

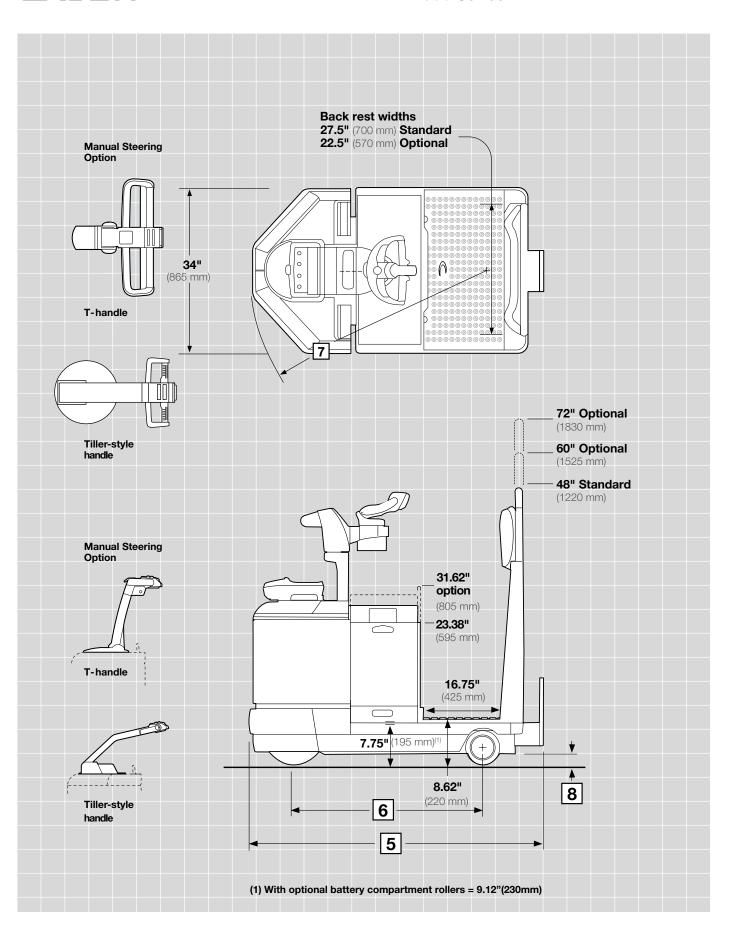
TR 4500 SERIES

Specifications

Tow Tractor







TR 4500 Series

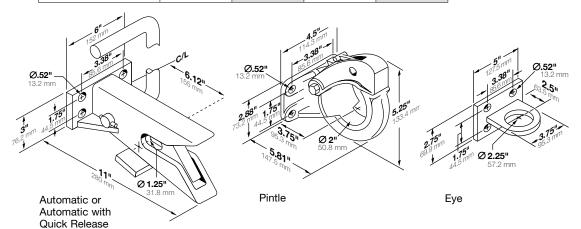
| | | | | | Imperial | Metric | |
|------------|----|-----------------------|--------------|----------|-----------------------------|--------|--|
| | 1 | Manufacturer | | | Crown Equipment Corporation | | |
| Info | 2 | Model | | | TR 4 | 1500 | |
| General In | 3 | Drawbar Pull | Normal | lb kg | 250* | 110* | |
| | | | Maximum | lb kg | 700* | 315* | |
| | 4 | Rolling Load Capacity | | lb kg | 10,000 | 4535 | |
| | 5 | Overall Length | | in mm | 60.3 | 1530 | |
| Dimensions | 6 | Wheelbase | | in mm | 38 | 965 | |
| | 7 | Turning Radius | | in mm | 48.3 | 1230 | |
| Dir | 8 | Grade Clearance | | % | 27 | 27 | |
| | 9 | Travel Speeds | Empty | mph km/h | 9.0** | 14.4 | |
| | | | Loaded | mph km/h | 6.0** | 9.6 | |
| | 10 | Truck Weight | Less battery | lb kg | 1280 | 580 | |

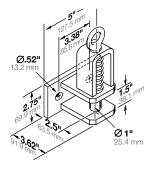
^{* 12&}quot; (305 mm) hitch height.

