

TROLLING Thunder™

THE EXTREME DUAL PURPOSE BATTERY

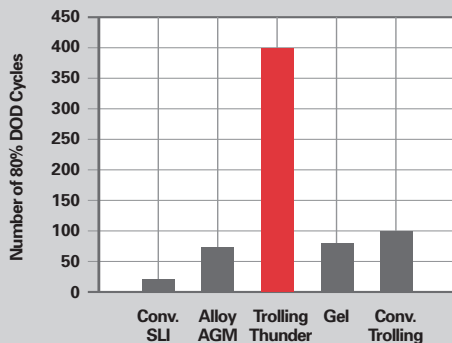
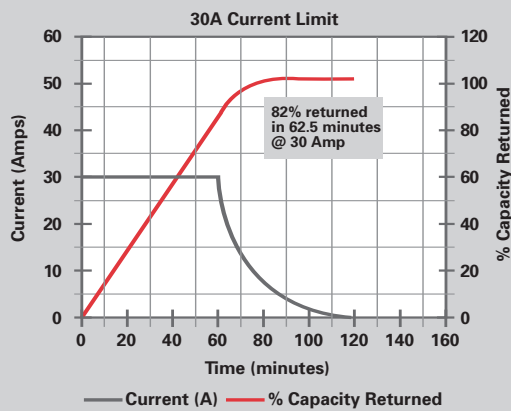
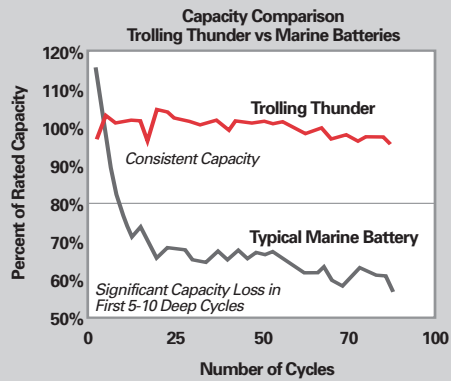


A GUIDE TO THE TROLLING THUNDER RANGE OF BATTERIES

TROLLING Thunder™

THE EXTREME DUAL PURPOSE BATTERY

The battery technology that has supplied telecommunication, medical, emergency lighting, and military applications with dependable, long lasting, and reliable power is now available to you. Whether you are a seasoned professional or a weekend angler, Trolling Thunder™ batteries are truly dual purpose for your deep cycle, starting or other recreational needs.



6 REASONS WHY YOU SHOULD BE USING TROLLING THUNDER BATTERIES:

1 SAVE MONEY AND TIME

- 3 - 5 years of service life
- No more annual battery replacements
- Lower cost of ownership
- Buy batteries less often
- A true maintenance free battery

2 FAST RECHARGE

- Highest recharge efficiency of any sealed lead battery on the market
- Capable of 100% recharge in 4 - 6 hours

3 INCREASED POWER WITH LONGER LIFE

- 70% longer cycle life as compared to conventional deep cycle batteries
- Provides high stable voltage for longer periods of time
- High purity lead/tin grid = less corrosion = long life

4 RUGGED CONSTRUCTION

- Ideal for outdoor application and abusive elements. Operating temperatures from -40°C (-40°F), -30°C (-22°F) for TT1550. No need to winterize this unit - leave it in the boat!
- Designed for high impact shock and mechanical vibration
- Less space in the boat than competitors
- Create your own 12V, 24V and 36V system
- Can be mounted on any side (in any position except inverted).








5 KEEPING CUSTOMERS SAFE

- US Department of Transportation classified as a 'nonspillable' battery
- Resealable venting system
- No more acid spills or acid burns, totally dry system
- Cannot leak, even if upside down

6 WARRANTY - THE ULTIMATE TEST

- Limited 2 year full replacement warranty
- No Pro Rata ratings
- Shelf life up to 2 years
- We put our money where your trust is... in your equipment

