

# R36 SERIES



**HILLYARD**  
  
The Cleaning Resource®

 **TRIDENT®**

Better Built. Better Equipment.



# Better Built. Better Equipment.

Our Trident Brand of equipment starts from the ground up - at a place where intelligent design intersects with innovative technology and exceptional engineering to deliver superior cleaning equipment. Cleaning equipment that lowers your total cost of ownership, reduces your cost to clean and improves cleaning results. It's what you expect out of your equipment investment, and it's what we deliver. We're Hillyard, The Cleaning Resource, since 1907.



Intelligent  
Design



Exceptional  
Engineering



Innovative  
Technology



## Protection & Longevity

The outer body surrounds the internal structure and mechanical parts, protecting them from impact and eliminating potential repair costs from scrub decks being exposed outside the body.

### Yellow Color-Coded Parts

Parts that should be cleaned daily are color coded in yellow. This saves time and makes sure your scrubber is kept in perfect condition at all times.





## Comfort

Ergonomically designed, adjustable padded seat delivers hours of stress-free operation. The operator can position the seat for maximum comfort and safety.

Maximum leg room and a steering wheel that's closer to the operator makes the machine even more comfortable to use.



The foot rest zone is designed to offer ample space for the feet within the compact dimensions of the machine.



The lateral paddles provide greater control over the machine for total peace of mind and a comfortable, safe driving experience.



The lowered footboard facilitates easy access from both sides and allows the operator to sit comfortably.

## Ease-Of-Use

### Service Light System

LEDs light up the areas that may require operator inspection.

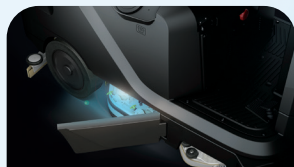
Squeegee Assembly



Battery Compartment



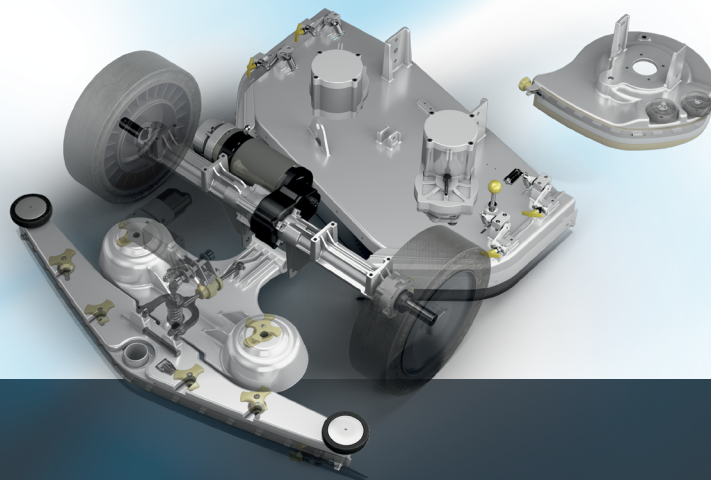
Brush Assembly



## Designed to Last a Lifetime

### Innovative Aluminum Chassis Components

The R36 Series combines the strength of steel and state-of-the-art aluminum to deliver an under-carriage built for performance. The key aluminum components are corrosion resistant, sturdy and durable, light weight and provide a precision fit.



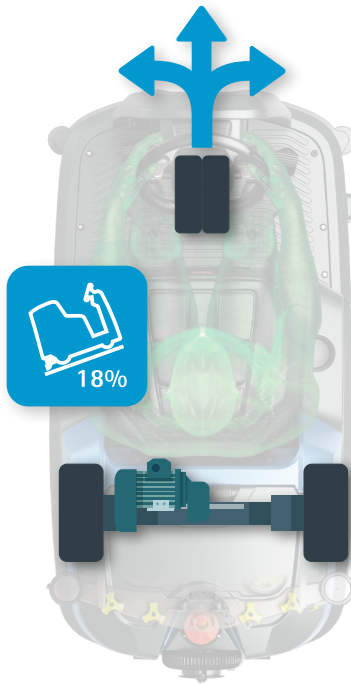


## Performance

### Outstanding Traction, Maneuverability and Cleaning

The Hillyard Trident R36 Series is engineered with dual rear-wheel drive while other manufacturers use single front-wheel pull systems. Rear-wheel drive comes with a host of advantages like:

- Battery and tank weight is evenly distributed over the heavy-duty rear axle providing more drive wheel traction.
- Easily climb ramps with an 18% slope.
- Better traction enhances safety and reduces potential for slipping.
- Frees up the dual front-wheel to deliver precise steering to turn and clean in any direction.



