



Trashmaster 3-90E

Landfill Compactor Specifications

Horsepower:	525 hp (391 kw) @ 2,100 rpm
Application:	Extreme Service Landfill Compaction
PU:	up to 767 lbs./linear inch (137 kg/linear cm)
Compaction Width:	13 ft. 8 in. (4166 mm)



**The highest landfill
compaction force
in the industry**

CMI TRASHMASTER 3-90E Landfill Compactor



DIESEL ENGINE

- Cummins Model QSK-19, 525 hp (391 kW) @ 2,100 rpm.
- Turbo charged and charge air-cooled.
- Fuel, lube oil and coolant filters; dry-type, replaceable air cleaner with safety element and service indicator.
- 46 in. (1168 mm) blower fan.
- The QSK-19 features robust design components, superior fuel economy, long life.



SELF-DIAGNOSTIC DRIVE SYSTEM MONITOR (DSM)

Protects power train components from failure due to:

- Low engine oil pressure.
- High engine coolant temperature.
- Loss of engine coolant.
- High hydrostatic oil temperature.
- Low hydrostatic charge pressure.
- Low battery voltage.
- High pump drive box lube oil temperature.

If the monitoring system detects a developing problem, it activates an in-cab audible and visual alarm and either automatically shuts down the engine or reduces engine speed before serious damage occurs.

DSM gauges identify the source of a problem to simplify troubleshooting and servicing.



POWER TRAIN

Engine power drives each hydrostatic system through a pump drive box which provides power to drive four variable displacement pumps, four variable displacement motors and four planetary wheel drives. A load controller in the hydrostatic system keeps engine at or near rated speed.

- Each wheel is driven independently by its own hydrostatic drive system. Each system consists of a flooded suction inlet, charge pressure filter, variable displacement pump and motor sharing a common hydrostatic reservoir with non-bypass suction filtration. Return oil is routed through an oil-to-air cooler with supplemental oil being automatically filtered and supplied from the main hydraulic reservoir.



GAUGES/INDICATORS

- Tachometer, engine oil pressure, engine coolant temperature, fuel level gauge, voltmeter, hour-meter, air filter service indicator, parking brake light and buzzer, belly pan up light, pump drive box temperature.
- Self-diagnostic DSM instrumentation with separate gauges for each hydrostatic drive system with an audible and visual alarm.



ELECTRICAL

- 24 volt system, two 8D 12 volt batteries.
- 75 amp alternator, heavy-duty starter and service shutoff.
- All wiring loom protected or run in water-tight conduit.
- Remote master disconnect switch located in cab.
- Eight, cab-mounted, 50 watt halogen lights; two front and two rear.
- Movable engine compartment service light with magnetic base.



COOLING SYSTEM

- Specially designed, large capacity, steel framed, aluminum cored, independent side-by-side radiator/oil cooler/CAC with widely-spaced fins and inline tubes; two side clean out doors; radiator sight glass and thermostatically controlled oil cooler by-pass valve for rapid, cold weather, hydrostatic system warmup.



WHEELS

- Four, large 85.5 in. (2172 mm) diameter wheels are designed to exert highest compaction force.
- Constructed of alloy steel
- 1.5 in. (38 mm) outer wrapper with .5 in. (13 mm) hard surfacing on the inner and outer wheel circumference.
- Wheel width front is 35 in. (889 mm); rear is 40 in. (1016 mm).
- Higher total ground clearance of 35 in. (889 mm).
- Inner wheels protected by labyrinth type antiwrap discs and cable traps.
- Two 19 in. (483 mm) quick opening access covers for easy visual inspection.



CLEATS

- Big Dog cleats, constructed of manganese alloy steel, provide a crisp chopping to reduce refuse size.
- The exclusive contour design of CMI cleats eliminates surface fluffing.
- CMI cleats are self-cleaning, discourage build-up and eliminate the need for power-robbing raker bars.
- Optional 2 piece Trak Lok™ and 7.25 in. (184 mm) high Terra Twist Torque® cleats available.