TROLLING THUNDER PROVIDES THE POWER FOR EVERY PURPOSE

MODEL	Voltage	MCA	CCA*	HCA	PHCA** (5 Sec)	Nominal Capacity		Reserve Capacity Minutes	Length inches (mm)	Width inches (mm)	Height inches (mm)	Weight lbs (kg)	Terminal	Torque Specs in-lbs (Nm max)	Internal Resistance (mΩ)	Short Circuit Current
						(20 Hr Rate - Ah)	(10 Hr Rate - Ah)									
 TT300	12	300	220	370	680	17	16	24	7.27 (184.7)	3.11 (79.0)	6.67 (169.4)	15.4 (7.0)	SAE 3/8" Receptacle	50 (5.6)	7	1800A
 TT500	12	500	380	625	925	28	27	52	6.64 (168.6)	7.05 (179.0)	5.04 (128.0)	26.0 (11.8)	SAE 3/8" Receptacle	60 (6.8)	5	2400A
 TT725	12	725	550	860	1200	44	40	78	7.87 (199.9)	6.66 (169.1)	6.80 (172.7)	38.2 (17.4)	SAE 3/8" Receptacle	60 (6.8)	4.5	2600A
 TT1050	12	1050	880	1250	1500	68	62	135	10.85 (275.6)	6.99 (177.5)	7.82 (198.6)	49.5 (22.4)	SAE Terminal and 3/8" Stud (Pos.), 5/16" Stud (Neg.)	70 (7.9)	2.5	3100A
 TT1175	12	1175	875	1325	1700	68	65	142	13.02 (330.7)	6.62 (168.2)	6.93 (176.0)	60.9 (27.6)	SAE 3/8" Receptacle	60 (6.8)	3.5	3500A
 TT1370	12	1370	1150	1545	2150	100	92	205	13.00 (330.2)	6.80 (172.7)	9.41 (239.0)	77.8 (35.3)	SAE	150-200 (16.9-22.6)	2.2	5000A
 TT1550	12	1550	1225	1730	2250	126	114	240	11.26 (286.0)	10.59 (269.0)	9.17 (233.0)	86.0 (39.0)	SAE/DIN Terminal and 3/8" Stud	100 (11.0) For 3/8" Stud only	2.1	5000A

* Cold Start Performance S.A.E J537 JUNE 82

**Pulse Current

Operating temperature range:

-40°C (-40°F) to 45°C (113°F)

-30°C (-22°F) to 40°C (104°F) for TT1550

Constant voltage portable charger parameters:

(A) Standby, per 12V battery

(B) Cyclic, per 12V battery (16-hour recharge)

Typical deep-cycle life at 25°C/77°F at a 5-hour rate

Typical service life at 25°C/77°F

13.5-13.8V no current limit required

14.4-14.8V no current limit required

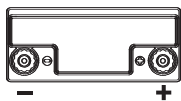
400 cycles at 80% DOD

Medium to heavy duty usage: 3+ years

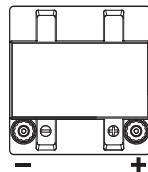
Light duty usage: 5+ years

TERMINAL LAYOUTS

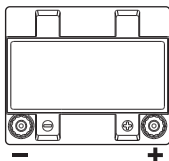
TT300



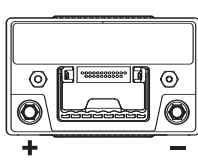
TT500



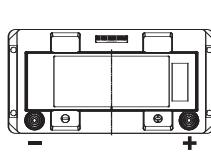
TT725



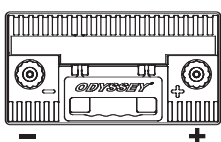
TT1050



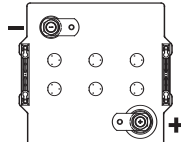
TT1175



TT1370



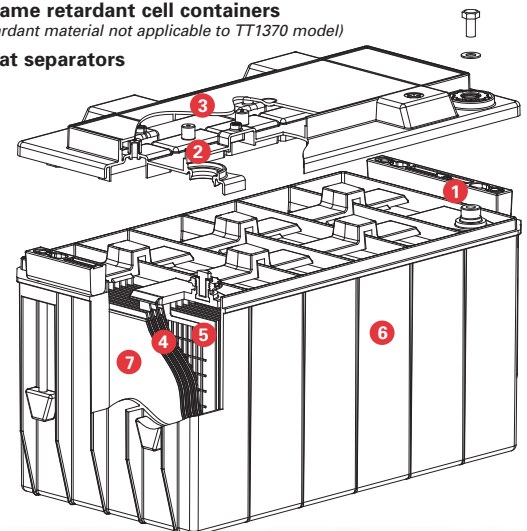
TT1550



Drawing sizes are for terminal position reference only; diagrams are not proportionate to each other.