#### Lateral Moving Side Brush

The third brush moves laterally to facilitate cleaning along walls or shelves, increasing productivity by up to 15%.



#### Start & Stop Technology

When the machine is idle, the brush motor, vacuum motor, traction and detergent pump will turn off automatically, reducing costs and environmental impact. All the functions are reactivated automatically as soon as the operator accelerates.

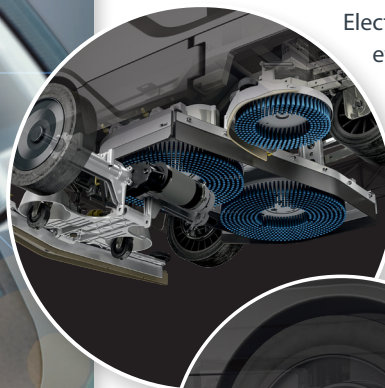
#### Power Mode For Heavy Soil



Activate the Power Mode to increase the delivery rate of detergent solution, boost brush pressure, and increase vacuum power to tackle heavy duty cleaning. Let Power Mode run for the full length of its 60-second countdown clock, or stop it with a touch at anytime.

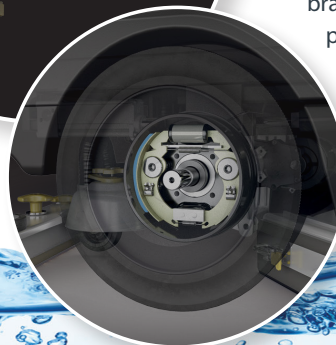
#### Adjustable Pressure To Clean

Electronically-controlled pressure setting tackles even the most stubborn soils by applying up to 330 lbs. of brush pressure.



#### Hydraulic Drum Brakes

Self-adjusting hydraulic drum brakes deliver the best braking performance.







## Safety



### Anti-Collision System

The anti-collision system detects obstacles when reversing, helping the operator work in complete safety and protects the machine.



### Emergency Stop

By pressing a single button the machine stops immediately.



### LED Lighting

Front and rear LED headlights maximize work safety in all conditions.



### Descent Control

Maintains a constant speed and prevents a sudden increase in speed when driving downhill.



### Steering Wheel Controls

The steering wheel controls offer the operator even greater control when cleaning. Also improves safety by eliminating distractions and letting the operator keep his or her eyes on the path ahead.



### Rear-View Camera

Rear-view camera lets the operator monitor cleaning results in real time from the display, without taking his or her eyes off the direction of travel.



### Stop & Go Control

The traction control system, which brakes and holds the machine when the accelerator pedal is released, provides assistance on both uphill and downhill gradients.



### One-Touch - Service On Site

One-touch service contact in case of emergency. Pushing the red button will automatically send an e-mail to the authorized Hillyard service department on record so they can quickly act on the request.



