# MARINCO®







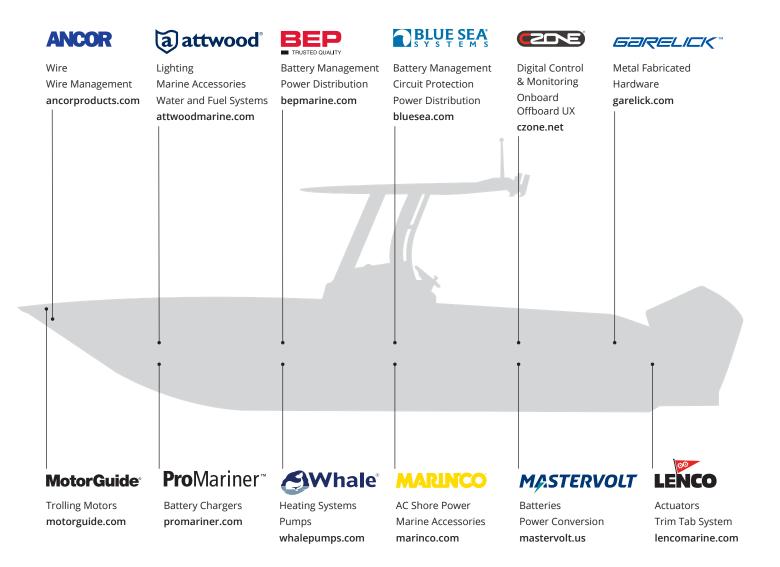
MARINE EMERGENCY VEHICLE INDUSTRIAL RV

2022



#### Your most trusted partner

Whether on water or on the road, delivering an optimal user experience is at the heart of ASG's business. It's why we are proud to be the world's leading supplier of products and integrated systems to the marine, RV, and Specialty Vehicle industries. Our broad portfolio of market leading brands in power management, digital control & monitoring, and networked devices are distributed globally to a diverse aftermarket and OEM customer base. ASG is driven, every day, to be the world's most trusted partner to the marine and mobile industries.













# What makes Marinco different:

#### Founder's Vision

Since 1972, Marinco power inlets and cords have set the industry standard. They are built to withstand the harshest marine environments. Marinco has continued to expand their product line to offer a complete range of shore power cords from 16A to 100A, as well as a broad range of cord adapters. Marinco is also a leading supplier of wipers, spotlights and horns to the marine industry.

#### Innovation & Engineering

Marinco engineers and manufactures a range of high quality electrical solutions designed for the harsh Marine and RV environments. Every product we make meets exacting performance specifications and is designed to withstand extreme conditions both at sea, and on land.

#### Selection

Over 800 electrical products are designed to work together as a system

#### Worldwide Access to Product

A distribution network in over 45 countries provides access to products when they are needed

#### **Information**

24-hour access to product information, selection tools, and technical articles online at marinco.com

#### Industry Standards

Industry involvement ensures products meet ABYC, NMMA, and Coast Guard standards

#### Quality

Product quality is managed in a manner consistent with international standards

## **NEW** Products

#### 27

#### **Marine Surge & Safety Pigtails**

Marine surge protection pigtails provide a convenient and cost effective solution to detect and protect from unsafe electrical conditions such as open ground, open neutral, and reverse polarity. In addition, they are designed to protect marine electronics from power surges by absorbing the surge, and indicating that the product has been compromised.

Part # 1RPCSP 30A Part # 1RPC50SP 50A



#### 45

#### 12/24V 4.8A Dual USB Chargers

Offer 4.8 total amps of charging power for modern devices, with 2.4A available at each USB receptacle. The increased amperage is used by devices such as tablets and laptops as well as many newer phones. Three configurations are available, including a circular mount and two Contura mount options.

Part # 12VDUSB48

Part # 12VCDUSB48 Contura

Part # 12VCDUSB48A Contura with volt/amp meter









#### **Hybrid Wiper Blades**

Use a multi-material construction for maximum flexibility and durability. They conform to all windshield shapes and reduce wind lift while the boat is underway. Three unique components work together to create a high-quality blade that has been performance tested to 500,000 cycles.

Part #	32012B	12 inch	OEM #	32112B	12 inch
Part #	32014B	14 inch	OEM#	32114B	14 inch
Part #	32016B	16 inch	OEM#	32116B	16 inch
Part #	32018B	18 inch	OEM#	32118B	18 inch
Part #	32020B	20 inch	OEM#	32120B	20 inch
Part #	32022B	22 inch	OEM#	32122B	22 inch
Part #	32024B	24 inch	OEM #	32124B	24 inch

## **UPDATED** Product

#### **Right Angle Adapters**

New ergonomic 90 degree (right angle) female connector.

\*New design coming in 2021.





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## **SHORE POWER**

#### **Inlets**



Marinco® power inlets are the industry standard. Offered in three styles, featuring robust construction and corrosion-resistant materials for long life in the harsh marine environment. All inlets have

#### Cordsets



All Marinco® cordsets are made of the highest quality, marine grade construction with features you won't find on other power cords.

## 15A Marine Grade Locking Extension Cords



15A extension cords contain a universal slide locking mechanism to prevent cable disconnection. Available in 25' and 50' lengths.

#### **Cordset Accessories**



Marinco offers everything you need to manage your shore power equipment.



## **SHORE POWER**



Marinco<sup>®</sup> power inlets and cords have been the industry standard and are designed and built to withstand the rigors of the marine environment.

#### Marinco® Dock Side to Boat Side Selection Guide

#### **DOCK SIDE**

#### **Marine Receptacles**

(pg 29-33) Corrosion resistant reinforced nylon construction.

#### **Weatherproof Covers**

(pg 34) Yellow LEXAN® polycarbonate with lift lid, for use with Marinco® receptacles.

#### **Male Plugs**

(pg 29-33) Superior strain-relief system. Dust seal keeps contaminants out of terminals.

#### **Weatherproof Covers**

(pg 29-33) Heavy-duty vinyl construction, use with male plugs for superior seal.

2-Pole 3-Wire Locking



305CRR



7420CR



305CRPN



102N

2-Pole 3-Wire Locking



6370CR



7788CR



6361CRN



7717N

2-Pole 4-Wire Locking



6369CR



7788CR



6365CRN



#### Cable TV/ Internet



#### **Marinco® Color Coding System**













marinco.com SHORE POWER 11

#### **BOAT SIDE**

#### **Shore Power Cord Sets**

(pg 18-19)

Marine grade cable, watertight molded plug and connector, line-up ridge for easy blade alignment.

#### **Weatherproof Covers**

(pg 29-33)

Heavy-duty vinyl construction, use with female connector for superior seal.

#### **Female Connectors**

(pg 29-33)

Ribbed nylon construction, color coded terminal pockets and screws.

#### **Power Inlets**

(pg 13-15, 20)

Styled to complement any boat, Marinco® power inlets are simple to install and feature a protective rear safety enclosure that provides safe, reliable strain relief. IP56 rated (see inside back cover).































#### **Inlets**

Marinco® power inlets are the industry standard. Offered in three styles, they all feature robust construction and corrosion-resistant materials for long life in the harsh marine environment. Each has technical features that make them easy to install and a pleasure to use for the marine professional or the casual recreational boater. All inlets have an IP56 rating (see inside back cover).



#### **Stainless Steel**

Marinco stainless steel inlets are solid cast marine grade 316 stainless steel and include a heavy duty cap strap for strength and durability.



#### Contoured

Marinco contoured inlets feature UV stabilized glass-filled polyester construction for long-lasting strength.



#### Standard

Marinco standard inlets feature UV stabilized glass-filled polyester construction for long-lasting strength.



- Easy Lock™—Marinco's exclusive Easy Lock System has been designed to connect the cordset (with an Easy Lock sealing ring installed) to the inlet and turn the locking ring less than a quarter turn. The tabs on the locking ring lock into the inlet for a positive watertight hook-up while eliminating any chance of cross threading. Easy Lock inlets have a threaded boss that will accept standard threaded cordsets as well.
- The covers on all Marinco inlets are designed to stay hinged open when the cover is lifted up. This allows the boater to connect their shore power cord while the cover remains open and out of the way. A soft touch unlocks it for closing.
- **3** Blades are nickel plated brass for maximum corrosion resistance.
- 4 Interior hardware is marine grade stainless steel.
- MPROVED Extra large tab provides more area to simplify opening and closing.

#### **6** Rear Enclosure

- Made of flame-resistant UL 94V0 plastic.
- All rear enclosures are glass-filled polyester for strength.
- Integral strain relief complies with ABYC requirements.
- Multiple positions allow for maximum installation flexibility.







black









#### Stainless Steel Power Inlet

· Cast 316 stainless steel

Part # 303SSEL-B OEM # 303SSEL-B.OEM



#### **Contour Power Inlet**

· Stainless steel trim

Part # 304EL-B OEM # 304EL-B.OEM



#### **Contour Power Inlet**

• Without stainless steel trim

OEM# 304EL-B.NT white OEM# 199136 black



#### **Power Inlet**

Stainless steel trim

Part # 301EL-B white
OEM # 301EL-B.OEM white
Part # 301ELCB replace

1ELCB replacement cap & bezel Power Inlet

Stainless steel trim

Part # 301EL-B.GRAY gray
Part # 301EL-B.BLACK black



#### **Power Inlet**

 ABYC shore power warning label on cap

Part # 301EL-B.W/L



#### **Power Inlet**

- · Stainless steel trim
- Hole in rear enclosure accommodates snap-in strain relief (not included)

Part # 301EL-B.FR



#### **Breaker Inlet**

- Includes cap & bezel and breaker plate
- · Breaker not included

Part # 3050BI



#### Stainless Steel Power Outlet

- Female 30A 125V configuration
- NEMA configuration L5-30R

Part # 303SSO













#### Stainless Steel Power Inlet

• Cast 316 stainless steel

Part # 6371EL-B OEM # 6371EL-B.OEM



#### Stainless Steel Power Inlet

- Cast 316 stainless steel
- · Without rear safety enclosure

Part # 6371EL



#### **Power Inlet**

- · Stainless steel trim
- · Without rear safety enclosure

Part # 6351EL



#### **Power Inlet**

- · Without stainless steel trim
- ABYC shore power warning label on cap

Part # 6351EL-B



#### **Contour Power Inlet**

· Stainless steel trim

Part # 6343EL-B

## **TECH TIP**

#### **50A Devices Explained**

There are two categories of 50A devices: 50A 125V (50A 3-wire) and 50A 125/250V (50A 4-wire). The 4-wire devices have two "hot" legs, each carrying 50A 125V. These two categories are not interchangeable. A 3-wire plug must never be altered to insert into a 4-wire connector or receptacle.



## 50 Amp 125/250V Inlets













#### Stainless Steel Power Inlet

• Cast 316 stainless steel

Part # 6373EL-B OEM # 6373EL-B.OEM

Part # 6373EL-B.W/L

w/separate warning label



#### Stainless Steel Power Inlet

- Cast 316 stainless steel
- · Without rear safety enclosure

Part # 6373EL OEM # 6373EL.OEM



## Contour Chrome Power Inlet

• Chrome finish cover

OEM# 6344EL-BCR.OEM



#### **Contour Power Inlet**

· Without stainless steel trim

Part # 6344EL-B.NT



#### **Power Inlet**

· Stainless steel trim

Part # 6353EL-B OEM # 6353EL-B.OEM

Part # 6353ELCB replace

replacement cap & bezel



#### **Power Inlet**

- Stainless steel trim
- Black

OEM # 6353EL-B.BLACK.OEM



#### **Power Inlet**

- Stainless steel trim
- Gray

Part # 6353EL-B.GRAY



#### **Power Inlet**

- · Stainless steel trim
- · Without rear safety enclosure

Part # 6353EL

#### **ELCI Inlets**

Marinco®'s solution to the ABYC E-11 requirement is based on our industry-standard marine inlets. We have taken the best available technology and built it into our inlets to provide boat builders and owners with the safest, best looking and most durable solution possible. All of our ELCI Inlets are ignition protected to comply with ABYC standards.

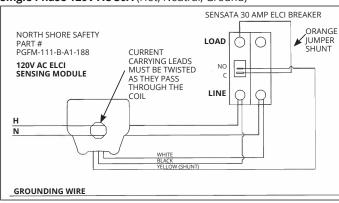
We provide two modules in addition to the standard inlet. One houses the ELCI Marine Sensing Module, the other the breaker. Unlike competing systems, our ELCI Marine sensing module has a 3/4" diameter coil that accepts up to three 6-gauge conductors. This sensing module, which also incorporates a test circuit, is compatible with 30A 125V, 50A 125V and 50A 125/250V systems. There is a different breaker for 30A and 50A systems.

#### **TECH TIP**

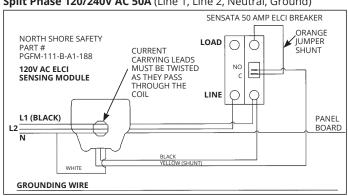
#### **ELCI ABYC Standards**

Electrical current leakage is a serious safety concern for any boat connected to shore power. Because of this ABYC requirements now include specific measures for avoiding this danger. ABYC E-11.11.1 states "An Equipment Leakage Circuit Interrupter (ELCI) shall be installed with or in addition to the main shore power disconnect circuit breaker(s) or at the additional overcurrent protection as required by E-11.10.2.8.3 whichever is closer to the shore power connection."

#### Single Phase 120V AC 30A (Hot, Neutral, Ground)



#### Split Phase 120/240V AC 50A (Line 1, Line 2, Neutral, Ground)





#### **Standard Sensing Breaker & Module Kits**

· Module & breaker packaged together

30A 120V AC Single Phase OEM # 301RCDKITIGN.OEM OEM# 6353RCDKITIGN.OEM 50A 120/240V AC Split Phase



#### Stainless Steel **Housing for Sensing** Modules

· Cast 316 stainless steel OEM # 303SSRCDPL.OEM



#### Stainless Steel Housing for 30A or 50A Sensing **Breakers**

· Cast 316 stainless steel OEM # 303SSBKRPL.OEM



**Standard Housing for Sensing Modules** OEM # 301RCDPL.OEM

Standard Housing for 30A or 50A Sensing **Breakers** 

OEM# 301BKRPL.OEM

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## Cable TV / Internet



Stainless Steel Phone & Cable TV Inlet

• Cast 316 stainless steel

Part # PH6592TV-SS OEM # PH6592TV-SS.OEM



**Phone & Cable TV Inlet** 

· Stainless steel trim

Part # PH6574TV

Part # PH6574TV.W/L w/ warning label



Stainless Steel Cable TV / Internet Inlet

• Cast 316 stainless steel

Part # TV6592 OEM # TV6592.OEM



Cable TV / Internet Inlet

Part # TV6574



Contour Cable TV / Internet Inlet

Part # TV6444



#### **Female Phone Plug**

MARINEGUARD II Cover

Part # PH6629



#### **Telephone Adapter**

• Use to hook up telephone to cordset PH6599. No inlet installation required.

Part # PH6600



#### **Telephone Adapter**

• Use to hook up a locking type inlet to a modular telephone connection

Part # PH6601



#### **EEL Shore Power Cordsets**

#### One Hand. A Simple Twist. Full Power.

The EEL (Easily Engaged Lock) Shore Power Cordset has a patented, industry first, jaw-clamp design providing one-handed operation and a secure waterproof seal which completely eliminates the need for a locking ring. The EEL connection is built for the harshest environments and is UL approved. This easy-to-use cordset features a built-in cord light which serves as an alert to boaters when the cord is left plugged in. And, best of all, it works with your current inlet. In addition to cordsets with the EEL System, Marinco® also has a full set of Pigtail and Y adapters all using the new EEL technology.

#### **Patented EEL Technology:**

- Designed for use with standard inlets (NEMA)
- · Single-handed operation
- · No sealing ring required
- Patented jaw-clamp technology provides a watertight seal every time

#### **Features & Benefits:**

- Built-in cord light for added safety alert light indicates if you are plugged into the dock and cord is powered
- Power indicator light on both ends informs you full power is flowing through the cord
- Meets and exceeds rigorous UL testing standards
- 30A and 50A cordset models, 12', 25' and 50' lengths in white and yellow available
- EEL product line includes connectors, pigtail, straight and "Y" adapters







Length	Color	Part #	
30A 125	V Cordsets		
12'	yellow	CS30-12	
25'	yellow	CS30-25	
50'	yellow	CS30-50	
50'	white	CS30-50W	
50A 125	V Cordsets		
25'	yellow	CS503-25	
50'	yellow	CS503-50	
50A 125	/250V Cord	sets	
25'	yellow	CS504-25	
50'	yellow	CS504-50	
50'	white	CS504-50W	

Amp	Volts	Plug	Connector
30A	125V AC	L5-30P	L5-30R
50A	125V AC	SS1-50P	SS1-50R
50A	125/250V AC	SS2-50P	SS2-50R

## **TECH TIP**

#### **Blade Function Letter Codes**

G Ground X Phase 1 Hot
W Neutral Y Phase 2 Hot

#### **Power Cord Plus® Cordsets**

All Marinco® cordsets are made of the highest quality, marine grade construction with features you won't find on other power cords.

- Watertight molded plug and connector for safety and durability
- 2 Heavy-duty, super flexible marine grade cable (30A 10-gauge, 50A 6-gauge)
- 3 All models include a standard threaded ring for hook-up to ordinary threaded inlets
- 4 Corrosion resistant, nickel plated contacts
- **5** Power Indicator Light: Boat side connector features a molded-in LED light. When it glows red, you know you have power to the boat.
- **6** Contour Grip with Thumbprint Locator: Both plug and connector ends are molded to fit the contour of your hand. When the thumbprint is in the 12 o'clock position, the blades line up for easy connection.
- Marinco's Easy Lock™ system: Quickly locks the cord set to the inlet in just 1/8 of a turn. The exclusive locking tabs engage slots built into all Marinco inlets (sold separately).

#### Easy Lock™ system









Length Color



Pkg

30A Power Cord Plus® Cordsets

80



Part #



OEM#



2













12'	yellow	sleeve pack	199116	_
25'	yellow	sleeve pack	199117	_
25'	white	sleeve pack	25SPPW	_
25'	gray	sleeve pack	199117G	_
35'	yellow	sleeve pack	35SPP	_
50'	yellow	sleeve pack	199119	50SPP.OEM
50'	white	sleeve pack	199120	50SPPW.OEM
50'	gray	sleeve pack	199119G	_
75'	yellow	box	_	75SPP.OEM
50A 12	25V Power	Cord Plus® Cord	dsets (3-Wire)	
25'	yellow	box	6153SPP-25	_
50'	yellow	box	6153SPP	_
50'	white	box	6153SPPW	_
75'	yellow	box	6153SPP-75	_
50A 12	25/250V Po	werCord Plus® (	Cordsets (4-Wire)	
12'	yellow	box	6152SPP-12SC	_
25'	yellow	box	6152SPP-25	_
25'	white	box	6152SPPW-25	_
25'	gray	box	6152SPPG-25	_
40'	yellow	box	6152SPP-40	_
50'	yellow	box	6152SPP	_
50'	white	box	6152SPPW	_
50'	gray	box	6152SPPG	_
75'	yellow	box	6152SPP-75	_
50A PI	ug End Onl	y Cordsets		
55'	white	box	6152SPPW-55.P/O	_
75'	white	box	6152SPPW-75.P/O	_

#### **15A Marine Grade Extension Cords**

- Marine grade SJTOW cable
- Clear ends with lighted female end for visual power indication on 14/3 models
- Female end contains slide button lock for protection against cable disconnection\*
- Slide button lock compatible with all other manufacturers' products\*
- ETL certified to UL standards

Cable	Length	Description	Part #
14/3	4/3 25' Locking and Lighted		150025
	50'	Locking and Lighted	150050
	25'	Lighted	150025NL
	50'	Lighted	150050NL
12/3	25'	Heavy-duty	151225
	50'	Heavy-duty	151250
*150025	and 1500	50 models only	



**LEARN MORE** Extension Cords Video







#### Cable TV/Internet



#### **HDTV / Internet Cable**

- 50' yellow cable
- 75 ohm, 3G Hz RG6 Quad Shield cable with gasket sealed
- Weatherproof F-type connections on both ends

Part # TVHD



#### Combo TV/Phone Cordset

- · Both cables are jacketed together
- Telephone and TV connections are molded on each end
- Features 18" of spliced cable at dock side for connections which are in separate power centers

Part # PHTV6599 50'



#### **Telephone Cordset**

• 3 conductor 16 AWG SJTO vinyl cord provides portable telephone connection for RV's and pleasure boats

Part # PH6599 50'



#### **TV Cable Cordset**

• Standard 75 ohm, RG59-U with quick, slip-on connections and heavy duty boots included on both ends

25' yellow Part # TV99-25 Part # TV99W 50' white



#### **Cable TV Outlet**

- · Spring-loaded lift cover
- · Weatherproof closure
- · Fits FS & FD boxes

Part # TV97 OEM # TV97.OEM



#### **Telephone & Cable TV Outlet**

- · Spring-loaded lift cover
- · Fits FS & FD boxes

PART # PH6597TV OEM # PH6597TV.OEM

#### **Cordset Accessories**



#### **Cord Clips**

- Includes six cord clips with stainless steel mounting screws
- Keeps shore power cable out of the water
- Holds 10-gauge 30A cable
- · Easy to install
- · Use on deck or edge of dock
- Organize shore power cable

Part # CLIP



#### **Railmount Cord Clips**

- For 30A cords
- Organize shore power cords quickly and easily
- Can be used on tube or wire rails
- · Packaged as set of 6 clips
- UV stable
- · Practically unbreakable

Part # CLIP-01 black



#### **Organizer Bag**

- Heavy-duty nylon zippered bag with handle
- Ideal for storing cordsets and adapters
- Dimensions 20" x 15" x 8"

Part # BAG

#### **Cord Cover**

- · Keep shore power cables neat and bundled
- Holds 50A or 30A cordsets, can hold multiple cables
- UV resistant, machine washable marine grade fabric
- 24'

Part # CCVR-24 black



#### **Carrying Strap**

Bundle and organize your shore power cables or hoses with this durable and flexible nylon carrying strap. Its adjustable design fits around cordsets or hoses up to 9" in diameter while, the ergonomic, rubber handle makes carrying even larger 50A cord sets easy on your hand. A metal, reinforced grommet allows for hanging and storage.

Part # STRAP





#### **Adapters**

The Marinco® Shore Power Adapters give you more power hook-up flexibility and resolve a variety of dock side power center / boat side inlet power incompatibility problems.

#### **TECH TIP**

#### **Choosing the Correct Adapter**

Step 1: Boat Side - Identify Your Boat's Inlet Electrical System



The voltage and amperage should be printed on the outside cover of your existing boat inlet(s)



The voltage and amperage should be printed inside the boat Inlet(s) next to the blades

30A 125V



Check the blade orientation of the various inlets pictured and compare to your boat inlet(s)



Pay special attention to the differences in the 50A 125V and the 50A 125/250V. The blades look similar, but they are different The plugs and receptacles for these systems are NOT interchangeable!!

Notice the additional grounding blade on the 50A 125/250V inlets.

IMPORTANT 50 AMP INFORMATION: If you are connecting to 50A dock side power service, it is CRITICAL to know the dock side receptacle's voltage rating (50A 125V or 50A 125/250V). An adapter designed for 50A 125V will not plug into a dock side receptacle rated for 50A 125/250V service, and vice versa.

Step 2: Identify the Dock Side Power Source



NEMA L5-20R 20A 125V Locking



NEMA L5-30R 30A 125V Locking



NEMA L5-15R 15A 125V Straight Blade



NEMA SS1-50R 50A 125V Locking X

NEMA SS2-50R 50A 125/250V Locking

#### Step 3: Choose a Marinco Adapter From page 23-28

Match your boat side inlet(s) to the appropriate dock side receptacle or other power source. Adapter ends are color coded for easier selection.

#### **Types of Adapters**



**Straight Adapters** are high-quality, one-piece adapters similar in usage to Pigtail Adapters. However, they do not have sealing collars and are not recommended for use in wet locations. Use only in an enclosed, dry location, such as powering your boat from a 15A power receptacle inside your house.



**Pigtail Adapters\*** allow you to connect from one dock side receptacle (or other power source receptacle) to one boat side inlet or equipment of dissimilar power configuration. These adapters are fully molded and equipped with Marinco's unique sealing collar (where indicated) and covers for use in wet locations.



"Y" Adapters\* let you split one dock side receptacle between two boat inlets of similar or dissimilar power configurations. "Y" adapters are fully molded and equipped with Marinco's unique sealing collar and covers (where indicated) for use in wet locations.

**The Reverse "Y" Adapter** (Part # RY504-2-30) The reverse "Y" provides 50A 125/250V power when only two 30A 125V receptacles are available.

\*Available with standard locking rings or with the new EEL quick locking system

#### **Straight Adapters**

Not recommended for use in wet locations. Includes power LED.

#### Part #

S20-15 Replaces the 80A.



#### **DOCK SIDE**

MALE PLUG Attaches to dock side receptacle or cordset



FEMALE CONNECTOR Attaches to boat inlet or cordset





















30A 125V Locking









30A 125V Locking







15A 125V Straight Blade



50A 125/250V Locking w/ Sealing 3Collar System



#### **EEL Pigtail Adapters**



These adapters are equipped with sealing collars and are for use in wet locations.

### DOCK SIDE

MALE PLUG Attaches to dockside receptacle or cordset



15A 125V Straight-Blade w/ Locking Screw

#### **BOAT SIDE**

FEMALE CONNECTOR Attaches to boat inlet or cordset



30A 125V Locking w/ Sealing Collar System



30A 125V Locking



15A 125V Straight Blade



P30-15

Part # P15-30 **(1)** 

P15-30-25 25'

P15-30-25W 25', white



0



30A 125V Locking



50A 125V Locking w/ Sealing Collar System







30A 125V Locking



50A 125/250V Locking w/ Sealing Collar System











30A 125V Locking w/ Sealing Collar System







50A 125/250V Locking



30A 125V Locking w/ Sealing Collar System







50A 125/250V Locking



50A 125V Locking w/ Sealing Collar System



#### **Related Products**

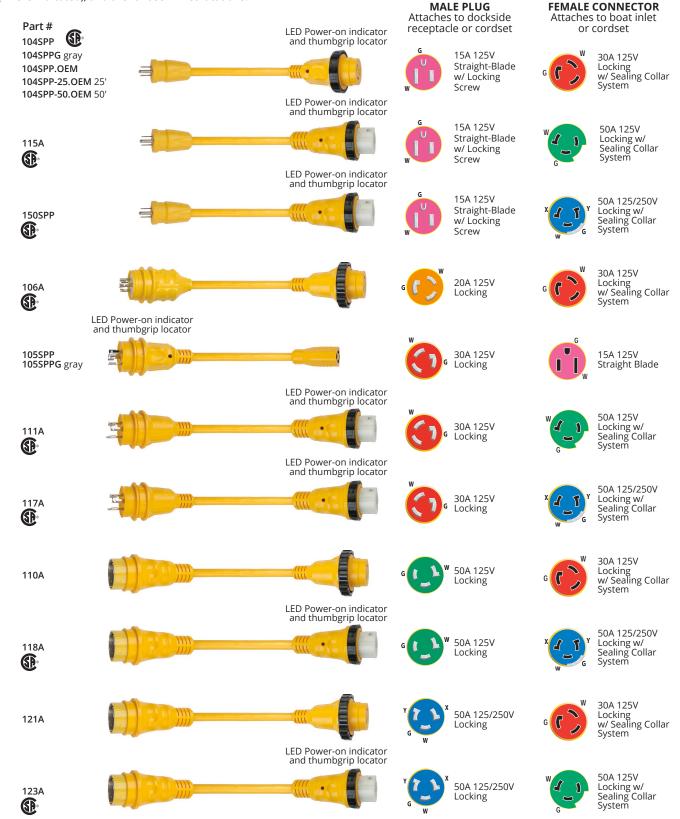


**DOCK SIDE** 

**BOAT SIDE** 

#### **Pigtail Adapters**

These adapters are equipped with covers and sealing collars (where indicated), and are for use in wet locations.



