in this literature are for demonstration purposes only. Actual products offered for sale may vary in use, design, required attachments and safety features. Consult your local Toro Distributor.

The HydroJect 3000 is manufactured in Tomah, WI ISO 9002 Certified Plant.

