

700 • 1,000 lbs

Yale® motorized hand trucks combine the latest in state-of-the-art technology and ergonomics making Yale the leader for motorized hand applications.

The Yale Tow Tractors are primarily used for low-level order picking and horizontal transportation.

Tractor/tugger capacity ratings are based on drawbar pull. Drawbar pull is the force required to tow trailers.

Controls

The control handle design provides full control of travel, steering and horn and allows for optimum maneuverability from the ride or walk beside position. Vertical adjustment of the control handle allows for a comfortable driving stance and the flexibility to move the handle forward to a locked position for easy access to the battery.

Travel: Full width grips allow smooth speed control with either the right or left hand. A high-speed or “rabbit” speed foot switch is on the floor of the operator’s compartment.

Operator’s Compartment

The ergonomically designed operator’s compartment is a roomy 20.8” deep and 32” wide. The forward bulkhead and operator’s backplate are padded. The 1” thick cushioned floormat absorbs shock

and helps reduce operator fatigue. The floormat is removable for cleaning. The compartment step height is 9.8”.

Electrical System

The electrical system utilizes AC drive technology designed for exceptional performance. High starting torque and smooth acceleration are a few factors benefited from this technology. A speed sensor built into the motor provides feedback to the control system, allowing motor speed and direction to be continuously monitored. The MTR provides industry leading acceleration and a top speed up to 9 mph.

CANbus Communication Technology

streamlines communications between truck systems. The control handle, controller, display and optional power assist steer communicate via the CANbus network. CANbus reduces wiring and electrical connections.

A Thermal Management System continuously monitors traction motor and motor controller temperatures, and if necessary, the system gradually adjusts performance to protect truck systems.

The traction control system includes Auto Deceleration. This feature decelerates the truck as the throttle is returned toward neutral. The Auto Deceleration System reduces the need to manually apply the service brake.

The controller has a programmable set-up including parameters for acceleration, top speed, plugging and Auto Deceleration. Diagnostics information can be read using a hand-held programmer tool or by viewing the LED status indicator mounted on the controller.

AC Traction System

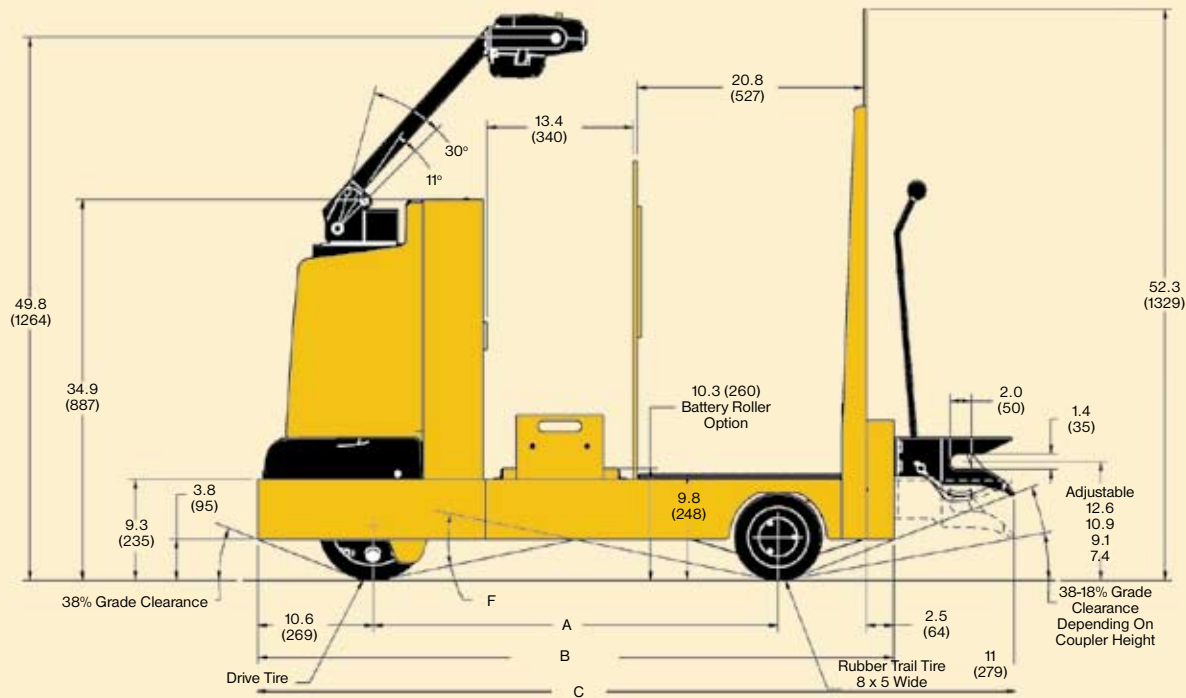
The traction system consists of the traction motor, gearbox, and brake. The innovative gear box design incorporates maintenance free steer bearings, a stationary mounted traction motor, integrated motor pinion, and drive axle string guard. The permanently lubricated steer bearings are sealed within the gearbox housing. The stationary traction motor eliminates power cable tension and flex. The integral pinion and support bearings optimize the gear mesh resulting in a quieter gearbox. The splined coupling allows for quick removal and installation of the traction motor. The drive axle string guard minimizes axle seal damage from shrink-wrap, banding, etc. The electrically released/mechanically applied brake is mounted on the top of the traction motor for ease of inspection and service.