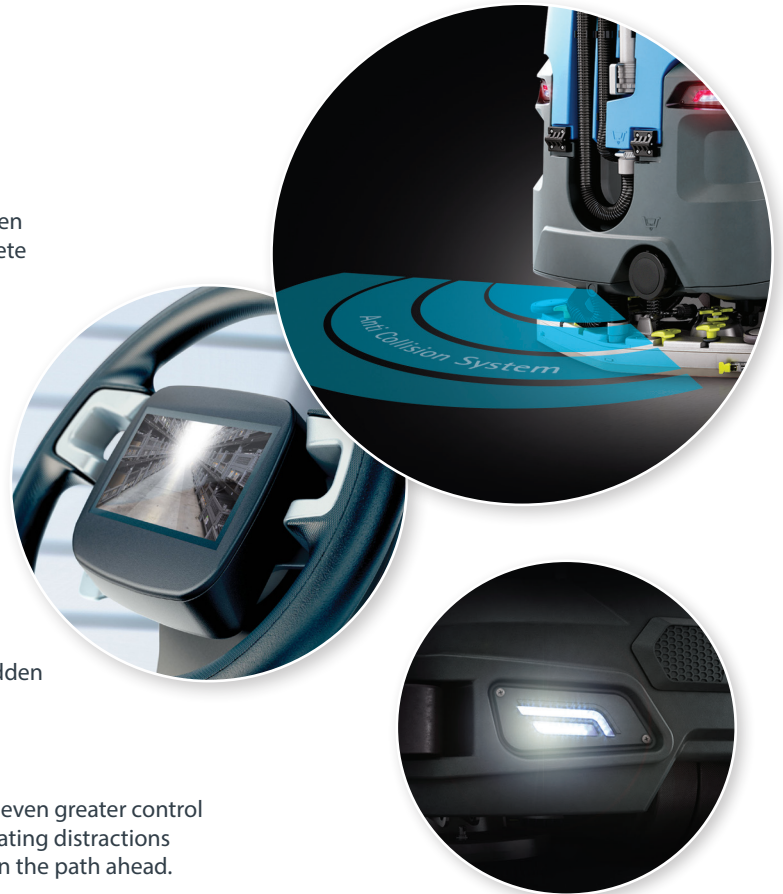
### Automatic Electro Braking

Automatically operated safety break engages when the machine stops. It acts as a safety parking brake.



### ESC - Electronic Stability Control

Automatically reduces speed when turning without the operator using the brake.



## Eco Mode For Conservation

The Eco Mode function helps conserve water, detergent and energy by using only the quantities you need and nothing more.



Better Built. Better Equipment.

# Intelligent Drive Technology



## Advanced Technology A Finger-Tip Touch Away



TOUCH SCREEN  
DISPLAY



LOG-IN WITH  
PASSWORD



PERSONALIZED  
WORK ZONE  
PROGRAMS



CRUISE  
CONTROL



SUSTAINABLE  
CLEANING



TOUGH  
CLEANING



REAR-VIEW  
CAMERA



ANTI-COLLISION  
SYSTEM



VIDEO  
TUTORIALS





## Simplified Cleaning and Control

The operator is the center of a high-tech universe, where everything is easy and intuitive.

All functions and activities are managed from a single interface, where a mere touch of the finger offers access to an extraordinary choice of customizable features that satisfy all types of requirements with effortless simplicity.

The high-definition color display offers the same intuitive experience as a smartphone.



### LOG-IN WITH PASSWORD

Protect your investment and personalize the settings.



### CUSTOM WORK ZONE PROGRAMS

One-touch equipment settings for area types or different operators.



### ONBOARD DIGITAL INSTRUCTIONS

Giving you all the information you need exactly when you need it.



### REAR-VIEW CAMERA

Keep everything under control.



### ECO MODE

Sustainable, cost-effective cleaning.



### POWER MODE

Maximum power for tough cleaning.

**NO TRAINING** The integrated video tutorials show how to perform routine maintenance.



# Join The Connected Cleaning World\*

Keep tabs on your machines remotely whenever you want and from wherever you want!



Hillyard Fleet Management



## GEOLOCATION

Know where your machines are.



## USAGE DATA

Know who's using your machine and how it is being used.



## MAINTENANCE

Know the health status of machines.



## TELEMETRY†

Critical machine data is always being monitored for peak performance.



An authorized Hillyard Trident Service Center can view real-time telemetry data, diagnose systems, and update settings over the internet - keeping your equipment running at peak performance - and minimizing downtime.

\* Requires optional Hillyard Fleet Management module and subscription.

† Battery charging information is available on equipment with onboard charging systems.





## Knowledge Is Power

Making technology available to improve efficiency is one of the core missions of Hillyard. It gives you the power to make the right decisions for your cleaning program.

HFM, the Hillyard Fleet Management system collects data sent by connected cleaning machines. When the machines are operating, valuable machine information is transmitted and easily accessible in real time, 24/7, from your smartphone.

Being constantly connected to your machines will help you operate them even more efficiently and effectively. Know where your machines are, and if the operation is being carried out according to plans at the scheduled time.

