

## Section 6

# Battery and Charger

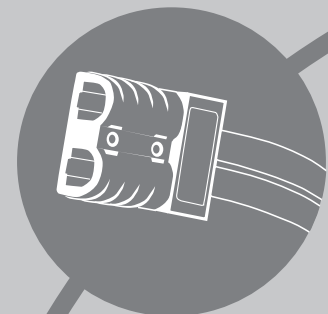
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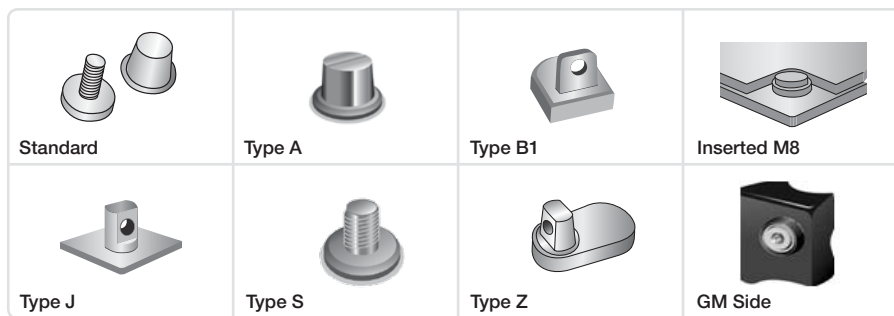
#### New Items:

Starter Battery - p. 6.3  
Intercell Connectors 5¾" and 6" - p. 6.5  
Mounting Bracket for Pogo Stick - p. 6.6  
350 SBX 4/0 Red Connector - p. 6.10

Note: 1910.178(q)(5) (1998) of the Occupational Safety and Health Act (OSHA) requires that "All parts of any such industrial truck requiring replacement shall be replaced only by parts equivalent as to safety with those used in the original design."



# Deep Cycle Batteries



Battery and Charger

Part Number	BCI Group	RC Min	20Hr Rate (AH)	Crown Applications	Terminal Style	Weight (lb)	LxWxH (in)	Liquid Level Indicator
<b>Flooded 6 Volt</b>								
345006-095	1	140 @ 25 A	640		Type A	31	9.08x6.91x8.75	No
071419-001	1	180 @ 75 A	100	M, B, ST3000	Type A	32	9.00x6.78x8.88	No
345006-180	GC2	90 @ 75 A	180		Type S	55	10.25x7.13x10.75	No
072798-001	GC2	100 @ 75 A	190	M	Type A	59	10.25x7.12x10.62	No
345006-200-01	GC2	105 @ 75 A	200		Standard	60	10.25x7.13x10.75	No
345225	GC2	115 @ 75 A	225	WP,GPW, WAVE	Standard	63	10.25x7.13x10.50	No
092222-002 (Dry)	GC2	115 @ 75 A	225		Type S	64	10.25x7.13x10.50	No
345006-235	GC2	125 @ 75 A	235		Standard	68	10.25x7.13x10.50	No
345006-240	Euro GC	125 @ 75 A	240		Type A	65	9.63x7.50x10.75	No
120194-001	GC2H	145 @ 75 A	245	WAVE	Standard	73	10.25x7.13x11.5	No
345006-250	901	140 @ 75 A	250		Standard	72	11.75x7.19x11.25	No
345006-275	901	155 @ 75 A	275		Standard	76	11.75x7.19x11.25	No
345006-305	902	175 @ 75 A	305		Standard	92	12.19x7.19x14.50	Yes
345006-325	902	196 @ 75 A	325		Standard	100	12.19x7.19x14.50	Yes
345006-350	903	210 @ 75 A	350		Standard	112	12.19x7.19x16.50	Yes
345006-395	903	225 @ 75 A	395		Standard	120	12.19x7.19x16.50	Yes
<b>Flooded 8 Volt</b>								
345008-165	GC8	90 @ 75 A	165		Type S	64	10.31x7.13x11.13	No
<b>Flooded 12 Volt</b>								
345012-085	24	160 @ 25 A	85		Standard	50	11.13x6.75x9.38	No
345012-115	27	170 @ 25 A	115		Standard	60	13.13x6.75x9.38	Yes
345012-140	31	200 @ 25 A	140		Standard	66	13.13x6.75x9.38	Yes
345012-155	920	72 @ 75 A	155		Type A & S	87	13.63x6.75x12.25	No
345012-185	921	95 @ 75 A	185		Standard	108	15.50x7.00x14.50	Yes
345012-210	921	110 @ 75 A	210		Standard	131	15.50x7.00x14.50	Yes
<b>Sealed 6 Volt</b>								
345006-200 (Gel)	GC2	100 @ 75 A	200		Standard	72	10.25x7.13x10.75	No
149455	27	195 @ 25 A	220	GPW, WAVE, WP2000, WP2300, ST3000, SX3000, WE/WS2300	Inserted M6	66	12.09x6.65x8.66	No
<b>Sealed 12 Volt</b>								
345012-018-0S	12V - 18 Ah	10 @ 25 A	18		Type B1	11.4	7.13x3.03x6.57	No
345012-026-0S	12V - 26 Ah	14 @ 25 A	26		Type B1, Tabs	17.14	6.50x6.93x5.00	No
345012-055-0S	22NF	60 @ 75 A	55		Type Z	37	9.00x5.43x9.50	No
345012-055-0G (Gel)	22NF	65 @ 75 A	55		Type Z	42	9.00x5.43x9.50	No
345012-075	24	140 @ 75 A	75		Type Z	51	10.25x6.65x9.19	No
345012-100 (Gel)	27	180 @ 75 A	95		Standard	68	12.00x6.57x8.20	No
345012-100-0S	27	175 @ 25 A	100		Type Z	60	12.09x6.65x9.19	No
345012-100-SS	27	175 @ 25 A	100		Type S	60	12.09x6.65x9.19	No
811377	27	N/A	110	ST3000	Inserted M6	64	12.05x6.85x8.80	No
345012-031-0G (Gel)	31	200 @ 25 A	110		Type S	82	13.36x6.81x9.20	No
345012-035-0S	U1	N/A	35		Type J	22.33	7.68x5.12x6.10	No

## Starter Batteries

Part Number	BCI Group	RC-Reserve Capacity @ 25 Amps	CCA	Terminal Style	Weight (lb)	LxWxH (in)
<b>Flooded 6 Volt</b>						
345004-950	4H-950	300	950	Type A	49	12.63x7.00x9.50
<b>Flooded 12 Volt</b>						
345022	22NF	65	400	Type A	27	9.50x5.56x9.00
345024	24	85	550	Type A	39	10.25x6.75x9.00
345024-675	24	105	675	Type A	42	10.25x6.75x9.00
345024-675-01	24F*	105	675	Type A	42	10.25x6.75x9.00
345025-500	25	65	500	Type A	35	9.63x7.00x8.88
345026-500	26/26R	65	500	Type A	29	8.25x6.81x8.25
345027-800	27	125	800	Type A	51	12.00x6.63x9.00
345029-340	29NF	90	340	Type A	39	13.00x5.50x8.88
345031-625	31	135	625	Type S	53	12.94x6.75x9.44
345031-730	31	190	730	3/8 x 16 Post	62.5	13.00x6.75x9.50
345031-775	31	170	775	Type A	59	12.94x6.75x9.44
345031-775-01	31	170	775	Type S	58	12.94x6.75x9.44
345031-1000	31	185	1000	Type S	61	12.94x6.75x9.44
345034-675	34	105	675	Type A	42	10.25x6.81x8.19
345034-675-01	34R*	105	675	Type A	42	10.25x6.81x8.19
345034-800	34/78	90	690	Type A / GM Side	39	10.25x6.88x8.19
345035-540	35	65	540	Type A	37	9.13x6.75x8.63
135898	45	70	500	Type A	30	9.50x5.69x9.06
345051-450	51	80	450	Type A	32	9.38x5.06x8.94
345051-450-0R	51R*	80	450	Type A	28	9.38x5.00x8.75
345055-525	55	85	525	Type A	29	8.56x6.06x8.38
345058-600	58	80	600	Type A	32	9.31x7.25x7.00
345058-600-0R	58R*	80	600	Type A	32	9.31x7.25x7.00
345065-650	65	100	650	Type A	42	12.06x7.44x7.56
345075-690	75	90	690	GM Side	37	9.13x7.06x7.38
345078-800	78	105	800	GM Side	42	10.25x7.06x7.38
345003-400-EE	3EE-400	100	400	Type A	44	19.25x4.34x8.75
345008-147-50	8D	430	1475	Type A	132	20.63x10.94x10.00
<b>Sealed 12 Volt</b>						
136392 (Gel)	51	66	450	Type A	28	9.25x5.12x8.94

\*Signifies reverse post.