The **on-board software** allows certified personnel access to programming, test and diagnostic functions without the need of a handset or special tools. More in-depth programming can be performed by the servicing dealer using a PC service tool. Certified technicians can customize the performance of the truck to meet the customer’s particular application. The truck features four operator selectable modes, as well as two master level performance settings.

(continued on back)



Truck shown with optional equipment



MTR005-F TRUCK DIMENSIONS

Drawbar Pull Capacity	700 lbs.	
Rolling Load Capacity*	10,000 lbs.	
	DIM	in (mm)
Wheelbase	A	37.1 (942.3)
Chassis Length	B	58.3 (1480.8)
Overall Length	C	69.3 (1760.2)
Outside Turning Radius	D	49.2 (1249.7)
Steer Handle Radius	E	37.1 (942.3)
Grade Clearance	F	43%

Note: *Typical capacity based on level grade and tow trailers with solid compound tires

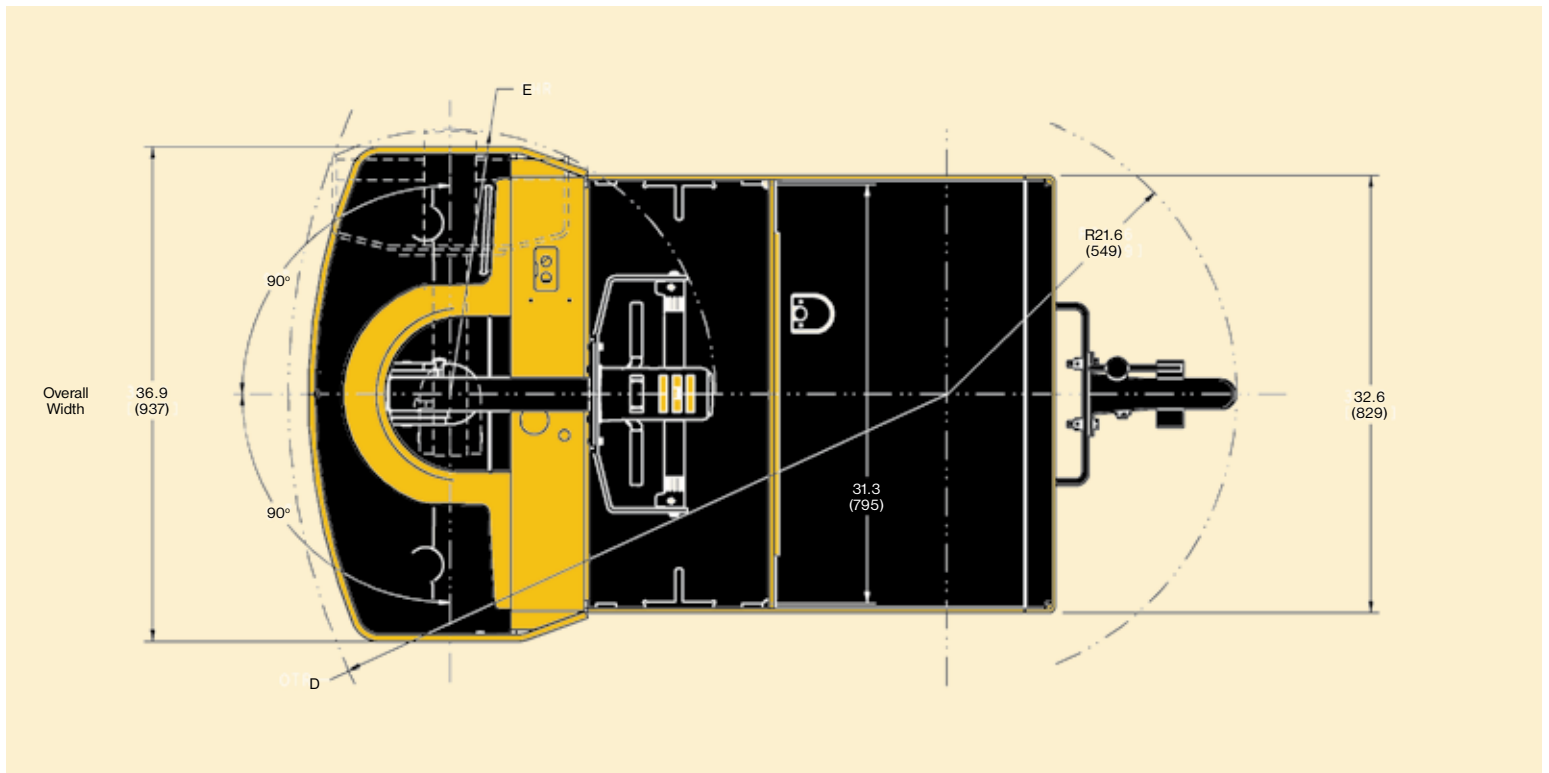
MTR005-F BATTERY AND COMPARTMENT SPECIFICATIONS

24 Volt - MTR005-F Capacity Tow Tractor

BATTERY COMPARTMENT: 31.3 (795) X 13.4 (340) X OPEN