#### EEL **EEL "Y" Adapters DOCK SIDE BOAT SIDE** SHOREPOWER These adapters are equipped with sealing **MALE PLUG FEMALE CONNECTOR** Attaches to dock side Attaches to boat inlet collars and are for use in wet locations. receptacle or cordset or cordset Part # (2) 30A 125V 30A 125V Locking w/ Sealing Y30-2-30 G Locking Collar System **1** (2) 30A 125V 50A 125V Locking w/ Sealing Collar System Y503-2-30 Locking (2) 30A 125V Locking w/ Sealing 125/250V Y504-2-30 Locking Collar System (2) 50A 125V Locking w/ Sealing Collar 50A 125/250V Y504-2-503 Locking System 1 (2) 50A 125/250V 50A 125/250V Y504-2-504 Locking w/ Sealing Locking 1 G Collar System "Y" Adapters DOCK SIDE **BOAT SIDE** These adapters are equipped with covers and sealing **MALE PLUG FEMALE CONNECTOR** collars (where indicated), and are for use in wet locations. Attaches to dock side Attaches to boat inlet receptacle or cordset or cordset Part # (2) 30A 125V Locking w/ Sealing 30A 125V 157AY G Locking Collar System 1 (2) 30A 125V Locking w/ Sealing 50A 125V 152AY Collar System (2) 50A 125V Locking w/ Sealing Collar System 50A 125V 162AY Locking 1 (2) 30A 125V 50A 125/250V Locking w/ Sealing Collar System 153AY Locking (2) 50A 125V 50A Locking w/ Sealing 154AY 125/250V Locking Collar System 1 (2) 50A 125/250V 50A

125/250V

Locking

Locking w/ Sealing Collar System

165AY

**(1)** 

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#### Reverse "Y" Adapter

The Reverse "Y" Adapter has two (2) male plugs with special power isolation circuitry for added safety. When one (1) plug is connected to a receptacle, the circuitry isolates the second plug. The reverse "Y" provides 50A 125/250V power when only two (2) 30A 125V receptacles are available.

Note: Reverse "Y" will NOT work with 50A, 125V, 3-wire inlets. Power is provided in both circuits to the 4-wire inlet, but the dock side receptacles limit the current in each circuit to 30A. The two (2) 30A 125V receptacles must be supplied from a single power source providing 208V to 250V between them for proper operation.

#### **DOCK SIDE**

#### MALE PLUG Attaches to dock side receptacle or cordset



#### **BOAT SIDE**

#### FEMALE CONNECTOR Attaches to boat inlet or cordset



50A 125/250V w/ Sealing Collar System











Part #

(30A)

(50A)

1RPCSP

1RPC50SP

#### Marine Surge & Safety Pigtails NEW

Detect faulty pedestal wiring conditions before they damage your equipment.

Faulty and unsafe shorepower can damage your sensitive electronics. These new pigtail adapters not only detect defective wiring at the pedestal, but also protect against electrical surges. Integrated LEDs provide visual indication of several unsafe conditions such as open ground, open neutral, and reverse polarity. Built-in surge protection with indicator that alerts that the adapter has been compromised.

- Ergonomic 90 degree (right angle) dockside plug
- Boat side connectors feature locking sealing collar system
- · Bright 3-color LED electrical status indicators
- Surge failure indicator
- Surge protection ratings: 30A: 825 joules
   50A: 1650 joules

#### **DOCK SIDE**

#### MALE PLUG Attaches to dock side receptacle or cordset





#### **BOAT SIDE**

#### FEMALE CONNECTOR Attaches to boat inlet or cordset



30A 125V Locking w/ Sealing Collar System



50A 125/250V Locking w/ Sealing Collar System

#### Related Products



#### Right Angle Adapters UPDATED

#### **DOCK SIDE**

#### **BOAT SIDE**

**FEMALE CONNECTOR** 

Attaches to boat inlet

or cordset

#### MALE PLUG

Attaches to dock side receptacle or cordset



30A 125V Locking



30A 125V Locking w/ Sealing Collar System



50A 125/250V Locking w/ Sealing Collar System

## Part # 1RPC (30A)

1RPC50 (50A)

50A 125/250V Locking

#### Dock Side 30A to 15A **Adapter with GFCI**



#### **DOCK SIDE**

#### **MALE PLUG** Attaches to dock side receptacle or cordset



#### **BOAT SIDE**

#### **FEMALE CONNECTOR** Attaches to boat inlet or cordset



(3) 15A 125V Straight Blade

- · Provides safer hook-up to 30A dock side power
- Provides protection against harmful electric shock
- · Reduces the possibility of fire
- Offers protection for up to three (3) attached tools
- Corrosion resistant and rain-proof rated for outdoor use
- GFI trip level of 4-6 mA
- Can also be used for other outdoor, harsh environments such as construction sites or wherever ground fault protection is desired

Note: A Ground Fault Circuit Interrupter (GFCI) limits the duration of an electrical shock to a period considered safe for healthy people. It does not prevent electric shock. This device does not protect against electric shock due to contact with both circuit conductors or a fault in any wiring supplying this device.

#### **TECH TIP**

#### **GFCI Protection**

According to ABYC standard E-11.11. A Ground Fault Circuit Interupter (GFCI) may be used on single phase AC circuits to provide additional protection for personnel and equipment.



#### 30A 125V Devices & Accessories



**Male Plug** 

Part # 305CRPN OEM # 305CRPN.OEM



**Female Connector** 

Part # 305CRCN OEM # 305CRCN.OEM



Male Plug & Cover

Weather resistant cover

Part # 305CRPN.VPK



Female Connector w/ Cover

Weather resistant coverPart # 305CRCN.VPK



#### **Locking Receptacle**

- Corrosion resistant
- Reinforced nylon construction
- Yellow

Part # 305CRR



#### **Locking Receptacle**

- Corrosion resistant
- · Reinforced nylon construction
- Black

Part # 305CRRB OEM # 305CRRB.OEM



#### Weatherproof Cover w/ Threaded Sealing Ring

• Use with 305CRCN or 205CRCN

Part # 103RN OEM # 103RN.OEM



Weatherproof Cover w/ Easy Lock™ Sealing Ring

• Use with 305CRCN or 205CRCN

Part # 103ELN



#### **Weatherproof Cover**

• Use with 305CRPN or 205CRPN

Part # 102N



Easy Lock™ Sealing Ring

• Use with 30A Marinco® Inlets

Part # 100EL



#### **Threaded Sealing Ring**

• Use with 30A systems

Part # 100R



#### Sealing Collar w/ Threaded Ring

- Provides maximum moisture protection between cordset & adapter
- Use with 20A & 30A locking systems

Part # 110R



#### **50A 125V Devices & Accessories**



**Male Plug** 

• 2-pole, 3-wire

Part # 6361CRN



#### **Female Connector**

• 2-pole, 3-wire

Part # 6360CRN OEM # 6360CRN.OEM



#### **Wire Dock Side Receptacle**

• 2-pole, 3-wire

Part # 6370CR



## 50A 125/250V Devices & Accessories



#### **Male Plug**

• 3-pole, 4-wire

Part # 6365CRN OEM # 6365CRN.OEM



#### **Female Connector**

• 3-pole, 4-wire

Part # 6364CRN OEM # 6364CRN.OEM



#### **Wire Dock Side Receptacle**

• 3-pole, 4-wire

Part # 6369CR OEM # 6369CR.OEM



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#### **50A Accessories**



#### Weatherproof Cover w/ Threaded Sealing Ring

• Use with 6360CRN or 6364CRN

Part # 7715CRN OEM # 7715CRN.OEM



#### Weatherproof Cover w/ Easy Lock™ Sealing Ring

• Use with 6360CRN or 6364CRN

Part # 7715ELN OEM # 7715ELN.OEM



#### **Weatherproof Cover**

- Use with 6361CRN or 6365CRN
- Can be used on both male & female ends

Part # 7717N yellow OEM # 7717N.OEM yellow Part # 102182 white



Part # 500EL

#### Easy Lock™ Sealing Ring

• Use with 50A Marinco® Inlets



#### Threaded Locking Sealing Ring

• Use with 50A systems

Part # 500R



#### Sealing Collar w/ Threaded Ring

- Provides maximum moisture protection between cordset & adapter
- Use with 50A only systems

Part # 510R



#### Universal Watertight Connector Cap

- For use on 16A or 32A products for CE compliance
- For use on 30A or 50A products to protect the connector when not in use

Part # 199111PK 16A/30A/32A/50A/63A



#### **Watertight Connector Cap**

- For use on 16A or 32A products for CE compliance
- For use on 30A or 50A products to protect the connector when not in use

Part# 199109PK 16A/30A Part# 199110PK 32A/50A



#### **15A125V Devices & Accessories**



**Male Plug** 

Straight bladePart # 5266CR



**Female Connector** 

Straight bladePart # 5269CR



**Male Plug** 

Locking type

Part # 4721CR



**Female Connector** 

Locking typePart # 4731CR



**Duplex Locking Receptacle** 

Yellow

Part # 4700CR



**Duplex Straight Receptacle** 

Part # 5262CRR Part # 5262CRR.GRY yellow gray

#### **Ground Fault Circuit Interrupter (GFCI)**

CAUTION: Ground Fault Circuit Interrupter protection is required when using electrical products outdoors or near water. GFCI Protection is required by the ABYC where a receptacle is in a head, galley, machinery space or weather deck.

 Part #
 1591-FI
 ivory

 Part #
 1591-FI.WHITE
 white

 OEM #
 1591-FI.GRY.OEM
 gray







#### **20A 125V Devices & Accessories**



**Male Plug** 

• Straight blade

Part # 5366CR



**Female Connector** 

• Straight blade

Part # 5369CR OEM # 5369CR.OEM



#### Male Plug

· Locking type

• Uses weatherproof cover 102N

Part # 205CRPN



#### **Female Connector**



**Locking Receptacle** 

Part # 205CRR

#### Locking type

• Uses weatherproof cover 103RN

Part # 205CRCN

## 15 & 20 Amp Accessories



**Weatherproof Cover** 

• Use with 5366CR or 5266CR plugs

Part # 6017



**Weatherproof Cover** 

• Use with 5369CR or 5269CR connectors

Part # 6018



#### **Weatherproof Cover**

• Can be used on 15A & 20A

OEM # 1520BI.OEM

#### **Boxes / Covers / Replacement Parts**



#### **FS Box**

- Black non-metallic, with two 3/4" K.O. holes
- Accepts 15A, 20A & 30A receptacles, and 7420CR weatherproof covers

Part # 6080



## FD Box with 3/4" or 1" K.O. Holes

- Yellow fiberglass, with two K.O. holes
- Accepts 15A, 20A, 30A & 50A receptacles, and 7420CR & 7788CR covers

Part # 6083CR 3/4" holes Part # 6084CR 1" holes



#### **Weatherproof Cover**

- Yellow LEXAN® polycarbonate with lift lid
- Fits 15A, 20A, & 30A single receptacles

Part # 7420CR OEM # 7420CR.OEM



#### **Weatherproof Cover**

- Yellow LEXAN® polycarbonate with lift lid
- Fits 50A receptacles 6369CR & 6370CR

Part # 7788CR



#### Plastic Switch/ Outlet Box

- 3-9/32" x 2-3/16" x 2-1/2" D
- Can be secured against the back of wall or wall facing
- Accepts 15A, 20A & 30A receptacles, telephone outlets and TV coax connectors

Part # 6079



#### 302 Stainless Steel Sealed Cover with Lift Lid

• Fits 4700CR, 5262CRR, & 5739CR duplex receptacles

Part # 7879CR



#### 302 Stainless Steel Sealed Cover with Lift Lid

• Fits GFCI duplex receptacles

Part # 7879CR-FI OEM # 7879CR-FI.OEM



#### **Replacement Interior**

 Fits 50A 125/250V Easy Lock 4-wire stainless steel or standard inlets manufactured after 8-1-93

Part # 6373ELMB



#### **Replacement Interior**

• Fits 303SSEL-B, 303SSI-B & 301EL-B boat inlets

Part # 305CRMB



#### Replacement Interior

 Fits 30A standard non-metallic inlets manufactured prior to 1/1/91

Part # 301CRMB



#### Replacement Boss Ring

 For use on 30A or 50A stainless steel inlets

Part # 102167 30A Part # 102164 50A



and disconnect cable as follows:

1. Turn off boat's shore power switch

2. Connect cable at boat first

3. If equipped with polarity indicator which activates, disconnect and correct polaries.

Bequipped with polarity indicator which activates, disconnect and correct polar 4. Disconnect at shore outlet first 5. Close inlet cover tightly

DO NOT ALTER SHORE POWER.

MARINCO

#### **Warning Labels**

- · For use on standard inlets
- For warning label placement use per ABYC standard 11.6.2.2.3

Part # 101739

## International Shore Power 16A 230V, 50Hz Locking



#### **Stainless Steel Inlet**

- 316 stainless steel
- Easy Lock™ system
- · Soft touch cap design
- · Rear safety enclosure with strain relief
- IP56 rated (see inside back cover)

Part # 303SSEL-BXPK OEM # 303SSEL-BX



#### **Female Connector**

- Corrosion resistant contacts and terminals
- Use with cover 103RNX and cap 199109

Part # 305CRCXNPK OEM # 305CRCXN







#### **Standard Inlet**

- Easy Lock™ system
- · Glass-filled polyester
- Watertight
- · Rear safety enclosure with strain relief
- IP56 rated (see inside back cover)

Part # 301EL-BXPK OEM # 301EL-BX



## Weatherproof Cover w/ Threaded Ring

• Use with 305CRCXN

Part # 103RNXPK OEM # 103RNX



#### **Contour Inlet**

- Easy Lock™ system
- · Glass-filled polyester
- Watertight
- · Rear safety enclosure with strain relief
- · IP56 rated (see inside back cover)

OEM# 304EL-BX.NT

OEM # 304EL-BX stainless steel trim



#### **Connector Kit**

 Includes female connector, weatherproof cover with threaded ring and watertight cap

Part # 199114



#### **Locking Shore Power Cordset**

- H07BQ-F 3G 2.50 mm<sup>2</sup> harmonized cable
- IEC 60309 plug 2P+E [6H], 250V/50Hz
- Watertight connector sealing cap for CE compliance
- NEMA L5-30 moulded connector with LED power indicator light

Part # 25MSPPXP 25 meters
Part # 20MSPPXP 20 meters
Part # 15MSPPXP 15 meters
Part # 10MSPPXP 10 meters
Part # 1MSPPXP 1 meters



#### **Harmonized Cable Cordset**

- Blunt cut
- H07BQ-F 3G 2.50 mm² harmonized cable
- Watertight connector sealing cap for CE compliance
- NEMA L5-30 moulded connector with LED power indicator light

Part # 25MSPPX 25 meters
Part # 20MSPPX 20 meters
Part # 15MSPPX 15 meters
Part # 10MSPPX 10 meters
Part # 1MSPPX 1 meters



#### 12/3 Cable Cordset

- Blunt cut
- 12/3 (3.3 mm²) cable 16A/220V 50Hz
- Watertight connector sealing cap for CE compliance
- NEMA L5-30 moulded connector with LED power indicator light

 Part #
 50SPPX
 50'

 Part #
 25SPPX
 25'

## International Shore Power 32A 230V, 50Hz Locking









#### Stainless Steel Inlet

- · 316 stainless steel
- Easy Lock™ system
- · Soft Touch cap design
- · Rear safety enclosure with strain relief
- IP56 rated (see inside back cover)

Part # 6371EL-BX

OEM # 6371ELX no enclosure



#### **Standard Inlet**

- Easy Lock™ system
- · Glass-filled polyester
- Watertight
- · Rear safety enclosure with strain relief
- IP56 rated (see inside back cover)

OEM # 6351EL-BX



#### **Contour Inlet**

- Easy Lock™ system
- · Glass-filled polyester
- Watertight
- · Rear safety enclosure with strain relief
- IP56 rated (see inside back cover)

OEM # 6343EL-BX



#### **Female Connector**

- Corrosion resistant contacts and terminals
- Use with cover 7715CRN and sealing cap 199110

Part # 6360CRNXPK OEM # 6360CRNX



## Weatherproof Cover w/ Threaded Ring

 Use with 6360CRNX, 6401CRCX, 6401CRPX, 6402CRCX, or 6402CRPX

Part # 7715CRNXPK OEM # 7715CRNX



#### **Connector Kit**

 Includes female connector, weatherproof cover with treaded ring and watertight cap

Part # 199115



#### **Locking Shore Power Cordset**

- ${\sf H07BQ\text{-}F3G4mm^2harmonized}$  cable
- IEC 60309 plug 2P+E [6H], 250V/50Hz
- Watertight connector sealing cap for CE compliance
- NEMA SS-1 moulded connector with LED power indicator light

Part # 15M32AXP 15 meters
Part # 1M32AXP 1 meter



#### **Harmonized Cable Cordset**

- Blunt cut
- H07BQ-F 3G 4 mm<sup>2</sup> harmonized cable
- Watertight connector sealing cap for CE compliance
- NEMA SS-1 moulded connector with LED power indicator light

Part # 15M32AX 15 meters



#### 8/3 Cable Cordset

- · Male end blunt cut
- 8/3 (8.6 mm<sup>2</sup>) cable
- Moulded connector with LED power indicator light

Part # 6153SPPX 50'

**SHORE POWER** marinco.com

# **International Shore Power 63A 230V, 50Hz Locking** Single Phase, 3-Wire



#### **Stainless Steel Inlet**

- 316 stainless steel
- Easy Lock™ System
- · Soft touch cap design
- Rear safety enclosure with strain relief
- IP56 rated (see inside back cover)

Part # 6401EL-BX







#### **Female Connector**

• Corrosion resistant contacts and terminals

Part # 6401CRCX



#### **Male Connector**

· Corrosion resistant contacts and terminals

Part # 6401CRPX

# **63A 230V, 50Hz Locking** Three Phase, 4 Wire



#### **Stainless Steel Inlet**

- 316 Stainless steel
- Easy Lock™ system
- Soft touch cap design
- Rear safety enclosure with strain relief
- IP56 rated (see inside back cover)

Part # 6402EL-BX







#### **Female Connector**

• Corrosion resistant contacts and terminals

Part # 6402CRCX



#### **Male Connector**

· Corrosion resistant contacts and terminals

Part # 6402CRPX



#### **Weatherproof Cover** w/ Threaded Ring

 Use with 6360CRNX, 6401CRCX, 6401CRPX, 6402CRCX, or 6402CRPX

Part # 7715CRNXPK OEM # 7715CRNX



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## 100A 125/250V 3-Pole 4-Wire



#### **Cordsets**

All Marinco® cordsets are made of the highest quality, marine grade construction with features you won't find on other power cords.

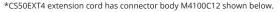
- For use with 100A 125V/250V shore power systems
- High visibility, 2 AWG, flexible yellow STOW cable is oil, water, UV resistant, and rated to 221°F (105°C)
- Ergonomic non-slip TPE coated gripping surfaces
- IEC pin & sleeve plugs and connectors are designed for harsh environments, watertight, and corrosion resistant. Feature integrated locking rings.
- Internal frame terminals provide high clamping force for safe and secure contact
- Options for use with on-board isolation transformers, male plug only power supply, and extension purposes
- · UL and ABYC approved components

Length	Neutral Wire	Female End	Application	Color	Part #
75'	no	yes	Isolation transformer cordset	yellow	CS75IT4
75'	yes	yes	Standard cordset	yellow	CS754
75'	yes	no, blunt cut	Cable winch	yellow	CW754
100'	no	yes	Isolation transformer cordset	yellow	CS100IT4
100'	no	no, blunt cut	Cable winch w/ isolation transformer	yellow	CW100IT4
100'	yes	yes	Standard cordset	yellow	CS1004
100'	yes	no, blunt cut	Cable winch	yellow	CW1004
125'	no	no, blunt cut	Cable winch w/ isolation transformer	yellow	CW125IT4
Extension	on Cord				
50'	yes	yes	Extension cable	yellow	CS50EXT4*











# Plug w/ Gasketed Locking Ring

• Mate with M4100R12 receptacle

Part # M4100P12



#### **Connector Body**

 Mate with plug on extension cords or adapters. Note: It does not mate with shore power inlet.

Part # M4100C12



#### Connector Body w/ Gasketed Locking Ring

• Mate with M4100B12R inlet

Part # M4100C12R

# **Dock Side Receptacle**

 Spring loaded cover providing a IP67 watertight rating when tightened (see inside back cover)

Part # M4100R12



#### **Shore Power Inlet**

 Spring loaded cover providing a IP67 watertight rating when tightened (see inside back cover)

Part # M4100B12R



# 100A 3ØY 120V/208V 4-Pole 5-Wire



#### **Cordsets**

All Marinco® cordsets are made of the highest quality, marine grade construction with features you won't find on other power cords.

- For use with 100A 120V/208V shore power systems
- High visibility, 2 AWG, flexible yellow STOW cable is oil, water, UV resistant, and rated to 221°F (105°C)
- Ergonomic non-slip TPE coated gripping surfaces
- IEC pin & sleeve plugs and connectors are designed for harsh environments, watertight, and corrosion resistant. Feature integrated locking rings.
- Internal frame terminals provide high clamping force for safe and secure contact
- Options for use with on-board isolation transformers and male plug only power supply purposes
- UL and ABYC approved components

Length	Neutral Wire	Female End	Application	Color	Part #
75'	No	yes	Isolation transformer cordset	yellow	CS75IT5
100'	No	yes	Isolation transformer cordset	yellow	CS100IT5
100'	No	no, blunt cut	Cable winch w/ isolation transformer	yellow	CW100IT5
125'	No	no, blunt cut	Cable winch w/ isolation transformer	yellow	CW125IT5









## Plug w/ Gasketed Locking Ring

• Mate with M5100R9 receptacle

Part # M5100P9



#### **Connector Body**

 Mate with plug on extension cords or adapters. Note: It does not mate with shore power inlet.

Part # M5100C9



## Connector Body w/ Gasketed Locking Ring

• Mate with M5100B9R inlet

Part # M5100C9R

# **Dock Side Receptacle**

 Spring loaded cover providing a IP67 watertight rating when tightened (see inside back cover)

Part # M5100R9



#### **Shore Power Inlet**

 Spring loaded cover providing a IP67 watertight rating when tightened (see inside back cover)

Part # M5100B9R



# DC POWER CONNECTIONS

#### 12V Receptacles & Plugs



Marinco offers a wide selection of high quality DC electrical products that are designed specifically for harsh marine environments.

#### 12V Receptacles & Plug Accessories



Mounting brackets, plates, extension cords, and other essential accessories for managing your 12V receptacles and plugs.

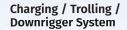
#### 12/24V 4.8A Dual USB Receptacles



A wide range of USB receptacles for charging mobile device, tablets, and other accessories.



# DC POWER CONNECTIONS





Marinco offers a complete line of plugs and receptacles designed exclusively for trolling motors and downriggers. Including the 70A trolling motor plug.

#### **Battery Direct Connect**



Terminate up to four (4) electronic instruments on each set of battery terminals.



Charging today's mobile devices on the go is a necessity and requires products built to withstand the marine environment.

DC POWER CONNECTIONS marinco.com



# The importance of a quality DC electrical system

There's an old axiom that states, "The strongest chain is only as reliable as its weakest link," and the same analogy can be applied to your boat's DC electrical system. Put it in a harsh salt water or fresh water environment, where a vessel's wiring and components are subjected to more concentrated abuse in one season than your family car would experience in five years, and it's easy to realize that small electrical problems can get out of hand very quickly.

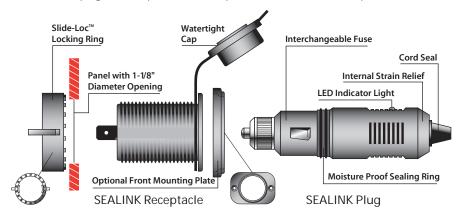
Safety onboard starts with a reliable DC electrical system that is installed and designed with the proper high quality wiring, components and connections to fulfill all of your intended DC tasks. If you're tempted to take shortcuts when wiring your boat, don't, as these types of cost-cutting measures can come back to bite you at the worst possible moments, potentially compromising the safety of your boat and crew.

So, whether you ply fresh water lakes, back bays, coastal areas or make long distance blue water runs to the edge of the continental shelf, Marinco® offers a wide selection of high quality, low voltage DC electrical products designed specifically for the harsh marine environment.

Now you can spend more time enjoying your boating experience and less time dealing with unwanted electrical hassles.

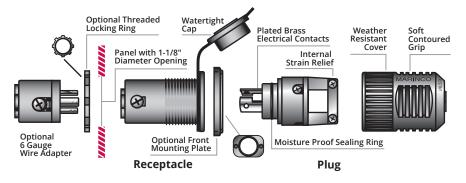
#### SeaLink® 12V

The SeaLink® 12V family of products are manufactured from corrosion resistant marine grade materials. Exclusive to SeaLink products is a unique interconnecting system that securely locks the plug into the receptacle resulting in a positive and moisture-proof connection. The plug and receptacle feature optimized metal connection points for maximum conductivity.



#### **ConnectPro® Charging & Trolling**

The ConnectPro® trolling motor plug and receptacle is a revolutionary concept in trolling motor DC connections. The ConnectPro system has superior electric current carrying capacity that eliminates problems that rob motors of power and reduce battery life. The ConnectPro system features a locking plug and receptacle and spring clamping connection, which provides a secure electrical contact.