Machine health is constantly monitored. In the unlikely event of a breakdown, you'll receive an alert notification directly on your smartphone, allowing you to promptly take corrective action and immediately call technical support.

The sensors provide hard impact feedback. Now you will know how the equipment is being used.

It's time to get your cleaning world connected with Hillyard Fleet Management.

## Sustainable Technologies



**TES**

Trident Energy Saver

Reduces energy consumption by up to 35%.

LED technology consumes much less - up to 80% less energy - than conventional headlights, offering a longer lifespan and illuminates with a brilliant natural daylight.



**TDC**

Trident Dosing Control\*

Water and detergent are dosed separately, optimizing cleaning and reducing chemical and water consumption by up to 50%.



**TFC**

Trident Flow Control

Engineered water flow system that delivers equal solution to both scrub brushes ensuring proper coverage to deliver consistent cleaning quality.



\* Optional System



My.Equipment

Discover the HFM universe and experience the advantages of being constantly connected with the My.Equipment app!

## R36 SERIES

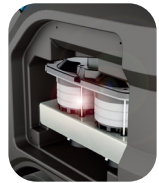
### Standard and Optional Equipment

• STANDARD    ○ DEALER INSTALLED OPTION    - NOT AVAILABLE

	User Experience	R36SC Plus	R36SS Plus
Intelligent Drive	- 5 Inch High-Resolution Color Touch Screen	•	•
	- Log-In With Password	•	•
	- "Zone" Program	•	•
	- Cruise Control	•	•
	- Eco Mode	•	•
	- Power Mode	•	•
	- Rear-View Camera	•	•
	- Anti-Collision System	•	•
	- Video Tutorials	•	•
	<b>Comfort</b>		
	Hour Meter	•	•
	Cleaning Solution Level Indicator	•	•
	Water And Detergent Empty Tank Lights	•	•
	Seat with Armrests and Seat Belts	•	•
	<b>Productivity</b>		
	Pressure Adjustment	•	•
	Right-hand Side Scrubbing Brush	•	-
	2 Sweeping Side Brushes	-	•
	3-Stage Vacuum Motor	•	•
	Trident Fast Fill	○ - HIL228435	○ - HIL228435
	Dual 3-Stage Vacuum Motor (Adds 1 Motor to Existing Motor)	○ - HIL227609	○ - HIL227609
	HFM - Hillyard Fleet Management with SOS	○ - HIL227743	○ - HIL227743
	<b>Safety</b>		
	Blinking Light	•	•
	Driving (Front - Rear) And Service LED Light Pack Kit	•	•
	Super Elastic Wheel Kit (Front and Rear)	○ - HIL227593	○ - HIL227593
	Ramp Up	•	•
	Stop & Go	•	•
	Descent Control	•	•
	ESC (Electronic Stability Control)	•	•
	Emergency Stop	•	•
	Overhead Guard (Requires Front Bumper Kit)	○ - HIL227639	○ - HIL227639
	Front Bumper Kit	○ - HIL227640	○ - HIL227640
	<b>Environment</b>		
	TDC - Trident Dosing Control	○ - HIL228266	○ - HIL228266
	TES - Trident Energy Saver	•	•
	TFC - Trident Flow Control	•	-
	Start & Stop Technology	•	•
	External Charger - standard but ordered separately. Charging profile is pre-configured for Trojan J305. For other batteries, charging profile must be re-configured to avoid permanent damage to batteries.	• - HIL34786	• - HIL34786



Trident Fast Fill



Dual 3-Stage Vacuum Motor



Super Elastic Wheel Kit



Overhead Guard Front Bumper Kit



External Charger



Seat with armrests and seat belt.