**Note:** See terminal types listed on page 6.2



### Battery Display Rack

Part Number	Holds Number of Batteries
345000	6
345001	9

# Rescue Jump Packs

Battery and Charger

Crown Part Number	Description	Starting Current / Peak Current	Cable Volt	Cable Length	Guage	DC Power Source	Air Compressor/ Air Gauge	Battery Status Gauge	Built-In Work Light & Flasher	Illuminated LED Clamps	Other Specs
300455-091	Rescue Jump Pack Model iStart					●					Personal jump pack, light weight, powerful, jumper cables, 12V DC plug, built-in flashlight and charger.
300455-090	Rescue Jump Pack Model 900	400/900	12	27"	6	●					Premium 18 amp hour battery, LED battery status.
300455-095	Rescue Jump Pack Model 950	400/900	12	55"	6	●	●	●	●	●	Multiple air tips
300455-096	Rescue Jump Pack Model 960	400/900	12	55"	6	●	●	●	●	●	Safeguard audible signal & light, multiple air tips, built-in 300 amp AC inverter, built in USB port for charging, premium 18 hour battery, in line 30 amp fuse
300455-100	Rescue Jump Pack Model 1000	500/1000	12	55"	4	●		●	●	●	Heavy duty battery, safeguard audible signal and light, storage compartment
300455-122	Rescue Jump Pack Model 1220	700/1500	12		2	●		●	●		Truck, aircraft and ground support starter, SB style connectors, Cessna style plug-ins (90" reach), 12V polarized style plug-ins (90" reach), parrot clamps (62" reach), safeguard audible signal, 2 heavy duty 20 amp hour batteries
300455-180	Rescue Jump Pack Model 1800	700/1500	12	62"	2	●		●	●		2 heavy duty 20 amp batteries, safeguard audible signal and light
300455-240	Rescue Jump Pack Model 2400	400/900	24	62"	2	●		●	●		2 heavy duty 20 amp hour batteries, safeguard audible signal and light, red handle indicates 24 volts
300455-242	Rescue Jump Pack Model 2420	400/900	24		2	●		●	●		Truck, aircraft and ground support starter, SB style connectors, Cessna style plug-ins (90" reach), 12V polarized style plug-ins (90" reach), parrot clamps (62" reach), safeguard audible signal, 2 heavy duty 20 amp hour batteries
300455-300	Rescue Jump Pack Model 3000		12	55"	4	●		●	●	●	You choose and add your own battery (accepts most U1 sealed batteries), safeguard audible signal & light, add your own battery
300455-092	Rescue Jump Pack Cart										Sturdy and lightweight, easy to assemble, fits all Rescue models except 900 & iStart, large 4" rubber wheels, jump packs snaps into place.



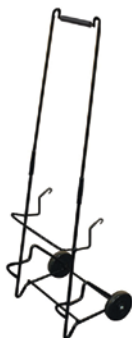
300455-090



300455-100



300455-300

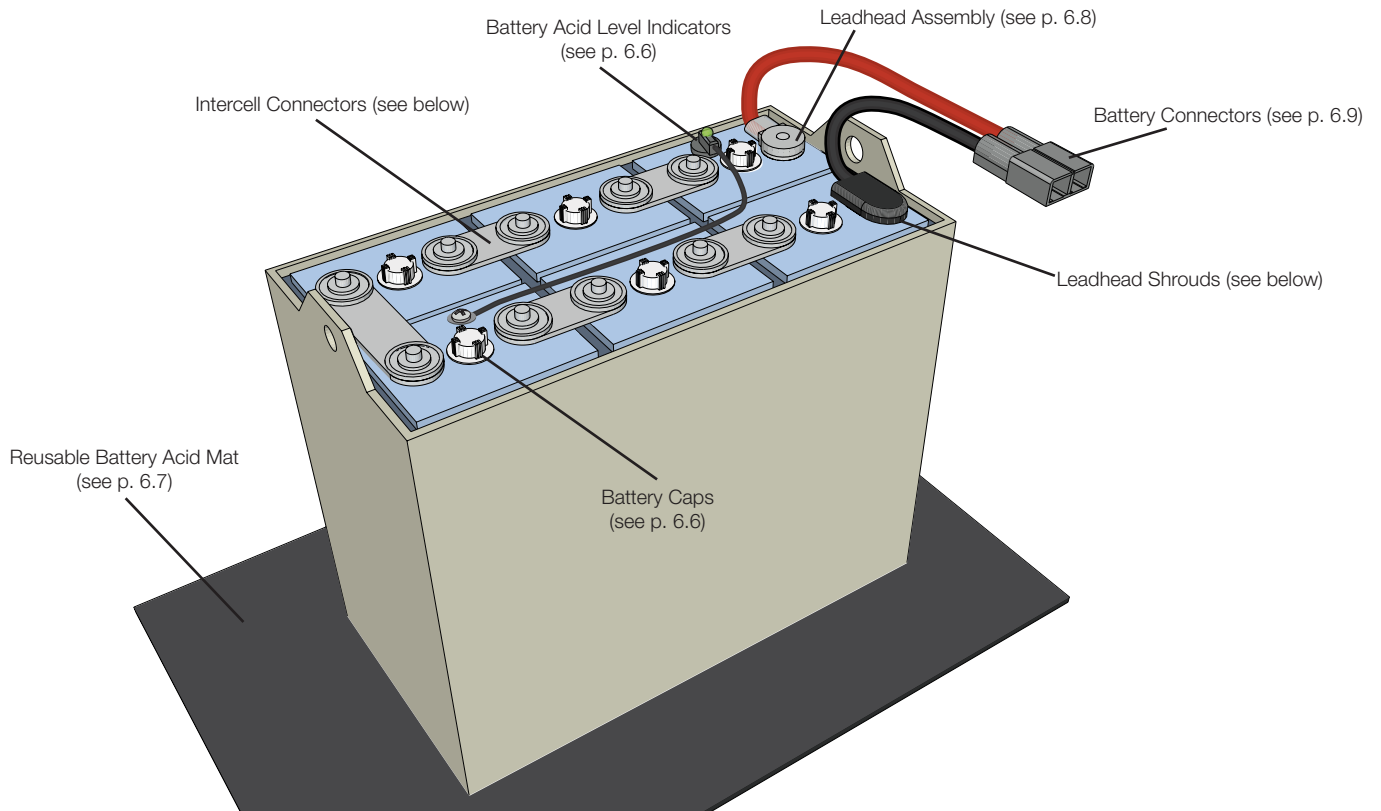


300455-092



300455-122 & 300455-242

# Battery Repair Parts



Battery and Charger

## Leadhead Shrouds

**Part Number**      **Description**

**Straight**

300430-001	Black
300431-001	Red

**Offset, One Hole**

300426-001	Black/Right
300427-001	Red/Right
300428-001	Black/Left
300429-001	Red/Left

**Offset Two Hole - 3.00" Center to Center**

300432-001	Black/Right
300433-001	Red/Right
300434-001	Black/Left
300435-001	Red/Left

**Offset Two Hole - 3.75" Center to Center**

300436-001	Black/Right
300437-001	Red/Right
300438-001	Black/Left
300439-001	Red/Left

**Universal**

300451	Black
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Straight



Offset One Hole (Right Hand Shown)



Offset Two Hole (Left Hand Shown)



Universal

## Intercell Connectors

### Intercell Battery Connectors, 5 per package

Part Number	Single Piece	Description
300402-001-05	300402-001	3" - 2 hole connector
300402-003-05	300402-003	3½" - 2 hole connector
300402-002-05	300402-002	3¾" - 2 hole connector
300402-004-05	300402-004	5" - 2 hole connector
300402-005-05	300402-005	5¾" - 2 hole connector
300402-006-05	300402-006	6" - 2 hole connector



- Safe-burning, High-conductivity Lead
- 3% Antimonial Lead, Free of Voids And Porosity, Greater Electrical Conductivity



Note: length is measured center to center



### Intercell Shrouds

**Part Number**      **Size (Center to Center)**

300424-001	3" - 3½"
300425-001	3¾"

## Battery Acid Indicators



### Blinky

#### Part Number

340011-003

UL classified, probe-mounted LED that is permanently mounted into one cell of a battery. Flashing green LED means electrolyte level is okay. No light means it is time to water the cells.



### Smart Blinky Remote

#### Part Number

340011-004

Smart-Sensing Technology monitors the electrolyte level over a period of time before it decides to change indication. This ensures a truer and more reliable signal than older technologies, which have no intelligence and can flicker. 2.35" probe length. Ideal for batteries that do not leave the truck or for batteries that are charged on multi-level racks where the indicator LED can be edge mounted for high visibility. The indicator LED is housed in a separate body from the probe, which allows the LED to be remotely mounted from the probe. UL classified.