Number of Cells	Cell Size	Plates per Cell	Capacity 6 Hour Rate amp hr (kwh)	Battery Dimensions			Max. Weight lb. (kg)
				"X"	"Y"	"Z"	
				in. (mm)	in. (mm)	in. (mm)	
12	75	11	375 (8.7)	26.5 (673.1)	13.0 (330.2)	23.3 (591.8)	825 (374.2)
12	85	11	425 (9.9)	26.1 (662.9)	12.8 (325.1)	23.3 (591.8)	865 (392.3)
12	75	13	450 (10.5)	30.9 (784.8)	13.0 (330.2)	23.3 (591.8)	987 (447.7)
12	85	13	510 (11.9)	30.9 (784.8)	13.0 (330.2)	23.3 (591.8)	1035 (469.5)

- Notes:
- 1) Steel tray with cover is required for all batteries
 - 2) Battery connector type is 175A Red for 24 volt (Gray is optional)
 - 3) Cable lead position "B"
 - 4) 16" cable length
 - 5) Maximum cable gauge of 1/0



MTR007-F TRUCK DIMENSIONS		
Drawbar Pull Capacity	1,000 lbs.	
Rolling Load Capacity*	15,000 lbs.	
	DIM	in (mm)
Wheelbase	A	39.2 (995.7)
Chassis Length	B	60.3 (1531.6)
Overall Length	C	71.3 (1811.0)
Outside Turning Radius	D	51.9 (1318.3)
Steer Handle Radius	E	21.6 (548.6)
Grade Clearance	F	41%

Note: *Typical capacity based on level grade and tow trailers with solid compound tires