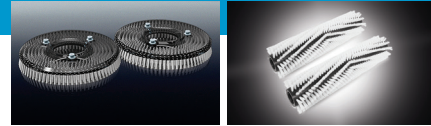
Side Scrubbing Brush - R36SC Plus



Side Sweep Brushes - R36SS Plus



# R36 SERIES



Specifications		R36SC Plus	R36SS Plus
Hillyard Item Number		HIL56020	HIL56013
Cleaning Path	In	36	34
Cleaning Path with side Brush(es)	In	41	47
Squeegee Width	In	43.3	43.3
Disc Brushes	(No.) In	(2) 18	n/a
Cylindrical Brushes	In	n/a	(2) 8.27 x 34
Side Brush(es)	(No.) In	(1) 11	(2) 17.7
Solution Tank	Gal	50.2	50.2
Recovery Tank	Gal	52.8	52.8
Supply/Traction	V	36/Automatic	36/Automatic
Acoustic Level (Iso 11201)	Db (A)	<70	<70
Brush Motor(s)	(No.) V/W/HP	(2) 36/750/1	(2) 36/750/1
Vacuum Motor	V/W/HP	36/650/0.87	36/650/0.87
Traction Motor	V/W/HP	36/900/1.2	36/900/1.2
Brush RPM (Central/Side)	RPM/Min.	180/140	550/75
Brush Pressure - Variable Range	Lb	99-215-331	66-100-132
Forward Speed	MPH	0 - 5.6	0 - 5.6
Minimum Aisle Turn	In	96.5	96.5
Gradeability - (Working, Transport Gross Wt., Transport Net Wt.)	%	7 / 10 / 18	7 / 10 / 18
Productivity	Sq.ft/Hr	58,000	54,000
Battery Compartment Dimensions (L,H,W)	In	37.8, 15.8, 19.9	37.8, 15.8, 19.9
Machine Dimensions (L,H,W)	In	72.5, 51.1, 42.7	72.5, 42.7, 51.1
Charging System		External - HIL34786	External - HIL34786
Machine Weight w/o Batteries	Lb	992	970
Machine Weight w/Batteries (6 - Trojan J305)	Lb	1,568	1,546
Contents		1 Machine, 2 Nylon Main Brushes, 2 Main Pad Holders, 1 Nylon Side Brush, 1 Side Pad Holder, 1 Owners Kit, Shelf charger comes with machine, no charge, but needs to be ordered separately.	1 Machine, 2 Nylon Cylindrical Brushes, 2 Side Brooms, 1 Owners Kit, Shelf charger comes with machine, no charge, but needs to be ordered separately.

Squeegee Replacement Guide	R36SC Plus	R36SS Plus
Para 40Sh - Stubborn Dirt, Standard (Front and Rear Kit)	HIL227076	HIL227076
Para 33Sh - Routine Maintenance, Smooth Floors (Front and Rear Kit)	HIL227075	HIL227075
PU 40Sh - Heavy Duty, Grease Resistant (Front and Rear Kit)	HIL227077	HIL227077

Brush and Pad Guide	R36SC Plus	R36SS Plus
Main Brush(es) - Medium, 0.6MM PPL, White (Standard - Requires 2)	HIL447244	HIL447963
Main Brush(es) - Stiff, 0.9MM PPL, Black (Optional - Requires 2)	HIL447246	HIL447964
Main Brush(es) - Abrasive, 80 Grit, Gray (Optional - Requires 2)	HIL447248	HIL447965
Main Brush Pad Holder - (Requires 2)	HIL447251	n/a
Side Brush - Medium, 0.6MM PPL, White (Standard)	HIL427710	n/a
Side Brush - Stiff, 0.9MM PPL, Black (Optional)	HIL427711	n/a
Side Brush - Abrasive, 80 Grit, Gray (Optional)	HIL427712	n/a
Side Brush Pad Holder	HIL427713	n/a
Side Broom(s) for Cylindrical Only, PPL 1.0 (Requires 2)	n/a	HIL437874

Battery Recommendations - Sold Separately	Discover Energy	Trojan*	U.S. Battery**
Type	AGM	Wet	Wet
Quantity Required	6	6	6
Size	6V / 360 Ah	6V / 330 Ah	6V / 360 Ah
Dimensions (L,W,H - Inches)	11 5/8 x 7 1/8 x 14 3/16	11 5/8 x 6 15/16 x 14 1/4	11 7/8 x 7 1/8 x 14 5/8
Weight (Each), Lbs.	107	96	96
Hillyard Item Number	DIEEV305AA	TROJ305PAC	UBMUS305HCXC2