### Smart Blinky

#### Part Number

340011-005

One piece design is ideal for batteries where the top of the battery can be seen and where Red/Green indication is needed. The Smart Blinky utilizes a one piece design where the indicator LED is located above the probe. The compact design is small enough to fit on even the smallest industrial battery cell. The indicator LED is located above the probe. Blinking green LED means the electrolyte level is good. Blinking red LED means water is needed. Installation is easier because the power wires are different lengths. Brighter Indicator LED. Improved probe design. Probe is easier to trim. Patented Smart Sensing Technology. UL classified.



### Battery Acid Level Indicator

#### Part Number Description

Part Number	Description
340011-001	Battery Acid Level Indicator, Cell Cap Style

**Note:** Signals low battery acid level at a glance.

- If LED is flashing, acid level is okay.
- If LED is off, add distilled water before operating battery to achieve long life and capacity.

## Battery Accessories



### Battery Side-Lift Carrier

#### Part Number Description

Part Number	Description
300040-002	Best quality for all battery types and sizes. Adjustable notches securely lock in place. Features bicycle grip handle and sidewall pads.



### Tab Insulator Terminal Protectors

Part Number	Color	Fits Gauges	Post Height (in)
125958-001	Red	6 and 8	0.94
125958-002	Black	6 and 8	0.94

Protects against electrical system shorts. Reduces the risk of battery explosion caused by sparks. High temperature PVC construction. Color coded for easy polarity identification.



### Battery Strap

#### Part Number Description

300040	Used to lift and move battery P.N. 125323 & 811377
300040-001	Used to lift and move battery P.N. 120724



### Battery Caps

Part Number	Type	Color	Height (in)
300053-001	Screw	Yellow	
300053-003	Screw	Red	
300053-004	Screw	White	
300053-002	Flip top	Yellow	1.25
300053-005	Flip top	Yellow	1.00

**Note:** Fits all batteries except Douglas.



### Battery Pogo Stick

#### Part Number Description

300038	Used to keep battery connectors and cables off the floor at charging stations, preventing damage and wear.
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▲ **Replacement Rubber Grommet**  
P.N. 300038-001



### L-Bracket

#### Part Number Description

300460	L-Bracket; includes hardware. Used to mount pogo stick to racking.
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## Battery Service Supplies

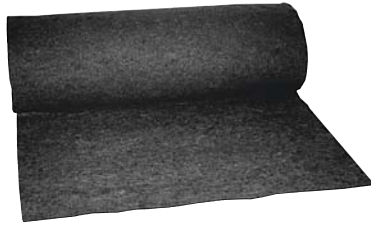


### Wash Water Neutralizer

Part Number	Sales Unit
300415-001	Gallon
300415-004	Case (4) Gallon
300415-005	5 Gallon
300415-035	35 Gallon

Used to adjust pH in wash water and clean acid contaminated floors and equipment such as battery racks and delivery vehicles.

- Concentrated sulfuric acid neutralizer
- Non-corrosive and non-hazardous
- Allows for reuse of wash water
- Can also be used to remove acid from concrete floors
- Used on Reusable Battery Acid Floor and Counter Mat P.N. 300403-050 (see Section 6, Battery and Charger)



\*Wash Water

### Reusable Battery Acid Floor and Counter Mat

Part Number	Size (ft)
300403-002	3 x 2 piece
300403-050	3 x 50 roll (can be cut easily)

- Absorbs 6 oz. of acid per square foot
- Cut to size for battery compartments, storage racks or drip pans
- Mat absorbs acid but won't leak through tough polypropylene backing
- Electrically isolates battery, preventing parasitic discharge
- Use on floor or under the battery
- Use mat over and over again

**\*Note:** Use Wash Water Neutralizer P.N. 300415-001 on mat and sweep it up with shop vac.



### Battery Cleaner

Part Number	Sales Unit
363124-001	Net wt 18 oz Can
363124-012	Case (12) - 18 oz Cans

Heavy-duty industrial battery cleaner is engineered for fast, effective, economical maintenance of storage battery terminals, hold-downs, cables and battery boxes. It detects leaks by changing from yellow to reddish purple when it comes in contact with acid.



### Battery Protector

Part Number	Sales Unit
363125-001	Net wt 15 oz Can
363125-012	Case (12) - 15 oz Cans

Heavy-duty industrial, non-methylene chloride, battery protector extends battery life and prevents corrosion. It provides an air-tight, waterproof seal, and resists oil, gasoline, dirt, grease and heat. Assures maximum electrical connectivity.



### Black Battery Reconditioner

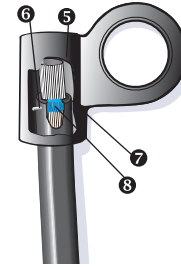
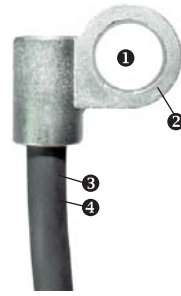
Part Number	Sales Unit
363133-001	Net wt 12 oz Can
363133-006	Case (6) - 12 oz Cans

Restores battery to original look. Formulated to adhere to battery plastics and metal. Ideal for automotive, truck and industrial batteries. When dry, paint finish resembles gloss of original molded plastic. Industrial grade, high solids for single coat coverage, outstanding hardness and durability, resists abrasion and heat. Fast drying. Other uses include battery hold-downs, trays and cases.

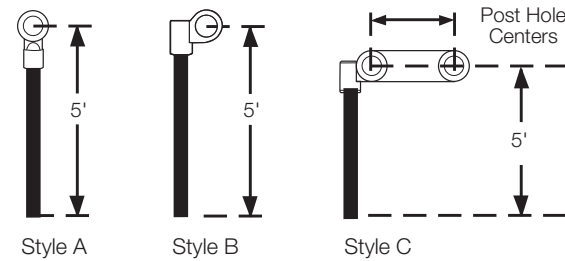
# Leadheads

## Burn-on 5 ft. Leadhead Cable Assemblies

Part Number	Description	Style
<b>Straight</b>		
300400-001	#1 red cable	A
300400-002	#1 black cable	
300400-008	#2 red cable	
300400-007	#2 black cable	
300400-009	1/0 red cable	
300400-010	1/0 black cable	
300400-022	2/0 red cable	
300400-021	2/0 black cable	
300400-027	3/0 red cable	
300400-028	3/0 black cable	
300400-031	4/0 red cable	
300400-032	4/0 black cable	
<b>Offset, 90 degree</b>		
300400-033	#1 red cable	B
300400-034	#1 black cable	
300400-003	#2 red cable	
300400-004	#2 black cable	
300400-011	1/0 red cable	
300400-012	1/0 black cable	
300400-019	2/0 red cable	
300400-020	2/0 black cable	
300400-030	3/0 red cable	
300400-029	3/0 black cable	
300400-038	4/0 red cable	
300400-037	4/0 black cable	
<b>Offset, 90 degree, Two Hole Posts, 3.00" Post Hole Centers</b>		
300400-013	1/0 red cable	C
300400-014	1/0 black cable	
300400-015	2/0 red cable	
300400-016	2/0 black cable	
300400-023	3/0 red cable	
300400-024	3/0 black cable	
<b>Offset, 90 degree, Two Hole Posts, 3.75" Post Hole Centers</b>		
300400-018	2/0 red cable	C
300400-017	2/0 black cable	
300400-025	3/0 red cable	
300400-026	3/0 black cable	
300400-035	4/0 red cable	
300400-036	4/0 black cable	



- 1 Post Hole 15/16"
- 2 5% Antimonial Lead for Durability
- 3 EPDM Insulation  
Rated 600 Volt  
Temperature Range: -40 +105°C  
(-40 +221°F), Flame Resistant, Abrasion,  
Tear and Cut Resistant, Impervious to  
Battery Acid, Oil, Grease
- 4 Quickflex Cable, Soft Bare #30 Copper  
Wire, Class K, Rope Stranded for  
Maximum Flexibility, Conforms to  
ICEA/NEMA Welding Cable Requirements,  
Meets or Exceeds ASTMB-172
- 5 Copper Wire Hot Tinned for Maximum Bond  
to Lead
- 6 Anti-pullback Lock Pin
- 7 Cable Deeply Embedded in Lead,  
Preventing Insulation Pull-back
- 8 Internal Silicone Seal™ Silicone Seal Under  
Insulation Prevents Corrosion, Sealing Out  
Acid and Water



## Bolt-on 5 ft. Cable Assemblies

Part Number	Description
300401-011	#1 red - single cable
300401-012	#1 black single cable
300401-001	#2 red - single cable
300401-002	#2 black - single cable
300401-003	1/0 red - single cable
300401-004	1/0 black - single cable
300401-005	2/0 red - single cable
300401-006	2/0 black - single cable
300401-007	3/0 red - single cable
300401-008	3/0 black - single cable
300401-009	4/0 red - single cable
300401-010	4/0 black- single cable

**Note:** Cone & Fastener not included in assembly. Must be ordered separately.



Cable Assembly



Standard Cone



Fastener



## Standard Cones, 5 per package (Fits all Gauge Sizes)

Part Number	Single Piece	Description
300416-001-05	300416-001-01	1 hole
300416-002-05	300416-002-01	2 hole - 3"
300416-003-05	300416-003-01	2 hole - 3 3/4"

## Fastener

Part Number	Description
300419	Includes 10 of each; bolt, flat washer and lockwasher.