FENDERS

- All wheels are fender covered and available with optional integral striker bars.
- Fixed antiwrap discs fit inside the rotating wheel drum to form a labyrinth seal for superior wheel and planetary drive protection. Each planetary wheel drive also has its own multiple labyrinth seal guard.
- Cable traps provide added protection for wheel drive seals.
- Hand rails and steps provide sure cab access.



FRAME

- Front and rear frames are constructed of heavy steel plate weldments.
- Frames are connected by large, hardened steel pins riding in large, tapered roller bearings.
- Massive box section steel castings support each planetary wheel drive.



BRAKES

- Hydrodynamic service brake for each wheel.
- Oil cooled parking/emergency wet fail-safe brakes on rear wheels are spring applied with automatic hydraulic release.

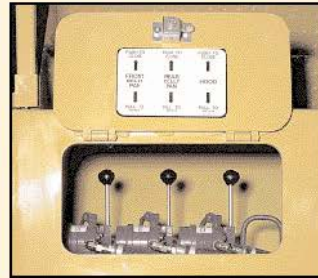
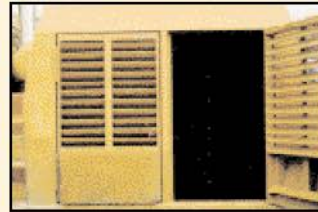


HYDRAULICS / STEERING AND BLADE

- Suction and return filters, with indicators, filter all oil entering and leaving the hydraulic reservoir.
- Tandem gear pump provides independent oil supply to the steering and blade systems.
- Steering and blade spool valves include high pressure reliefs, steering system anti-cavitation checks and cylinder port cross-over relief valves.

These exclusive features are designed to provide fast, easy service access.

- ✚ For underneath access, two, heavy-duty reinforced belly pans swing up and down hydraulically. Separate pin lock system secures belly pans in up position.
- ✚ The reinforced steel articulation doors swing open for easy access and are secured by a positive pin lock system.
- ✚ Fenders provide stable service platforms and deflect debris.
- ♦ Hydrostatic drive system in cab gauges for wheel traction system charge pressure and oil temperature.



- ✚ Hydraulically actuated, heavy-gauge tilt hood.
- ✚ Heavy radiator grill doors swing out for easy radiator cleaning and radiator / oil cooler servicing.
- ♦ Control for tilt hood and belly pans is conveniently located in rear fender step.

- ♦ Articulated, full-power steering is actuated by two 5 x 20.5 in. (127 x 521 mm) cushioned hydraulic cylinders powered by an independent 39 gpm (148 lpm) pump for easy operation and maximum maneuverability.
- ♦ Cylinders are located high – away from debris.
- ♦ All hoses are located inside the mainframe for maximum protection.
- ♦ Total articulation is 64 degrees.

CONTROLS / STEERING & BLADE

- ✚ A joystick control is mounted on each seat arm rest.
- ♦ One joystick controls blade operation and forward/neutral/reverse propulsion.
- ♦ The other joystick controls steering and work range (2) speed selection.
- ♦ Each joystick has a horn button.
- ♦ Machine reversals can be made at maximum engine rpm without power train shocks.
- ♦ Blade and steering controls are independent of hydrostatic systems for smooth operation.

- ♦ Joystick input and output are transmitted through durable inductive coupling technology for long life operation. No solenoids. No mechanical linkages. No lubrication. Spool sniffing is enclosed and operates in oil.
- ♦ Self diagnostic LED indicators simplify troubleshooting.

CAB FEATURES

- ♦ A fully enclosed, sound suppressed structure with insulated walls and heavy-duty floor matting.
- ✚ High back, side facing seat with lumbar support is suspension mounted, adjusts six ways and features breathable cloth upholstery.
- ♦ Heater and defroster fans.
- ✚ Large windows all around for best 360 degree visibility in the industry.
- ♦ Independent ROPS.
- ♦ Tinted safety glass.
- ♦ Front and rear windshield wipers and washers.

- ♦ Front clean out door.
- ✚ Fenders, stairs and handrails provide sure access to the cab.