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# 12V Receptacles / Plugs / Accessories



### 12V Receptacle with Protective Cap

- · Stainless Steel
- · Includes stainless steel mounting plate and wire set
- · Max rating is 15A

Part # 20036



### SeaLink® Deluxe 12V Receptacle w/ Old Style Ring

- · Watertight sealing cap
- Easy to install with locking ring for rear access installation
- · Compatible with standard 12V plugs
- Max rating is 15A

OEM # 12VRCO

OEM # 12VRCO.PG w/gasket OEM # 12VRCY sealed seams





#### SeaLink® Deluxe 12V Receptacle

- · Watertight sealing cap
- Easy to install, with supplied mounting plate for front panel installation, or locking ring for rear access installation
- · Compatible with standard 12V plugs
- Max rating is 15A

Part # 12VRC black

Part # 12VRC.PG black w/gasket

Part # 12VRCW white





#### SeaLink® Deluxe 12V Receptacle

- · Watertight sealing cap
- Easy to install with locking ring for rear access installation
- · Compatible with standard 12V plugs
- · No mounting plate
- Max rating is 15A

OEM# 12VRC.OEM black OEM # 12VRCW.OEM white



#### SeaLink® Deluxe 12V Plug

- · Moisture proof sealing ring
- · LED power indicator light
- Interchangeable 10A fuse
- Internal strain relief and cord seal
- · Compatible with standard 12V receptacles
- · Max rating is 10A

Part # 12VPG OEM # 12VPG.OEM



#### SeaLink® Deluxe 12V Receptacle & Plug

• 12VRC and 12VPG packaged together

Part # 12VPK

DC POWER CONNECTIONS marinco.com

# 12V Receptacles / Plugs / Accessories



### **SeaLink® Mounting Plate**

- · Easy to install or retrofit
- 12MP.OEM use with 12VRCY, 12VRC.OEM, 12VRCO, or 12VBR.OEM
- 300259 use with 12VRCW.OEM

OEM # 12MP.OEM black OEM # 300259 white



#### **Boot**

- For use with 12V products
- Creates a weatherproof seal

Part # 300275



#### **Trolling Motor Adapter Terminal**

• 6-gauge

Part # 12VPL.OEM





## SeaLink® Receptacle Mounting Bracket

- Bracket for under dash mounting of the SeaLink® or ConnectPro® receptacles
- Receptacle installs with rear mounting threaded nut
- · Marine grade anodized aluminum
- Dimensions: 2" W x 2-1/2" H

Part # 12BKT



#### SeaLink® Deluxe 12V Extension Cord

- Heavy-duty 18-gauge wire, extends to over six (6) feet
- Watertight cap
- Plug features an LED indicator light, moisture proof sealing ring, strain relief and built-in 10A fuse
- SeaLink® locking system
- Works with any standard 12V plug and receptacle

Part # 12VXT





#### SeaLink® Deluxe Dual USB Charger Receptacle

- 12V to 24V DC input
- 5V, 2.1A total output
- LED power indicator light for USB
- Water resistant cover protects against dust and water

Part # 12VDUSB black (with insulated terminals)

 OEM #
 12VDUSB-B
 black

 OEM #
 12VDUSBN-B
 black no LED

 OEM #
 12VDUSBW-B
 white



#### 12/24V 4.8A Dual USB Charger NEW

- Dual USB ports with 4.8A total output
- · Cover prevents dust and water from damaging receptacles

Part # 12VDUSB48



#### 12/24V 4.8A Contura Dual USB Charger NEW

- Dual USB ports with 4.8A total output
- Blue LED shows power is available
- Installs in standard Contura switch footprint
- Cover prevents dust and water from damaging receptacles

Part # 12VCDUSB48



### SeaLink® Deluxe Dual USB Charger & 12V Receptacle

- 12V DC input
- Dual USB has 5V, 2.1A total output
- · LED power indicator light for USB
- Receptacle has 12V DC output, rated up to 15A
- · Water resistant covers protects against dust and water

Part # 12VCOMBO black (with insulated terminals)

 OEM #
 12VCOMBO-B
 black

 OEM #
 12VCOMBON-B
 black no LED

 OEM #
 12VDUSBW-B
 white





# 12/24V 4.8A Contura Dual USB Charger with Volt/Amp Meter NEW

- Dual USB ports with 4.8A total output
- 3-digit blue LED volt/amp meter
- · Installs in standard Contura switch footprint
- · Cover prevents dust and water from damaging receptacles

Part # 12VCDUSB48A

6 DC POWER CONNECTIONS marinco.com

# 3-Wire 70A Charging / Trolling System



#### **70A Trolling Motor Receptacle**

- 70A continuous rating
- Universal design for 2 or 3-wire configuration 12V, 24V, 12/24V, 24/36V, 36V or 48V systems
- Floating pin design for maximum connectivity and durability
- Corrosion resistant, plated brass electrical components
- · Watertight sealing cap
- · Accepts 8 and 6 AWG wire

Part # 12VBRS3 OEM # 12VBRS3.OEM



## **70A Trolling Motor Plug**

- · 70A continuous rating
- Universal design for 2 or 3-wire configuration 12V, 24V, 12/24V, 24/36V, 36V or 48V systems
- Floating pin design for maximum connectivity and durability
- Corrosion resistant, plated brass electrical components
- · Integrated strain relief
- Keyed design with thumbprint locator
- · Accepts 8 and 6 AWG wire

Part # 12VBPS3 OEM # 12VBPS3.OEM



# 70A Trolling Motor Plug & Receptacle

- 70A continuous rating
- Universal design for 2 or 3-wire configuration 12V, 24V, 12/24V, 24/36V, 36V or 48V systems
- Floating pin design for maximum connectivity and durability
- Corrosion resistant, plated brass electrical components
- Receptacle contains watertight sealing cap
- Plug contains Integrated strain relief and keyed design with thumbprint locator
- · Accepts 8 and 6 AWG wire

Part # 12VCPS3



# **TECH TIP**

# **Trolling Motor Amperages**

Marinco offers multiple trolling motor plugs and receptacles to accommodate many different trolling motors. To select the correct plug and receptacle for your trolling motor, identify the amperage and voltage rating of your trolling motor. All Marinco trolling motor plugs and receptacles are rated at the stated amperage for continuous use and the amperage rating may vary by voltage. If a trolling motor plug and receptacle is undersized based on the amperage and voltage of the trolling motor, issues may occur.

# 2-Wire ConnectPro® Charging / Trolling System / Downrigger



#### ConnectPro® Receptacle

- Works with 12V, 24V, or 36V 2-wire systems
- · For front mount panel installations
- · Weather resistant sealing cap
- Drain holes in receptacle keep water away from electrical components
- Perma-Lock™ screw terminals will not loosen under extreme hull vibration
- Fits standard 1-1/8" diameter mounting hole
- · Accepts up to 10 AWG wire

Part # 12VBRS2 OEM # 12VBRS2.OEM



#### ConnectPro® Plug

- O-ring seal for waterproof connections
- · Weather resistant plug cover
- Corrosion resistant, plated brass electrical components
- · Accepts 16 to 8 AWG wire
- Ergonomic contoured grip for easy hook-up and ground blade alignment
- Max rating is 40A

Part # 12VBPS2 OEM # 12VBPS2.OEM



#### ConnectPro® Receptacle & Plug

 12VBRS2 and 12VBPS2 packaged together

Part # 12VCPS2

# 3-Wire ConnectPro® Charging / Trolling System



#### **ConnectPro® Receptacle**

- Universal design for 2 or 3-wire configuration 12V, 24V, 12/24V, 24/36V or 36V systems
- · Watertight sealing cap
- Corrosion resistant, plated brass electrical components
- Drain holes in receptacle keep water away from electrical components
- Perma-Lock™ screw terminals will not loosen under extreme hull vibration
- Standard 1-1/8" diameter mounting hole
- Easy to install, with supplied mounting plate for front panel installation, or locking ring for rear access installation
- Accepts 10 and 8 AWG wire
- Easily replaces other trolling motor plugs and receptacles
- Max rating is 40A

Part # 12VBR with mounting plate
OEM # 12VBR.OEM without mounting plate



#### ConnectPro® Plug

- O-ring seal for waterproof connections
- · Weather resistant plug cover
- Corrosion resistant, plated brass electrical components
- · Accepts 16 to 8 AWG wire
- Ergonomic contoured grip for easy hook-up and ground blade alignment
- · Max rating is 40A

Part # 12VBP OEM # 12VBP.OEM



### ConnectPro® Receptacle & Plug

12VBR and 12VBP packaged together

Part # 12VCP



## 6 Gauge ConnectPro® Wire Receptacle Adapter

- Allows 6 AWG wire connection to ConnectPro® receptacle
- Corrosion resistant, plated brass electrical components

Part # 12VBRAD OEM # 12VBRAD.OEM





# ConnectPro® Receptacle, Plug & 6 Gauge Adapter

- 12VBR and 12VBP and 12VBRAD packaged together
- Max rating is 40A

Part # 12VCP6

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# 3-Wire 30A 125V Locking Charging / Trolling System



#### Male Plug

• Short housing, black nylon with internal strain relief system and recessed fasteners

Part # 305BP OEM # 305BP.OEM



#### **Female Connector**

 Short housing, black nylon with internal strain relief system and recessed fasteners

Part # 305BC



#### Receptacle

- · Corrosion resistant reinforced nylon.
- Accepts 8 AWG stranded wire or up to 6 AWG with spade terminals

Part # 305CRRB OEM # 305CRRB.OEM

# 4-Wire 12/24V Locking Charging / Trolling System

The 4-wire trolling/charging system eliminates the need for a charge/run switch. Install the receptacle on the boat, mount the black trolling motor plug on the trolling motor, and the red charger plug on the leads of the battery charger. Simply plug in the black plug to troll, or plug in the red plug to charge.



#### **Charger Plug (Male)**

- Accepts up to 10 AWG wire
- Red

Part # 2018BP-12



## Trolling Motor Plug (Male)

- · Connects to trolling motor
- Jumpered internally to supply 12V & 24V power to the trolling motor when plugged into the receptacle
- · Accepts up to 8 AWG wire
- · Max rating is 60A
- Black

Part # 2018BP-24 OEM # 2018BP-24.OEM

#### Trolling-Charging System Package

 Includes the 2018BP-12, 2018BP-24, and 2018BR-MB

Part # 2018PKG



#### **Bracket**

 Spring loaded flip lid cover, without receptacle

Part # 2018MB OEM # 2018MB.OEM



12/24V Locking

30A

125V

Locking

#### Receptacle & Bracket

Spring loaded flip lid cover and 2018BR receptacle, pre-assembled

Part # 2018BR-MB



#### Receptacle

 Glass-reinforced corrosion resistant nylon. Accepts 8 AWG stranded wire or up to 6 AWG with spade terminals.

Part # 2018BR OEM # 2018BR.OEM

OEM # 2018BR.OEM.BPS (case pack)

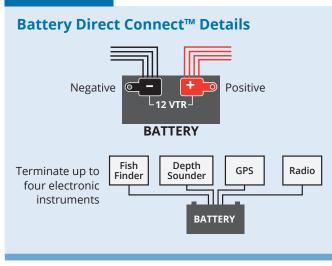
# Battery Direct Connect™ Multi Connection Battery Terminals

- Terminate up to four electronic instruments on each set of terminals
- Comes complete with quick-connect terminals
- · Positive molded in red, negative molded in black
- All one-piece, no screws or parts to lose
- Cover snaps tight when closed
- Meets ABYC standard E-10.8

Part # 12VTR OEM # 12VTR.OEM



# **TECH TIP**



# POWER CONVERSION

#### **Guest ChargePro™ On-Board Battery Chargers**



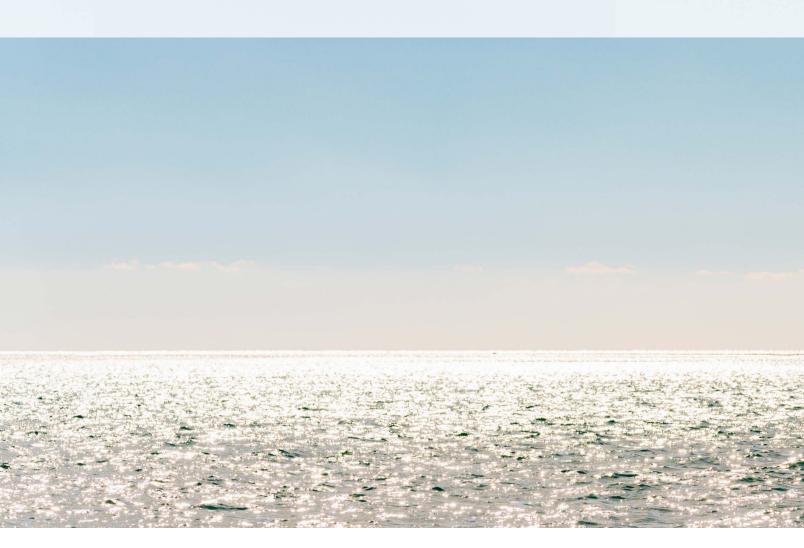
New line of Guest chargers ranging from 5A to 40A, with fully automatic 5-stage performance charging for 12V lead acid and AGM batteries. Chargers have dedicated outputs, aluminum housings and expanded LED charge status. 100% waterproof and shock resistant for all fresh and salt water applications.

#### 1.5 Amp ChargePro™ Maintainer

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Keep your battery charged with this highly reliable, Guest 1.5 Amp maintainer. Extends battery life and will charge, monitor and re-charge your battery if the voltage drops below 12.9V. The maintainer can be safely connected to the battery for short or long periods of time.



# **POWER CONVERSION**

## **Guest Portable Battery Chargers**



Take the charger to the battery with the Guest portable charger. Charges and maintains a full charge without the fear of overcharging or boiling electrolytes.

#### **Battery Charger Accessories**



Intuitive new charger accessories simplify installation and operation.



POWER CONVERSIONS marinco.com

# **CHARGEPRO**

## **Guest On-Board Battery Chargers**

#### For 12V, 24V, 36V and 48V systems (model specific)

Guest On-Board battery chargers have been redesigned from the inside out with the customer in mind. Our newest generation On-Board Marine battery chargers include leading advancements in digital charging technology and waterproof design/construction. Designed to maximize individual battery performance, extend battery life and show battery status better than ever before.

Every Guest charger has a dedicated output that delivers the full amount of amps per bank. The easy to read graphics indicates the status of each battery bank through the charging process.

ChargePro's low profile flangeless extruded aluminum housing is sealed by gaskets with heavy duty end caps for 100% waterproof performance to IP67. This new construction design delivers an increase in charging and thermal management performance. The new ChargePro Series is up to 40% lighter while increasing durability and ease of installation over prior generations of older technology epoxy filled plastic body chargers.

- · All high frequency, digital charging technology
- Microprocessor and software control for precision, fully automatic
   5-stage performance charging
- Dedicated battery charging, sensing and control per bank
- Expanded LED charge status monitor
- Wiring and battery fault detection
- · Auto-maintain energy saver mode
- · Up to 40% lighter
- 100% Waterproof (IP67) and shock resistant for all fresh and saltwater applications (see inside back cover)
- · All models are pre-wired for easy installation
- For all 12V flooded and AGM lead acid batteries
- Built-in safety: reverse polarity, over-current, over-voltage, over-temperature and ignition protection. In-line fuses for maximum DC wire protection.
- · 2-year warranty

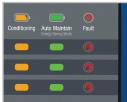












**Battery fault detection LEDs** 



**Heavy-Duty strain reliefs** 



In-line safety fuses



NEMA 5-15P plug













**POWER CONVERSIONS** 53 marinco.com

#### Guest ChargePro™ Series Selection

#### ChargePro 5A to 20A Models













Model	ChargePro 5	ChargePro 4/4	ChargePro 10	ChargePro 5/5	ChargePro 5/5/5	ChargePro 10/10
Part #	2708A	2707A	2710A	2711A	2713A	2720A
Input Volts	90-135V AC 50/60Hz	90-135V AC 50/60Hz				
DC System Voltage	12	12/24	12	12/24	12/24/36	12/24
Banks	1	2	1	2	3	2
Amps	5	4/4	10	5/5	5/5/5	10/10
Amps Per Bank	5	4	10	5	5	10
AC Cord Length	6'	6'	6'	6'	6'	6'
Size (W x H X L)	7.5" x 2.4" x 7.2" 191 x 61 x 183 mm	7.5" x 2.4" x 9.0" 191 x 61 x 229 mm	7.5" x 2.4" x 9.0" 191 x 61 x 229 mm	7.5" x 2.4" x 9.0" 191 x 61 x 229 mm	7.5" x 2.4" x 12.9" 191 x 61 x 328 mm	7.5" x 2.4" x 12.9" 191 x 61 x 328 mm
Weight (lbs)	3.2	4.5	4.2	4.7	6.7	6.6

#### ChargePro 30A and 40A Models

Designed for demanding 12V, 24V, 36V and 48V battery systems requiring 10per battery for the fastest charge times.

Pa In

D A A A Si





Model	ChargePro 10/10/10	ChargePro 10/10/10/10
art #	2731A	2740A
nput Volts	90-135V AC 50/60Hz	90-135V AC 50/60Hz
C System Voltage	12/24/36	12/24/36/48
anks	3	4
mps	10/10/10	10/10/10/10
mps Per Bank	10	10
C Cord Length	6'	6'
ize (W x H X L)	9.0" x 4.1" x 8.7" 229 x 104 x 221 mm	9.0" x 4.1" x 8.7" 229 x 104 x 221 mm
Veight (lbs)	8.0	8.5



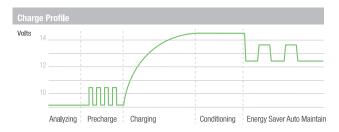




**Expanded LED display** 

**Heavy-Duty Strain Reliefs** 

## **Fully Automatic Multi-Stage Performance Charging** Overview



#### Chargepro's 5-Stage Performance Charging Algorithm is Fully **Automatic and Designed to Maximize Battery Performance** and Extend Battery Life.

Stage 1 - Analyze Mode: AC power is applied. ChargePro's red charging LED will flash indicating it is analyzing individual wiring connections for proper connection/polarity and that each battery is over 4.0V DC and capable of accepting a precharge. When completed, any errors will trip a battery specific red fault LED, or if no faults are present the red charging LED will illuminate solid red.

**Stage 2 - Precharge Mode:** For batteries under 10V, this mode is designed to pulse the battery up to 10V before accepting full rated constant current (Stage 3). During this mode the red charging LED will be illuminated with a solid on.

Stage 3 - Charging Mode Constant Current: During this mode the red charging LED will be illuminated with a solid on indicating each battery is being charged in constant current mode as controlled by temperature until the battery voltage is raised to a precise 14.6V DC and the red charging LED

Stage 4 - Conditioning Mode Constant Voltage: During this mode the amber conditioning LED will be solid on indicating each battery is being is being conditioned at 14.6V for up to 3 hours until the battery is fully charged. Followed by the amber LED turning off while the charger enters into Stage 5.

Stage 5 - Storage Recondition Mode: During this mode the blue AC power and green auto maintain LED will be solid on indicating each battery is being monitored while the charger is in standby mode consuming little to no power until the battery drops under 12.8V (fully charged) and the charger will turn on and auto maintain the battery in a fully charged state. This is fully automatic and safe for short and long term storage.

#### **Related Products**





AC Plug Holder page 56

Cable Extender page 57

**POWER CONVERSIONS** marinco.com

# 1.5 Amp ChargePro™ Maintainer

Keep your battery charged with this highly reliable, Guest 1.5 Amp maintainer. Extends battery life and will charge, monitor and re-charge your battery if the voltage drops below 12.9V. The maintainer can be safely connected to the battery for short or long periods of time. To increase versatility the maintainer comes with alligator clips and ring terminals for the output cable. This maintainer will charge smaller batteries and maintain batteries up to 150Ah (group 31).

- · Ideal for sport fishing boats, ski boats, jet ski's, ATV's, automobiles, tractors, riding lawn mowers and more
- · For Flooded, Gel and AGM batteries
- · Charge batteries 1.2 Ah to 40 Ah
- Maintain batteries 1.2 Ah to 150 Ah
- Energy savings mode automatically shuts off the charger when the battery is charged. The charger periodically monitors the battery and turns back on when the battery falls below 12.9V.
- · Maintainer can safely stay connected to the battery for long periods of time
- LEDs let you know when the Power is ON, battery is being charged and when charging is complete.
- Includes ring terminals and alligator clips for connection to the battery
- Weather resistant, IP65 (see inside back cover)
- 3-wire AC plug, NEMA 5-15P
- 3-year warranty

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· Meets UL 1236 and CSA Standards, cETLus





**Concealed Mounting** 



**Expanded LED Status Center** 



**Portable Foam Resting Pad** 



**Included DC Cable Assemblies** 



NEMA 5-15P Plug

Part #	Output Volts	Output Amps	Banks	Cable Length	Size (WxHxD)	Weight	AC In
2701A	12V DC	1.5 A	1	6'	5.0"x5.8"x2.0" 127 x 147 x 51 mm	2.3 lbs	120V AC 60Hz







# **Portable Battery Chargers**





Model	6 Amp Battery Charger	3 Amp Battery Charger
Part #	2606A-B	2603-B
Total amps	6A	3A
Outputs	1	1
Amps per out	6	3
<b>Battery System</b>	12V	12V
Input Voltage	100-130V AC / 60Hz	100-130V AC/60Hz
Output Voltage	12V	12V
AC	6' AC cord with standard plug	18" AC cord with standard plug
Dimensions	5.5" x 5.0" x 2.4" 140 x 127 x 61 mm	3.10" x 3.50" x 2.34" 79 x 89 x 59 mm
Weight	3.5 lbs / 1.6 kg	1.0 lbs / 0.5 kg



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# **Universal AC Plug Holder+**

#### Universal design for all standard 120V AC plugs

- Plug clamp insert included—converts plug holder to an AC inlet for Guest engineered chargers
- No cutting, stripping or rewiring of AC power cord
- · Watertight and UV resistant cover
- Easy to reach safe AC power cord connections
- Stainless steel mounting screws included
- · Easy installation
- Compatible with Guest ConnectCharge™ plug

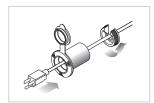
Description	Part #
Black	150PHB
White	150PHW



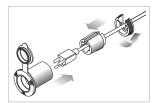
Plug Clamp Insert

Available in black or white

#### **AC Plug Holder Configurations—Multi-Use Design**



**Universal Plug Holder** Fits marine chargers with 120V plugs.



With Plug Clamp Insert For all ProMariner chargers, Bass Pro shops, Cabela's and Guest chargers.



ConnectCharge™ Plug Guest and Marinco ConnectCharge plug



# **Hard Wired Charger Inlets**

- 15A or 20A 125V straight blade inlet
- Low profile cap won't catch fishing line
- · Mounts easily to fiberglass and aluminum hulls
- Perma-Lock  $\!\!\!\!\!\!^{\mathsf{TM}}$  terminals and color coded wire entrance holes make wiring a snap
- UV resistant housing/cap

Amp	Color	Universal Mount Part #	Front Mount OEM #	Rear Mount OEM #
15	Black	150BBI	150BBI.OEM	150BBI-TM
15	White	150BBIW	150BBIW.OEM	_
20	White	_	200BBIW.OEM	_







# **Charger DC Cable Extenders**

Universal design for all marine chargers with ring terminal cables

- Rated up to 30A
- Color coded for quick and easy installation
- No cutting, stripping or splicing required
- Slide & snap fully insulated connection covers
- Corrosion resistant tinned 12 AWG copper wire and gold plated hardware
- Dual inline waterproof fuses for maximum wire protection
- Available in 5 ft or 15 ft cable lengths
- Use with all on-board marine battery chargers when standard battery charger cables do not reach your bow, center mount or stern battery compartment locations

Description	Part#
5 ft	27505
15 ft	27515



#### Easy to extend charger cables with two 1/2" wrenches



**Step 1:** Align charger red and black wires and assemble hardware as shown



Step 2: Tighten all hardware to approximately 12 ft. lbs.



**Step 3:** Slide and snap connection cover





# BATTERY MANAGEMENT

#### **Dynaplates**



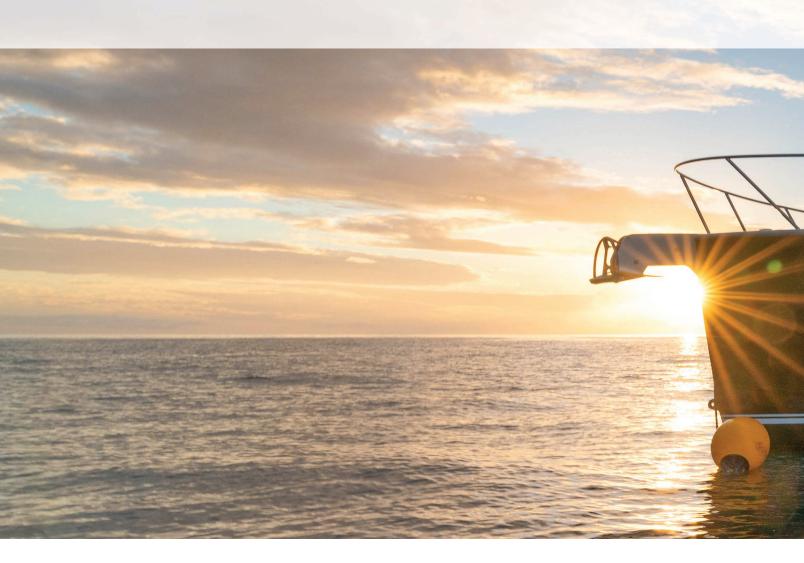
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Improve the performance of electronics and reduce RF interference. Deters electrolysis and galvanic corrosion.

#### **Universal Mount Switches**



Longer stud length for easier assembly and cable routing.



# **BATTERY MANAGEMENT**



Battery management systems protect and support rechargeable batteries by extending the charge and life cycle of your batteries.

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# **Dynaplates for Hull Bonding & Grounding**

- Improves performance of electronics and reduces RF interference
- Offers the best path for hull bonding without long runs of copper foil
- Deters electrolysis and galvanic corrosion
- Sintered porous bronze sphere construction for maximum conductivity in a compact size
- · Low drag, non-fouling shape
- Easy to clean with wire brush
- Conforms to ABYC standards
- · Mounting hardware included
- Gold plated mounting bolt
- Bronze mounting nuts









	Standard	Large	Giant	Super
Part #	4006	4008	4012	4018
Use for	bonding and grounding	bonding, grounding and Loran use	bonding, grounding and Loran use	SSB radio
Dimensions	6" x 2" x .5" 152 x 51 x 13 mm	8" x 2.5" x .5" 203 x 64 x 13 mm	12" x 3" x .5" 305 x 76 x 13 mm	18" x 6" x .5" 457 x 152 x 13 mm
Mounting holes	2-1/2" center to center	4" center to center	6" center to center	9.875" center to center; 3" top to bottom
Weight	1.4 lbs / .6 kg	2.1 lbs / 1 kg	3.7 lbs / 1.7 kg	11.1 lbs / 5 kg

#### **Accessories for dynaplates**

Part	Material	Use with:	Dimensions	Part #
Washer	Bronze	4006/4008	1/4" x 20"	P-11D03
		4012/4018	3/8" x 16"	P-11D04
Bolt	Bronze	4006/4008	1/4" x 20"	P-12D34
		4012/4018	3/8" x 16"	P-12D36
	Bronze Gold Plate	4006/4008	1/4" x 20"	P-12D35
		4012/4018	3/8" x 16"	P-12D37

Part	Material	Use with:	Dimensions	Part #
Nut	Bronze	4006/4008	1/4" x 20"	P-13A27
		4012/4018	3/8" x 16"	P-13A29
	Bronze	4006/4008	1/4" x 20"	P-13A28
	Gold Plate	4012/4018	3/8" x 16"	P-13A2A

# **TECH TIP**

## **Choosing a Battery Switch**

ABYC requires a battery switch on every boat with a battery over 800 Cold Cranking amps (CCA). This requirement exists so the potentially destructive energy in the batteries can be isolated in the event of a fire.