## 50 SB Ampere

Part Number	Color	Cable Size
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### Connector Housing

078723-005	Gray	NA
340054-001	Red	NA

### Kit Housing/Contacts

340054-002	Red	6
340054-003	Red	10-12
077917-005	Gray	10-12

### Contacts

078724-003	NA	10-12
078724-005	NA	6

### ▼ Accessories

Part Number	Description
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#### Battery Connecting Handle

340029-001	Red - Includes hardware
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#### Cable Clamp

340056-001	Cannot be used in combination with handle
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340029-001



340056-001



## 175 SB Ampere

Part Number	Color	Cable Size
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### Connector Housing

078723-002	Gray	NA
078723-004	Yellow	NA
078723-007	Red	NA
078723-008	Blue	NA
078723-010	Orange	NA

### Kit Housing/Contacts

077917-002	Gray	1/0
077917-004	Yellow	1/0

### Contacts

300452-001	NA	2
078724-002	NA	1/0

### ▼ Accessories

Part Number	Description
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#### Battery Connecting Handle

340029-002	Plastic, gray - includes hardware
340029-003	Plastic, red - includes hardware
340029-005	Steel, red - includes hardware

#### Cable Clamp

340056-002	Includes hardware, can be used with or without handle
340056-003	Includes hardware, used with "A Frame" handle only

#### Drive Block

077034	For use with Quick Disconnect
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340029-005



340029-002



340056-003



077034



## 350 SB Ampere

Part Number	Color	Cable Size
-------------	-------	------------

### Connector Housing Kit

078723-001	Gray	NA
078723-003	Red	NA
078723-006	Blue	NA
078723-009	Yellow	NA
078723-011	Green	NA
378723-015	Orange	NA

### Kit Housing/Contacts

077917-001	Gray	2/0
077917-003	Red	2/0
380000	Blue	2/0

### Contacts

078724-006	NA	1/0
078724-001	NA	2/0
078724-004	NA	3/0
078724-007	NA	4/0

### ▼ Accessories

Part Number	Description
-------------	-------------

#### Battery Connecting Handle

340029	Plastic, gray - includes hardware
340029-004	Plastic, red - includes hardware
340029-005	Steel, red - includes hardware

#### Cable Clamp

340056-004	Includes hardware; can be used with or without handle
------------	---



340029-004



340029-005



340056-004

## SB - Safety Boots



Part Number	Amp
300413-050	50
300413-175	175
300413-350	350

- Strain relief for cables
- Seals contacts and cable from corrosion, acid, chemicals, salt, water, and dirt
- Fits all major brands of SB connectors
- Adjustable cable ports cut to fit cable gauge
- Does not interfere with mounting brackets, handles & protective caps
- Made of black vinyl rubber
- Operator Safety
- Reduces chances of a short circuit
- Isolates negative from positive
- Ergonomic grip

# Battery Connectors



## 160 SBE Ampere

Part Number	Color	Cable Size
-------------	-------	------------

### Connector Housing

108801-005	Red	NA
108801-007	Black	NA

### Kit Housing/Contacts

108800-005	Red	1/0
------------	-----	-----

### Contacts

108802-002	NA	1/0
------------	----	-----

### ▼ Accessories

Part Number	Description
-------------	-------------

### Battery Connecting Handle

340029-002	Plastic, gray - includes hardware
340029-003	Plastic, red - includes hardware

### Cable Clamp

340056-005	Includes hardware, use with or without handle
------------	---

340029-002

340056-005



## 175 SBX Ampere

Part Number	Color	Cable Size
-------------	-------	------------

### Connector Housing

340028-001	Gray	1/0
340028-002	Blue	1/0
340028-003	Orange	1/0
340028-004	Yellow	1/0
340028-005	Red	1/0
340028-006	Green	1/0

### Contacts

108802-002	1/0
------------	-----

### ▼ Accessories

Part Number	Description
-------------	-------------

### Battery Connecting Handle

340029-002	Plastic gray - includes hardware
------------	----------------------------------

### Cable Clamp

340056-005	Includes hardware, use with or without handle
------------	---

340029-002

340056-005



## 320 SBE Ampere

Part Number	Color	Cable Size
-------------	-------	------------

### Connector Housing

108801-001	Gray	NA
108801-003	Red	NA
108801-006	Blue	NA
108801-008	Yellow	NA

### Kit Housing/Contacts

108800-001	Gray	2/0
108800-006	Red	3/0
108800-007	Gray	1/0
108800-008	Blue	2/0
108800-009	Gray	2/0

### Contacts

108802-001	NA	2/0
108802-003	NA	3/0

### ▼ Accessories

Part Number	Description
-------------	-------------

108437	Drive Block used on P.N. 108800-006 & 108800-009.
060015-025	Screw
060005-006	Lockwasher
060021-006	Nut
108852-002	Spacer used on P.N. 108800-007.

### Battery Connecting Handle

340029	Plastic gray - includes hardware
340029-004	Plastic, red - includes hardware

### Cable Clamp

340056-006	Includes hardware, use with or without handle
------------	---

340029-004

340056-006



## 350 SBX Ampere

Part Number	Color	Cable Size
-------------	-------	------------

### Connector Housing Kit

118802-001	Gray	2/0
118802-002	Blue	2/0
118802-003	Red	2/0
118802-004	Green	2/0
118802-005	Black	2/0
118802-006	Yellow	2/0
340055-001	Blue	4/0
340055-002	Yellow	4/0
340055-003	Gray	4/0
340055-004	Red	4/0

### Contacts

108802-001	2/0
108802-003	3/0
108802-004	4/0

### ▼ Accessories

Part Number	Description
-------------	-------------

### Battery Connecting Handle

340029	Plastic, gray - includes hardware
--------	-----------------------------------

### Cable Clamp

340056-006	Includes hardware, use with or without handle
------------	---

340029

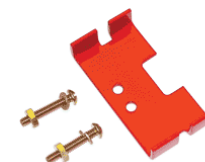
340056-006



## Manual Release Handle - SBE 320/SBX 350

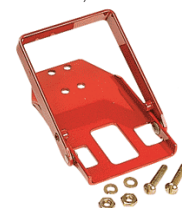
### Part Number - H47593-533

Charger/Truck Half  
(includes hardware)



### Part Number - 340060-001

Battery Half  
(includes hardware)



## Battery Connectors - DIN

### A320

#### Crown Part Number Description

##### A320 Complete Kits - handle, auxiliary tips, clamp and carrier

340320-215	A320 Conn- Male Pin, 2/0
340320-315	A320 Conn- Male Pin, 3/0
340320-415	A320 Conn- Male Pin, 4/0
340320-205	A320 Conn- Female Skt, 2/0
340320-305	A320 Conn- Female Skt, 3/0
340320-405	A320 Conn- Female Skt, 4/0

##### A320 Kits - Do not include contact tips, auxiliary tips or handle

340320-211	A320 Kit- Male Pin Hsg, Clamps, Carrier
340320-201	A320 Kit- Female Skt Hsg, Clamps, Carrier

##### A320 Connectors with Contacts

340320-212	A320 Conn- Male Pin, 2/0
340320-312	A320 Conn- Male Pin, 3/0
340320-412	A320 Conn- Male Pin, 4/0
340320-202	A320 Conn- Female Skt, 2/0
340320-302	A320 Conn- Female Skt, 3/0
340320-402	A320 Conn- Female Skt, 4/0

##### A320 Auxiliary Tips

340320-002	A320 Aux Pin Contact, Lower 14/18 AWG
340320-003	A320 Aux Skt Contact, Lower, 14/18 AWG
340320-004	A320 Aux Pin Contact, Upper 14/18 AWG
340320-005	A320 Aux Skt Contact, Upper, 14/18 AWG

##### A320 Contact Tips

340320-006	A320 Contact, Male Pin, 2/0
340320-007	A320 Contact, Male Pin, 3/0
340320-008	A320 Contact, Male Pin, 4/0
340320-009	A320 Contact, Female Skt, 2/0
340320-010	A320 Contact, Female Skt, 3/0
340320-011	A320 Contact, Female Skt, 4/0