Adjustable Hitch Options

Hitch plate allows all types of hitches to be adjusted in 1.75" (44.5 mm) increments.

| Hitch | | Hitch Heights | | | | | |
|--------------|-------|---------------|-----|---------|-----|--|--|
| | | Mini | mum | Maximum | | | |
| Automatic | in mm | 8" | 205 | 15" | 380 | | |
| Pintle | in mm | 8.62" | 220 | 15.62" | 395 | | |
| Eye | in mm | 8.75" | 225 | 15.75" | 400 | | |
| Pin & Clevis | in mm | 7.88" | 200 | 16.62" | 420 | | |





Pin & Clevis

Maximum Battery Size

13.19" (335 mm) wide x 31.12" (790 mm) long x 31.62" (803 mm) high

Batteries

24-volt, 750 amp hour, 21.5 kWh Min/Max weight 975/1500 lb (440/680 kg)

Standard Equipment

- 1. 24-volt fused electrical system
- 2. Access 1 2 3[®]
 Comprehensive System
 Control
- 3. AC traction system
- 4. e-GEN® braking
- 5. X10[®] Handle
- 6. Electronic power steering
- Access Display (battery discharge indicator, hour meters, event code readout and PIN codes)

TR 4500 Series

- 8. Operator sensing floorboard
- 9. Premium urethane floorboard cushion
- 10. 27.5" (700 mm wide padded wrap around backrest
- 11. 48" tall backrest
- 12. Magnetic mount storage module with X10 handle
- 13. Upper storage bin in backrest
- 14. Hitch
- 15. Short battery wall (use with 23.38" (590 mm) tall battery)

Technical Information

- 16. InfoPoint® Quick Reference Guide and Maps
- 17. Orange polyurethane trail wheels
- 18. Black polyurethane drive tire
- 19. SB175 amp gray battery connector
- 20. Key switch
- 21. Horn
- 22. Lift-off left and right battery retainers
- 23. Auto parking brake
- 24. Ramp hold

^{**}Power unit first travel only.

TR 4500 Series

Optional Equipment facility and the flexibility to stand

- 1. Manual steering with "T" type control handlefull width twist grips with cams, full width horn button and dual brake levers.
- 2. Manual steering with Tiller type control handleincludes full width twist grips with cams and full width horn
- 3. Molded urethane leg cushion (battery wall mount)
- 4. Quick adjust casters with manual steering
- 5. Tall battery wall (use with 31.62" (805 mm) tall battery)
- 6. 22.5" (570 mm) wide backrest
- 7. 60" (1525 mm) or 72" (1830 mm) high backrest
- 8. Lower storage bin located in backrest (27.5" (700 mm) wide backrest only)
- Storage module on battery (23.38" (590 mm) high battery only)
- 10. Second level order picking steps (requires 31.62" battery wall and 27.5 wide x 60" or 72" tall load backrest)
- 11. Battery compartment rollers
- 12. Battery retainer interlock switch
- 13. Quick battery disconnect handle (SB 175 and right side only)
- 14. Left side battery connector (facing power unit doors)
- 15. Drive tire and trail wheel options
- 16. Toggle switch in lieu of key
- 17. Freezer and corrosion conditioning
- 18. Special color paint
- 19. Automatic coupler with "Quick Release"
- 20. Travel Alarm
- 21. Flashing Light/Strobe
- 22. Shrink Wrap Holder (X10® Handle)
- 23. InfoLink® Ready System
- 24. Work Assist® Accessories

Operator Area and Controls

The TR 4500 Series features Crown's innovative electronic power steering and performance enhancing operator compartment

Electronic power steering provides effortless handling while transporting carts throughout the in a side stance position while maneuvering in reverse and hooking up carts.