#### Universal Mount Switches

- Longer stud lengths for improved assembly and easier cable routing
- Built with heavy-duty copper sweep contacts to ensure positive circuit control
- Rugged internal components protected by a tough, impact resistant polycarbonate housing that is impervious to the elements
- Cable Lug Size: 3/8"
- Dimensions: 5.0" x 2.75"



#### Selector Switch w/out AFD

Continuous: 230A Momentary: 345A



Description	Part #	OEM#
black	2111A	2111A-B
orange	2111A-O	_
red	2111A-17	_

#### Selector Switch with AFD

Continuous: 230A Momentary: 345A



Description	Part#	OEM#
black	2110A	2110A-B

#### On/Off Switch w/out AFD

Continuous: 230A Momentary: 345A



Description	Part #	OEM#
black	2112A	2112A-B

#### **Battery Selector Switches**

- · Polycarbonate case
- For 6V, 12V, 24V or 36V systems
- Surface mount
- · Cable Lug Size: 3/8"
- Dimensions: 5.50" x 2.63"



#### **Selector Switch with AFD**

Continuous: 230A Momentary: 345A



Description	Part #	OEM#
orange	2100	2100-B

#### Selector Switch w/out AFD

Continuous: 230A Momentary: 345A



Description	Part #	OEM #
orange	2101	2101-B

#### On/Off Switch w/out AFD

Continuous: 230A Momentary: 345A



Description	Part #	OEM #
orange	2102	2102-B

#### Heavy-duty Diesel Power Battery Switches

- For 6V, 12V, 24V or 36V systems
- Built with heavy-duty copper sweep contacts to ensure positive circuit control
- Rugged internal components protected by a tough, impact resistant polycarbonate housing that is impervious to the elements
- All feature Alternator Field Disconnect (AFD) allowing selection of any position, including "off", without damage to alternator or electrical system
- · Cable lug size: 1/2"
- 2304A and 2304A-B have 3 studs

#### Heavy-duty On/Off Switch

Continuous: 450A Momentary: 800A



Description	Part#	OEM#
gray	2303A	2303A-B

#### **Extra-duty On/Off Switch**

Continuous: 600A Momentary: 1000A



Description	Part #	OEM#
gray	2304A	2304A-B

#### **Battery Selector Switch**

Continuous: 360A Momentary: 600A



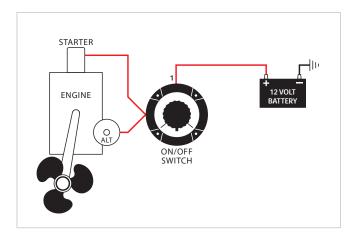
Description	Part #	OEM#
gray	2300A	2300A-B



BATTERY MANAGEMENT marinco.com

# **Battery Switch Operation Diagrams**

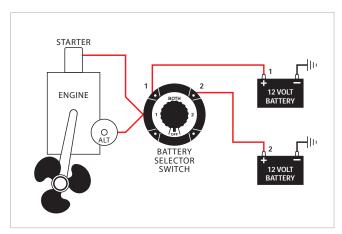
As more and more electronics and electrical accessories are added to your boat (autopilot, refrigeration, etc.) the use of multi-batteries becomes a necessity. Guest components allow you to set up the system (from simple to complex) for your boat's application. The following diagrams are for use in identifying and designing the right system for your boating needs.



#### Single battery

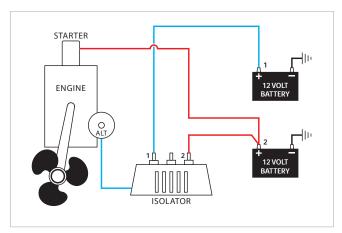
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Installation: To shut off all power at source. Recommended installation by approved authorities.



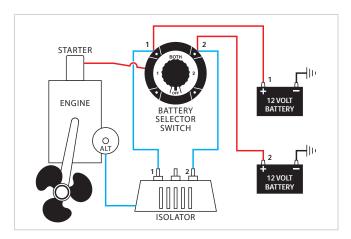
#### Two batteries without isolator

Installation: To select a starter battery and ship service battery. Manually isolates each battery, parallels both batteries for emergency start, master disconnect, manually selects batteries for charging.



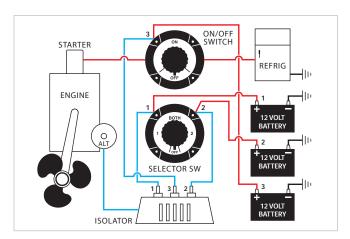
#### Two batteries with isolator

Installation: Isolator automatically selects lower charged battery to be charged first. Full battery can't discharge to drained battery. Dedicated system, no flexibility, no emergency parallel or disconnect function.



#### Two batteries with emergency parallel

Installation: An isolator automatically isolates each battery, lower charged battery will automatically be charged first. Two different size batteries can be used, larger for ship services, smaller for engine cranking. Switch selects usage, master disconnect, emergency parallel function.

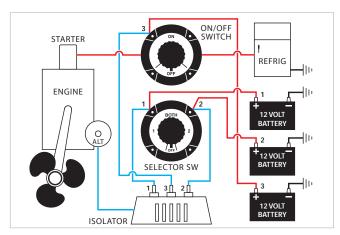


# One battery selector switch, one On/Off selector switch automatic battery isolation and automatically charges three batteries

Installation: Use for sailboats and trawlers. Third battery isolated from other ship circuits. All batteries being automatically charged while running through isolator. To be used for refrigeration or other heavy load devices. Isolator protects other batteries.

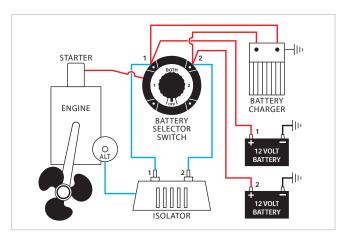
#### Switch selector usage:

1. Master disconnect 2. Emergency parallel function



# Three batteries, one battery selector switch, one On/Off or selector switch, two alternators, one isolator

Installation: Isolator separates both alternators so both alternators will charge simultaneously. Automatically charges lowest battery first. All batteries can be used for start, third battery, ship's source.



#### Adding automatic battery charger/converters to system

Installation: At dock side multi-bank charger built in isolator which will automatically charge lower battery.

#### **Alternator Field Disconnect (AFD)**

Allows selection of any position, including "Off," without damage to alternator or electrical system. AFD is required on some electrical systems.

- Heavy-duty copper sweep contacts
- Positive click-stop on all positions
- "Make before break" contacts allow selection of all positions except "Off" while engine is running
- · New design is easy to retrofit into existing hole patterns
- Use with 6V, 12V, 24V or 36V systems
- Built-in skirt protects connections
- Surface or rear panel mounting
- Marine grade construction

Important Note: The boater's electrical needs and problems should be discussed with your boatyard's electrical technician.



Exclusive flat 360 "sweep" contact design provides up to 60% more contact area than other switch designs.

# WIPER SYSTEMS



# **WIPER SYSTEMS**



Wiper assembly systems ensure your visibility remains clear through a storm or vicious passages.

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# **Wiper Motors**

The motor choice is based primarily on the size of the windshield and where the motor is to be installed, either in an exterior or interior location. Marinco motors are split into two categories, Standard and Heavy-Duty with the categoies being defined by the power range of the motors. Within the two categories, there are motors designed for interior or protected installations, and motors designed for exterior installations.

The Standard motor category includes the STD, WMW, and 500, which are all designed for light duty use, defined as being able to drive a 14" arm and a 14" blade.

When coverage of a larger windshield is required, Marinco® offers the Heavy-Duty motors, which are capable of driving a

wide range of arm and blade sizes, up to a 26" x 26" Deluxe arm and blade combination, which would cover windshields up to 39". The 1000 motor can pull up to a 16" x 16" Deluxe arm and blade combination. The MRV is built for interior or well-protected locations, and has the power to pull a 22" X 22" Deluxe arm and blade combination. The 1.5 motor has the power to pull a 22" x 22" Deluxe arm and blade combination like the MRV, but is waterproof and built for exposed installations. The 2.5 motor has the power to pull a 26" x 26" Deluxe arm and blade combination and is waterproof for exposed installations.

#### **Choosing the Right Motor**

CHOOSIN	g the Right	LIVIOLOI						
	Model	Voltage	Speeds	Stall Torque/ Stall Current	Compatible Blade Lengths	Available Shaft Lengths	Sweep Angles	Housing
	2.5	12V & 24V	2 speed	139 in-lbs / 9A-10.5A	26" Deluxe 24" Premier	2.5"	Factory preset: 80° or 110° Adjustable: 45° or 60°	Fully sealed powder coated aluminum
	1.5	12V & 24V	2 speed	109 in-lbs / 11.5A-13A	22" Deluxe 20" Premier	1.5" 2.5"	Factory preset: 80° or 110° Adjustable: 45° or 60°	Fully sealed powder coated aluminum
	3000	12V	2 speed	159 in-lbs / 10.2A-12.2A	26" Deluxe 26" Premier	1.5" 2.5"	Factory preset: 80° or 110° Adjustable to 40°, 50°, 60°, 70°, 80°, 90°, 100° or 110°	Fully sealed aluminum
	1000	12V	Single	55 in-lbs / 9.8A-10A	16" Deluxe 18" Premier	1.5" 2.5"	Factory preset: 65°, 80° or 110° Adjustable: 50°, 65°, 80° or 110°	Fully sealed, UV stabilized hi-temp thermoplastic
	MRV	12V & 24V	2 speed (but can be operated as 1)	109 in-lbs / 11.5A-13A	22" Deluxe 20" Premier (at 80° sweep)	1.5" 2.5" 3.5"	Factory preset: 80° or 110° Adjustable: 45°, 60°, 80° or 110°	Corrosion resistant cast housing
6: 6	500	12V	Single	-	14" Deluxe	2.5"	Factory preset: 80° or 110°	Fully sealed, UV stabilized hi-temp thermoplastic
	WMW	12V	Single	_	14" Deluxe	2.5"	Factory preset: 110°	Chrome plated brass case
. 6	STD	12V	Single	_	14" Deluxe	2.5" 3.5"	Factory preset: 80° or 110° Adjustable: 80° or 110°	Corrosion proof aluminum alloy case







#### **Related Products**

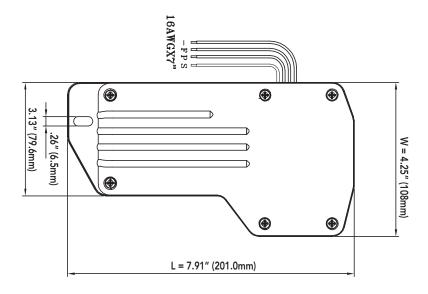


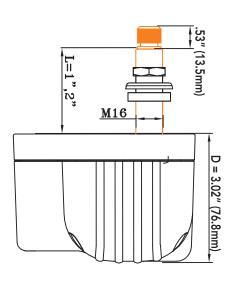
Intermittent Wiper Motor Controller page 72

# 2.5 Waterproof Wiper Motor

- Fully sealed powder coated aluminum waterproof base and housing
- Powers a 26" Deluxe arm and Deluxe blade combination or a 24" Premier arm and Deluxe blade combination
- Available in two (2) shaft lengths: 1.5" and 2.5" (includes .5" length of knurled arm fitting)
- Factory pre-set sweep angles of 80° or 110°, with easy adjustment to 45° or 60°
- Chrome plated solid brass knurled drive nut with brass and stainless steel drive shaft
- · Two-speed motor
- Sealed 6" wire leads, 16 AWG
- · Adjustable right or left self parking
- .625" diameter shaft (16 mm)
- · Available in 12V and 24V models
- · Coast to park
- RF shielded circuitry
- · Retail version includes 6A fuse and holder (operating switch not included)
- Measures approximately 7.875" L x 4.25" W x 3" D (see below for detailed dimensional drawings)
- Stall torque: 139 in-lbs (160 kgf/cm; 15.7 Nm)
- Stall current: 9.0A-10.5A
- No load current: 1.0A -1.6A

Description	Voltage	Sweep	Part #	OEM#
1.5" Shaft	12V	80°	82081	_
2.5" Shaft	12V	80°	82082	82182
		110°	82012	_
	24V	110°	82312	82212





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#### **Related Products**

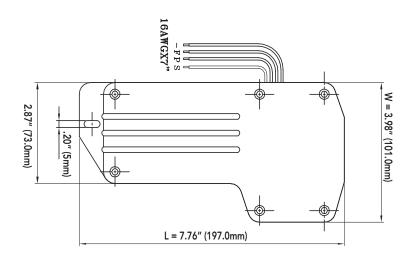


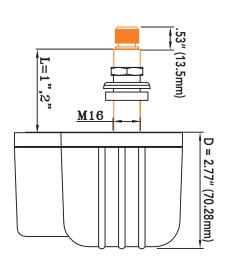
Intermittent Wiper Motor Controller page 72

# 1.5 Waterproof Wiper Motor

- Fully sealed powder coated aluminum waterproof base and housing
- Powers a 22" Deluxe arm and 22" Deluxe blade combination or a 20" Premier arm and 20" Deluxe blade combination
- Available in three (3) shaft lengths: 1.5" and 2.5" (includes .5" length of knurled arm fitting)
- Factory pre-set sweep angles of 80° or 110°, with easy adjustment to 45° or 60°  $\,$
- Chrome plated solid brass knurled drive nut with brass and stainless steel drive shaft
- · Two-speed motor
- Sealed 6" wire leads, 16 AWG
- · Adjustable right or left self parking
- .625" diameter shaft (16 mm)
- Available in 12V
- · Coast to park
- RF shielded circuitry
- Retail version includes 5A fuse and holder (operating switch not included)
- Measures approximately 7.75" L x 4" W x 2.75" D (see below for detailed dimensional drawings)
- Stall torque: 109 in-lbs (125 kgf/cm; 12.3 Nm)
- Stall current: 11.5A-13.0A
- No load current: 0.5A-1.2A
- Replaces AFI 2000 motor

Description	Voltage	Sweep	Part #	OEM#
1.5" Shaft	12V	80°	71081	_
		110°	71011	_
2.5" Shaft	12V	80°	71082	71182
		110°	71012	71112







# **3000 Waterproof Wiper Motor**

- Fully sealed powder coated aluminum waterproof base and housing
- Powers a 26" Deluxe arm and Deluxe blade combination or a 24" Premier arm and Deluxe blade combination
- Available in two (2) shaft lengths: 1.5" and 2.5" (includes .5" length of knurled arm fitting)
- .625" diameter shaft (16 mm)
- Factory preset sweep angles of 80° or 110°, with easy adjustment from 40° to 110° at 10° increments
- · Sealed 6" wire leads, 16 AWG
- · Adjustable right or left self parking
- Two-speed settings
- Retail version includes 5A fuse and holder (on/off switch not included)
- · Isolated ground
- Stall torque: 159 in-lbs (183 kgf/cm; 18 Nm)
- Stall current: 10.2A-12.20A
- IP66 rated (see inside back cover)

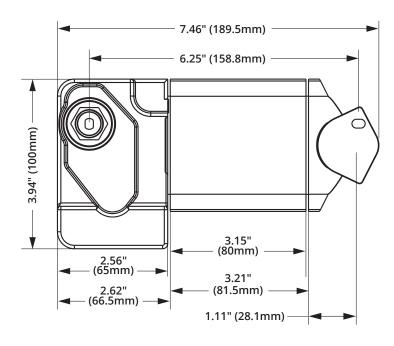
Description	Voltage	Sweep	Part #	OEM#
1.5" Shaft	12V	80° <b>83081 83</b> 1	83181	
		110°	83011	83111
2.5" Shaft	12V	80° <b>83082 8318</b> 2	83182	
		110°	83012	83112

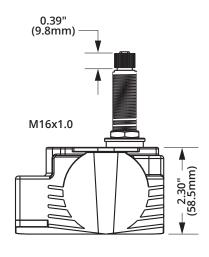
#### **Related Products**

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#### **Related Products**

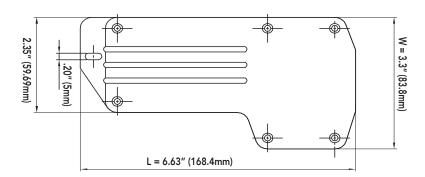


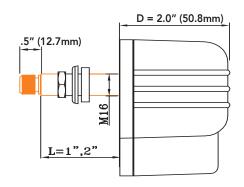
Intermittent Wiper Motor Controller page 72

# **1000 Waterproof Wiper Motor**

- Powers 18" Deluxe arm and 18" Deluxe blade combination at sweep sets of 80° or less (not compatible with pantograph arms)
- Powers 16" Deluxe arm and 16" Deluxe blade combinations at a sweep set of 110° (not compatible with pantograph arms)
- Factory pre-set sweep of 80° or 110° adjustable to 50°, 65°, 80°, or 110°
- .625" diameter shaft (16 mm)
- Fully sealed waterproof housing made of UV stabilized, high-temperature, high-impact thermoplastic
- 12V heavy-duty motor with anti-rotation drive shaft
- · Knurled drive shaft and solid brass arm drive nut
- · Coast to park with adjustable right or left self parking
- Retail version includes 5A fuse and holder (on/off switch not included)
- RF shielded circuitry
- · Weight: 1.75 lbs
- Available in two (2) shaft lengths: 1.5" and 2.5" (includes .5" length of knurled arm fitting)
- Measures approximately 6.625" L x 3.375" W x 2" D
- Stall torque: 55 in-lbs (63 kgf/cm; 6.2 Nm)
- Stall current: 9.8A-10.0A
- No load current: 0.8A-1.2A

Description	Voltage	Sweep	Part #	OEM#
1.5" Shaft	12V	65°	_	36161
		80°	36180	36181
		110°	36110	36111
2.5" Shaft	12V	65°	_	37161
		80°	37180	37181
		110°	37110	37111
2.5" Shaft Kits	12V	80°	37100	_
		110°	37200	_





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# 3 YEAR WARRANTY



#### **Related Products**

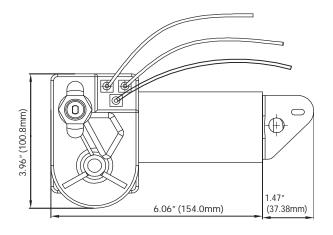


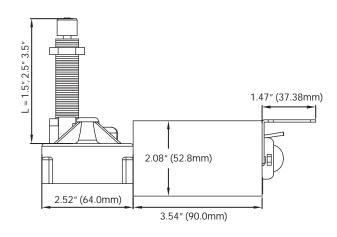
Intermittent Wiper Motor Controller page 72



- Easily powers 22" x 22" deluxe arm/blade combinations, or a 20" x 20" premier arm/blade combination at sweep sets of 80° or less
- Factory pre-set sweep of 80° or 110° adjustable from 40° to 110° in 10° increments
- .625" diameter shaft (16 mm)
- Available in three (3) shaft lengths: 1.5", 2.5" and 3.5" (includes .5" length of knurled arm fitting)
- · Corrosion-resistant casing
- · Heavy-duty motor with right angle drive
- Two-speed motor, can be operated as one speed
- Solid brass knurled drive nut with brass and stainless steel drive shaft
- Adjustable right or left self parking, coast to park
- · Retail version includes 5A fuse and holder
- Stainless steel fasteners and mounting bracket
- Use with three-position switch (not included)
- Compact size 7.625" L x 4" W x 2" D
- Stall torque: 109 in-lbs (125 kgf/cm: 12.3 Nm)
- Stall current: 11.5A-13.0A
- No load current: 0.5A-1.2A

Description	Voltage	Sweep	Item#	OEM#
1.5" Shaft	12V	80° <b>34001 38001</b>	38001	
		110°	34011	38011
2.5" Shaft	12V	80°	34000	38000
		110°	34010	38010
	24V	110°	34210	_
3.5" Shaft	12V	80°	34005	38005
		110°	34015	_







#### **MRV Wiper Motor Cover**

- Constructed of white ABS plastic
- · Easily installed

Description	Part #	OEM#
White	33025	33125

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# **WMW Wiper Motor**

Windshield Mount: .375" shaft diameter

- Powers up to 14" x 14" arm/blade combinations
- · Water-resistant sealed motor
- · Chrome-plated brass case and shaft housing
- · Stainless steel front plate and wiper shaft
- Maximum current draw: 2A
- Shaft diameter: .375"
- · For external use in open cabin boats
- Dimensions: 4.25" L x 2.75" W x 3.5" D

Description	Voltage	Sweep	OEM#
2.5" Shaft	12V	110°	35010



# **STD Wiper Motor**

Windshield Mount: .375" shaft diameter

Deck Mount: .5" shaft diameter

- Deck mount version includes deck mount adapter kit (33000)
- Powers up to 14" x 14" arm/blade combinations
- Corrosion-proof aluminum alloy case with black crackle finish
- Base & mounting plates are chrome plated naval brass
- Maximum current draw: 2A
- 80° or 110° adjustable sweep, adjustable right or left self-parking
- Shaft diameter: .375" windshield mount, .5" deck mount
- Dimensions: 3.875" L x 2.25" W x 3.5" D

Description	Voltage	Sweep	Part #
2.5" Shaft	12V	80°	35040



3 YEAR WARRANTY

# **Intermittent Wiper Motor Controller**

- · Single-speed and dual-speed options
- Allows for the control of single motor systems, and synchronized control of dual motor systems
- Intuitive automotive-style functionality—features adjustable intermittent settings, adjustable continuous settings, and washer system operation
- $\bullet \ \ \mathsf{IP67} \mathsf{Potted} \ \mathsf{case} \ \mathsf{for} \ \mathsf{harsh} \ \mathsf{environment} \ \mathsf{durability} \ \mathsf{(see} \ \mathsf{inside} \ \mathsf{back} \ \mathsf{cover} \mathsf{)}$
- Includes Contura Switch, SPDT (On)-Off-(On) (retail only)
- Easy to install with 1/4" spade connectors
- · Reverse polarity protection
- Compatible with 12V and 24V DC motors

Description	Part #	OEM#
Single Speed	76090	76190
Dual Speed	76080	76180



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3 YEAR WARRANTY

# **WMW Wiper Motor Kit**

Windshield Mount: .375" shaft diameter

- Powers up to 14" x 14" arm/blade combinations
- · Water-resistant sealed motor
- · Chrome-plated brass case and shaft housing
- · Stainless steel front plate and wiper shaft
- · Maximum current draw: 2A
- · Shaft diameter: .375"
- For external use in open cabin boats
- Dimensions: 4.25" L x 2.75" W x 3.5" D

#### Kit includes:

- · WMW wiper motor
- 11.5" Deluxe stainless steel curved blade (33004)
- Deluxe adjustable (6.75" to 10.5") stainless steel arm (33006AS)

Description	Voltage	Sweep	Part #	OEM#
2.5" Shaft	12V	80°	30000	_
2.5" Shaft	12V	110°	30002	_



3 YEAR WARRANTY

# **500 Wiper Kit**

Windshield Mount: .5" shaft diameter

#### Kit includes:

- 500 Waterproof wiper motor
- 11.5" Deluxe stainless steel curved blade (33004)
- Deluxe adjustable (6.75" to 10.5") stainless steel arm (33006AS)

Des	cription	Voltage	Sweep	OEM#	
2.5"	' Shaft	12V	80°	30004	
2 5"	' Shaft	12V	110°	30005	



3 YEAR WARRANTY

# **STD Wiper Motor Kit**

Windshield Mount: .375" shaft diameter

Deck Mount: .5" shaft diameter

- Deck Mount version includes deck mount adapter kit (33000)
- Powers up to 14" x 14" arm/blade combinations
- Corrosion-proof aluminum alloy case with black crackle finish
- · Base & mounting plates are chrome plated naval brass
- · Maximum current draw: 2A
- 80° or 110° adjustable sweep, adjustable right or left self-parking
- Shaft diameter: .375" windshield mount, .5" deck mount
- Dimensions: 3.875" L x 2.25" W x 3.5" D

#### Kit includes:

- STD wiper motor (recommended for interior installations only)
- 11.5" Deluxe stainless steel curved blade (33004)
- Deluxe adjustable (6.75" to 10.5") stainless steel arm (33006AS)

Description	Voltage	Sweep	Part #	OEM#
2.5" Shaft	12V	80°	_	32000
		110°	_	32002
3.5" Shaft	12V	80°	_	32001



# **Hand-operated Wiper Blade**

- · Chrome-plated brass handle
- Includes stainless steel 7-1/2" to 12" adjustable wiper arm, 11" blade, and all parts for installation
- Economical—an inexpensive alternative to wiper motor kit
- Requires 7/16" diameter hole for installation
- Can be installed up to 7/8" thick material
- For use on flat windshields only

Description	Part #	OEM#
Full Kit	31000	_
Replacement Blade	_	30005

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# **Wiper Arms**

Wiper arms are available in Deluxe and Premier styles and the primary construction material in all wiper arms is stainless steel. The Deluxe arms are used on Standard and Heavy-Duty motors. When choosing arms (and blades) it is very important to use only the recommended lengths for the motor that you are using.

The arms are available in a wide range of sizes, in both black and stainless-steel finish, and regular and pantographic models. Pantographic arms use a set of two arms joined together to give a flatter and somewhat wider sweep pattern. The Deluxe arms are available in a polished stainless-steel finish or a black powder-coated finish. Premier arms are the top of the line product in this category, utilizing heavy-duty stainless-steel tubing and components, and they can only be used with the Heavy-Duty motors.

Premier arms are also available as "wet arm" versions, with the water hose and sprayer nozzle built into the wiper arm. All that is needed is a water delivery system that the arm can be tied into. For those wanting a windshield washer system for the Deluxe arms, there is a complete washer kit system that is made especially to fit the Deluxe arms.