340320-405 / 341227-125



340320-201 / 341227-122



340320-212 / 341227-112



340320-402 / 341227-122



340320-002



340320-003



340320-004



340320-005



340320-006 /  
341227-003



340320-009 /  
341227-002



### A160

#### Crown Part Number Description

##### A160 Complete Kits - handle, auxiliary tips, clamp and carrier

341227-115	A160 Conn- Male Pin, 1/0
341227-125	A160 Conn- Female Skt, 1/0

##### A160 Kits - Do not include contact tips, auxiliary tips or handle

341227-112	A160 Conn- Male Pin, 1/0
341227-122	A160 Conn- Female Skt, 1/0

##### A160 Contact Tips

341227-003	A160 Contact, Male Pin 1/0
341227-002	A160 Contact, Female Pin 1/0

340327



340320-001

340328



### A320/A160 Tools and Accessories

#### Crown Part Number Description

340320-001	A160 & A320 Handle
340329	Hand Crimp Tool - crimps auxiliary DIN contacts

### A320 (only) Tools and Accessories

#### Crown Part Number Description

340060-001	A320 Manual Release Brkt.
340321	Crimp Tool-A320 Aux Contacts
340322	Crimp Tool-Manual/Hydraulic; bench mounted; has built-in die selector, no need for external dies
340323	Crimp Tool-Battery Powered; hand held hydraulic tool that uses dies 340325 & 340326
340324	Crimp Tool-Hand held hydraulic tool that uses dies 340325 & 340326
340325	Die Set-2/0 - use with 340323 & 340324
340326	Die Set-3/0-4/0 - use with 340323 & 340324
340327	Latch Plate w/Hardware
340328	A-Frame Handle for Latch, w/hardware
H47593	A320 Manual Release Lever

## Battery Connectors - 1 Pole



### 120 Ampere

Part Number	Color	Cable Size
<b>Connector Housing</b>		
081591	Blue	NA
<b>Contacts</b>		
081823	NA	2/0



### 180 Ampere

Part Number	Color	Cable Size
<b>Connector Housing</b>		
084528	Blue	NA
<b>Kit Housing/Contacts</b>		
084529	Blue	1/0
<b>Contacts</b>		
078724-002	NA	1/0

## Power Cable

### Power Cable

Part Number	Gauge	Ordering Instructions
084568-010	6	Order quantity is length in feet - black UL
384569-010	4	10 ft - black UL
384569-050	4	50 ft - black UL
384569-105	4	100 ft - red, not UL rated
384569-250	4	250 ft - black UL
384575-050	4	50 ft - red UL
384575-100	4	100 ft - red UL
344570-050	2	50 ft - black UL (same as 084570-100)
344570-100	2	100 ft - black UL (same as 084570-100)
344570-500	2	500 ft - black UL (same as 084570-100)
384576-050	2	50 ft - red UL
384576-100	2	100 ft - red UL
344571-050	1	50 ft - black UL (same as 084571-100)
344571-100	1	100 ft - black UL (same as 084571-100)
384571-050-02	1	50 ft - red UL
384571-100-02	1	100 ft - red UL
384572-050	1/0	50 ft - black UL
384572-100	1/0	100 ft - black UL
384574-050	1/0	50 ft - red UL
384574-100	1/0	100 ft - red UL
384573-013	2/0	100 ft - red, not UL rated
384573-014	2/0	100 ft - orange not UL rated
384573-100	2/0	100 ft - black UL
384573-250	2/0	250 ft - black UL
384577-100	4/0	100 ft - black UL
384578-100	4/0	100 ft - red not UL rated



### Heat Shrink Tubing

Part Number	Color	Expanded		Shrunk	
		Dia. (in)	Dia. (in)	Gauge Size	Length (in)
300414-001	Black	0.75	0.25	4 thru 2/0	6
300414-002	Red	0.75	0.25	4 thru 2/0	6
300414-003	Black	1.125	0.375	1/0 thru 250 MCM	6
300414-004	Red	1.125	0.375	1/0 thru 250 MCM	6

- Double wall with extra meltable sealant
- Premium quality for heavy duty applications or for use in abusive environments requiring protection from abrasion
- Inner surface lined with adhesive sealant which melts when heated: permanently seals connection as tube cools & shrinks
- Conforms to DOD Mil-DTL-23053/15A Class 1 & 2 specifications

### Expandable Sleeving

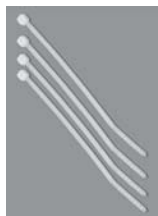
Part Number - 300456-100

- 1 1/4" - 100 ft roll
- Fray resistant, cuts with scissors
- High abrasion resistance
- Increased braid density for better coverage
- Expansion Range minimum 1" to maximum 1 1/2"
- Will fit both negative & positive cables from 1 gauge to 4/0 gauge



### Cable Ties

Part Number	Length (in)	Width (in)	Max. Wire Bundle	Color	Qty Per Box
365003-002	4.00	0.09	0.63	Natural	1000
365003-003	7.44	0.19	1.75	Natural	1000
365003-004	5.60	0.14	1.38	Black	1000
365003-005	11.40	0.14	3.00	Black	1000



### Cable End - Copper Tin Plated

AWG Wire Size	Stud Size	Part Number
1/0	0.344	384000-001
2/0	0.344	384000-002
4	0.344	384000-004
6	0.344	384000-006

### Automotive Battery Connectors, 10 per package

Part Number	Single Piece	Description	Specifications
300457-010	300457-001	Heavy Duty Universal Top Post Lead Terminal	Clamps designed for truck, bus, construction, agriculture & industrial applications. Accepts 1 thru 4/0 gauge cable.
300458-010	300458-001	Automotive Universal Top Post Lead Terminal	Automotive and light truck applications. Accepts 6 thru 2/0 gauge cable sizes.

300457-010



300458-010





**Post Drill Bit, 2 Flute**

Part Number - 300404

Designed for Leadheads, FastCharge Leadheads and Intercells.

- Extra tall flutes allow drilling depth of up to one inch
- 1 inch O.D. leaves a .70 inch post
- Tool length 5 inches
- Center Pin to guide drill straight
- Can be resharpened
- Use Centerless drill for deep bore.

- ① Three flats on shank prevent spinning in chuck
- ② Extra tall flutes improve drilling depth in thick leadheads, Wide flutes prevent chip pile-up
- ③ Electroplating improves corrosion resistance



**Hydrometer - Glass**

Part Number - 300406

- Professional quality for highest accuracy
- Precision graduated specific gravity float
- Overall Length 13.5 inches, glass barrel 8 inches long



**Hydrometer - Plastic**

Part Number - 300407

- Professional quality for highest accuracy
- Precision graduated specific gravity float



**Post Builder Mold**

Part Number - 300405

- Create a post on batteries or intercells
- Post mold is tall enough that when leadhead is attached, the post will burn down and fill leadhead cavity, creating tight seal
- Enables you to add a leadhead where needed

- ① Tapered mold for ease of release
- ② Handle to break mold free from new post



**QuickStrip Pro - Cable Strippers**

Part Number - 300412

- Strips insulation from cable 10 - 250 mcm
- Includes spare blade

Replacement Blade: P.N. 300412-001



**Lead Sticks**

Part Number - 300417-005 (5 - 1 lb sticks)

- Made of 5 percent antimonial lead
- Clean melting alloy, free of foreign material, voids and porosity
- Sticks are 12 inches long (30.5 cm) and weigh 1lb (.45 kg)



**QuickStrip - Cable Strippers**

Part Number - 300411

- Strips insulation from cable 10 - 4/0 gauge
- Includes spare blade

Replacement Blade: P.N. 300418



**Carbon Arc Burner**

Part Number - 300440

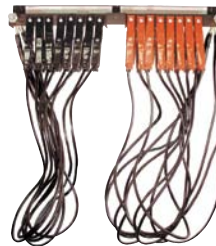
- No Flame
- Use voltage from battery to melt lead to repair battery

▼ **Accessories**

**Copper Coated Electrodes**

Part Number - 300441-050

- For use with Carbon Arc Burner
- 50 in a box



**Multi-Charging Bus Bar**

Part Number - 300453

Charge up to 8 batteries at one time  
Affordable - low cost alternative to multiple charger's Flexible - can be mounted on wall, work bench or charger housing

**Includes:** Mounting hardware, side terminal-to-top post conversion connectors ( 4 pairs)

**Note:** Used to charge SLI and SLA batteries  
**SLI** = (Starting, Lighting and Ignition) most common lead acid battery, typical starting battery in any car, truck.  
**SLA** = (Sealed Lead Acid) sealed battery, you cannot add water to it, most commonly used in standby systems.



**Butane Torch**

Part Number - 300408

Butane Torch used for heat shrink applications along with soldering of some smaller connectors. Not used to repair batteries.