BLADE

- ✚ A 16 ft. wide x 7 ft. high (4877 x 2134 mm) semi-U shaped blade directs trash under the wheels.
- ♦ Full-width, rugged trash screen with 1 in. (25 mm) square bars.
- ♦ Blade controlled by a single 6 x 40 in. (152 x 1016 mm) hydraulic cylinder powered by an independent 50 gpm (189 lpm) pump for easy operation with up, down, hold and float positions. Cylinder and both exposed hydraulic lines are located high and guarded for maximum protection.
- ♦ Cutting edges are reversible for extended life.

✚ Denotes CMI standard features which may only be available at extra cost from competitors.



Powerful, yet simple to service and maintain – Each of four wheels is driven by an independent hydrostatic drive traction system consisting of a variable displacement pump, variable displacement motor, non-bypass charge pressure filter and a planetary wheel drive.

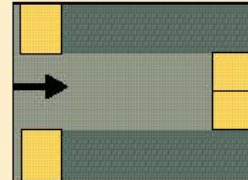
A common pump drive box, reservoir, non-bypass suction filter and oil cooler complete the hydrostatic drive traction system.

The Best Compaction In The Industry

At up to 800 PLI, the 3-90E Trashmaster exerts the greatest compaction force available in the industry. The reason is its triangular wheel configuration. Machine weight is equally distributed across three points of contact.

The result is:

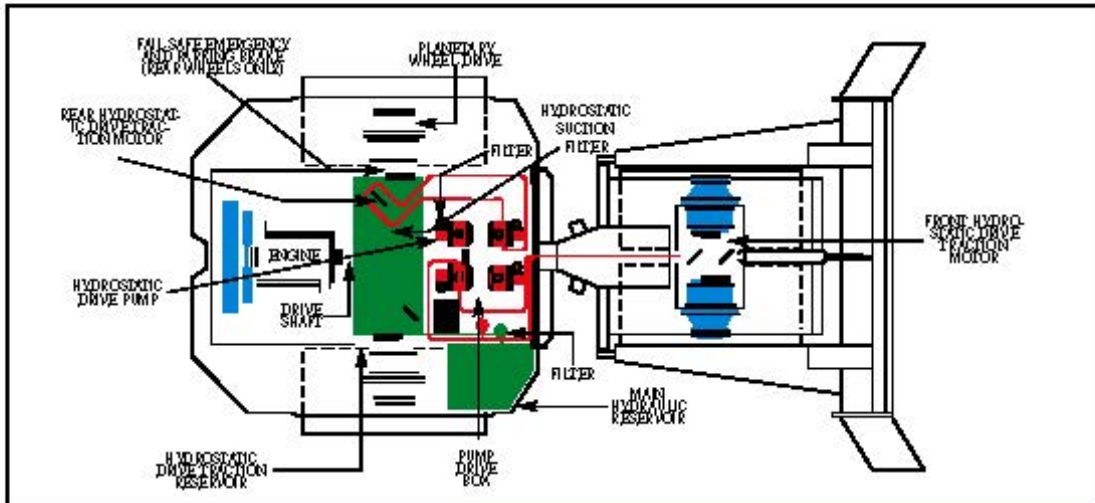
- ☞ Much greater compaction pressure than its competitors.
- ☞ Greater landfill densities than competitors.
- ☞ Superior efficiency because of its single-pass, full-width compaction.



Consult the CMI PLI Story for more details.

☞ Denotes CMI standard features which may only be available at extra cost from competitors.

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Easy troubleshooting – Each hydrostatic drive system has its own gauges for monitoring traction system charge pressure and oil temperature, and is integrated with an automatic engine shutdown or speed reduction on fault. The source of the problem is identified. Gauges are located in the cab with individual indicator lights and audible alarm on the instrument panel.

Test ports are also located throughout the system to further facilitate troubleshooting. For convenience, a service light with extension cord and magnetic base is located in the engine compartment.