#### **Wiper Arm Compatibility Chart**

•		•									
								ı	Motor Com	patibility Chart	
Style	Wet/ Dry	Length (adjustable)	Color	Material	Part #	OEM#	2.5	3000	1.5	1000	MRV
Premier	,	(,,							- 110		
single	wet	15"-20"	stainless	stainless	33084W	33184W	V	V	V	_	V
single	wet	20"-25"	stainless	stainless	33086W	33186W	V	V	_	_	_
pantographic	dry	12"-17"	stainless	stainless	33090	33190	<b>~</b>	<b>V</b>	<b>V</b>	_	<b>V</b>
pantographic	dry	17"-22"	stainless	stainless	33092	33192	<b>~</b>	<b>V</b>	_	_	max 20"
pantographic	dry	22"-26"	stainless	stainless	33094	33194	<b>~</b>	<b>V</b>	_	_	_
pantographic	wet	12"-17"	stainless	stainless	33090W	_	<b>✓</b>	<b>V</b>	<b>V</b>	_	<b>V</b>
pantographic	wet	17"-22"	stainless	stainless	33092W	33192W	<b>V</b>	•	_	_	max 20" ≤ 80"
Deluxe Adjusta	ble										
single	dry	6.75"-10.5"	stainless	stainless	33006A	33106A	V	V	~	✓	V
single	dry	10"-14"	stainless	stainless	33007A	33107A	V	<b>V</b>	~	✓	<b>V</b>
single	dry	14"-20"	stainless	stainless	33010A	33110A	<b>V</b>	•	<b>✓</b>	max 18" ≤ 80° max 16" @ 110°	<b>✓</b>
single	dry	10"-14"	black	stainless	33012A	33112A	V	V	V	V	V
single	dry	14"-20"	black	stainless	33014A	33114A	•	•	~	max 18" ≤ 80° max 16" @ 110°	<b>✓</b>
single	dry	18"-24"	black	stainless	33070A	33170A	~	~	_	_	max 22"
Deluxe Pantog	aphic										
pantographic	dry	12"-17"	black	stainless	33032A	33132A	V	V	<b>V</b>	_	<b>V</b>
pantographic	dry	17"-22"	black	stainless	33037A	33137A	<b>✓</b>	<b>V</b>	<b>V</b>	_	<b>V</b>

# **Premier Stainless Steel Pantographic Dry Arms**

- Heavy-duty component design for use with most Marinco® motors
- Stainless steel construction
- Features "articulating/ bend back" design that locks arm in upright position for windshield cleaning
- Motor shaft mount with notched teeth



#### **Pantographic**

Style	Wet/Dry	Length (adjustable)	Color	Material	Part #	OEM#
pantographic	dry	12"-17"	stainless	stainless	33090	33190
pantographic	dry	17"-22"	stainless	stainless	33092	33192
pantographic	dry	22"-26"	stainless	stainless	33094	33194

Pantographic wiper arms will only function properly with wiper motor sweep angles 80° or less

# **Premier Stainless Steel Wiper Wet Arms**

- Heavy-duty component design for use with most Marinco® motors
- Features "articulating/ bend back" design that locks arm in upright position for windshield cleaning
- Built-in wet arm system that allows for a clean and easy installation of a washer system
- Black PVC hose runs up the center of the arm and ends in an adjustable four-nozzle fixture that is an integral part of the wiper arm itself



Style	Wet/ Dry	Length (adjustable)	Color	Material	Part #	OEM#
single	wet	15"-20"	stainless	stainless	33084W	33184W
single	wet	20"-25"	stainless	stainless	33086W	33186W
pantographic	wet	17"-22"	stainless	stainless	33092W	33192W

Pantographic wiper arms will only function properly with wiper motor sweep angles 80° or less

# **Deluxe Adjustable Wiper Arm**

- All arms are stainless steel
- Arm has "articulating/ bend-back" feature
- Motor shaft mounting has additional set screw clamping



Style	Wet/Dry	Length (adjustable)	Color	Material	Part #	OEM#
single	dry	6.75"-10.5"	stainless	stainless	33006A	33106A
single	dry	10"-14"	stainless	stainless	33007A	33107A
single	dry	14"-20"	stainless	stainless	33010A	33110A
single	dry	10"-14"	black	stainless	33012A	_
single	dry	14"-20"	black	stainless	33014A	33114A
single	dry	18"-24"	black	stainless	33070A	33170A

# Deluxe Adjustable Pantographic Arm

- For Use with 2.5, 1.5 and MRV Motors
- · Stainless steel
- Arm has "articulating/ bend-back" feature
- Motor shaft mounting has additional set screw clamping



Style	Wet/Dry	Length (adjustable)	Color	Material	Part #	OEM#
pantographic	dry	12"-17"	black	stainless	33032A	33132A
pantographic	dry	17"-22"	black	stainless	33037A	33137A

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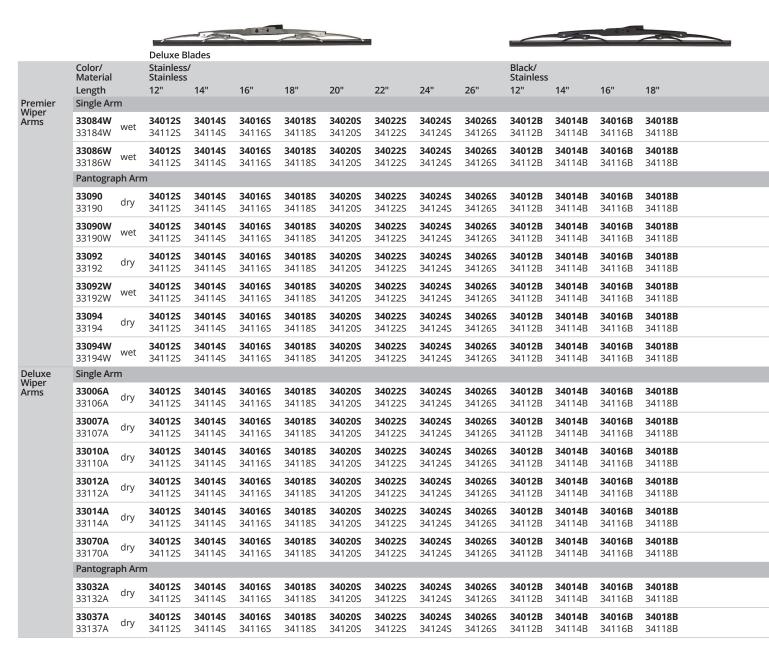
#### **Wiper Blade Selection Charts**

**Step 1:** Find the type and part number of wiper arm you have along the left side of the chart.

**Step 2:** Follow along to the right until you match up with the type and length of wiper blade you want.

**Step 3:** The bold number is the part number and the lighter number is the OEM number (if available).







Deluxe and Hybrid wiper blades are offered in different sizes and styles to fit all the different types of wiper arms. Standard styles have plastic frame construction and marine grade rubber squeegees.

Deluxe blades have stainless steel frame construction and high-end silicone rubber squeegees. This style has a multiple frame construction, allowing for equal pressure of the entire length of the blade and silicone rubber squeegees that are durable and create a smoother wiping motion.

Hybrid blades are designed from a multi-material construction of an electro coated galvanized steel frame, with a durable polycarbonate shell. This along with a graphite-coated natural rubber squeegee make this an excellent marine grade construction. For maximum performance of all blade styles, replacement of wiper blades is recommended every 6 months.

								NEW		
Deluxe B	lades (cont	.)		Hybrid Bl	lades				•	
Black/		.,		Black/						
Stainless 20"		2411	26"	Polymer 12"	4.411	16"	4011	2011	22"	2411
20"	22"	24"	26"	12"	14"	16"	18"	20"	22"	24"
240000	240000	240245	240060	222422	222442	222468	222422	22222	22222	220245
<b>34020B</b> 34120B	<b>34022B</b> 34122B	<b>34024B</b> 34124B	<b>34026B</b> 34126B	<b>32012B</b> 32112B	<b>32014B</b> 32114B	<b>32016B</b> 32116B	<b>32018B</b> 32118B	<b>32020B</b> 32120B	<b>32022B</b> 32122B	<b>32024B</b> 32124B
34020B	34022B	34024B	34026B	32012B	32014B	32016B	32018B	32020B	32022B	32024B
34120B	34122B	34124B	34126B	32112B	32114B	32116B	32118B	32120B	32122B	32124B
34020B	34022B	34024B	34026B	32012B	32014B	80°	80°	80°		
34120B	34122B	34124B	34126B	32112B	32114B	only	only	only		
34020B	34022B	34024B	34026B	32012B	32014B	80°	80°	80°		
34120B	34122B	34124B	34126B	32112B	32114B	only	only	only		
34020B	34022B	34024B	34026B	32012B	32014B	32016B	32018B	32020B	32022B	80°
34120B	34122B	34124B	34126B	32112B	32114B	32116B	32118B	32120B	32122B	only
34020B	34022B	34024B	34026B	32012B	32014B	32016B	32018B	32020B	32022B	80°
34120B	34122B	34124B	34126B	32112B	32114B	32116B	32118B	32120B	32122B	only
<b>34020B</b> 34120B	<b>34022B</b> 34122B	<b>34024B</b> 34124B	<b>34026B</b> 34126B	<b>32012B</b> 32112B	<b>32014B</b> 32114B	<b>32016B</b> 32116B	<b>32018B</b> 32118B	<b>32020B</b> 32120B	<b>32022B</b> 32122B	<b>32024B</b> 32124B
34020B	34022B	34024B	34026B	32012B	32014B	32016B	32018B	32020B	32022B	32024B
34120B	34122B	34124B	34126B	32112B	32114B	32116B	32118B	32120B	32122B	32124B
<b>34020B</b> 34120B	<b>34022B</b> 34122B	<b>34024B</b> 34124B	<b>34026B</b> 34126B	<b>32012B</b> 32112B	<b>32014B</b> 32114B	<b>32016B</b> 32116B				
<b>34020B</b> 34120B	<b>34022B</b> 34122B	<b>34024B</b> 34124B	<b>34026B</b> 34126B	<b>32012B</b> 32112B	<b>32014B</b> 32114B	<b>32016B</b> 32116B	<b>32018B</b> 32118B	<b>32020B</b> 32120B		
34020B	34022B	34024B	34026B	32012B	32014B	32016B	32018B	32020B	32022B	32024B
34120B	34122B	34124B	34126B	32112B	32114B	32116B	32118B	32120B	32122B	32124B
34020B	34022B	34024B	34026B	32012B	32014B	32016B	32018B	32020B		
34120B	34122B	34124B	34126B	32112B	32114B	32116B	32118B	32120B		
<b>34020B</b> 34120B	<b>34022B</b> 34122B	<b>34024B</b> 34124B	<b>34026B</b> 34126B	<b>32012B</b> 32112B	<b>32014B</b> 32114B	<b>32016B</b> 32116B	<b>32018B</b> 32118B	<b>32020B</b> 32120B	<b>32022B</b> 32122B	<b>32024B</b> 32124B
34020B	34022B	34024B	34026B	32012B	32014B	32016B	32018B	32020B	32022B	32024B
34120B	34122B	34124B	34126B	32112B	32114B	32116B	32118B	32120B	32122B	32124B
34020B	34022B	34024B	34026B	32012B	32014B	32016B	32018B	32020B		
34120B	34122B	34124B	34126B	32112B	32114B	32116B	32118B	32120B		
34020B	34022B	34024B	34026B	32012B	32014B	32016B	32018B	32020B	32022B	32024B
34120B	34122B	34124B	34126B	32112B	32114B	32116B	32118B	32120B	32122B	32124B

78 WIPER SYSTEMS marinco.com

# **Deluxe Stainless Steel Wiper Blades**

- Works well on curved or flat windshields
- All stainless steel construction
- Marine grade silicone squeegee



Length	Color	Material	Part #	OEM#
12"	stainless	stainless	34012S	34112S
14"	stainless	stainless	34014S	34114S
16"	stainless	stainless	34016S	34116S
18"	stainless	stainless	340185	34118S
20"	stainless	stainless	34020S	34120S

Length	Color	Material	Part #	OEM#
22"	stainless	stainless	34022S	341225
24"	stainless	stainless	340245	341245
26"	stainless	stainless	34026S	341265



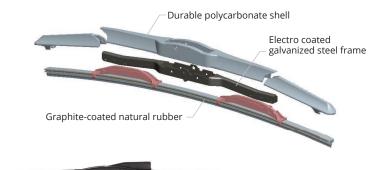
Length	Color	Material	Part #	OEM#
12"	black	stainless	34012B	34112B
14"	black	stainless	34014B	34114B
16"	black	stainless	34016B	34116B
18"	black	stainless	34018B	34118B
20"	black	stainless	34020B	34120B

Length	Color	Material	Part #	OEM#
22"	black	stainless	34022B	34122B
24"	black	stainless	34024B	34124B
26"	black	stainless	34026B	34126B

# **Hybrid Wiper Blades** NEW

Hybrid Multi-Material Construction. Electro coated galvanized steel frame, with durable polycarbonate shell.

- Designed for maximum flexibility to conform to all windshield shapes
- Marine grade construction will not rust or corrode
- Graphite-coated natural rubber squeegee for optimal wipe quality and durability
- · Streamlined shape for reduced wind-lift
- Performance-tested to 500,000 cycles



Length	Color	Material	Part #	OEM#	
12"	black	hybrid	32012B	32112B	
14"	black	hybrid	32014B	32114B	
16"	black	hybrid	32016B	32116B	
18"	black	hybrid	32018B	32118B	
20"	hlack	hyhrid	32020B	32120B	

Length	Color	Material	Part #	OEM#
22"	black	hybrid	32022B	32122B
24"	black	hybrid	32024B	32124B

# Classic Stainless Steel Straight Wiper Blades

- Replaces most standard blades in boats made before 1990
- Hook and catch style



- Can be used on new or existing Deluxe wiper arm and blade sets
- Kit includes parts to outfit two (2) wiper arms
- Sprayer fittings (kit includes two) each have four (4) adjustable brass nozzles to provide maximum spray coverage for most any windshield
- Plastic parts are numbered to make installation easy

#### **Complete Kit**

#### Includes:

marinco.com

- · Water tank with mounting bracket
- 12V pump motor
- · Under deck tee fitting
- Thru deck fitting and hardware
- Below deck clear tubing (16')
- Above deck black tubing (6')
- · Large and small rivet clips
- · Wiper arm clips
- Sprayer fittings with clamps

Description	Part #	OEM#
Complete Kit	33505	33515
Below Deck	_	33513
Above Deck	_	33517

#### **Below Deck Kit**

#### Includes:

- · Water tank with mounting bracket
- · 12V pump motor
- · Under deck tee fitting
- · Thru deck fitting and hardware
- Below deck clear tubing (16')

#### **Above Deck Kit for One Small Arm**

#### Includes:

- Small rivet clip
- · Wiper arm clips
- Sprayer fitting with narrow clamp
- Thru deck fitting
- · Above deck black tubing (6')



# **Intelligent Wiper Switch**

Microcontroller based "intelligent" switch provides all necessary wiper motor functions in one small component.

- Settings for two (2) continuous speed functions and three (3) intermittent speed functions (2-, 4-, or 8-second delay)
- · Washer system operation function
- Blinking LED lights in switch indicate operating function
- Works with 12V or 24V DC motors
- Fits standard switch size openings, requires 2.65"/67.5 mm depth
- Includes one (1) ten pole connector with female pins and two (2) female quick-connects

Description	Part #	OEM#	
Single Motor	76030	76130	



# HORNS

#### **Hidden Horns**



Marinco®, the inventor of the first below-deck horn offers a complete line of below deck horn products.

#### **Compact Horns**



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Marinco compact electric horns feature a low profile design and a lower frequency which provides a deeper sound.



# **HORNS**



82 HORNS marinco.com

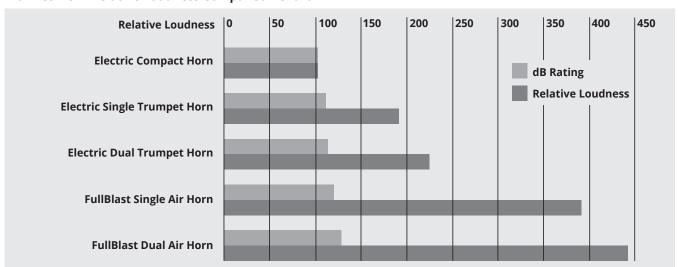
## **Marinco® Horns**

Marinco is the leading supplier of horns to the marine industry, with over fifty years of experience in designing and manufacturing sound devices specifically for use in harsh marine environments. Stainless steel is used for all critical components such as trumpets, motor cover, diaphragms, and assembly and mounting hardware. In the case of the XLP trumpet horns, the horn is given extra protection through the complete overmolding of the internal motor cover housing. It is this extra process that provides the added protection needed to back up the five-year warranty.

Marinco offers a complete line of marine horn products designed to meet almost any need, including electric and air trumpet horns, compact horns, electric and air below deck horns, and a comprehensive line of drop-in horns with a wide assortment of grill options. After developing the first below deck horn for the marine industry in the late 1980's, the offering of that product line has continued to expand.

- Meets the ABYC Regulation #A23 for boats up to 12 meters
- Meets the U.S. Coast Guard's C.O.L.R.E.G.S. and U.S. Inland Navigation Rules, Annex III Regulations for boats up to 20 meters
- Listed in the NMMA's Certification Program Type Accepted
- Horns are set at a lower frequency to provide greater range as the sound travels across the water

#### **Marinco Horn Relative Loudness Comparison Chart**



# **TECH TIP**

#### **EMI and Horns**

In order to operate, an electric horn rapidly makes and breaks an electric circuit. This operation creates electromagnetic disturbance, which may cause electrical "noise" in communications equipment. Because a horn is only used temporarily, any interference in electronic equipment is stopped when the horn is turned off.

The International Marine Certification Institute (IMCI), which certifies boats to the European Community Regulations (CE), has determined that boats using electric horns can comply with CE requirements on electromagnetic compatibility provided the above message is given to the boat owners in their manual.

Marinco®, the inventor of the first below deck horns, offers a full line of below deck horn products. Concealed horns utilize an upright horn installation and a large grill opening to offer greater sound volume. Drop-in Hidden Horns use a fabric lined grill for water-resistant installations. The concealed trumpet horns are all air horns and provide the maximum amount of sound available in a below deck horn installation.

Marinco's Drop-in Hidden Horns combine a number of desired features into one unit including:

- · Simple, drop-in installation
- Stylish snap-on grill with water-resistant fabric
- · Authentic marine sound
- · Easy aftermarket retrofit

Important: Please note the space requirement dimensions on some of the below deck models to ensure there is adequate room on the interior of the mounting area to house the horn assembly. Concealed horn models require a minimum 45° mounting angle to ensure proper drainage.

#### Low Profile Hidden Horn

#### With Black and White Grills

- New louder dB(A) rating: 111 at one meter
- Fundamental frequency: 360±20Hz
- 12V DC
- Easy installation: 2.75" diameter hole x 1" deep
- · Maximum amp draw: 4A
- · Comes with both white ASA and black ABS screw-in grills
- · Grills have water resistant fabric liners
- Mounts from the outside, grill screws on for easy install
- · Easy retrofit

Part # 10080

#### **Without Grill**

- · Same as 10080 without grill
- · When purchasing bulk version, grill must be ordered separately

OEM # 11080

( Lower Frequency for a Deeper Sound )



## Grills for Low Profile Hidden Horn

- Water resistant fabric liner
- Screw-in
- 4" from hole to hole

Туре	Color	Vertical Style OEM #	Horizontal Style OEM #	Dimensions
Screw-in	White ASA	11080SC-W	11187	5.25" x 3.375" x .75"
	Off-White ASA	_	11194	5.25" x 3.375" x .75"
	Black ABS	11080SC-B	11188	5.25" x 3.375" x .75"
	Stainless Steel	11080SC-SS	_	5.25" x 3.375" x .75"

#### Stainless Steel Grill Cover

- Horizontal style grill design
- Installs over plastic horizontal style grills (11187, 11194, or 11188)
- Installation requires plastic grill
- Grill dimensions: 5.3125" W x 3.4375" H x .875" D

**OEM # 11196** Stainless steel grill

OEM # 11096 Kit (includes: stainless steel grill cover and plastic screw-in grill (11187)







84 **HORNS** marinco.com

# **Drop-in Hidden Horns**

#### With Black and White Grills

- dB(A) rating: 107 at one meter
- Fundamental frequency: 370±20Hz
- 12V DC
- Internal space requirements: 2" H x 3.375" W x 3.25" D
- · Maximum amp draw: 4A
- · Comes with both black ABS and white ASA snap-in grills
- · Distinctive marine horn sound
- · Enclosed sound unit
- Easy installation or retrofit, mounts from the outside

Part # 10079

#### **Enclosed without Grill**

- Same as 10079 without grill
- When purchasing 11079, grill must be ordered separately

OEM # 11079

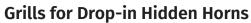


- dB(A) rating: 105 at one meter
- Fundamental frequency: 430±20Hz
- 12V DC

- Easy retrofit
- · Grill must be ordered separately

OEM # 11095

# • Internal space requirements: 2.25" H x 3.625" W x 3.5" D · Maximum amp draw: 3A • Mounts from the outside, horn grill snaps on for easy installation



- Water resistant fabric liner
- · Choose between snap-in or screw-in.
- 4" from hole to hole

Туре	Color	Vertical Style OEM #	Horizontal Style OEM #	Dimensions
Snap-In	White ASA	11079SN-W	11090	5" x 2.625" x .5"
	Black ABS	11079SN-B	11091	5" x 2.625" x .5"
	Chrome Plated ABS	11079SN-C	11225	5" x 2.625" x .5"
Screw-In	White ASA	11079SC-W	11190	5" x 2.625" x .5"
	Black ABS	11079SC-B	11191	5" x 2.625" x .5"
	Chrome Plated ABS	11079SC-C	11226	5" x 2.625" x .5"
	Stainless Steel	11079SC-SS	_	5" x 2.625" x .5"

#### **Stainless Steel Grill Cover**

- Installs over screw-in plastic grill
- · Requires plastic screw-in grill for installation
- Grill dimensions: 5.0625 W x 2.75 H x .5 D

OEM # 11124 Stainless steel grill

OEM # 11024 Kit (includes: stainless steel grill cover and plastic screw-in grill











#### **Under Deck Horn**

- dB(A) rating: 110 at one meter
- Fundamental frequency: 420±20Hz
- 12V DC
- Dimensions: 4" W x 3.625" H x 5.75" L
- Permanently mounted grill to protect against water intrusion
- Available with and without 2-way weather pack connector pigtail

OEM # 11044 Horn with Pigtail
OEM # 11045 Horn without Pigtail



#### Mini Hidden Horn

- dB(A) rating: 105 at one meter
- Fundamental frequency: 430±20Hz
- 12V DC
- Dimensions: 3.25" W x 1.75" H x 3" L
- · Maximum amp draw: 3A
- Type 304 stainless steel diaphragm
- This horn is not designed for installation in exposed areas

Part # 10031 OEM # 11031

#### With Grill Bracket

- Same horn motor as 11031 but includes grill mounting bracket
- · Grill must be ordered separately

OEM# 11034





#### **Grills for Mini Hidden Horn 11034**

- Screw-In
- Black ABS version includes gasket for watertight seal
- 4" from hole to hole

Туре	Color	Vertical Style OEM #	Horizontal Style OEM #	Dimensions
Screw-In	Black ABS	11034SC-B	11168	5" x 2.625" x .375"
	Stainless Steel	11034SC-SS	11088	5" x 2" x .25"





**HORNS** marinco.com

#### **Electronic Horn**

#### With White Grill

- 107 dB(A) at one meter
- Fundamental frequency: 550±100Hz
- 12V DC
- Internal space requirements: 2.25" W x 2.25" H x 2" D
- Grill dimensions: 4.875" W x 2.75" H x .5"D
- Draws less than one amp, maximum draw: 0.8A
- · Electronic piezo horn sound
- · One piece water resistant housing, grill is molded to horn
- Mounts in a standard 2.25" opening
- · Stainless steel grill cover 11185 sold separately

Part # 10082

#### Stainless Steel Grill Cover for Electronic Horn 10082

- Grill dimensions: 4.9375" W x 2.8125" H x .5" D
- 4" from hole to hole

OEM # 11185





# **Concealed Single Mini Air Horn**

- dB rating: 126 at one meter, 1/3 octave band
- Fundamental frequency: 630±15Hz
- 12V DC
- Internal space requirements: 13" H x 5" W x 3.75" D
- Air compressor dimensions: 2.625" D x 5" L
- Maximum amp draw: 20A
- · Solid brass construction
- · Includes compressor, air tubing, fittings, and hardware
- · Grill must be ordered separately

OEM # 11059

• Dimensions: 4.6875" H x 4.6875" W

OEM # 11064

#### **Stainless Steel Grill for 11059**

# **Concealed Dual Trumpet Air Horn**

- dB rating: 121 at one meter, 1/3 octave band
- Fundamental frequency: 375±15/315±15Hz
- 12V DC
- Internal space requirements: 10" W x 18.5" H x 3.75" D
- Air compressor dimensions: 5" L x 2.625" D
- · Maximum amp draw: 20A
- · Solid brass construction
- · Can be mounted side by side with dual grill 11066 or separately with two single grills 11064
- · Includes compressor, air tubing, fittings, and hardware

OEM # 11058

#### Stainless Steel Grill for 11058

Dimensions: 9.375" W x 4.6875" H

OEM # 11066







# MiniBlast™ Compact Electric Horns

- dB(A) rating: 106 at one meter (3 feet)
- Fundamental frequency: 430±20Hz
- 12V DC
- Dimensions: 4.375" L x 3.375" W x 2" H
- · Maximum amp draw: 3A
- · Long lasting, non-corrosive ASA plastic cover
- · Sealed sound unit with stainless steel diaphragm
- Mounts in same hole pattern as the 10035 horn

White Part # 10099 OEM # 11099 Black Part # 10098 OEM # 11098



# **Mini Compact Electric Horn**

- · dB(A) rating: 106 at one meter
- Fundamental frequency: 430±20Hz
- 12V DC
- Dimensions: 3" L x 3.25" W x 1.75" H
- · Maximum amp draw: 3A
- · Totally sealed sound unit
- Type 304 stainless steel cover, diaphragm, mounting bracket

Part # 10035 OEM # 11035

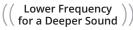




#### Mini Twin Electric Horn

- dB(A) rating: 109 at one meter
- Fundamental frequency: 490±20/430±20Hz
- 12V DC
- Dimensions: 3" L x 8" W x 1.75" H
- · Maximum amp draw: 6A
- Type 304 stainless steel covers, diaphragms, and mounting bracket

Part # 10001 OEM # 11001





# **International Shorty Horn**

- dB(A) rating: 123 at one meter
- Fundamental frequency: 310±20 Hz
- 12V DC
- Dimensions: 4.25" L x 5" W x 6.5" H
- · Maximum amp draw: 4A
- · Stainless steel diaphragm and mounting bracket
- · ABS, triple chrome-plated housing

Part # 10036



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# **Single Trumpet Electric Horn**

- dB(A) rating: 118 at one meter
- Fundamental frequency: 370±20Hz
- Dimensions: 16.5" L x 4" W x 4.75" H
- · Maximum amp draw: 5A
- · 100% stainless steel exterior
- Type 304 stainless steel diaphragm

12V Part # 10028XLP OEM # 11028XLP

24V Part # 10017XL OEM # 11017XLP Max amp draw: 2.5A



( Lower Frequency ) for a Deeper Sound )

# 5 YEAR WARRANTY

# **Dual Trumpet Electric Horn**

- dB(A) rating: 123 at one meter
- Fundamental frequency: 370±20/310±20Hz
- Dimensions: 18.5" L x 8" W x 5" H
- · Maximum amp draw: 10A
- · 100% stainless steel exterior
- Type 304 stainless steel diaphragm

12V Part # 10029XLP OEM # 11029XLP

24V Part # 10018XL OEM # 11018XLP Max amp draw: 2.5A



# 5 YEAR WARRANTY

# **Compact Single Trumpet Electric Horn**

- dB(A) rating: 110 at one meter
- Fundamental frequency: 420±20Hz
- 12V DC
- Dimensions: 14" L x 3.5" W x 4" H
- · Maximum amp draw: 3.5A
- · Compact design makes it easier to install in smaller spaces
- 100% stainless steel exterior
- · Type 304 stainless steel diaphragm

Part # 10010



( Lower Frequency for a Deeper Sound )

# **Compact Dual Trumpet Electric Horn**

- dB(A) rating: 115 at one meter
- Fundamental frequency: 420±20/370±20Hz
- 12V DO
- Dimensions: 16" L x 7.5" W x 4" H
- · Maximum amp draw: 7A
- · Compact design makes it easier to install in smaller spaces
- 100% stainless steel exterior
- Type 304 stainless steel diaphragm

Part # 10011



All of our air horns produce sound levels ranging between 120dB and 127dB, which means all of our air horns meet the ABYC and NMMA regulations for boats up to 20 meters/66 feet. Both 12V and 24V compressors are CE listed.