## Battery Tools

### Oxygen & Acetylene Torch Welding & Regulator Kit

Part Number - 300442

**Includes:**

- Tote
- 150 Series Cutting Attachment
- 150 Series Oxygen / Acetylene Regulators
- #2 Welding Nozzle Welds to 1/8"
- #0 Cutting Tip Cuts to 1/2"
- 3/16" X 12.5' Dualine Hose
- Goggles/Shade #5 and Striker
- 10 cu ft "MC" Acetylene Cylinder and 20 cu ft "R" Oxygen Cylinder (Empty)



**▼ Replacement Parts**

Part Number	Description	Quantity
300443	Welding Nozzle, 0-W-1	1
300444	Cutting Tip, 0-3-101	1
300445	Cutting Attachment	1
300446	Welding Handle	1
300447	Regulator Oxygen	1
300448	Regulator Acetylene	1
300449	3/16" x 12-1/2" Hose Twin	1
300450	2001 Spark Lighter Single	Box (10)

### Quick Cutter 2 - Heavy-Duty Cutter

Part Number - 300409

- Hand held
- Cuts cable up to 6/0 gauge
- 22 inch handle for easier cutting
- Blades made of 1075 carbon steel, hardened for long life, can be resharpened
- Made in North America



### Hex Crimp 26 inch

Part Number - 300410

- Crimps 8 thru 4/0 gauge cable
- Crimps all major brands of connectors
- Hand held
- 26 inch handles



### Hex Crimp Repair Kit

Part Number - 300410-001

- Includes 2 dies, 2 springs, 2 pins and 2 washers



### Carrying Case for Crimp Tools

Part Number - 300454



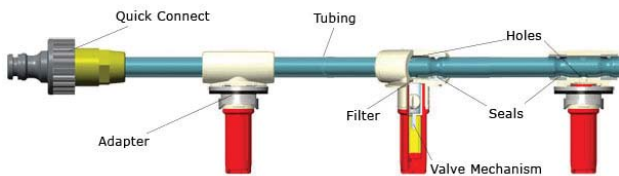
## Battery Watering Application Chart

Use the following table to help determine the best system for the application at hand. Not all applications are alike; be sure to put the appropriate product into the correct application to ensure years of cost effective & reliable operation.

Product	Water Injector System	Stealth Float System	Watering Gun
Facility Size	25 or more batteries	5-25 batteries	1-5 batteries
Application	Heavy Duty Abusive Conditions Rapid Charge Battery Changers	Medium Duty Low Water Pressure Medium Facility	Light-Duty Small Facility Infrequent Use Golf Course
Time to Install	3 Minutes	12 Minutes	Not Applicable
Time to Fill an 18-Cell Battery	15 Seconds	2-10 Minutes	20 Minutes
Payback/ROI	\$\$\$	\$\$	\$

## Philadelphia Scientific - Injector System

Continued ▶



### Injector Kits

Part Number	Vendor Number	Description
300301-012	INJ-S12	24V Injector Kit Standard
300301-018	INJ-S18	36V Injector Kit Standard
300301-024	INJ-S24	48V Injector Kit Standard

Note: Prestrung options available upon request.

**ATTENTION:** Water Injectors require a minimum of 25 psi of flowing water at a rate of 8 gallons per minute. If the flow is inadequate, the Injectors will not shut off. If a Philadelphia Scientific factory authorized water supply is not being used water pressure from the wall must be confirmed with a 300310-027 Water Flow Pressure Measurement Tool.



### Features

- Very Fast Operation:** An average industrial truck battery can be filled, with precise level control, in less than 15 seconds. The savings in labor costs alone often pays for the system within its first year of operation.
- Quality of Watering:** It extends the life of each expensive battery it is installed on due to improved quality of watering. The battery is properly watered every time.
- Safety and Environmental Cleanliness:** There is no need to peer into cells to inspect levels as with manual filling, and Water Injectors™ automatically fill each cell to the correct level, so no over filling and no electrolyte overflow during charge.
- Compact:** A very low profile allows them to fit on almost any battery. Injectors can snap in and out to allow inspection of electrolyte levels and specific gravities.
- Rugged:** Tough enough to survive impacts, abuse and extremes of battery temperatures. There are no exposed parts to break off even when an Injector is removed from a cell. True level sensing mechanism. Needs no submergence to sense level as a float does. Can work right down to the top of the separators. Will not fail if it touches cell components.
- No-Freeze Tubing:** The surplus water drains from the tubing into cells after filling is complete. This allows the system to be used in cold stores and other freezing environments.
- 2-Stage Filtration:** In addition to the filter screen in the water tubing, each Injector has its own individual filter.
- 5 Year Warranty:** Warrantable against defects in materials and workmanship.



**Bladder Tank 10 Gallon**

**Part Number Vendor Number**

300306	INJ-T10M
--------	----------

- 10 gallon steel tank
- Requires no power

**Tank capacities based on input pressure**

**Input Pressure Tank Capacity**

80 PSI	10 Gallon
70 PSI	9.5 Gallon
60 PSI	8 Gallon
50 PSI	6 Gallon

**Note:** Water pressure below 50 PSI will require a booster pump.



**Check Valve/Quick Disconnect Coupling Male**

**Part Number Vendor Number**

300310-034	ACC-038
------------	---------

**Note:** Replacement Part for 300307 Bladder Tank



**Tee and Regulator**

**Part Number Vendor Number**

300310-032	INJ-434
------------	---------

**Note:** Replacement Part for 300307 Bladder Tank



**Hydro Cart Injector**

**Part Number Vendor Number**

300302	INJ-HCT
--------	---------

- 20 gallon polypropylene tank
- 45 feet of total reach
- Plug into 110 VAC outlet
- Low indicator tell when the injectors have shut off

**Replacement part for Hydro Cart Injector:** Pump P.N. 300311



**Mini Hydro Cart Injector**

**Part Number Vendor Number**

300303	INJ-MINI
--------	----------

- 8 gallon polypropylene tank
- 23 feet of total reach
- Easy to transport to remote locations
- Plug into 110 VAC outlet

**Replacement parts for Mini Hydro Cart Injector:**

Wheels, Axle & Cap P.N. 300313  
Pump P.N. 300311



**Replacement Pump**

**Part Number Vendor Number**

300311	INJ-540
--------	---------

**Note:** Replacement Pump for 300302 & 300303



**Booster Pump**

**Part Number Vendor Number**

300304	INJ-BP
--------	--------

- Use with 300306 and 300307 bladder tanks
- Delivers 1.5 Gallons per minute
- Automatically turns off when output pressure reaches 80 psi
- Wall mountable and requires 110v A/C outlet
- 15 Foot input hose

Used when the in-plant water pressure is not high enough to completely fill a bladder tank. It cannot be used to fill the injector system directly since it does not have a high enough flow rate.



**Direct Fill Hose Injector**

**Part Number Vendor Number Length**

300305	INJ-DF	20 ft.
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**Note:** The Direct Fill Hose Injector requires a minimum of 25 psi of flowing water at a rate of 8 gallons per minute. If the flow is inadequate, the Injectors will not shut off. If a Philadelphia Scientific factory authorized water supply is not being used water pressure from the wall must be confirmed with a 300310-027 Water Flow Pressure Measurement Tool.

▲ **Note:** The use of deionized water is recommended for all tanks.



# Philadelphia Scientific - Injector System



Battery and Charger

## Injector System Supplies

Part Number	Vendor Number	Description
300310-004	INJ-126	Flow Indicator
300310-005	INJ-CP	Coupling Quick Connect
300310-008	INJ-198	Injector Tubing 25 feet
300310-009	INJ-202	Installation Tape 36 yards
300310-010	INJ-212	Terminating Injector Clamp
300310-012	INJ-250	Vent Adapter Quarter Turn
300310-013	INJ-253	Vent Adapter DIN
300310-014	INJ-311	Punch Tool Tubing
300310-015	INJ-TL1	Terminating Injector
300310-016	INJ-465	Repair Coupling
300310-017	INJ-472	Check Valve
300310-018	INJ-495	Tubing Type (2) 500 feet
300310-019	INJ-L1A	Extended Diffuser Injector
300310-020	INJ-534	Injector Input, Dual Barb with extended downtube
300310-022	INJ-601	Water Injector Collar Installation Tool

Part Number	Vendor Number	Description
300310-023	INJ-608	Water Injector Collars
300310-025	INJ-615	Wye Fitting with Ratchet Clamps (10 Pack)
300310-026	INJ-CL1	ClampLock Injector (single) with collars
300310-027	INJ-FC	Water Flow Pressure Measurement Tool
300310-028	INJ-L1	Injector Standard
300310-033	INJ-607	Instant Valve Pro, replaces INJ120 (On/Off Valve) & INJ121 (Nozzle), INJ491 (Quick Connect, Female, Male Thread)
300310-037	INJ-657	Replacement Parts Kit - hoses and fittings to connect the hydrotronic to submersible pump

**Features:**

- The Float based, single-point watering system precisely fills all battery cells to the same level simultaneously. It makes battery watering safe, easy and affordable.
- Push-fit tubing ports - a unique design feature - makes tubing installation fast, easy and secure. Secure tubing by simply pushing tubing into ports.
- Operating pressure range is from 3 to 45 psi.
- The system tubing is kink and crush-resistant. With a small bend radius, it fits the smallest cells easily, including 5- and 7-plate batteries.
- No need for multiple float sizes. This unique system design incorporates a one-size-fits-all philosophy.
- Designed to sit lower than the intercell connectors when installed on a battery. This means reduced damage from the battery's cables as they move across the top of the battery.