\*Other Trojan Battery Options: TROJ305EAC, TROJ305GAC, TROJ305HAC, TROJ305HGAC  
\*\*Other U.S. Battery Options: UBMUS305XC2, UBMUS305EXC2



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PO Box 909  
St. Joseph, MO 64502  
[www.hillyard.com](http://www.hillyard.com)

LIT-R36\_FULL-1123

*Subject to change without notice.*



# The battery that's always ready for work!



## No more watering or waiting to charge

Virtually maintenance-free NexSys® PURE batteries never need watering, so there's never a risk of spills on clean floors. Thanks to Thin Plate Pure Lead (TPPL) technology, NexSys PURE batteries provide longer life, lower corrosion rates and higher energy throughput.

## A safer, cleaner choice for carpets and public spaces

Sealed NexSys PURE batteries generate minimal gassing, so they are a great option for retail or public environments. With a shelf life of up to two years, NexSys PURE batteries will be ready to go after sitting idle for months. They can also be full fast charged in less than two hours and opportunity charged during breaks or whenever convenient. Plus, NexSys PURE batteries have integrated data communication tools that issue automatic alerts when it's time to recharge and capture operating data for battery monitoring.

## Thin Plate Pure Lead (TPPL) Design

NexSys® PURE batteries are constructed with pure lead plates. Pure lead plates are extremely thin, so more of them fit into the battery. More plates mean more power – up to 20% more power than the same sized conventional flooded battery.

## Superior Storage Life

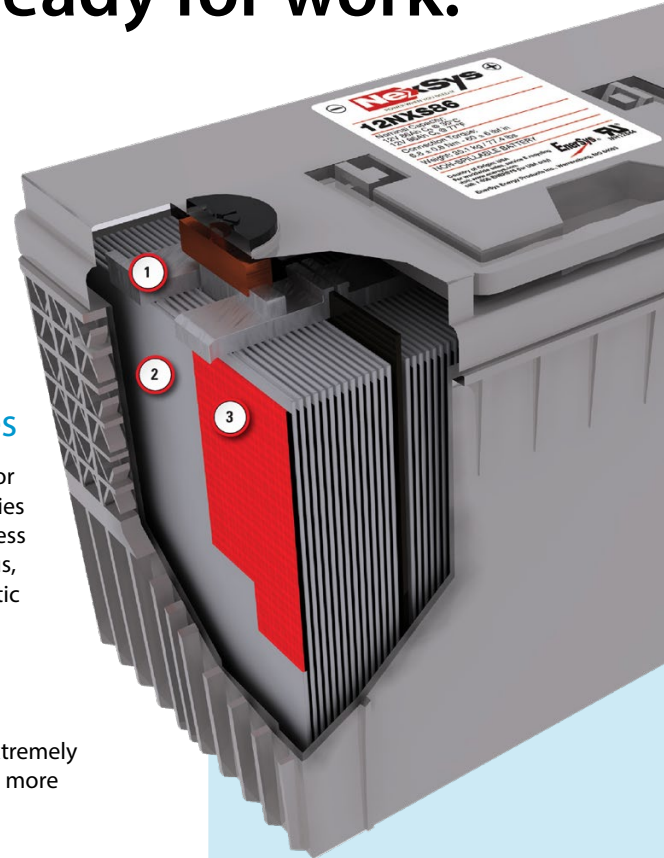
NexSys PURE batteries will be ready for work even after months of inactivity – when fully charged, NexSys PURE Gen 1 batteries have a storage life of up to 24 months and NexSys PURE Gen 2 batteries will last up to 18 months.

## Protection from Over-Discharge™ - POD™

To support frequent charges, NexSys batteries are equipped with a Protection from Over-Discharge™ (POD™) device that analyzes battery voltage and State of Charge (SOC) during operation and storage. The device issues audible and visual reminder alarms when the battery requires charging.

## Full Replacement, 3 Year Warranty Coverage

When installed in Hillyard Trident Equipment, and recommended operating procedures are followed, the EnerSys Nexsys platform offers 3 years full replacement as long as the POD was installed. Effective from date of invoice.