# **Single Trumpet Mini Air Horns**

- dB rating: 126 at one meter, 1/3 octave band
- Fundamental frequency: 630±15Hz
- Dimensions: 9.5" L x 3.5" W x 3.5" H
- Maximum amp draw: 20A (12V DC)
- Solid brass construction with non-corrosive LEXAN® polycarbonate diaphragm
- · Includes compressor, air tubing, fittings, and hardware

 Chrome Plated
 Part # 10107
 OEM # 11107

 White Epoxy Coated
 Part # 10104
 OEM # 11114

# Air Compressor included

# **Dual Trumpet Mini Air Horns**

- dB(A) rating: 127 at one meter, 1/3 octave band
- Fundamental frequency: 630±15/525±15Hz
- Dimensions: 9.5" L x 5" W x 3.75" H
- Maximum amp draw: 20A (12V DC)
- Solid brass construction with non-corrosive LEXAN® polycarbonate diaphragm
- · Includes compressor, air tubing, fittings, and hardware

Chrome Plated Part # 10108



# **Single Trumpet Air Horns**

- dB rating: 120 at one meter, 1/3 octave band
- Fundamental frequency: 315±15Hz
- Dimensions: 17" L x 3.75" W x 3.75" H
- Maximum amp draw: 20A (12V DC), 10A (24V DC)
- Solid brass construction with non-corrosive LEXAN® polycarbonate diaphragm
- · Includes compressor, air tubing, fittings, and hardware

12V Part # 10105 OEM # 11115

24V Part # 10524

# Air Compressor included

# **Dual Trumpet Air Horns**

- dB rating: 121 at one meter, 1/3 octave band
- Fundamental frequency: 375±15/315±15Hz
- Dimensions: 17" L x 7" W x 3.75" H
- Maximum amp draw: 20A (12V DC), 10A (24V DC)
- Solid brass construction with non-corrosive LEXAN® polycarbonate diaphragm
- · Includes compressor, air tubing, fittings, and hardware

12V, Chrome Plated	Part #	10106	OEM # 11106
12V, White Epoxy Coated	Part #	10122	
24V, Chrome Plated	Part #	10624	
24V White Energy Coated	Dart #	12224	OEM # 22224

# Air Compressor

- Replacement compressor fits all Marinco® and AFI™ Air Horns
- Maximum amp draw: 20A (12V DC), 10A (24V DC)
- Produces 9–11 PSI
- Dimensions: 2.625" D x 5" L
- · Includes mounting bracket

12V OEM # 10102 24V OEM # 10224





# LIGHTING

# **Precision Wireless Controlled Spotlight**



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Controlled by wireless remote control. Provides 370° sweep and 120° tilt. Designed for harsh marine environments, it is moisture, salt, and vibration resistant.

# IP67 Stainless Steel Spot/Floodlight

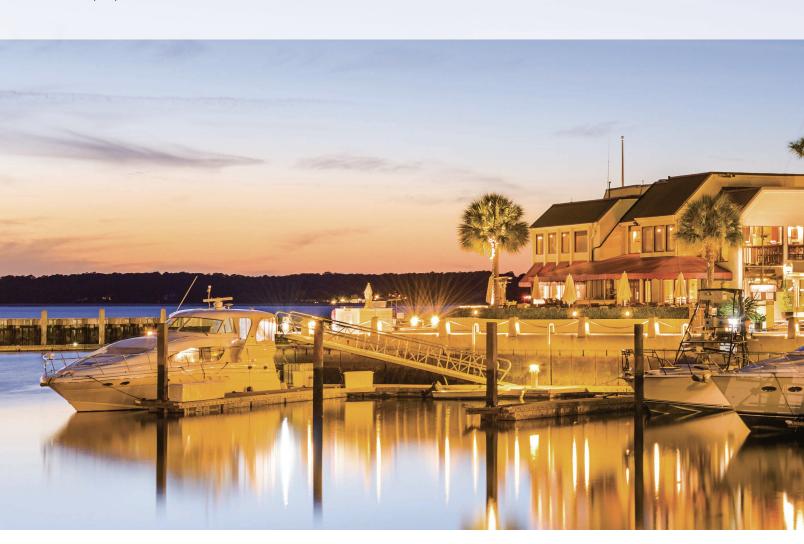


Wireless remote communication. Stainless steel construction.

#### 5" Stainless Steel Spot/Floodlight



Remote control / joystick operated stainless steel construction.



# LIGHTING



Proper lighting is necessary for safety and operational activities aboard vessels.

**LIGHTING** marinco.com



# 3 YEAR WARRANTY

Bulb:	100 Watt, H3 Halogen
Power (Input voltage):	12V or 24V
Current draw (idle/in use):	0.03A / 7.0A
Peak Beam Intensity:	210,000 Cp
Peak Beam Distance:	917 ft (280 m)
Lux @ 66' (20 m):	525 Lux
Coverage at 66' (20 m):	132 sq ft (12 sq m)
Rotation:	370° (built in limit stops)
Tilt:	120° Tilt (75° up & 45° down)
Wireless range:	200 ft (65 m)
Dimensions:	7.5"W x 7.5"H x 9.25"D (19 x 19 x 23.5 cm)
Weight:	3.30 lbs (1.5 kg)
Housing material:	UV resistant PC/ASA
Lens material:	UV resistant Lexan®
operating temp range:	5°F-113°F (-15°C-45°C)
IP Rating:	IP56 (see inside back cover)

# **Precision Wireless Controlled Spotlight**

- Universal 12V/24V circuit with bright 100W, H3 halogen bulb
- UV resistant, IP56 Weatherproof ABS housing and Lexan® lens
- O-ring sealed housing, designed for the harsh marine environment moisture, salt, shock and vibration tested
- Universal snap-in mounting system (can be mounted upside down)
- Super-quiet, all-weather motor with limit stops provides a full range of coverage
- 370° sweep and 120° tilt (75° up and 45° down)
- One-touch auto sweep and S.O.S. function
- · Wireless dash mount remote standard; (hard wired & handheld remotes are optional)
- Three-year limited warranty
- · Available in white, black and chrome





#### **Spotlights**

Description	Color	Part #	OEM#
12V/24V, 100 Watt	white	SPL-12W	_
12V/24V, 100 Watt	black	SPL-12B	_
12V/24V, 100 Watt	chrome	SPL-12C	_
12V, 100 Watt	white	_	SPL-12W.OEM
12V, 100 Watt	black	_	SPL-12B.OEM
12V, 100 Watt	chrome	_	SPL-12C.OEM
24V, 100 Watt	white	_	SPL-24W.OEM
24V, 100 Watt	black	_	SPL-24B.OEM
24V, 100 Watt	chrome	_	SPL-24C.OEM

#### **Replacement Bulbs**

Description	Part #
12V, H3 Halogen	202319
24V, H3 Halogen	202320









#### **Remote Options**

Part #	SPLR-2 (Included)	SPLR-1 (optional)	SPLR-3 (optional)
Remote Specifications	Wireless Communication Bridge Remote	Hand Held Bridge Remote	Wired Bridge Remote
Power	12V or 24V (hard wired)	CR2450 button cell battery	12V or 24V (hard wired)
Current draw (idle / in use)	negligible	negligible	negligible
Wireless range	200 ft (65m)	200 ft (65m)	_
Estimated battery life	_	> 40 hours (continuous use)	_
Dimensions	3.5"W x 2.25"H x .75"D 88 x 57 x 19 mm	2.0"W x 3.78"H x 1"D 51 x 96 x 25 mm	3.5"W x 2.25"H x .75"D 88 x 57 x 19 mm
Weight	2.12 oz (60g)	2.82 oz (80g)	2.12 oz (60g)
Housing material	UV resistant PC/ASA	UV resistant PC/ASA	UV resistant PC/ASA
Button material	Silicone (glow in the dark)	Silicone (glow in the dark)	Silicone (glow in the dark)
Operating temp range	5°F-113°F (-15°C-45°C)	5°F-113°F (-15°C-45°C)	5°F-113°F (-15°C-45°C)
IP Rating	IP53 (see inside back cover)	IP54 (see inside back cover)	IP53 (see inside back cover)

# IP67 Halogen Stainless Steel Spot/Floodlight

- Wireless remote communication
- 316 stainless steel base, 304 stainless steel head
- 350° horizontal, 60° vertical two speed movement

Peak beam intensity	165,000 CP spot
Amp draw	Spot 8.3A, flood 7.5A @ 12V Spot 4.15A, flood 3.75A @ 24V
Power (Input voltage)	12V & 24V
Bulb	H4 halogen
Dimensions	9.875"H x 4.75"W x 8.35"L
Weight	6 lbs.
IP Rating	IP67 (see inside back cover)

Description	Part #
12V Spot/Flood with Remote (22250-R)	22050A
12V Spot/Flood Only	22051A
24V Spot/Flood with Remote (22350-R)	22150A
24V Spot/Flood Only	22151A

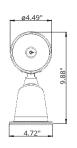




# Remote Options

Part #	22250-R	22350-R	22250-HH
Voltage	12V	24V	12/24V
Power	12V DC	24V DC	Battery: L1028F Alkaline 12V
Remote Specifications	Wireless Communication Bridge Remote		Hand Held Bridge Remote
Wireless range	100 ft (30m)		100 ft (30m)
Dimensions	2.2"W x 3.65"H	1 x 0.9"D	2.25"W x 3.95"H x 1.2"D
Housing material	ASA		ASA
Button material	Silicone (glow	in the dark)	Silicone (glow in the dark)







# **IP67 LED Stainless Steel Spotlight**

- Wireless remote communication
- 316 stainless steel base, 304 stainless steel head
- 350° horizontal, 60° vertical two speed movement

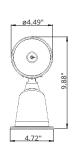
Light Output	92,000 CD
Amp Draw	3A @12V DC 1.5A @24V DC
Power (Input voltage)	12V or 24V DC
# of LEDS	12
Dimensions	9.875"H x 4.75"W x 8.35"L
Weight	11.36 lbs (5.2 kg)
IP Rating	IP67 (see inside back cover)

Description	Part #
12V Spotlight with Remote (23250-R)	23050A
12V Spotlight Only	23051A
24V Spotlight with Remote (23350-R)	23150A
24V Spotlight Only	23151A

Silicone (glow in the dark)











**Button material** 

Remote Options			Marco
Part #	23250-R	23350-R	23250-HH
Voltage	12V	24V	12/24V
Power	12V DC	24V DC	Battery: L1028F Alkaline 12V
Remote Specifications	Wireless Comm Bridge Remote	unication	Hand Held Bridge Remote
Wireless range	100 ft (30m)		100 ft (30m)
Dimensions	2.2"W x 3.65"H :	x 0.9"D	2.25"W x 3.95"H x 1.2"D
Housing material	ASA		ASA

Silicone (glow in the dark)

P4 LIGHTING marinco.com

# 5" Stainless Steel Spot/Floodlight

- Remote control, joystick operation
- 316 stainless steel base, 304 stainless steel head
- Dual station option available
- Light can be directed manually without damaging motors
- One year warranty

Description	Part #
Spot/Flood Kit	22040A
Spot/Flood Only	22041A

Spot Power:	72,000 CP
Flood Power:	30,000 CP
Amp Draw:	7A
Operation:	12V Incandescent
Bulb:	Replaceable Incandescent
Lamp Dimensions:	9.5" H x 4.5" W x 7.5" L
Base Dimensions:	5.5" L x 3.5" W
Weight:	6 lbs (2.7 kg)
Joystick requires:	2.75" installation hole







# **Replacement Bulb**

• 12V Incandescent

Part # 22014-P

# **Spotlight Parts & Accessories**

#### **Stainless Steel Spot/Flood Parts and Accessories**

Part #	Oval Panel	Rectangular Control	Dual Station Control Kit	Replacement Bulb Kit
22040A	22240-R	22208A	22218A	22014-P
22041A	22240-R	22208A	22218A	22014-P

#### Beamer™ Parts and Accessories

Part #	Control Panel	Dual Station Control Kit	Replacement Bulb Kit	Extension Cable Kit	Wires in Cable
500, 500A	729823-P	729823-P	729493	_	1
501, 501A	729825	729825	729493	_	Wireless
502, 502A	729827-P	729828-P	729493	729528	5
502-1	U-3605	729488	729493	729528	5
502-2	729489	729489	729493	729528	5
503, 503A	729829-P	729830-P	729494	729528	6
503-1	U-3606	729491	729494	729528	6
503-2	_	729492	729494	729528	6



#### **M100 Remote Halogen Spot Parts and Accessories**

Part #	Joystick Control	Dual Station Control Kit	Replacement Bulb Kit
22200	22209	22219A	22230-P
22201	22209	22219A	22230-P

#### Cables

Length	Replacement Male to Male	Extension Male to Female
25 ft	22011A-P	_
35 ft	22012A-P	22012MA-P

Use with: 22040A, 22041A, 22044, 22045, 22200 or 22201 Lights

marinco.com LIGHTING 95



#### **Universal Halogen Deck Lamps**

State-of-the-art free form lens reflector technology allows for 30% more light output than comparable 55W lamps. Universal mounting brackets and compact size make for easy installation anywhere. Lamp housing is made of UV stabilized plastic and all hardware is 316 chrome plated stainless steel. Includes 12V, 55W halogen bulb and is 24V, 70W compatible.

Bulbs:Replaceable H3 12V 55W/H3 24V 70WDimensions:3.75" H x 3.375" W x 5.5" LMounting Height:4" with bracket

 Part # ML-005BW/DSP
 OEM # ML-005BW-STC
 black

 Part # ML-005WW/DSP
 OEM # ML-005WW-STC
 white



#### Flush Mount Docking Lights— Convex Lens

Compact flush mount docking lights for a variety of applications. Easy to install through a 2" hole. Ideal for Pontoon and Deck boat docking lamps, spreader lamps or rear docking lamps for motor homes. Features a high performance convex lens with a 12V 37.5W halogen bulb for optimum performance. Available with and without stainless steel frame. Pigtail required.

Bulbs: Replaceable #893 12V 37.5W Halogen Dimensions:  $\emptyset$  = 2-1/2" Frame thickness: 7/8" Overall depth: 2-7/8" Mounting depth: 2"

Mounting Depth: 2"

Part # M051B With out frame
Part # M051B-SS Stainless frame

Part # 11-004-N Pigtail for M051B and M051B-SS

# John Mount Dody Lamo

#### **Flush Mount Deck Lamp**

In addition to our highly popular conventional halogen deck lamps, we now offer a flush mount version. Ideally suited for fiberglass hardtop installations and allows for a very clean and finished installation. Free Form lens reflector technology guarantees maximum output. Lamp is completely waterproof and constructed of impact resistant UV stable plastic. Comes complete with 12V 55W halogen H3 bulb. Also suitable for 24V 70W bulbs.

 Bulbs:
 Replaceable H3 12V 55W/H3 24V 70W

 Dimensions:
 3.375" H x 1.5" W x 5.625" L

 Cutout:
 3" hole

Part # ML-005NWW



## Flush Mount Docking Lights— Flat Lens

Compact flush mount docking lights for a variety of applications. Easy to install through a 2" hole. Ideal for Pontoon and Deck boat docking lamps, spreader lamps or rear docking lamps for motor homes. Features a high performance free form reflector with a 12V 35W halogen bulb for optimum performance. Available with and without stainless steel frame.

Bulbs: Replaceable MR16 12V 35W Halogen

Dimensions: Ø = 2-1/2" Frame thickness: 7/8"

Overall depth: 2-7/8" Mounting depth: 2"

Mounting Depth: 2'

Part # M051A With out frame Part # M051A-SS Stainless frame

# Slim Line Docking Light

This slim line docking lamp was specifically designed for flush mount installations on Pontoon boats. Includes low profile, stainless steel mounting bracket and 12V 35W halogen H3 bulb.

 Bulbs:
 Replaceable H3 12V 35W

 Dimensions:
 6-7/8" x 2-3/8" x 1-1/2"

 Mounting Height
 2-1/4" with bracket



Part # WJ-B2005-A-35W

# VENTILATION

#### Day/Night Solar Vent



Day/Night solar vents offer 24-hour ventilation in a compact footprint. The new design can be removed from the deck and features LED lights and additional controls that are accessed from the cabin.

#### MiniVent 1000



The MiniVent 1000 is the smallest and most economical solar vent in the Marinco® line. At just 7" in diameter and approximately 1-3/4" high, the MiniVent 1000 is compact yet effective. This solar powered model is an exhaust vent only.

#### Air Vent 500 Passive Exhaust Ventilation



Marinco offers the AirVent 500 as a non-solar ventilation option that can passively move 600 to 1,000 cubic feet of air per hour in a 15 knot breeze. Marinco's engineering expertise created this vent to be strong, compact and effective.



# **VENTILATION**

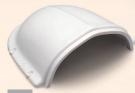
#### **Cowl Vents**



#### 102

Cowl Vents are available in both low profile and standard height contours. These vents are a perfect air intake supplement to solar ventilation, and are also commonly used as a bilge ventilating system with or without a mechanical blower.

#### **Clam Shell Vents**



#### 103

Clam shell vents are ideal for ventilation needs where a taller vent would foul lines or restrict crew movement. These vents work well as stern mounted ventilators for engine compartments.

#### **Deck Plates**



#### 103

Deck plates are used to attach ventilators to the deck, hatch or hose. These plates create a clean installation and can be used with multiple material thicknesses.

#### Fans



#### 104

Marinco fans provide cabin comfort by direct wiring into a 12V DC system. Multiple models are available to accommodate different installations.



Properly ventilated vessels provide for a more comfortable environment aboard and eliminates the accumulation of dangerous fumes.

8 VENTILATION marinco.com

# **TECH TIP**

#### **Ventilation Explained**

#### **Maintenance Ventilation**

In most climates, boats that have been closed for a period of time will become "stuffy." The temperature differential that develops between the boat cabin and the outdoor environment will cause the humidity level inside the boat cabin to rise. When the humidity level in the closed cabin rises, moisture forms, resulting in mold, mildew and musty air. In these conditions, fabrics, boat electronics and even the boat's fiberglass structure can be damaged. By consistently replacing trapped, stale air in the closed boat with fresh outside air, the humidity equalizes from inside to outside, resulting in effective maintenance ventilation.

#### **Comfort Ventilation**

Combining different types of vents, with one vent providing "intake" air flow while another vent provides "exhaust" air flow, creates crossflow ventilation. A cross-flow ventilation system will make the interior cabin more comfortable and pleasurable because air is constantly moving throughout the cabin. No matter what your boat size or cabin configuration is, you can increase your boating enjoyment with the addition of ventilation.

#### **Safety Ventilation**

Most boaters are unaware of the hazards that exist in the boating environment. Any number of serious ventilation problems can occur when a boat is left unattended. And even if you are underway, these problems don't go away. Fumes and gasses, ranging from carbon

monoxide to hydrogen gas from battery charging, to gasoline, propane or solvents stored below, are unpleasant, and can sometimes be dangerous. Also, any open flame devices in the cabin require proper ventilation. Ventilation helps to eliminate these hazards by providing constant air circulation resulting in effective safety ventilation.

#### **How Much Ventilation Is Required For Your Boat?**

Ideally, the air in the interior of a boat should be circulated once every hour. A typical 30-foot boat contains approximately 800 cubic feet of air. As you will see, our solar powered models can move between 600 and 1,000 cubic feet of air every hour. The general guidelines for providing maintenance ventilation are as follows:

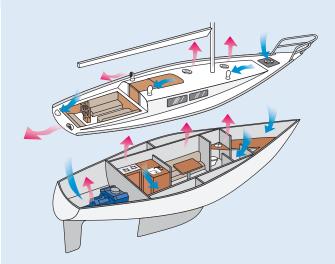
Boat Size Recommended Ventilation

Up to 24'. 1 Exhaust Vent\*

24' to 40'. 1 Exhaust Vent & 1 Intake Vent 40'. and larger 2 Exhaust Vents & 1 Intake Vent

\* For effective maintenance ventilation, one vent assumes there will be access for air to get into the cabin (i.e., cowl vent, clamshell vent or louvered panel)

It is important to evaluate the cabin layout of your boat to determine optimal locations for both intake and exhaust ventilation. These illustrations suggest placement for Marinco® solar powered vents and Marinco® passive vents.

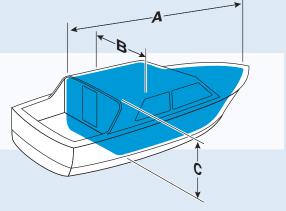




# To specifically calculate your boat's air volume, use this simple formula:

A x B x C x 70% = Boat Interior Volume

- A Dimension is the interior length (excluding cockpit)
- **B** Dimension is the boat width
- C Dimension is the average interior height



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#### **Ventilation Selection Chart**

	Airflow Size	Hole Size Diameter	Deck Plate	Mounting Flange Depth	Operation Day	Night	Cubic Feet of Air	Intake	Exhaust
Day/Night	4" 102 mm	4-3/4"	Screw-In (6" Outer Diameter)	2.75"	Solar	Rechargeable Battery Power	1000 ft³/hour 28 m³ 24,000 ft³/day 680 m³	Fan (switch	) Fan
Омпун	3" 76 mm	3-3/4"	Screw-In (5" Outer Diameter)	2.75"	Solar	Rechargeable Battery Power	800 ft³/hour 23 m³ 19,200 ft³/day 550 m³	Fan (switch)	Fan
MiniVent 1000	3" 76 mm	3-3/4"	None (Direct to Deck Mounting)	1"	Solar	Passive	700 ft³/hour 20 m³ 5,600 ft³/day 160 m³	Exhaust fan only	Fan
AirVent 500	3" 76 mm	3-3/4"	None (Direct to Deck Mounting)	1"	Passive	Passive	600 ft³/hour 17 m³ In a 15 Knot Breeze	Passive	Passive
Cowl Vents	4" 102 mm	4-3/4"	Snap-In (6" Outer Diameter)	1"	Passive	Passive	_	Passive	Passive
	3" 76 mm	3-3/4"	Snap-In (5" Outer Diameter)	1"	Passive	Passive	_	Passive	Passive

# **TECH TIP**

#### **Vent Installation Explained**

#### Installation

All Marinco® ventilation products include clear, easy-to-understand installation instructions. These instructions address all of the key factors of a professional installation, such as:

- Proper hole measurement and cutting procedures
- · Proper deck plate installation
- Use of sealants to waterproof your vent installation
- · Installing vents in hatches
- Installing vents in "cambered" or slightly curved decks

Use of interior trim rings to "dress up" the cabin

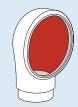
The high quality level of Marinco Ventilation products must be combined with a sound installation to guarantee that your vent performs in all conditions. Marinco will make sure that your installation will be easy and successful so that you can enjoy the benefits of installation for a long time to come.

#### Marinco® Ventilation Installation Systems Snap-In Deck Plate Installation

The 12V vent, 12V combo vent and cowl vents use the Marinco Snap-In deck plate system. The snap-in system allows the easy exchange of any snap-in part for upgrading or convenience, as well as the use of a snap-in cover that completely seals the deck plate making it water tight.

#### **Direct-To-Deck Installation**

The Day/Night Plus, MiniVent 1000 and AirVent 500 are designed to be installed directly to the deck without the requirement for a deck plate. All of these vent systems have built-in shutoff dampers that operate from below.







Deck

Plastic Interior Trim Ring 100 VENTILATION marinco.com

### **Day/Night Solar Vent**

- · Circulates fresh air in boat cabin eliminating mold, mildew and musty air
- Moves 1,000 cubic feet of air/hour or 24,000 cubic feet of air/day (4" model)
- Rechargeable battery allows for 24-hour continuous operation
- · No wiring required
- · Built-in on/off fan switch, LED lights and intake/exhaust switch
- High capacity NiMh battery operates vent for up to 24-hours without sunlight on a full charge
- Threads into included deck plate and can be removed from outside without tools
- Complete air and green water shut-off from below
- All Day/Night Plus models come complete with white plastic interior trim ring, insect screen, mounting hardware and an easy-to-understand installation manual
- Replaces NICRO 3" & 4" snap-in deck plates (fits existing holes once snap-in deck plates are removed)

Description	Part #
3" White	N20803W
3" Stainless Steel	N20803S
4" White	N20804W
4" Stainless Steel	N20804S



- High capacity battery pack
- · 4.8V, 2.5 amp-hours
- Replacement battery pack for current Day/Night Vents

Part # N20890



#### **Solar Vent Cap**

· Includes screw-in watertight cap



Description	Part #	
for 3" vents	N20803CAP	
for 4" vents	N20804CAP	







#### **Replacement Trim Ring**



Description	Part #
for 3" vents	N20803RING
for 4" vents	N20804RING

# Original Day/Night Plus Vent Accessories

#### Replacement NiMh Battery

- High capacity C-cell battery
- 1.2V, 2.8 amp-hours
- Replacement battery for older Day/Night Plus Vents, as well as, older model PowerVent 3000 and Day/ Night 2000 Vents

Part # N20790



#### **Gasket Kit**

 Includes gaskets and fasteners for both 3" and 4" vents

Part # 202432



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#### MiniVent 1000

The MiniVent 1000 is the smallest and most economical solar vent in the Marinco® line. At just 7" in diameter and approximately 1-3/4" high, the MiniVent 1000 is compact yet effective. This solar powered model is an exhaust vent only. It will keep the boat cabin cool when you need it most, during the hot sunlight hours. Under solar power, the MiniVent 1000 will move 700 cubic feet of air an hour. At night, even a light breeze will continue to ventilate the boat passively.

Built-in shut-off damper prevents water intrusion in rough seas. Fits a 3-3/4" diameter installation hole. The vent can be retrofitted to an existing hole of up to 6" in diameter. Available in white ABS plastic or stainless steel. Optional stainless steel cover is also available separately.

- · Solar powered exhaust ventilation during daylight and passive exhaust at night
- · No batteries or wiring required
- · Whisper-quiet fan operation
- · Durable white ABS construction
- Shut-off damper to prevent water intrusion in rough seas
- Dimensions: 7" diameter X 1-3/4" high
- All MiniVent 1000 models come complete with white plastic interior trim ring, mounting hardware and an easy-to-understand installation manual

Description	Part #
3" White	N20020
3" Stainless Steel	N20030





YEAR 2 YEAR

#### **Air Vent 500 Passive Exhaust Ventilation**

Marinco® offers the AirVent 500 as a non-solar ventilation option that can passively move 600 to 1,000 cubic feet of air per hour in a 15 knot breeze. Marinco's engineering expertise created this vent to be strong, compact and effective. The AirVent 500 is an economical way to provide ventilation in your boat or it can be used in conjunction with other solar powered or 12V vents to create cross flow air circulation.

- Compact size: 7" diameter x 1-3/4" high
- High air flow volume 1,000 cu. ft./hour in a 15 knot breeze
- Strong U.V. stabilized white ABS construction
- Center panel is translucent plastic allowing light to pass through it below deck
- · Center damper shuts vent off from below
- Easy installation attaches directly to deck in compact 3-3/4" diameter hole and can be retrofitted to an existing hole of up to 6" in diameter

Part # N28810





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#### **Cowl Vents**

Cowl Vents are available in both low profile and standard height contours. These vents are a perfect air intake supplement to solar ventilation, and are also commonly used as a bilge ventilating system with or without a mechanical blower. Marinco® was the first supplier of soft, durable PVC vents that are flexible and safe. For interchangeability, Marinco 4" cowl vent models fit into the same 4" Snap-In deck plates used by the combo and 12V vents (3" or 4" sizes).