CONSTRUCTION

- 1 High conductivity terminals
- 2 High integrity terminal seal
- 3 Self-regulating relief valve
- 4 Rugged high performance positive plates
- 5 Balanced negative plates
- 6 Tough flame retardant cell containers
(flame retardant material not applicable to TT1370 model)
- 7 Glass mat separators



TROLLING Thunder™

THE EXTREME DUAL PURPOSE BATTERY

TROLLING THUNDER TECHNOLOGY COMPARISON

	TROLLING THUNDER	CONVENTIONAL
DESIGN LIFE	8-12 years (Float) @ 25°C (77°F)	5 years
SERVICE LIFE	3 to 5 years	1 to 5 years
ELECTROLYTE	Drycell ("starved electrolyte") no external leakage or corrosion	Most are acid flooded (causing acid burns and spills); some wet sealed or "gelled"
STORAGE LIFE	2 years before needing charge @ 25°C (77°F)	6-12 weeks before needing charge
SHIPPING	Air transportable; classified non-spillable (less expensive)	Ground transport; classified as hazardous material (more expensive)
END OF LIFE	Battery slowly loses power at end of life; no catastrophic failure	Immediate and catastrophic loss of power (can leave you stranded)

WARRANTY:

EnerSys Energy Products Inc. ("Manufacturer") warrants its TROLLING THUNDER™ batteries to be free of defects in material and workmanship for the earlier of (a) the Applicable Warranty Period or (b) within 400 cycles to 80% depth of discharge, whichever occurs first. The Applicable Warranty Period is two (2) years in all applications from the date of purchase with original receipt, or, if no receipt is available, from Manufacturer's shipping date. Within the warranty period, the battery will be replaced free of charge if adjustment is necessary due to defect in material or workmanship (not merely discharged). Simply return the battery to any authorized TROLLING THUNDER dealer with the original receipt for a replacement. This warranty may vary from country to country; contact your authorized TROLLING THUNDER wholesaler or dealer for the applicable warranty.

GENERAL PROVISIONS

Manufacturer has no obligation under the limited warranty set forth above in the event the battery is damaged or destroyed as a result of one or more of the following:

- Willful abuse or neglect or if the top decorative cover has been removed.
- Natural forces such as wind, lightning, hail; damage due to fire, collision, explosion, vandalism, theft, penetration or opening of the battery case in any manner.
- Overcharging, undercharging, charging or installing in reverse polarity, improper maintenance, allowing the battery to be deeply discharged via a parasitic load or mishandling of the battery such as but not limited to using the terminals for lifting or carrying the battery. Trickle chargers that do not have a regulated trickle charge voltage between 13.5V and 13.8V (no lower than 13.5V and no higher than 13.8V) will cause early failure of Trolling Thunder batteries. Use of such chargers with Trolling Thunder batteries will also void the battery's warranty.
- Failure to properly install the battery or lack of metal jacket for high temperature or vibration applications.
- Normal deterioration in the electrical qualities or the acceleration of such deterioration due to conditions that accelerate such deterioration.
- If the battery is used for an application that requires higher cranking power or a greater reserve rating than the battery is designed to deliver, or the battery capacity is less than the battery capacity specified by the vehicle manufacturer, or the battery is otherwise used in applications for which it was not designed.

To obtain warranty service:

Return the battery to any authorized TROLLING THUNDER wholesaler or dealer.

If the battery is determined to be defective for material or workmanship under terms of this limited warranty, it will be replaced.

THIS LIMITED WARRANTY IS IN LIEU OF, AND MANUFACTURER DISCLAIMS AND EXCLUDES, ALL OTHER WARRANTIES, STATUTORY, EXPRESS OR IMPLIED, INCLUDING, WITHOUT LIMITATION, ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. MANUFACTURER'S EXCLUSIVE LIABILITY FOR BREACH OF WARRANTY SHALL BE TO REPLACE THE BATTERY WITHIN THE EFFECTIVE WARRANTY PERIOD. IN NO EVENT SHALL MANUFACTURER BE LIABLE FOR ANY LOSS OR DAMAGES OF ANY OTHER KIND, WHETHER DIRECT, INCIDENTAL, CONSEQUENTIAL, EXEMPLARY, SPECIAL OR OTHERWISE. NOR SHALL MANUFACTURER BE LIABLE FOR ANY REMOVAL OR INSTALLATION EXPENSE, OR THE LOSS OF TIME OR PROFITS.

Some countries and/or states do not allow limitation on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you. This warranty gives you specific legal rights which may vary from country to country and/or state to state.

Contact:

EnerSys

P.O. Box 14145
Reading, PA 19612-4145, USA
Tel: +1-610-208-1991
+1-800-538-3627
Fax: +1-610-372-8613

Regional Sales

EnerSys Energy Products Inc.
617 North Ridgeview Drive,
Warrensburg, MO 64093-9301, USA
Tel: +1-660-429-2165
Fax: +1-660-429-1758

Website: www.trollingthunderfactory.com