Utilizing the intelligence of Access 1 2 3® technology and a tactile feedback device (TFD), operator stability and control are maximized at higher speeds and steer effort is minimized at lower speeds. In addition, as the steer angle increases during a turn the speed is automatically reduced, enhancing operator and load

Steering simplicity is further enhanced by the X10® Handle. It features ergonomically designed hand grips and dual thumb wheels to simplify operation.

The hand grips feature a comfortable urethane covering and integrated horn buttons. Dual thumb wheels provide infinite speed control in both the forward and reverse direction.

The X10 handle features a travel speed switch to choose between two operating modes. Placing the switch in the rabbit mode allows high speed travel and a steer angle of 60 degrees each way of center to meet typical application requirements. For congested areas, placing the switch in the turtle/rabbit mode reduces travel speed and increases the steer angle to 90 degrees each way of center for safe, optimized performance and maneuverability.

A manual steering option remains available with a choice of T-handle or Tiller-style handle.

The operator's compartment features a wide platform, operator sensing floorboard and a load backrest with contoured edges to allow quick entry/exit. The X10 handle, wrap around back pad, premium urethane floormat and electronic power steering work together to improve comfort and stability.

The operator sensing floorboard eliminates the needs for a high speed pedal.

When you add up all the benefits of Crown's electronic power steering, X10 handle and operator compartment along with industry leading performance, you have the most productive tugger available.

Electrical System

Heavy-duty 24-volt electrical system for demanding warehouse applications. Crown-manufactured AC drive motor delivers powerful performance and proven reliability for long-lasting productivity in any environment.

Color coded wiring is used for ease of service.

Drive Unit

All gear drive from drive motor to drive wheel axle. Drive tire axle is mounted in the drive unit on both sides for maximum strength in rough floor applications. Drive unit is top and bottom mounted. Top mount is a large taper roller bearing for vertical or horizontal forces. Bottom mount has four shock mounted rollers on drive unit running in a hardened steel roller race. Gear train runs in oil-filled, sealed housing.

Wheels and Tires

Drive tire, 13.5" (343 mm) diameter x 4.5" (114 mm) wide x 8" (203 mm) hub polyurethane. Trail wheels, 7" (178 mm) diameter x 5" (127 mm) wide rubber or polyurethane.

Heavy-duty Power Unit Structure

Rugged steel doors are suspended on heavy-duty pin hinges. Doors swing wide for good access. Doors can also be lifted off for unrestricted service access. Door bolts have an exclusive convex design that mates with concave door holes for fast reinstallation of bolts. Heavy-steel skirt surrounds entire area.

Brake

Crown's e-GEN braking system uses the powerful torque of the AC motor for smooth consistent braking. Braking is optimized and virtually eliminates brake maintenance.

While moving, e-GEN braking is applied if the operator activates the brake button on the X10 handle, moves the tiller handle into the brake zone, activates brake levers on "T" handle, removes travel input or reverses direction.

Technical Information

The closed loop Access 1 2 3 traction control will keep the truck static until a travel input is requested, even when operating on a grade.

Automatic electric parking brake activates when the truck has been stationary for four seconds, the truck is keyed off or the battery has been disconnected.

Other Options

- 1. Audible travel alarm
- 2. Flashing lights

Safety considerations and dangers associated with audible travel alarms and flashing lights include:

- Multiple alarms and/or lights can cause confusion.
- Workers ignore the alarms and/or lights after day-in and day-out exposure.
- Operator may transfer the responsibility for "looking out" to the pedestrians.
- Annoys operators and pedestrians.

Dimensions and performance data given may vary due to manufacturing tolerances. Performance is based on an average size vehicle and is affected by weight, condition of truck, how it is equipped and the conditions of the operating area. Crown products and specifications are subject to change without notice.

You can count on Crown to build lift trucks designed for safe operation, but that's only part of the safety equation. Crown encourages safe operating practices through ongoing operator training, safety-focused supervision, maintenance and a safe working environment. Go to crown.com and view

our safety section to learn more.

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Because Crown is continually improving its products. specifications are subject to change without notice

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