- Soft and durable PVC construction returns to original shape if stepped on
- Safer than metal cowl vents prevents injury and resists snagging lines
- Snap-In vents include deck plate and cover
- 4" models interchangeable with Marinco® Combo and 12V Vent 4" snap-in deck plates
- Marinco adapter accessories make installing below-deck duct hose easy

#### Snap-In Deluxe Low Profile PVC Cowl Vent

- · White with bright red interior
- Available in 3" or 4" sizes
- 3" size measures 4-1/2" high
- 4" size measures 5-1/2" high
- Includes white Snap-In deck plate and cover

Description	Part #
3"	N10863
4"	N10864



#### Snap-In Deluxe Standard PVC Cowl Vent

- · White with bright red interior
- Available in 3" or 4" sizes
- 3" size measures 8" high
- 4" size measures 10" high
- Includes white Snap-In deck plate and cover

Description	Part #
3"	N10963
4"	N10964





#### **Clam Shell Vents**

- Ideal for ventilation needs where a taller vent would foul lines or restrict crew movement
- Work well as stern mounted ventilators for engine compartment
- · Can be used for cabin ventilation with dorade boxes
- Flexible PVC construction
- Small clam shell dimensions Inner : 2-1/2" H x 4-1/2" W x 5" L Outer: 2-3/4" H x 6" W x 5-1/2" L
- Large clam shell dimensions Inner : 3" H x 5-3/8" W x 6" L Outer: 3-1/2" H x 7" W x 6-3/4" L

Description	Part #
Small	N10873
Large	N10874



# White Snap-In Deck Plate

- Includes Snap-In watertight cover
- Use with any Marinco® Snap-In vent system
- N10863DW requires a 3-3/4" diameter hole cutout
- N10864DW requires a 4-3/4" diameter hole cutout

Description	Part #
3"	N10863DW
4"	N10864DW



# **Plastic Interior Trim Ring**

- Finishes off interior installation of vent
- Can be installed in decks between 1" and 2" thick
- Available in 3" and 4" sizes
- White plastic construction
- · Note: Interior trim rings are not compatible with threaded deck plates

Description	Part #
3"	N10866
4"	N10867



# Thru Bulkhead Hose Adapter

- For termination attachment of hose to bulkhead
- For attaching hose to cowl vent
- Can be used with Snap-In or threaded deck plates
- For use in decks or bulk heads of more than 1" thick

Description	Part #
3"	N10869
4"	N10870







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# YEAR WARRANTY



#### **Marine Fan**

- 120° adjustable oscillating fan
- Can be set for stationary operation
- Mount on wall, ceiling or dash
- Built-in on/off switch
- Installation hardware included
- 12V DC operation, 1.2A draw
- · Translucent fan blades
- 7.5" vinyl-coated fan guard
- Mounting base dimensions: 3.375" L x 1.5" W
- Stands 8" from mounting surface

Part # 900

## **Personal Fan**

- 180° adjustable swivel fan
- Mount on wall, ceiling or dash
- Built-in on/off switch
- Installation hardware included
- 12V DC operation, 0.5A draw
- · Compact design installs anywhere
- Great for windshield defogging
- Base Dimensions: 3" diameter
- Stands 5" from mounting surface

Part # 903-5



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PN	Page	PN	Page	PN	Page	PN	Page	PN	Page
10001	87	11080SC-B	83	12VRCY	43	2101	61	301EL-B.OEM	13
10010	88	11080SC-SS	83	12VTR	49	2101-B	61	301EL-B.W/L	13
10011	88	11080SC-W	83	12VTR.OEM	49	2102	61	301EL-BX	35
10017XL	88	11088	85	12VXT	44	2102-B	61	301EL-BXPK	35
10018XL	88	11090	84	150025	20	2110A	61	301ELCB	13
10028XLP	88	11091	84	150025NL	20	2110A-B	61	301RCDKITIGN.OEM	16
10029XLP	88	11095	84	150050	20	2111A	61	301RCDPL.OEM	16
10031	85	11098	87	150050NL	20	2111A-17	61	303SSBKRPL.OEM	16
10035	87	11099	87	150BBI	56	2111A-B	61	303SSEL-B	13
10036	87	110A	25	150BBI-TM	56	2111A-O	61	303SSEL-B.OEM	13
10079	84	110R	29	150BBI.OEM	56	22011A-P	94	303SSEL-BX	35
10080	83	11106	89	150BBIW 150BBIW.OEM	56	22012A-P	94	303SSEL-BXPK	35
10082 10098	86 87	11107 11114	89 89	150PHB	56 56	22012MA-P 22014-P	94 94	303SSO 303SSRCDPL.OEM	13 16
10098	87	11115	89	150PHW	56	22040A	94	304EL-B	13
10055 100EL	29	11124	84	150SPP	25	22041A	94	304EL-B.NT	13
100R	29	11168	85	151225	20	22050A	93	304EL-B.OEM	13
10102	89	11185	86	151250	20	22051A	93	304EL-BX	35
10104	89	11187	83	1520BI.OEM	33	22150A	93	304EL-BX.NT	35
10105	89	11188	83	152AY	26	22151A	93	3050BI	13
10106	89	11190	84	153AY	26	22200	94	305BC	48
10107	89	11191	84	154AY	26	22201	94	305BP	48
10108	89	11194	83	157AY	26	22208A	94	305BP.OEM	48
10122	89	111A	25	1591-FI	32	22209	94	305CRCN	29
101739	34	11225	84	1591-FI.GRY.OEM	32	22218A	94	305CRCN.OEM	29
102164	34	11226	84	1591-FI.WHITE	32	22219A	94	305CRCN.VPK	29
102167	34	115A	25	15M32AX	36	22224	89	305CRCXN	35
102182	31	117A	25	15M32AXP	36	22230-P	94	305CRCXNPK	35
10224	89	118A	25 25	15MSPPX	35	22240-R	94	305CRMB	34
102N 103ELN	29 29	121A 12224	25 89	15MSPPXP 162AY	35 26	22250-HH 22250-R	93 93	305CRPN 305CRPN.OEM	29 29
103ELN 103RN	29	12224 123A	25	165AY	26	22350-R 22350-R	93	305CRPN.VPK	29
103RN 103RN.OEM	29	12BKT	44	199109PK	31	2300A	61	305CRFN.VFR	29
103RNX	35	12MP.OEM	44	199110PK	31	2300A-B	61	305CRRB	29
103RNXPK	35	12VBP	47	199111PK	31	2303A	61	305CRRB.OEM	29
104SPP	25	12VBP.OEM	47	199114	35	2303A-B	61	31000	73
104SPP-25.OEM	25	12VBPS2	47	199115	36	2304A	61	32000	73
104SPP-50.OEM	25	12VBPS2.OEM	47	199116	19	2304A-B	61	32001	73
104SPP.OEM	25	12VBPS3	46	199117	19	23050A	93	32002	73
104SPPG	25	12VBPS3.OEM	46	199117G	19	23051A	93	32012B	5
10524	89	12VBR	47	199119	19	23150A	93	32014B	5
105SPP	25	12VBR.OEM	47	199119G	19	23151A	93	32016B	5
105SPPG	25	12VBRAD	47	199120	19	23250-HH	93	32018B	5
10624	89	12VBRAD.OEM	47	199128	28	23250-R	93	32020B	5
106A	25	12VBRS2	47	199136	13	23350-R	93	32022B	5
10MSPPX	35	12VBRS2.OEM	47	1M32AXP	36	25MSPPX	35	32024B	5
10MSPPXP	35	12VBRS3	46	1MSPPX	35	25MSPPXP	35	32112B	5
11-004-N	95 87	12VBRS3.OEM 12VCDUSB48	46 45	1MSPPXP 1RPC	35 28	25SPPW 25SPPX	19 35	32114B 32116B	5 5
11001 11017XLP	88	12VCDUSB48A	45	1RPC50	28	2603-B	55	32118B	5
11017XLP	88	12VCDOSB40A	45	1RPC50SP	27	2606A-B	55	32110B 32120B	5
11024	84	12VCOMBO-B	45	1RPCSP	27	2701A	54	32122B	5
11028XLP	88	12VCOMBON-B	45	20036	43	2707A	53	32124B	5
11029XLP	88	12VCOMBOW-B	45	200BBIW.OEM	56	2708A	53	33006A	74
11031	85	12VCP	47	2018BP-12	48	2710A	53	33007A	74
11034	85	12VCP6	47	2018BP-24	48	2711A	53	33010A	74
11034SC-B	85	12VCPS2	47	2018BP-24.OEM	48	2713A	53	33012A	74
11034SC-SS	85	12VCPS3	46	2018BR	48	2720A	53	33014A	74
11035	87	12VDUSB	45	2018BR-MB	48	2731A	53	33025	71
11044	85	12VDUSB-B	45	2018BR.OEM	48	2740A	53	33032A	74
11045	85	12VDUSB48	45	2018BR.OEM.BPS	48	27505	57	33037A	74
11058	86	12VDUSBN-B	45	2018MB	48	27515	57	33070A	74
11059	86	12VDUSBW-B	45	2018MB.OEM	48	30000	73	33084W	74
11064	86	12VPG	43	2018PKG	48	30002	73	33086W	74
11066	86	12VPG.OEM	43	202319	92	30004	73	33090	74
11079	84	12VPK	43	202320	92	30005	73	33090W	74
11079SC-B	84	12VPL.OEM	44	202432	100	300259	44	33092	74
11079SC-C	84	12VRC	43	205CRCN	33	300275	44	33092W	74
11079SC-SS	84	12VRC.OEM	43	205CRPN	33	301BKRPL.OEM	16	33094	74
11079SC-W	84	12VRC.PG	43	205CRR	33	301CRMB	34	33106A	74
11079SN-B	84 84	12VRCO PG	43	20MSPPX	35 35	301EL-B	13 13	33107A	74 74
11079SN-C		12VRCO.PG 12VRCW	43 43	20MSPPXP 2100	35 61	301EL-B.BLACK 301EL-B.FR	13	33110A 33112A	74 74
					01	JUIEL-D.FK	15	JJ112A	/4
11079SN-W 11080	84 83	12VRCW.OEM	43	2100-B	61	301EL-B.GRAY	13	33114A	74