**Float Kits**

Part Number	Vendor Number	Description
300220-012	FLT-K12	24v Standard Float Kit
300220-018	FLT-K18	36v Standard Float Kit
300220-024	FLT-K24	48v Standard Float Kit
300221-012	FLT-DK12	24v Douglas Float Kit *
300221-018	FLT-DK18	36v Douglas Float Kit *
300221-024	FLT-DK24	48v Douglas Float Kit *

\*Note: Includes float assembly adaptor part number 300227-016 for each battery cell. Adaptor only required for Douglas batteries.



300220-012



300220-018



300220-024

**Note:** Philadelphia Scientific does not recommend the installation of the Stealth Watering System into Exide Technologies/GNB Batteries. Philadelphia Scientific cannot guarantee that the Stealth valves will fit into all cells of the Exide Technologies/GNB battery. Because of this we recommend the use of the Water Injector System or Water Injector Spider System for Exide Technologies/GNB batteries, which fit all Exide Technologies/GNB cells. Customers that want to install the Stealth Watering System onto Exide Technologies/GNB batteries do so of their own accord and assume responsibility if it does not fit.

**Water Supply Systems - Float**

Part Number	Vendor Number	Description
300222	FLT-DL	Direct Fill Link
300222-020	FLT-039	Hose 20 foot
300223	FLT-GT	5 Gallon Gravity Flow Tank & hose
300223-002	FLT-018	Shelf For Float System Gravity Tank
300224-010	CRT-12V	12 Volt -10 Gallon Watering Cart
300224-010-01	CRT-095	Battery for 10 Gallon Watering Cart
300228	CRT-035	Charger for 10 Gallon Watering Cart
300232	CRT-070	Hose, Output, with Disconnect Fitting 12'
300225-020	FLT-12AC20	110 Volt A/C 20 Gallon Watering Cart - Includes FLT-015 Converter for use on Stealth Float System
300311	INJ-540	Replacement Pump
300226	PS-300	Philadelphia Scientific Water Deionizer
300226-001*	PS-600	Deionizer Filter
300231	PS-150	Deionizer Output Hose 20 foot
300226-002	PS-191	D/C Purity Light with Tee
300229	FLT-015	Adapter to Convert from Float to Injector System

**Note:** Deionizer Filter - Cartridge is two feet long and rated for 600 gallons of pure water. Actual output may vary with tap water quality.



**Highly Visible Fill Level Indicator**  
Viewable from top and side

**Push-fit Tubing Ports**

- Secure tubing by simply pushing tubing into ports.
- No barbed fittings to break.

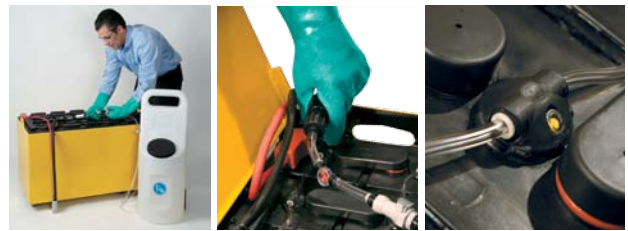
**Snap-Fit Base**  
No separate adapter required

**Rotatable Base**  
Once installed

**One Size Fits All Design**

- Fills all cells to appropriate level
- Multiple float sizes not needed.

**Built in Float Guard**



300222



300223



300223-002



300226



300225-020



300224-010



300226-001



300229

300231



# Philadelphia Scientific - Stealth Float System

## Float System Supplies

Part No.	Vendor No.	Description
300227-001	FLT-L1	Float Assembly
300227-002	FLT-004	Float Input Assembly with Filter
300227-003	FLT-004A	Float Input Assembly with Filter - BFS
300227-004	FLT-009	End Plug, Float Systems
300227-005	FLT-010	Tee for Float System
300227-006	FLT-011	1/4" Tubing, 25 ft, Float System
300227-017	198-IN	1/2" Tubing, 12 ft
300227-007	FLT-012	Tubing Cutter, Float System
300227-010	FLT-020	Assembled Filter
300227-011	FLT-035	Float Valve, Coupling, Female - use w/Flow Rite
300227-012*	FLT-035A	Float Valve, Coupling, Female - BFS - Black
300227-014	FLT-024	Male Coupling, Float System Input
300227-015*	FLT-024A	Input Coupling Male - BFS Converter - Black
300227-016	FLT-030	Douglas Float Assembly Adaptor
300227-021	FLT-032	Flow Indicator Spinner
300227-026	FLT-033	Direct Link Front End Only
300227-029	INJ-527	Quick Disconnect, Female x Male Thread
300227-030	FLT-035E	Female Coupling - BFS Converter - Blue Connector
300227-031	FLT-027E	Male Coupling - BFS system - Blue Connector
300227-032	ACC-066	Repair Kit for 300224-010. Black back panel includes on/off switch, charger jack, and 6 mounting screws. Does not include wiring.

\*Note: Order this coupling if you already have BFS fill guns or links.

## Water Deionizer Replacement Parts

300227-023	PS-122	Quick Connect Set for Water Deionizer
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Battery and Charger

# Watering Guns

## Battery Watering Gun

Part No.	Vendor No.	Description
300234	GUN-X	Works in 5/8" and 7/8" nozzle applications. Replaces GUN-B, GUN-FB, GUN-C, GUN-FC, GUN-G, GUN-FG, GUN-K, GUN-FK, GUN-R, GUN-R24.



Battery and Charger

## GUN-B Replacement Parts

Part No.	Vendor No.	Description
300227-020	GUN-AT	Pressure Regulator
300227-022	GUN-FC	Front End, 5/8" Nozzle, Sharp 60 degree bend
300227-024	GUN-FB	Front End, 7/8" Nozzle, Shallow 30 degree bend



300227-020



300227-022



300227-024



## V-110 Plug In 24V Charger

Part Number - 390040-124

Model - HBS1200-24 Charger



### Features

- Single Shift Application Charger
- UL & CSA approved
- 40 amp DC output
- Utilizes High Frequency charger technology.
- Charges Flooded or Sealed 24Volt Batteries (300A-hr to 550A-hr) in 16 hours or less.
- Self detecting input automatically senses and adjusts to single phase AC voltages (100, 110, 115, 120, 220, 230, or 240 Volts) and frequencies (50 or 60Hz). (8ft AC Cable)
- Minimum standard 15A circuit breaker at 120 VAC required.
- Maintenance mode to keep batteries charged while in storage.
- IEL charge profile for flooded batteries and IE type for sealed lead acid batteries.
- Manual start and stop.
- Completely sealed case (7" width x 11.26" length x 8.27" height).
- 1 year parts and labor warranty.
- SB175 gray connector (10' DC cable).