MTR007-F BATTERY AND COMPARTMENT SPECIFICATIONS							
24 Volt - MTR007-F Capacity Tow Tractor							
BATTERY COMPARTMENT: 31.3 (795) X 13.4 (340) X OPEN							
Number of Cells	Cell Size	Plates per Cell	Capacity 6 Hour Rate	Battery Dimensions			Max. Weight
				"X"	"Y"	"Z"	
			amp hr (kwh)	in. (mm)	in. (mm)	in. (mm)	lb. (kg)
12	75	11	375 (8.7)	26.5 (673.1)	13.0 (330.2)	23.3 (591.8)	825 (374.2)
12	85	11	425 (9.9)	26.1 (662.9)	12.8 (325.1)	23.3 (591.8)	865 (392.3)
12	75	13	450 (10.5)	30.9 (784.8)	13.0 (330.2)	23.3 (591.8)	987 (447.7)
12	85	13	510 (11.9)	30.9 (784.8)	13.0 (330.2)	23.3 (591.8)	1035 (469.5)
12	100	13	600 (14.0)	30.9 (784.8)	13.0 (330.2)	26.2 (665.5)	1140 (517.1)
12	125	13	750 (17.6)	30.9 (784.8)	13.0 (330.2)	31.0 (787.4)	1450 (657.7)

- Notes:
- 1) Steel tray with cover is required for all batteries
 - 2) Battery connector type is 175A Red for 24 volt (Gray is optional)
 - 3) Cable lead position "B"
 - 4) 16" cable length
 - 5) Maximum cable gauge of 1/0

Brake

The brake is an electrically released, spring applied, electro-mechanical brake. Plugging or braking using the hand levers are acceptable methods for stopping the truck. Within the range of motion for the brake levers there are two "zones". The first zone applies regenerative braking. The second zone fully applies the brake. The hand brake mechanism is equipped with a detent in order to provide the operator with an indication between the regenerative braking range and fully applying the brake.

Park brake is engaged when the brake switch located on the cowl is turned to the "on" position. The key switch turned to the "off" position will also engage the park brake.

Frame

Heavy gauge plate and bar steel frame is electrically welded into unitized structure for rigidity and strength. The front bumper is a full 1/2" thick for toughness and 3-5/8" off the floor to allow for good ramp and dockplate clearance.

Electrical compartment cover is a durable engineered thermo-plastic elastomer and conveniently snaps into place.

Wheels

Trail wheels - The standard trail wheels are a rubber compound measuring 8" x 5". Poly trail wheels are optional. The larger wheels improve ride comfort.

The drive tire for the MTR005-F is 10" x 5". The drive tire for the MTR007-F is 12" x 4.5". A 90 durometer polyurethane compound is standard on both trucks. The drive wheel is secured to the drive axle with five bolts.

Coupler

The MTR features as standard an automatic latching, manually released jaw type coupler. The coupler height is adjustable from 7.4" to 12.6" high for a variety of application needs. This highly efficient coupler is engaged and disengaged by a simple hand lever and is designed for positive engagement and quick release, cycle after cycle.

Additional Features

The horn switch is conveniently located on the control handle. The key switch is positioned on the frame cowl. Paint: Gold and black.

Options

- Cold Storage/Freezer Packages
- 25" wide handle
- Premium Backpad - 3" thick and includes integral armrest
- Coupler - Pin Type
- Battery Rollers: Height from top of rollers to floor is 10.3"
- Battery Mounted Convenience Tray
- Pick Assist Control Handle
- Display with BDI, hour meter and status code readout
- Severe Freezer/Corrosion/Food Processing Packages on MTR007-F
- Underwriters' Laboratories Type "EE" Construction on the MTR007-F

Truck performance may be affected by the condition of the vehicle, how it is equipped and the application. Consult your Yale Industrial Truck Dealer if any of the information shown is critical to your application. Specifications are subject to change without notice.

This truck meets all design specifications of ANSI B56.1 Safety Standard for Powered Industrial Trucks at the time of manufacture. Classified by Underwriters' Laboratories, Inc. as to fire hazard only.

The Yale products included in this document may be covered by US patent 6,684,148 and other patents pending.

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