Hydrostatic Drive

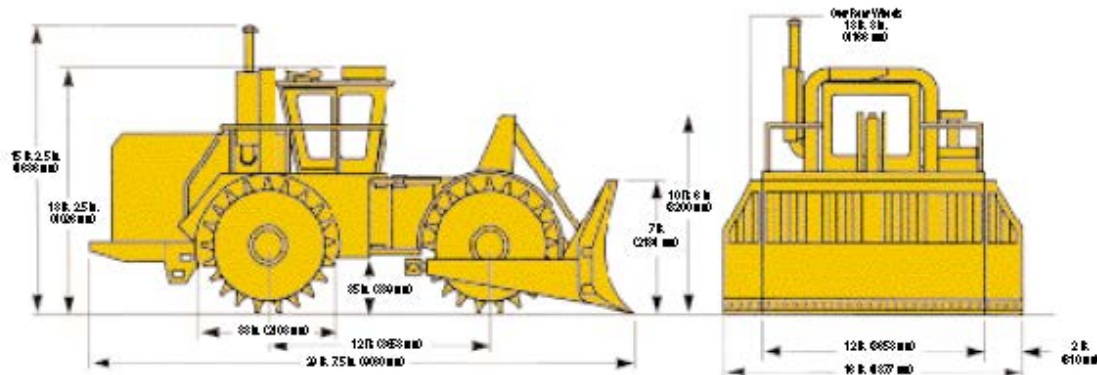
The system behind 3-90E's awesome pushing power

CMI 3-90E Trashmaster profiles a superior level of pushing, climbing and compaction power no others can match — thanks to the high-performance power train system which is composed of a Cummins 525 hp QSK 19 diesel engine coupled with Trashmaster's proven hydrostatic drive system, plus extra-large diameter wheels and our ultra-efficient blade design.

On the landfill, this system has no equal. Fact is, the 3-90E power train is backed by a decade of landfill compaction experience, and field-proven results.

The new age of landfill design has begun. The large, high volume landfills are being designed to handle the world's growing waste stream. CMI's 3-90E Trashmaster offers unequalled compaction efficiency to maximize the capacity of your landfill sites, as well as the return on your investment.

CMI TRASHMASTER 3-90E Landfill Compactor



	English	Metric		English	Metric
Compactive Stress			Capacities		
Crushing (Crest)*	9,340 psi	660 kg/cm ²	Engine Coolant System	33 gals.	125 liters
Compressing (Wheel)*	up to 767 FLI*	137 kg/cm ²	Engine Crankcase	16 gals.	45 liters
Machine Dimensions			Fuel	294 gals.	886 liters
Compaction Width	13 ft. 8 in.	4166 mm	Hydraulic System	110 gals.	454 liters
Inside Turning Radius	12 ft. 4 in.	3750 mm	Hydrostatic System	60 gals.	280 liters
Outside Turning Radius	26 ft.	7925 mm	Wheel Ends	25 qts.	23.7 liters
Blade Raise Above Grade	48 in.	1219 mm	Optional Equipment		
Blade Lower Below Grade	6 in.	152 mm	Air Conditioner With		
Ground Clearance	35 in.	889 mm	Cab Pressurizer	140 lbs.	64 kg
Operating Weight*	up to 115,000 lbs.*	52163 kg	Back-up Alarm	4 lbs.	2 kg
Shipping Specifications			Cab Fire Extinguisher	20 lbs.	9 kg
Shipping Weight	up to 115,000 lbs.*	52163 kg	Cold Weather Starting	12 lbs.	6 kg
Shipping Height	13 ft. 2.5 in.	4026 mm	Fire Suppression System	115 lbs.	52 kg
Shipping Width Over			Trak Lok™ Two-Piece		
Guard Rails	12 ft.	3658 mm	Replaceable Cleats	1,944 lbs.	882 kg
Shipping Length			Vandal Kit	14 lbs.	6 kg
With Blade and with	28 ft. 8 in.	8798 mm	Terra Twist Torque®	1,845 lbs.	837 kg
blade wings stored			Wheel Rakers	1,201 lbs.	587 kg
*Depending on options					

CMI TRASHMASTER — the most efficient compactor available!



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