085560-XXX



086747-XXX



109131-XXX



107244



125322



144020

Part Number	Output Voltage	Output Amps	Input Voltage	Cycle	Dimensions L x W x H (in)	Connector Attached	Features
085560-007	12	5	120	50-60	10.25 x 5 x 5.75	Ring Terminal and Male Snap-on Disconnect	
086747-003	12	40	120	50	12 x 8 x 10.25	SB50 - Gray	Manual Timer, Cord is 8 feet long
086747-001	12	40	120	60	12 x 8 x 10.25	SB50 - Gray	Manual Timer, Cord is 8 feet long
086747-002	12	40	230	60	12 x 8 x 10.25	SB50 - Gray	Manual Timer, Cord is 8 feet long
085560-008	12	10	120	50-60	10.25 x 5 x 5.75	Ring Terminal and Male Snap-on Disconnect	
109131-001	24	15	120	60	11.375 x 5.375 x 7.25	SB175 - Gray	Manual Timer
107244	24	15	120	60	12 x 6.5 x 7	SB175 - Gray	Manual Timer
125322	24	25	120	50-60	20.5 x 6.25 x 4.75	SB175 - Gray	
144020	24	30	120	50-60	10 x 4.75 x 3		Auto Start/Stop
109131-002	24	15	230	50	11.375 x 5.375 x 7.25	SB175 - Gray	Manual Timer

# Industrial Battery Chargers



## Default Configuration

All Chargers will ship with the following configuration:

- Input Voltage: 480 Volts
- Battery Type: Flooded
- Connector: Listed in chart
- Lead Length: 9 Feet
- AMP HR Setting: Maximum

## Specs

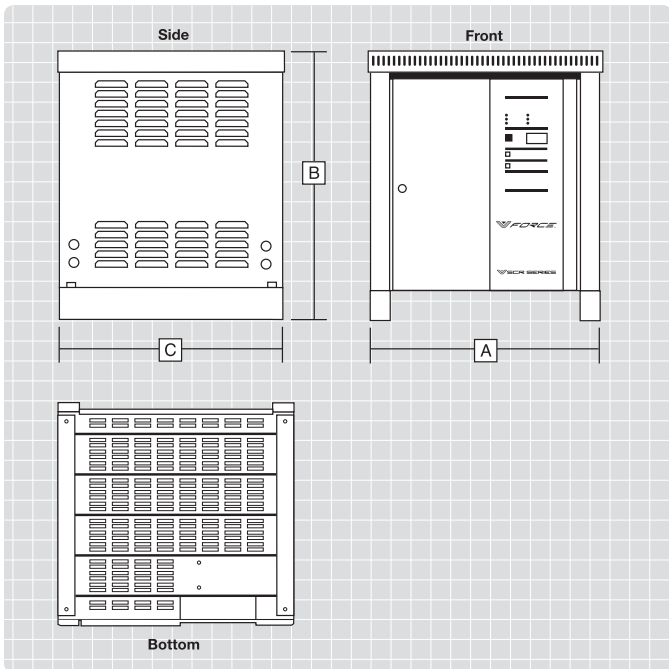
- Utilizes silicon controlled rectifier (SCR) technology
- 100% rated multi-shift charger  
(Charges batteries in eight hours or less)
- Adjustable input voltages 480/240/208 Volts AC
- Adjustable flooded or sealed batteries
- 60 Hertz
- UL & CSA approved

## Features

- Extends battery life by reducing heat during charge cycle. (IEI charge profile)
- Ensures batteries are fully charged through dV/dt charge termination.
- Automatic start and stop. (5 second start delay)
- Charge cycle is constantly monitored and stopped when any critical voltage or current threshold is exceeded.
- AMP HR rating adjustable down to 65% of chargers rated capacity.
- In unplanned or emergency situations, allows for charging of batteries up to double the amp-hour rating of the charger with extended charge time.
- Rugged design (no moving parts)
- Better warranty than the competition, 10 year warranty on transformers and power semi-conductors, and 5 years on all other parts. (excluding fuses)
- Opportunity Charge profile capable

Crown Part Number	V-SCR Model Numbers (Cells-Phase-Amp per hour)	Connector
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24 Volt		
390475-124-01	SMC12-1-475	Gray 175
390600-124-01	SMC12-1-600	Gray 175
390475-324-01	SMC12-3-475	Gray 175
390600-324-01	SMC12-3-600	Gray 175
390750-124-01	SMC12-1-750	Red 350
390865-124-01	SMC12-1-865	Red 350
390750-324-01	SMC12-3-750	Red 350
390865-324-01	SMC12-3-865	Red 350
390965-324-01	SMC12-3-965	Red 350
391050-324-01	SMC12-3-1050	Red 350
36 Volt		
390600-136-01	SMC18-1-600	Gray 350
390750-136-01	SMC18-1-750	Gray 350
390750-336-01	SMC18-3-750	Gray 350
390865-336-01	SMC18-3-865	Gray 350
390965-336-01	SMC18-3-965	Gray 350
391050-336-01	SMC18-3-1050	Gray 350
391200-336-01	SMC18-3-1200	Gray 350
48 Volt		
390750-348-01	SMC24-3-750	Blue 350
390865-348-01	SMC24-3-865	Blue 350
390965-348-01	SMC24-3-965	Blue 350
391050-348-01	SMC24-3-1050	Blue 350



## Dimensions

Cabinet Model	Dim. A	Dim. B	Dim. C
B	22.70"	26.65"	22.25"

**Note:** For additional information on the industrial chargers listed here, please reference the V-Force SCR Charger brochure available through your local Crown Lift Truck dealer. (PF14703)

## Battery Capacity Indicators



Part Number	Voltage	Body Diameter	Overall Length	Display
130997	12-24	66.7mm (2.63")	52mm (2.05")	Hour Meter
824819	24-48	69mm (2.73")	52mm (2.05")	99999.9 LCD BDI - LED

Combines in one instrument a completely solid state battery discharge indicator, an LCD hour meter and lift lockout, housed in a 52 mm case. Indicates state of charge in 10 bar LED display. Void of moving parts, this instrument is exceptionally reliable even in severe operating environments. Suitable for all electric vehicles. Mounting hardware included.



Part Number	Voltage	Display
108043	24-36	LED
Overall Length	Body Diameter	
55mm (2.15")	52mm (2.05")	

Discharge meter, use in conjunction with 134527, 134528 and 134529 battery interrupts. Mounting hardware included.



Part Number	Voltage	Display
115083	12-24	LED
106288	24-36	
126238-002*	24-36	
Overall Length	Body Diameter	
64mm (2.53")	52mm (2.05")	

Dual voltage, easy to install "fuel" gage. Reliable, accurate and easy to read display of battery state-of-charge. For lead acid battery-powered vehicles that require a display function only. Mounting hardware included.

\*Note: Maintenance free batteries.



Part Number	Voltage	Vendor Number
134527	24	Curtis 933
134528	36	Curtis 933
134529	24-36-48	Curtis 933

Controller with lift lockout and adjustable reset and discharge settings. It features a rugged aluminum controller for reliable operation, even in the most severe conditions. It prolongs battery life and protects vehicle components from the effects of deep discharge in material handling and other battery powered vehicles. Use in conjunction with part number 108043.

**Note:** All round gauges utilize an industry standard mounting hole.



Part Number	Voltage	Type	Display
130600-001	12	Standard	Hour Meter 8
130600-002	12	Freezer	alpha-numeric, LCD, BDI-LED
Overall Length	Body Diameter		
64mm (2.53")	52mm (2.05")		

Displays various system parameters, such as battery state-of-charge, operation hours or maintenance status from a motor controller or other serial communication source. Ideal for pallet trucks, walkies, stackers and order pickers as well as other equipment with a need to display data using a dedicated unidirectional asynchronous serial signal. Mounting hardware included.

## Multi-Voltage Battery Hour Meters



Part Number	Voltage	Display
113773-001	12-48	9999.9
Overall Length	Body Diameter	
38mm (1.48")	52mm (2.05")	

Highly reliable solid state hour meter that offers an unprecedented combination of patented technology, performance, reliability and value. It has a provision for continuous display. Has LCD display. DC only. Mounting hardware included.



Part Number	Voltage	Display
113773-004	12-48	9999.9
Overall Length	Body Diameter	
34mm (1.318")	31mm x 54mm (1.224" x 2.098")	

Highly reliable solid state hour meter that offers an unprecedented combination of patented technology, performance, reliability and value. It has a provision for continuous display. Has LCD display. DC only. Utilizes flat quick-connect terminal tabs with hole.



Part Number	Voltage	Display
107666	36-80	9999.9
Overall Length	Body Diameter	
59mm (2.34")	32mm x 54mm (1.25" x 2.125")	

Rugged and reliable mechanical hour meter. Two wire hookup included. DC only.

## DC/DC Converters



### Part Number - 110979

- Operates 12v
- UL recognized
- Input voltage range: 18v minimum, 55v maximum
- Output current: 5 amp
- Not suitable for solid state electronics



### Part Number - 128652

- Operates 12v
- UL recognized
- Input voltage range: 36v minimum, 48v maximum
- Output current: 21-23 amps
- Input over and under voltage protection
- Input polarity protection
- Input spike protection
- Output short circuit protection
- Thermal protection
- Suitable for all electronics

### Replacement Parts:

Input fuse: 094362-002  
Output fuse: 062765-001

## Emergency Quick Disconnect



Part Number	Voltage	W x H x L (in)
089961-001	12	3.00 x 2.75 x 9.38
089961-002	24	
089961-003	36	

This Quick Disconnect is a single pole emergency disconnect switch. When an electrical malfunction prevents the normal shutdown of a battery powered vehicle or industrial device, the QD can be triggered to interrupt the main power circuit. The solenoid trigger action and high-energy spring assures that current interruption occurs immediately. Mounts easily in any suitable location and position. Protects the motor and associated circuitry from damage due to high currents.