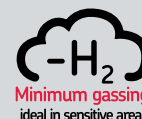
- 1 Robust Connections**  
 Cell connectors are cast on the plates and bonded to resist vibration.
- 2 Pure Lead Plates**  
 Constructed of 99% pure lead, the plates are extremely thin so more of them can fit in the battery.
- 3 Compressed Plate Separators**  
 Separators are compressed before being inserted in the case for extreme vibration resistance.



No watering, battery cleaning or long equalize charges



Optimized cycling performance and high energy throughput



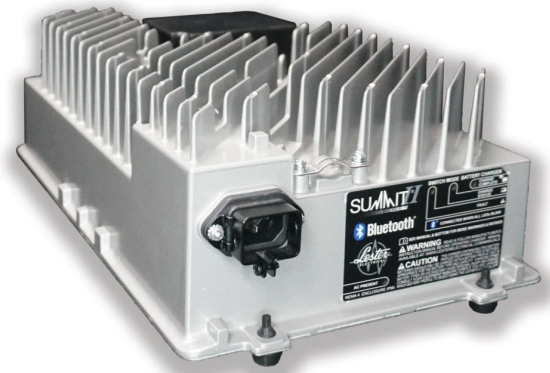
Minimum gassing and sealed



Cell connectors are cast and bonded to the plates



# SUMMIT SERIES® II CHARGERS



## BLUETOOTH®

Featuring Bluetooth wireless communication with apps for Apple® and Android™ phones and tablets. View charge cycle status, select the active battery profile, upload new profiles, change between on-board and off-board and download charge history records anytime using just a smart phone or tablet.



## PERFORMANCE

Our Summit Series® II provides industry-leading charging performance and intelligence. Our proprietary Progressive DV/DT™ charge algorithm ensures a precisely charged battery every time. The chargers are tested in extreme temperatures and operating conditions and built to last.



## EFFICIENCY

Our switch mode (high frequency) chargers have best-in-class efficiency and are compliant with the latest DOE and CEC, standards. We operate a CEC approved laboratory in our Lincoln, NE manufacturing plant.

## Full Replacement, 3 Year Warranty Coverage

Three year full replacement from the date of invoice.

Scrubber		Foam Inserts		Battery									Charger					
Model	Item No	Insert-A 1/machine unless noted	Insert-B 1/machine unless noted	Qty	Hil Item No Prefix (EnerSys Block In Bold)	Bat Ah @C5	Dimensions			Wt. Lbs.	Ah @17% charge rate/ hr	Charger Min Amp Output	EnerSys POD	Lester Model	Hil Item No	Charging Battery Profile #	OnB Charger Bypass	Spare Hardware Kit
							L	W	H									
B20SC*	HIL56003	n/a	n/a	2	<b>ESY12NXS86</b>	86	12	7	9	77.4	14.7	17	ESY6LA11921	650	HIL34787	22657	N/A	Local Source
T20SC Pro	HIL56005	n/a	n/a	2	<b>ESY12NXS120</b>	120	13.5	7.25	11	94.8	20.4	21	ESY6LA11921	650	HIL34787	22659	HIL436428	ESY32079818
T20SC Pro Orb	HIL56006																	
T26SC Plus	HIL56007																	
R22SC Orb	HIL56008																	
R22SC	HIL56010																	
R26SC Plus	HIL56026																	
R26SC Pro	HIL56027																	
R30SC	HIL56009	HIL36000	HIL36003	2	<b>ESY12NXS157</b>	157	17.5	7	10.5	117	26.7	27	ESY6LA11921	1425	HIL34788	22854	HIL436428	ESY23010422
R30SC Plus	HIL56011	HIL36000	HIL36003															
R28SC Plus Orb	HIL56012	HIL36000	HIL36003															
T28S Pro	HIL56028	HIL36002	n/a															
T30SC Pro	HIL56029	HIL36002	n/a															
R36S Plus**	HIL56013	HIL36001	HIL36000 requires 3	3	<b>ESY12NXS186</b>	186	22	5.25	12.75	131.1	31.7	33	ESY6LA11921	1425**	HIL34788	22806	n/a	ESY32079819
R36SC Plus**	HIL56020																	

\*B20 also requires LE543844 adapter cable. \*\* Charger set up for R36 models also require adapter cable HIL449979.