

# Battery Carts & Carriages Battery Transfer Carriage



BHS offers a complete family of manual and powered Battery Transfer Carriages (BTC) for your every need. The BTC is available in various models. Exclusive BHS features add durability and versatility to every carriage.

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The BHS Battery Transfer Carriage (BTC) is a manually operated, portable battery changer available in various models utilizing a combination of manual and powered functions. Choose from the available models, options and compartment widths to customize a BTC to your specifications.

### Available Models



### Winch (BTC-WINCH)

The BHS Winch Model Battery Transfer Carriage has an adjustment height of 5.5" to 23.5" (140 mm to 597 mm) and is available in two roller widths. The Winch model features spark-proof poly rollers, large 6" (152 mm) phenolic casters, and is recommended for maintenance tasks only.



### Manual Extraction & Manual Lift (BTC-MPP)

This fully manual-operated Battery Transfer Carriage features a hand wheel to ensure control of extractor arm operation. Raising and lowering is accomplished with a center-mounted manual hand jack. Lift range is from 5.5" to 23.5" (140 mm to 597 mm).



### Manual Extraction & Powered Lift (BTC-MPPEL)

This combination manual extraction and powered lift Battery Transfer Carriage features a hand wheel for extractor arm operation. Raising and lowering is accomplished with a center-mounted hydraulic cylinder controlled by a manual control valve with overload relief for additional safety. Power is supplied by a 12-volt hydraulic power unit. Lift range is from 5.5" to 21.5" (140 mm to 546 mm).



### Powered Extraction & Manual Lift (BTC-MPPEE)

This combination manual lift and powered extraction Battery Transfer Carriage features a hydraulic operated extractor arm. Extraction is accomplished with a heavy-duty hydraulic motor controlled by a manual control valve with overload relief for additional safety. Power is supplied by a 12-volt hydraulic power unit. Raising and lowering is accomplished with a centermounted manual hand jack. Lift range is from 5.5" to 23.5" (140 mm to 597 mm).



### Powered Extraction & Powered Lift (BTC-MPPAE)

This fully powered Battery Transfer Carriage features a hydraulic operated extractor arm. Raising and lowering is accomplished with a center-mounted hydraulic cylinder. Each function is controlled by a manual control valve with overload relief for additional safety. Power is supplied by a 12-volt hydraulic power unit. Lift range is from 5.5" to 21.5" (140 mm to 546 mm).

### Features & Benefits

- Provides safe and easy low cost battery handling solution
- Versatile height adjustment allows battery extraction from most battery compartments
- Large 6" (152 mm) phenolic wheels help protect floors and provide low rolling resistance
- Many flexible options available to satisfy unique battery handling requirements
- High 3,000 lb (1,360 kg) load capacity rating (based on 40" [1,016 mm] long battery battery length longer than 40" [1,016 mm] will reduce capacity)
- Each model available in multiple compartment widths
- Power enclosure standard on all electric models allowing easy service and maintenance\*

\*Excludes BTC-MPP

### Standard Features



**Hook & Chain Extraction**Hook and chain is the standard method of extraction for easy battery removal.



**Vector Floor Lock**Vector floor locks eliminate the need for attachment chains during battery extraction and come with easy-to-lift handles.



**Ergonomic Controls**Each powered BTC model contains
easy-to-use ergonomically designed
controls for powered lift and extraction.



Parking Brake
The parking brake keeps the unit in place when not in use.



**Hydraulic Jack**For manual elevation changes, the hydraulic jack allows the operator to raise and lower the unit to accommodate various lift truck roller heights.

### Available Options

### 7" Cantilever (BTC-CAN-7)

Extends extractor arm reach an additional 7" (178 mm) and is ideal for use with outriggers

## 7" Cantilever & 6" Extension Bed (BTC-CAN-7-6)\*

7" (178 mm) additional extractor arm reach is ideal for use with outriggers, and 6" (152 mm) bed extension accommodates longer batteries

# 7" mm Cantilever & 8" Extension Bed (BTC-CAN-7-8)\*

7" (178 mm) additional extractor arm reach is ideal for use with outriggers, and 8" (203 mm) bed extension accommodates longer batteries

#### 14" Cantilever & 6" Extension Bed (BTC-CAN-14-6)\*†

14" (356 mm) additional extractor arm reach is ideal for use with outriggers, and 6" (152 mm) bed extension accommodates longer batteries

### Extra Capacity (BTC-EC)\*†

Increases capacity to 3,400 lb (1542 kg) while standard capacity is 3,000 lb (1360 kg)  $\,$ 

- \* Consult Factory on this option.
- † Long batteries will reduce load capacity.

### Push-Arm Extension (BTC-PA)

Low cost solution for extending extractor arm an additional 4" (101 mm) past the standard 6" (152 mm) extension

### Rubber Bumper (BTC-RB)

Protects lift truck during battery change-outs

### Rubber Guard (BTC-RGD)

Completely encloses chain and sprockets for safe operation

### Track Mount (BTC-TM)

Provides dedicated location for battery change-out Note: Single Guide Flat Track (SGT-F) is used for the Track Mount option, and minimum roller height is 6" (152 mm) with track mount

### Vacuum Extraction (BTC-VAC)

Vacuum option eliminates the need for manual hook-up and reduces wear and tear on batteries (available on MPPAE and MPPEE models only)

### Self Contained Charger (BTC-CHGR)

Fully enclosed 110 volt charger for use with powered BTC models

BTC-CAN-7

## Product Specifications

Imperial / Metric

	BTC-MPPAE	BTC-MPPEL	BTC-MPPEE	BTC-MPP
Max. Load Capacity <sup>1</sup>	3,000 lb / 1360 kg	3,000 / 1360 kg	3,000 lb / 1360 kg	3,000 lb / 1360 kg
Voltage Requirement	12 VDC	12 VDC	12 VDC	N/A
Hydraulic Pump	1.3 gal/min / 4.9 l/m	1.3 gal/min / 4.9 l/m	1.3 gal/min / 4.9 l/m	N/A
Extractor Arm Travel Speed	0-20 ft/min / 0-0.1 m/s	N/A	0-20 ft/min / 0-0.1 m/s	N/A
Battery Attachment	Hook & Chain	Hook & Chain	Hook & Chain	Hook & Chain
Optional Vacuum	Yes	N/A	Yes	N/A
Primary Drive Reduction	N/A	4.5 to 1	N/A	4.5 to 1
Primary Drive Chain Size	#50	#50	#50	# 50
Roller Diameter	2.4" / 61 mm	2.4" / 61 mm	2.4" / 61 mm	2.4" / 61 mm
Roller Shaft Size	7/16" / 11 mm Hex (Model 18) 7/16" / 11 mm Hex (Model 24) 3/4" / 19 mm Hex (Model 30)	7/16" / 11 mm Hex (Model 18) 7/16" / 11 mm Hex (Model 24) 3/4" / 19 mm Hex (Model 30)	7/16" / 11 mm Hex (Model 18) 7/16" / 11 mm Hex (Model 24) 3/4" / 19 mm Hex (Model 30)	7/16" / 11 mm Hex (Model 18) 7/16" / 11 mm Hex (Model 24) 3/4" / 19 mm Hex (Model 30)
Maximum Battery Width	17" / 432 mm (Model 18) 23" / 584 mm (Model 24) 29" / 737 mm (Model 30)	17" / 432 mm (Model 18) 23" / 584 mm (Model 24) 29" / 737 mm (Model 30)	17" / 432 mm (Model 18) 23" / 584 mm (Model 24) 29" / 737 mm (Model 30)	17" / 432 mm (Model 18) 23" / 584 mm (Model 24) 29" / 737 mm (Model 30)
Battery Length	25"-39.75" 635-1,010 mm	25"-39.75" 635-1,010 mm	25"-39.75" 635-1,010 mm	25"-39.75" 635-1,010 mm
Min. Battery Height	20" / 508 mm	20" / 508 mm	20" / 508 mm	20" / 508 mm
Overall Length <sup>2</sup>	67" / 1,702 mm	67" / 1,702 mm	67" / 1,702 mm	67" / 1,702 mm
Overall Width	46.5" / 1,181 mm (Model 18) 52.5" / 1,334 mm (Model 24) 58.5" / 1,486 mm (Model 30)	46.5" / 1,181 mm (Model 18) 52.5" / 1,334 mm (Model 24) 58.5" / 1,486 mm (Model 30)	46.5" / 1,181 mm (Model 18) 52.5" / 1,334 mm (Model 24) 58.5" / 1,486 mm (Model 30)	38.5" / 978 mm (Model 18) 44.5" / 1,130 mm (Model 24) 50.5" / 1,283 mm (Model 30)
Overall Height	65.5" / 1,664 mm	65.5" / 1,664 mm	65.5" / 1,664 mm	65.5" / 1,664 mm
Roller Height Service Range	5.5"-21.5" 140-546 mm	5.5"-21.5" 140-546 mm	5.5"-23.5" 140-597 mm	5.5"–23.5" 140–597 mm
Roller Width (Nominal)	18" / 457 mm (Model 18) 24" / 610 mm (Model 24) 30" / 762 mm (Model 30)	18" / 457 mm (Model 18) 24" / 610 mm (Model 24) 30" / 762 mm (Model 30)	18" / 457 mm (Model 18) 24" / 610 mm (Model 24) 30" / 762 mm (Model 30)	18" / 457 mm (Model 18) 24" / 610 mm (Model 24) 30" / 762 mm (Model 30)
Extended Arm Reach³ (Beyond Roller Bed)	6" / 152 mm	6" / 152 mm	6" / 152 mm	6" / 152 mm
Service Weight (unloaded)	1,050 lb / 476 kg (Model 18) 1,128 lb / 512 kg (Model 24) 1,135 lb / 515 kg (Model 30)	945 lb / 429 kg (Model 18) 960 lb / 435 kg (Model 24) 1,090 lb / 494 kg (Model 30)	850 lb / 386 kg (Model 18) 934 lb / 424 kg (Model 24) 1,060 lb / 481 kg (Model 30)	718 lb / 326 kg (Model 18) 748 lb / 339 kg (Model 24) 960 lb / 435 kg (Model 30)

- 1. Maximum Load Capacity based on 39" (990 mm) Battery Length
- 2. Not including cantilever or roller bed extension options
- 3. Not including any roller bed extension options