33132A 74 8006 60 6396CR.0EM 30 903 104 33137A 74 8008 60 6396CR.0EM 30 903-5 104 33137A 74 8008 60 6376CR.0EM 30 903-5 104 33137A 74 8012 60 6371EL 14 CCVR24 21 3316W 74 4018 60 6371EL 14 CCVR24 21 3316W 74 470CR 32 6371EL 14 CLIP 21 3316W 74 470CR 32 6371EL 36 14 CLIP 21 3319D 74 472CR 32 6371EL 36 14 CLIP 21 3319D 74 472CR 32 6371EL 36 14 CLIP 21 3319D 74 472CR 32 6371EL 36 CST004 38 3319W 74 800EL 31 6372EL 36 CST004 38 3319W 74 800EL 31 6372EL 36 15 CST004 38 3319W 74 800EL 31 6372EL 36 15 CST005 18 3319D 79 500L 31 6372EL 36 15 CST005 18 3319D 79 500L 31 6372EL 36 15 CST005 18 3319D 79 500L 31 6372EL 36 30 CST005 18 3319D 79 500L 31 6372EL 36 30 CST005 18 3319D 79 500L 31 6372EL 36 30 CST005 18 3319D 79 500L 31 6372EL 36 30 CST005 18 3319D 79 500L 31 6372EL 36 30 CST005 18 3319D 79 500L 31 6372EL 36 30 CST005 18 3319D 78 500.500A 41 600CRCX 37 CS505-50 18 3319D 78 500.500A 41 600CRCX 37 CS505-50 18 3319D 78 500.500A 41 600CRCX 37 CS505-50 18 3300D 71 500.2 94 600CRCX 37 CS505-50 18 3300D 71 500.500A 41 600CRCX 37 CS505-50 18 3300D 71 500.500A 41 600CRCX 37 CS505-50 18 330D 72 S505-50 18 330D 73 S505-50 18 330D 74 S505-50 18 330D 75 S505-50 18 330D 75 S505-50 18 330D 75 S505-50 18 330D 77 S505-50 18 330D 77 S505-50 18 330D 77 S505-50 18 330D 78 S505-50 18 330D 79 S505-60 18 330D 79 S505	Page	PN	Page	PN	Page	PN	Page	PN	Page
33170A 74 4008 60 6370CR 30 BAG 21 331870A 74 4012 60 6371EL 14 CCVR.24 21 331840W 74 4018 60 6371EL 14 CCVR.24 21 331840W 74 4018 60 6371EL 14 CCVR.24 21 331840W 74 4700CR 32 6371ELB.CDM 14 CLIP 12 331930 74 4721CR 32 6371ELB.CDM 14 CLIP 12 33192 74 4721CR 32 6371ELB.CDM 14 CLIP 12 33192 74 4721CR 32 6371ELB.CDM 15 CS001T4 38 33192 74 4731CR 32 6371ELB.CDM 15 CS001T4 38 33192 75 500, 500A 94 6373EL 15 CS001T4 38 33193 77 500, 500A 94 6373EL 15 CS001T4 38 33193 79 500R 31 6373ELB.CDM 15 CS301T2 18 33317 79 500.50A 94 6373ELB.CDM 15 CS301T2 18 33317 79 500.50A 94 6373ELB.CDM 15 CS301T2 18 33317 79 500.50A 94 6373ELB.CDM 15 CS301T2 18 33319 78 50.50A 94 6401CRCX 37 CS3045 18 33319 78 50.50A 94 6401CRCX 37 CS3045 18 33319 78 50.50A 94 6401CRCX 37 CS3045 18 3300 79 500R 94 6401CRCX 37 CS3045 18 3300 79 500R 94 6401CRCX 37 CS3045 18 3300 71 509.2 94 6401ELBX 37 CS3045 18 3300 71 509.2 94 6401ELBX 37 CS3045 18 3300 71 509.2 94 6401ELBX 37 CS3045 18 34000 71 509.5 50A 94 6401CRCX 37 CS3045 18 34001 71 509.5 50A 94 6401CRCX 37	71	38011	71	6369CR	30	900	104	P-11D04	60
33170A	74	4006	60	6369CR.OEM	30	903-5	104	P-12D34	60
13184W	74	4008	60	6370CR	30	BAG	21	P-12D35	60
331900	74	4012	60	6371EL	14	CCVR-24	21	P-12D36	60
33190 74 4721CR 32 6371ELBX 36 C\$1004 38 33192 74 4731CR 32 6371ELX 36 C\$10014 38 33192 75 500,500A 94 6373EL 15 C\$30-12 18 33194 74 500EL 31 6373ELB 15 C\$30-12 18 33505 79 500R 31 6373ELB 015 C\$30-25 18 33505 79 500R 31 6373ELB 015 C\$30-25 18 33513 79 50.2-1 94 6373ELBW 15 C\$30-50 18 33515 79 50.2-1 94 6373ELBW 15 C\$30-50 18 33517 79 50.2-2 94 6373ELBW 15 C\$30-50 18 33517 79 50.2-2 94 6373ELBW 15 C\$30-50 18 33510 79 50.5-1 94 6401CRCX 37 C\$50-3-0 18 33510 79 50.5-2 94 6401CRCX 37 C\$50-3-0 18 33510 79 50.2-2 94 6401CRCX 37 C\$50-3-0 18 33510 79 50.2-2 94 6401CRCX 37 C\$50-3-0 18 34000 71 50.2-2 94 6401CRCX 37 C\$50-4-5 18 34000 71 50.2-2 94 6401CRCX 37 C\$50-4-5 18 34000 71 50.5-2 94 6401CRCX 37 C\$50-4-5 18 34001 71 50.5-2 94 6401CRCX 37 C\$50-4-5 18 34011 71 50.5-2 94 6401CRCX 37 T\$50-4-5 18	74	4018	60	6371EL-B	14	CLIP	21	P-12D37	60
33192	74	4700CR	32	6371EL-B.OEM	14	CLIP-01	21	P-13A27	60
33194W 75 S00, 500A 94 6373EL 15 C\$100T15 39 331949 74 S00FL 31 6373EL.8 PT 5 C\$30-5 18 333194 79 S00, 500R 31 6373EL.8 PT 5 C\$30-5 18 333195 79 S00, 500R 31 6373EL.8 PT 5 C\$30-5 18 33515 79 S0.2-1 94 6373EL.8 PT 15 C\$30-5 PT 18 33517 79 S0.2-2 94 6373EL.8 PT 15 C\$30-5 PT 18 333010 78 S0.2, 502A 94 6471CRCX 37 C\$503.5 PT 18 333010 78 S0.2, 502A 94 6471CRCX 37 C\$503.5 PT 18 33000 71 S0.3-2 94 6471CREX 37 C\$503.5 PT 18 34000 71 S0.3-2 94 6471CREX 37 C\$504.5 PT 18 34000 71 S0.3-2 94 6471CREX 37 C\$504.5 PT 18 34000 71 S0.5-2 94 6471CREX 37 C\$504.5 PT 18 34000 71 S0.5-2 94 6471CREX 37 C\$504.5 PT 18 34001 71 S0.5-2 94 6471CREX 37 C\$504.5 PT 18 34001 71 S0.5-2 94 6471CREX 37 C\$506.5 PT 18 34001 71 S0.5-2 94 6471CREX 37 C\$506.5 PT 18 34001 71 S0.5-2 94 6471CREX 37 C\$506.5 PT 18 34001 71 S0.5-2 94 6471CREX 37 C\$506.5 PT 18 34001 71 S0.5-2 94 6471CREX 37 C\$506.5 PT 18 34001 71 S0.5-2 94 6471CREX 37 C\$506.5 PT 18 34001 71 S0.5-2 94 6471CREX 37 C\$506.5 PT 18 34011 71 S0.5-2 2 94 6471CREX 37 C\$506.5 PT 18 34011 71 S0.5-2 2 94 6471CREX 37 C\$506.5 PT 18 34012 78 S0.5-2 2 94 6471	74	4721CR	32	6371EL-BX	36	CS1004	38	P-13A28	60
33194 74 500EL 31 6373EL-B 15 C330-12 18 33505 79 500R 31 6373EL-B.WIL 15 C330-25 18 33515 79 501,501A 94 6373EL-B.WIL 15 C330-50 18 33515 79 502-1 94 6373EL-B.WIL 15 C330-50 18 33517 79 502-2 94 6373EL-B.WIL 15 C330-50 18 33517 79 502-2 94 6373EL-B.WIL 15 C350-50 18 33517 79 502-2 94 6670EMB 34 C5503-25 18 33919 78 502-1 94 6670EMB 34 C5503-25 18 33919 78 503-1 94 6670EMB 37 C5504-55 18 34000 71 503-2 94 6670EMB 37 C5504-55 18 34000 71 503-2 94 6670EMB 37 C5504-50 18 34000 71 503-503A 94 6602EMB 37 C5504-50 18 34000 71 505PW 19 6602EMB 37 C5504-50 18 34000 71 505PW 19 6602EMB 37 C5504-50 18 34010 71 505PW 19 6602EMB 37 C5504-50 18 34010 71 505PW 19 6602EMB 37 C5504-50 18 34010 71 505PW 19 6602EMB 37 C5504-50 18 34011 71 505PW 35 7101 68 C57514 38 34012 78 510R 31 71012 68 C57514 38 34012 78 526CER.GRY 32 71081 68 CW10014 38 34014 78 526CER.GRY 32 71081 68 CW10014 38 34014 78 526CER.GRY 32 71082 68 CW10014 38 34014 78 526CER.GRY 32 71082 68 CW10014 38 34016 78 526CER.GRY 32 7112 68 CW10014 38 34016 78 5360CR 33 729489 94 CW754 38 34016 78 5360CR 33 729489 94 CW754 38 34018 78 5360CR 33 729489 94 CW754 38 34018 78 5360CR 33 729489 94 CW754 38 34018 78 5360CR 33 72949 94 M0514-55 95 34018 78 600 78 600 34 72949 94 M0514-55 95 34018 78 600 78 600 34 72949 94 M0515-55 95 340205 78 6083CR 34 72949 94 M0518-55 95 340205 78 6083CR 34	74	4731CR	32	6371ELX	36	CS100IT4	38	P-13A29	60
33915   79	75	500, 500A	94	6373EL	15	CS100IT5	39	P-13A2A	60
33915 79 501,501A 94 6373EL.BWL 15 C530.500 18 33515 79 502-1 94 6373EL.BWL 15 C530.50W 18 33517 79 502-2 94 6673EL.BWL 15 C530.50W 18 33517 79 502.502 94 6670.ECK 37 C550.50 18 33919 78 503-1 94 6670.ECK 37 C550.50 18 33919 78 503-1 94 6670.ECK 37 C550.50 18 33919 78 503-1 94 6670.ECK 37 C550.50 18 34000 71 503-2 94 6670.ECK 37 C550.50 18 34000 71 503.503.A 94 6602.ECK 37 C550.50 18 34001 71 503.503.A 94 6602.ECK 37 C550.50 18 34000 71 505PP.OFM 19 6402.ECK 37 C550.50 18 34001 71 505PP.OFM 19 6402.ECK 37 C550.50 18 34010 71 505PP.OFM 19 6402.ECK 37 C550.50 18 34010 71 505PP.OFM 19 6402.ECK 37 C550.50 18 34011 71 505PP.OFM 19 505PP.OFM 19 6402.ECK 37 C550.50 18 34 C550.50	74	500EL	31	6373EL-B	15	CS30-12	18	P15-30	24
33915 79 502-1 94 6373EL.DEM 15 C530-50W 18 33917 79 502-2 94 6373EL.DEM 34 C5503-25 18 33919 78 502, 502-6 94 6401CRCK 37 C5503-50 18 33919 78 502, 502-6 94 6401CRCK 37 C5503-50 18 34000 71 503-2 94 6401CRDK 37 C5504-50 18 34000 71 503-2 94 6401EL.BX 37 C5504-50 18 34000 71 503-2 94 6401EL.BX 37 C5504-50 18 34000 71 505PPLOEIM 19 6402CRDK 37 C5504-50 18 34000 71 505PPLOEIM 19 6402CRDK 37 C5504-50 18 34000 71 505PPLOEIM 19 6402CRDK 37 C5504-50 18 34010 71 505PPLOEIM 19 6402CRDK 37 C5504-50 18 34010 71 505PPLOEIM 19 6402CRDK 37 C5504-51 38 34011 78 5262CRR 32 71081 68 C57515 39 34012 78 5262CRR 32 71081 68 C57515 39 34012 78 5262CRR 32 71182 68 C57515 39 34014 78 5262CRR 32 71182 68 C57515 39 34014 78 5262CR 32 71182 68 C57515 39 34015 71 5260CR 32 71182 68 C57515 39 34015 71 5260CR 32 71182 68 C57515 39 34015 71 5260CR 33 729488 94 C57551 38 34015 78 5360CR 33 729488 94 C57551 38 34015 78 5360CR 33 729489 94 C57551 38 34015 78 5360CR 33 729489 94 C57551 38 34015 78 5360CR 33 729489 94 C57551 38 34015 78 5360CR 33 729491 94 M0514 59 554000 50 55400 50 55540	79	500R	31	6373EL-B.OEM	15	CS30-25	18	P15-30-25	24
33915 79 502-1 94 6373EL.DEM 15 C530-50W 18 33917 79 502-2 94 6401CRCX 37 C5503-50 18 33901 78 502,502-6 94 6401CRCX 37 C5503-50 18 33901 78 502,502-6 94 6401CRCX 37 C5503-50 18 34000 71 503-2 94 6401CRCX 37 C5503-50 18 34000 71 503-2 94 6401CRDX 37 C5504-50 18 34000 71 503-2 94 6401CRDX 37 C5504-50 18 34000 71 505PP.OEM 19 6402CRCX 37 C5504-50 18 34000 71 505PP.OEM 19 6402CRCX 37 C5504-50 18 34000 71 505PP.OEM 19 6402CRDX 37 C5504-50 18 34010 71 505PP.OEM 19 6402CRDX 37 C57514 38 34010 71 505PP.OEM 19 6402CRDX 37 C57515 39 34010 71 505PP.OEM 19 71 505PP								P15-30-25W	24
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34000   71		·						P503-30	24
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SACTION   SACT								PH6599	20
MAISB   78								PH6600	17
340185 78 6017 33 729492 94 M051A-SS 95 404020B 78 6018 33 729493 94 M051B-SS 95 404020B 78 6079 34 729494 94 M051B-SS 95 404020B 78 6080 34 729528 94 M4100E12R 38 404025 78 6080 34 729528 94 M4100E12R 38 404025 78 6083CR 34 729523-P 94 M4100C12 38 404025 78 6084CR 34 729823-P 94 M4100C12 38 404025 78 6084CR 34 729825 94 M4100C12 38 404026B 78 6152SPP 19 729827-P 94 M4100C12 38 404026B 78 6152SPP-12SC 19 729828-P 94 M4100C12 38 404026S 78 6152SPP-12SC 19 729828-P 94 M4100C12 38 404026S 78 6152SPP-12SC 19 729828-P 94 M5100B9R 39 404112B 78 6152SPP-40 19 729830-P 94 M5100C9 39 404112B 78 6152SPP-5 19 729829-P 94 M5100C9 39 404112B 78 6152SPP-6 19 7420CR 34 M5100C9 39 404114B 78 6152SPPG 19 7420CR 34 M5100C9 39 404114B 78 6152SPPW 19 76030 79 ML-00SBW-STC 95 404114B 78 6152SPPW-5 19 76080 72 ML-00SBW-STC 95 404118B 78 6152SPPW-5 19 76080 72 ML-00SBW-STC 95 404118B 78 6152SPPW-5,P/O 19 76090 72 ML-00SBW-STC 95 404120B 78 6153SPP 19 76130 79 ML-00SBW-STC 95 404120B 78 6153SPP 19 7715CRN 31 N10863 102 404122B 78 6153SPP-3 19 7715CRN 31 N10863 102 404122B 78 6153SPP-3 19 7715CRN 31 N10863 102 404122B 78 6153SPP 36 7715CRN 31 N10866 103 404124B 78 633SEL-B 14 7715CRN/EM 31 N10867 103 404124B 78 633SEL-B 14 7715CRN/EM 31 N10866 103 404124B 78 633SEL-B 14 7715CRN/EM 31 N10867 103 404124B 78 633SEL-B 14 7715CRN/EM 31 N10869 103 404124B 78 633SEL-B 14 7715CRN/EM 31 N10867 103 404124B 78 633SEL-B 14 7715CRN/EM 31 N10867 103 404124B 78 633SEL-B 14 7715CRN/EM 31 N10867 103 404124B 78 633SEL-B 15 7879CR-FI 34 N10864 102 404124B 78 633SEL-B 16 7879CR-FI 34 N10867 103 404124B 78 633SEL-B 16 7879CR-FI 34 N10867 103 404124B 78 633SEL-B 16 7879CR-FI 34 N10867 103 404125 78 633SEL-B 16 7715CRN/EM 36 N10864D 103 404126 79 633SEL-B 16 7715CRN/EM 36 N10864D 103 40410 70 633SEL-B 16 7879CR-FI 34 N1086	78	5369CR	33	729489	94	CW754	38	PH6601	17
340208 78 6018 33 722493 94 M051B 95 840205 78 6079 34 725494 94 M051B 95 840205 78 6079 34 725494 94 M051B-SS 95 8400228 78 6080 34 725528 94 M4100612R 38 840225 78 6083CR 34 725823-P 94 M4100C12 38 840248 78 6084CR 34 725825-P 94 M4100C12R 38 840248 78 6084CR 34 725825-P 94 M4100C12R 38 840248 78 6152SPP-12SC 19 725828-P 94 M4100C12 38 840268 78 6152SPP-12SC 19 725828-P 94 M4100R12 38 840268 78 6152SPP-2S 19 725828-P 94 M4100R12 38 840266 78 6152SPP-2S 19 725828-P 94 M4100R12 38 840266 78 6152SPP-2S 19 725828-P 94 M5100E9 39 84112B 78 6152SPP-40 19 725830-P 94 M5100E9 39 84112B 78 6152SPP-40 19 725830-P 94 M5100E9 39 84112B 78 6152SPP-5 19 7420CR.OEM 34 M5100E9 39 84114B 78 6152SPP-5 19 7420CR.OEM 34 M5100E9 39 84114B 78 6152SPPW-5 19 740CR.OEM 34 M5100E9 39 84114B 78 6152SPPW-5 19 76030 79 M0.058W-5TC 95 84116S 78 6152SPPW-5 19 76030 79 M0.058W-5TC 95 84116S 78 6152SPPW-5 19 76080 72 M0.058W/DSP 95 84118B 78 6152SPPW-5.P/O 19 76090 72 M0.058W/DSP 95 84112B 78 6152SPPW-5.P/O 19 76130 79 M1.0058W/DSP 95 84112B 78 6152SPPW-5.P/O 19 76130 79 M1.0058W/DSP 95 84112B 78 6152SPPW-75.P/O 19 76130 79 M1.0058W/DSP 95 84112B 78 6153SPP 19 7715CRN.OEM 31 N10863 102 84122B 78 6153SPP 19 7715CRN.0EM 31 N10863 102 84122B 78 6153SPP 19 7715CRN.0EM 31 N10864 102 84122B 78 6153SPP 19 7715CRN.0EM 31 N10864 102 84122B 78 633SEL-B 14 7715CRN.VEM 36 N10866 103 84124B 78 633SEL-B 14 7715CRN.VEM 36 N10866 103 841265 78 634SEL-B 14 7715CRN.VEM 36 N10866 103 841265 78 634SEL-B 14 7715CRN.VEM 31 N10867 103 841265 78 634SEL-B 14 7715CRN.VEM 31 N10869 103 841265 78 634SEL-B 15 7715CRN.VEM 31 N10869 103 841265 78 634SEL-B 15 7715CRN.VEM 31 N10869 103 841265 78 634SEL-B 15 7775CRN.VEM 31 N10869 100 835SEL-B 15 7879CR-FI 34 N10964 102 835SEL-B 15 7879CR-FI 3	78	5369CR.OEM	33	729491	94	M051A	95	PH6629	17
340205   78	78	6017	33	729492	94	M051A-SS	95	PHTV6599	20
340222B 78 6083CR 34 729528 94 M4100E12R 38 84040225 78 6083CR 34 729823-P 94 M4100E12R 38 8404024B 78 6084CR 34 729825-P 94 M4100C12R 38 8404024B 78 6084CR 34 729825-P 94 M4100C12R 38 8404024B 78 61525PP 19 729827-P 94 M4100F12 38 8404026B 78 61525PP-12SC 19 72982P-P 94 M4100F12 38 8404056S 78 61525PP-12SC 19 72982P-P 94 M5100E9R 39 94112B 78 61525PP-40 19 72982P-P 94 M5100C9 39 94112B 78 61525PP-5 19 7420CR 34 M5100C9 39 94112B 78 61525PPG 19 7420CR 34 M5100C9 39 94114B 78 61525PPG 19 7420CR 34 M5100P9 39 94114B 78 61525PPG-25 19 755PP.0EM 19 M5100P9 39 94114B 78 61525PPW-5 19 76030 79 M5100P9 39 94114B 78 61525PPW-5 19 76030 79 M5100P9 39 94118B 78 61525PPW-5 19 76080 72 M6-0058W/DSP 95 95 94118B 78 61525PPW-5P/O 19 76090 72 M6-0058W/DSP 95 95 94118B 78 61525PPW-5P/O 19 76090 72 M6-0058W/DSP 95 95 94120B 78 61535PP-75 19 76180 72 M6-0058W/DSP 95 95 94120B 78 61535PP-75 19 76180 72 M6-0058W/DSP 95 95 94120B 78 61535PP-75 19 76180 72 M6-0058W/DSP 95 95 94120B 78 61535PP-75 19 76190 72 M6-0058W/DSP 95 95 94122B 78 61535PP-75 19 76190 72 M6-0058W/DSP 95 95 94122B 78 61535PP-75 19 7715CRN 31 N10863 102 84122B 78 61535PP-75 19 7715CRN 31 N10864 102 84122B 78 61535PP-75 19 7715CRN 31 N10864 102 84122B 78 61535PP-75 19 7715CRN 31 N10864 102 84122B 78 6343EL-BX 36 7715CRN 31 N10866 103 84122B 78 6343EL-BX 36 7715CRN 31 N10866 103 84122B 78 6343EL-BX 36 7715CRN 31 N10867 103 85000 72 6351EL-BX 36 7775CRN 31 N10869 103 85000 72 6351EL-BX 36 779CR-FI 34 N10867 103 85000 70 6353EL-B 15 7879CR-FI 34 N10867 103 85000 70 6353EL-B 15 7879CR-FI 34 N10867 100 85000 101 85000 70 6353EL-B 15 7879CR-FI 34 N10867 100 85000 101 85000 70 6353EL-B 15 7879CR-FI 34 N10864 102 85000 70 6353EL-B 15 7879CR-FI 34 N10867 100 85000 70 6353EL-B 15 7879CR-FI 34 N10869 100 85000	78	6018	33	729493	94	M051B	95	RY504-2-30	27
Section   Sect	78	6079	34	729494	94	M051B-SS	95	S15-30	23
340248   78	78	6080	34	729528	94	M4100B12R	38	S15-504	23
34024B 78 6084CR 34 729825 94 M4100C12R 38 6152SPP 19 729827-P 94 M4100C12R 38 84024S 78 6152SPP 19 729827-P 94 M4100C12 38 84026S 78 6152SPP-25C 19 729828-P 94 M5100B9R 39 84026S 78 6152SPP-25 19 729828-P 94 M5100B9R 39 84112B 78 6152SPP-40 19 729829-P 94 M5100C9 39 84112B 78 6152SPP-5 19 7420CR 34 M5100C9R 39 84112B 78 6152SPPC 19 7420CR 34 M5100C9R 39 84112B 78 6152SPPC 19 7420CR 34 M5100C9R 39 84114B 78 6152SPPC 19 7420CR 05M 34 M5100C9R 39 84116B 78 6152SPPC 19 75SPP.OEM 19 M5100R9 39 84116B 78 6152SPPC 19 76030 79 ML-005EW-STC 95 84116S 78 6152SPPW-25 19 76080 72 ML-005EW-STC 95 84116S 78 6152SPPW-55.P/O 19 76090 72 ML-005EW-STC 95 84118B 78 6152SPPW-55.P/O 19 76090 72 ML-005EW-STC 95 84112B 78 6152SPPW-55.P/O 19 76130 79 ML-005EW-STC 95 84112B 78 6152SPPW-55.P/O 19 76130 79 ML-005EW-STC 95 84112B 78 6152SPPW-55.P/O 19 76130 79 ML-005EW-STC 95 84112B 78 6152SPPW-55.P/O 19 76180 72 ML-005WW-DSP 95 84112B 78 6152SPPW-55.P/O 19 76190 72 ML-005WW-DSP 95 84112B 78 6152SPPW-55.P/O 19 76190 72 ML-005WW-DSP 95 84112B 78 6152SPPW 19 7715CRN 31 N10863 102 84122B 78 6153SPP 19 7715CRN 31 N10864 102 M1424B 78 6153SPP 36 7715CRN 31 N10864 102 M1424B 78 6153SPP 36 7715CRN 31 N10864 102 M1424B 78 6153SPPW 19 7715CRN.PK 36 N10866 103 M1426B 78 6343EL-B 14 7715CRNPK 36 N10866 103 M1426B 78 6343EL-B 14 7715CRNPK 36 N10866 103 M1426B 78 6343EL-B 14 7715CRNPK 36 N10866 103 M1426B 78 6344EL-B.NT 15 7715ELN.DEM 31 N10867 103 M14265 78 6344EL-B.NT 15 7715ELN.DEM 31 N10867 103 M1426B 78 6344EL-B.NT 15 7715ELN.DEM 31 N10867 103 M1426B 78 6344EL-B.NT 15 7715ELN.DEM 31 N10867 103 M1426B 78 634EL-B.NT 15 7715ELN.DEM 31 N10873 103 M1426B 78 634EL-B.NT 15 7715ELN.DEM 31 N10867 103 M1426B 78 634EL-B.NT 15 7715ELN.DEM 31 N10873 103 M1426B 78 634EL-B.NT 15 7715ELN.DEM 31 N10867 103 M1426B 78 634EL-B.NT 15 7715ELN.DEM 31 N10867 103 M1426B 78 634EL-B.NT 15 7715ELN.DEM 31 N10869 103 M1426B 78					94			S20-15	23
340245   78								S20-30	23
34026B   78								S30-15	23
340265   78								SPL-12B	92
Satistic   Section   Sec								SPL-12B.OEM	92
34112S   78								SPL-12B.OEW	92
Section   Sect								SPL-12C.OEM	92
Math									
34116B         78         6152SPPW         19         76030         79         ML-005BW-STC         95           34116S         78         6152SPPW-55.P/O         19         76080         72         ML-005BW/DSP         95           34118B         78         6152SPPW-55.P/O         19         76090         72         ML-005NWW         95           34118S         78         6153SPP         19         76130         79         ML-005NWW-STC         95           34120B         78         6153SPP         19         76180         72         ML-005WW/DSP         95           34120S         78         6153SPP-25         19         76190         72         N10863         102           34122S         78         6153SPP-25         19         7715CRN         31         N10863DW         103           34122B         78         6153SPPX         36         7715CRN         31         N10864         102           34124B         78         6153SPPX         36         7715CRNX         36         N10866DW         103           34126B         78         6343EL-B         14         7715CRNX         36         N10866         103								SPL-12W	92
34116S         78         6152SPPW-25         19         76080         72         ML-005BW/DSP         95           34118B         78         6152SPPW-55.P/O         19         76090         72         ML-005NWW         95           34118S         78         6152SPPW-75.P/O         19         76180         79         ML-005WW-DSP         95           34120S         78         6153SPP-25         19         76180         72         ML-005WW-DSP         95           34122B         78         6153SPP-25         19         76190         72         N10863         102           34122B         78         6153SPP-75         19         7715CRN         31         N10863DW         103           34122B         78         6153SPPX         36         7715CRN         31         N10864         102           34124B         78         6153SPPX         36         7715CRN         31         N10864         102           34124B         78         64343EL-BX         36         7715CRNX         36         N10866         103           34126B         78         6344EL-BXT         15         7715ELN         31         N10867         103								SPL-12W.OEM	92
34118B         78         6152SPPW-55.P/O         19         76090         72         ML-005NWW         95           34118S         78         6152SPPW-75.P/O         19         76130         79         ML-005WW-STC         95           34120B         78         6153SPP         19         76180         72         ML-005WW-DSP         95           34120B         78         6153SPP-25         19         76190         72         N10863         102           34122B         78         6153SPP-75         19         7715CRN         31         N10863DW         103           34122B         78         6153SPPX         36         7715CRN.DEM         31         N10864         102           34122B         78         6153SPPX         36         7715CRN.DEM         31         N10864DW         103           34122B         78         6134EL-B         14         7715CRN.DEM         31         N10866         103           34124B         78         6343EL-B         14         7715CRN.DEM         31         N10866         103           34126B         78         6343EL-BX         36         7715ELN.DEM         31         N10867         103								SPL-24B.OEM	92
34118S         78         6152SPPW-75.P/O         19         76130         79         ML-00SWW-STC         95           34120B         78         6153SPP         19         76180         72         ML-00SWW/DSP         95           34120S         78         6153SPP-25         19         76190         72         N10863         102           34122B         78         6153SPP-75         19         7715CRN.OEM         31         N10863DW         103           34122B         78         6153SPPX         36         7715CRN.OEM         31         N10864         102           34124B         78         6153SPPX         36         7715CRN.X         36         N10864DW         103           34124B         78         6343EL-B         14         7715CRNX         36         N10864DW         103           34126B         78         6343EL-B         14         7715CRNX         36         N10866         103           34126B         78         634EL-B         14         7715CRNX         36         N10867         103           34126B         78         634EL-B         15         7717N         31         N10869         103           3421		***************************************						SPL-24C.OEM	92
84120B         78         6153SPP         19         76180         72         ML-005WW/DSP         95           84120S         78         6153SPP-25         19         76190         72         N10863         102           34122B         78         6153SPPW         19         7715CRN         31         N10863DW         103           34122B         78         6153SPPW         19         7715CRN.OEM         31         N10864         102           34124B         78         6153SPPX         36         7715CRN.OEM         31         N10864         102           34124S         78         6134EL-B         14         7715CRNXPK         36         N10866         103           34126B         78         6343EL-B         34         7715CRNXPK         36         N10866         103           34126S         78         6344EL-B.NT         15         7715ELN         31         N10867         103           34126S         78         6344EL-B.RT         36         7715ELN         31         N10869         103           34126S         78         6344EL-B.RT         15         7717N         31         N10870         103           34126S </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>SPL-24W.OEM</td> <td>92</td>								SPL-24W.OEM	92
84120S         78         6153SPP-25         19         76190         72         N10863         102           84122B         78         6153SPP-75         19         7715CRN         31         N10863DW         103           84122B         78         6153SPPW         19         7715CRN.OEM         31         N10864         102           84124B         78         6153SPPX         36         7715CRNXPK         36         N10866         103           84124B         78         6343EL-B         14         7715CRNXPK         36         N10866         103           84126B         78         6343EL-BX         36         7715ELN         31         N10866         103           84126B         78         6344EL-B.XT         15         7715ELN.OEM         31         N10869         103           84126S         78         6344EL-B.NT         15         7717N         31         N10870         103           84210         71         634EL-B.C.OEM         15         7717N         31         N10870         103           85040         72         6351EL         14         771N.OEM         31         N10873         103           855PP						ML-005WW-STC		SPLR-1	92
34122B         78         6153SPP-75         19         7715CRN         31         N10863DW         103           34122S         78         6153SPPW         19         7715CRN.OEM         31         N10864         102           34124B         78         6153SPPX         36         7715CRNX         36         N10864DW         103           34124S         78         6343EL-B         14         7715CRNXPK         36         N10866         103           34126B         78         6343EL-BX         36         7715ELN.OEM         31         N10867         103           34126S         78         6344EL-B.NT         15         7717N         31         N10870         103           34210         71         6344EL-B.CR.OEM         15         7717N         31         N10870         103           355010         72         6351EL-B         14         771N.OEM         31         N10873         103           355NPP         19         6351EL-B         14         778CR         34         N10963         102           36110         70         6353EL-B         15         7879CR-FI         34         N10963         102           361611 <td>78</td> <td>6153SPP</td> <td>19</td> <td>76180</td> <td>72</td> <td>ML-005WW/DSP</td> <td>95</td> <td>SPLR-2</td> <td>92</td>	78	6153SPP	19	76180	72	ML-005WW/DSP	95	SPLR-2	92
84122S         78         6153SPPW         19         7715CRN.OEM         31         N10864         102           84124B         78         6153SPPX         36         7715CRNX         36         N10864DW         103           84124S         78         6343EL-B         14         7715CRNXPK         36         N10866         103           84126B         78         6343EL-BX         36         7715ELN         31         N10867         103           84126S         78         6344EL-B.NT         15         7715ELN.OEM         31         N10869         103           84210         71         6344EL-B.CR.OEM         15         7717N         31         N10870         103           85010         72         6351EL         14         7717N.OEM         31         N10873         103           855040         72         6351EL-B         14         7788CR         34         N10963         102           836110         70         6353EL-B         15         7879CR-FI         34         N10964         102           836111         70         6353EL-B         15         7879CR-FI         34         N10964         102           836180 <td>78</td> <td>6153SPP-25</td> <td>19</td> <td>76190</td> <td>72</td> <td>N10863</td> <td>102</td> <td>SPLR-3</td> <td>92</td>	78	6153SPP-25	19	76190	72	N10863	102	SPLR-3	92
34124B         78         6153SPPX         36         7715CRNX         36         N10864DW         103           34124S         78         6343EL-B         14         7715CRNXPK         36         N10866         103           34126B         78         6343EL-BX         36         7715ELN         31         N10867         103           34126S         78         6344EL-B.NT         15         7715ELN.OEM         31         N10869         103           34210         71         6344EL-BCR.OEM         15         7717N         31         N10870         103           355010         72         6351EL         14         7717N.OEM         31         N10873         103           355040         72         6351EL-B         14         7788CR         34         N10873         103           355PP         19         6351EL-BX         36         7879CR         34         N10963         102           36110         70         6353EL-B         15         789CR-FI.OEM         34         N20020         101           36161         70         6353EL-B.GRAY         15         82012         67         N20030         101           36181	78	6153SPP-75	19	7715CRN	31	N10863DW	103	STRAP	21
84124S         78         6343EL-B         14         7715CRNXPK         36         N10866         103           84126B         78         6343EL-BX         36         7715ELN         31         N10867         103           84126S         78         6344EL-B.NT         15         7715ELN.OEM         31         N10869         103           84210         71         634EL-BCR.OEM         15         7717N         31         N10870         103           85010         72         6351EL         14         7717N.OEM         31         N10873         103           85040         72         6351EL-B         14         7788CR         34         N10874         103           85SPP         19         6351EL-BX         36         7879CR         34         N10963         102           86110         70         6353EL         15         7879CR-FI.OEM         34         N10964         102           86161         70         6353EL-B.BLACK.OEM         15         82012         67         N20030         101           86180         70         6353EL-B.GRAY         15         82081         67         N20803CAP         100           86181 <td>78</td> <td>6153SPPW</td> <td>19</td> <td>7715CRN.OEM</td> <td>31</td> <td>N10864</td> <td>102</td> <td>TV6444</td> <td>17</td>	78	6153SPPW	19	7715CRN.OEM	31	N10864	102	TV6444	17
34126B         78         6343EL-BX         36         7715ELN         31         N10867         103           34126S         78         6344EL-B.NT         15         7715ELN.OEM         31         N10869         103           34210         71         6344EL-BCR.OEM         15         7717N         31         N10870         103           35010         72         6351EL         14         7717N.OEM         31         N10873         103           35040         72         6351EL-B         14         7788CR         34         N10874         103           355PP         19         6351EL-BX         36         7879CR         34         N10963         102           36110         70         6353EL         15         7879CR-FI         34         N10964         102           36111         70         6353EL-B         15         7879CR-FI.OEM         34         N10964         102           36161         70         6353EL-B.BLACK.OEM         15         82012         67         N20030         101           36180         70         6353EL-B.GRAY         15         82081         67         N20803CAP         100           367100 <td>78</td> <td>6153SPPX</td> <td>36</td> <td>7715CRNX</td> <td>36</td> <td>N10864DW</td> <td>103</td> <td>TV6574</td> <td>17</td>	78	6153SPPX	36	7715CRNX	36	N10864DW	103	TV6574	17
34126S         78         6344EL-B.NT         15         7715ELN.OEM         31         N10869         103           34210         71         6344EL-BCR.OEM         15         7717N         31         N10870         103           35010         72         6351EL         14         7717N.OEM         31         N10873         103           35040         72         6351EL-B         14         7788CR         34         N10874         103           35SPP         19         6351EL-BX         36         7879CR         34         N10963         102           36110         70         6353EL-BX         36         7879CR-FI         34         N10964         102           36111         70         6353EL-B         15         7879CR-FI.OEM         34         N20020         101           361611         70         6353EL-B.BLACK.OEM         15         82012         67         N20030         101           36180         70         6353EL-B.BLACK.OEM         15         82081         67         N20790         100           36181         70         6353EL-B.OEM         15         82082         67         N20803CAP         100           3	78	6343EL-B	14	7715CRNXPK	36	N10866	103	TV6592	17
84126S         78         6344EL-B.NT         15         7715ELN.OEM         31         N10869         103           84210         71         6344EL-BCR.OEM         15         7717N         31         N10870         103           85010         72         6351EL         14         7717N.OEM         31         N10873         103           85040         72         6351EL-B         14         7788CR         34         N10874         103           85SPP         19         6351EL-BX         36         7879CR         34         N10963         102           86110         70         6353EL         15         7879CR-FI         34         N10964         102           86111         70         6353EL-B         15         7879CR-FI.OEM         34         N20020         101           86161         70         6353EL-B.BLACK.OEM         15         82012         67         N20030         101           86180         70         6353EL-B.BLACK.OEM         15         82081         67         N20790         100           86181         70         6353EL-B.GRAY         15         82082         67         N20803CAP         100           8671	78	6343EL-BX	36	7715ELN	31	N10867	103	TV6592.OEM	17
84210     71     6344EL-BCR.OEM     15     7717N     31     N10870     103       85010     72     6351EL     14     7717N.OEM     31     N10873     103       85040     72     6351EL-B     14     7788CR     34     N10874     103       85SPP     19     6351EL-BX     36     7879CR     34     N10963     102       86110     70     6353EL     15     7879CR-FI     34     N10964     102       86111     70     6353EL-B     15     7879CR-FI.OEM     34     N20020     101       86161     70     6353EL-B.BLACK.OEM     15     82012     67     N20030     101       86180     70     6353EL-B.GRAY     15     82081     67     N20790     100       86181     70     6353EL-B.OEM     15     82082     67     N20803CAP     100       87100     70     6353ELCB     15     82182     67     N20803RING     100       87110     70     6353RCDKITIGN.OEM     16     82212     67     N20803S     100       87111     70     6360CRN     30     83011     69     N20804CAP     100       87180     70     6360CRNX		6344EL-B.NT	15	7715ELN.OEM	31	N10869		TV97	20
85010         72         6351EL         14         7717N.OEM         31         N10873         103           85040         72         6351EL-B         14         7788CR         34         N10874         103           85SPP         19         6351EL-BX         36         7879CR         34         N10963         102           86110         70         6353EL         15         7879CR-FI         34         N10964         102           86111         70         6353EL-B         15         7879CR-FI.OEM         34         N20020         101           86161         70         6353EL-B.BLACK.OEM         15         82012         67         N20030         101           86180         70         6353EL-B.GRAY         15         82081         67         N20790         100           86181         70         6353EL-B.OEM         15         82082         67         N20803CAP         100           87100         70         6353ELCB         15         82182         67         N20803RING         100           87110         70         6350CRN         30         82312         67         N20803S         100           87111 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>TV97.OEM</td><td>20</td></td<>								TV97.OEM	20
85040         72         6351EL-B         14         7788CR         34         N10874         103           85SPP         19         6351EL-BX         36         7879CR         34         N10963         102           36110         70         6353EL         15         7879CR-FI         34         N10964         102           36111         70         6353EL-B         15         7879CR-FI.OEM         34         N20020         101           36161         70         6353EL-B.BLACK.OEM         15         82012         67         N20030         101           36180         70         6353EL-B.GRAY         15         82081         67         N20790         100           36181         70         6353EL-B.OEM         15         82082         67         N20803CAP         100           36181         70         6353ELCB         15         82182         67         N20803RING         100           37110         70         6353RCDKITIGN.OEM         16         82212         67         N20803S         100           37111         70         6360CRN         30         83011         69         N20804CAP         100           37180								TV99-25	20
85SPP         19         6351EL-BX         36         7879CR         34         N10963         102           86110         70         6353EL         15         7879CR-FI         34         N10964         102           86111         70         6353EL-B         15         7879CR-FI.OEM         34         N20020         101           86161         70         6353EL-B.BLACK.OEM         15         82012         67         N20030         101           86180         70         6353EL-B.GRAY         15         82081         67         N20790         100           86181         70         6353EL-B.OEM         15         82082         67         N20803CAP         100           871100         70         6353ELCB         15         82182         67         N20803RING         100           871101         70         6353RCDKITIGN.OEM         16         82212         67         N20803S         100           87111         70         6360CRN         30         82312         67         N20803W         100           87161         70         6360CRN.OEM         30         83011         69         N20804CAP         100           87180 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>TV99W</td> <td>20</td>								TV99W	20
36110         70         6353EL         15         7879CR-FI         34         N10964         102           36111         70         6353EL-B         15         7879CR-FI.OEM         34         N20020         101           36161         70         6353EL-B.BLACK.OEM         15         82012         67         N20030         101           36180         70         6353EL-B.GRAY         15         82081         67         N20790         100           36181         70         6353EL-B.OEM         15         82082         67         N20803CAP         100           37100         70         6353ELCB         15         82182         67         N20803RING         100           37110         70         6353RCDKITIGN.OEM         16         82212         67         N20803S         100           37111         70         6360CRN         30         82312         67         N20803W         100           37161         70         6360CRN.OEM         30         83011         69         N20804CAP         100           37180         70         6360CRNX         36         83012         69         N20804S         100           37181								TVHD	20
36111         70         6353EL-B         15         7879CR-FLOEM         34         N20020         101           36161         70         6353EL-B.BLACK.OEM         15         82012         67         N20030         101           36180         70         6353EL-B.GRAY         15         82081         67         N20790         100           36181         70         6353EL-B.OEM         15         82082         67         N20803CAP         100           37100         70         6353ELCB         15         82182         67         N20803RING         100           37110         70         6353RCDKITIGN.OEM         16         82212         67         N20803S         100           37111         70         6360CRN         30         82312         67         N20803W         100           37161         70         6360CRN.OEM         30         83011         69         N20804CAP         100           37180         70         6360CRNX         36         83012         69         N20804FING         100           37181         70         6360CRNY         36         83081         69         N20804S         100           37200 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>94</td>									94
36161         70         6353EL-B.BLACK.OEM         15         82012         67         N20030         101           36180         70         6353EL-B.GRAY         15         82081         67         N20790         100           36181         70         6353EL-B.OEM         15         82082         67         N20803CAP         100           37100         70         6353ELCB         15         82182         67         N20803RING         100           37110         70         6350CRN         30         82312         67         N20803S         100           37111         70         6360CRN         30         82312         67         N20803W         100           37161         70         6360CRN.OEM         30         83011         69         N20804CAP         100           37180         70         6360CRNX         36         83012         69         N20804RING         100           37181         70         6360CRNXPK         36         83081         69         N20804S         100           37200         70         6361CRN         30         83082         69         N20804W         100           38000         7								U-3605	
36180         70         6353EL-B.GRAY         15         82081         67         N20790         100           36181         70         6353EL-B.OEM         15         82082         67         N20803CAP         100           367100         70         6353ELCB         15         82182         67         N20803RING         100           367111         70         6353RCDKITIGN.OEM         16         82212         67         N20803S         100           37111         70         6360CRN         30         82312         67         N20803W         100           37161         70         6360CRN.OEM         30         83011         69         N20804CAP         100           367180         70         6360CRNX         36         83012         69         N20804RING         100           37181         70         6360CRNXPK         36         83081         69         N20804S         100           37200         70         6361CRN         30         83082         69         N20804W         100           38000         71         6364CRN         30         83111         69         N20890         100								U-3606	94
36181     70     6353EL-B.OEM     15     82082     67     N20803CAP     100       37100     70     6353ELCB     15     82182     67     N20803RING     100       37110     70     6353RCDKITIGN.OEM     16     82212     67     N20803S     100       37111     70     6360CRN     30     82312     67     N20803W     100       37161     70     6360CRN.OEM     30     83011     69     N20804CAP     100       37180     70     6360CRNX     36     83012     69     N20804RING     100       37200     70     6361CRN     30     83081     69     N20804W     100       38000     71     6364CRN     30     83111     69     N20809     100								Y30-2-30	26
87100         70         6353ELCB         15         82182         67         N20803RING         100           87110         70         6353RCDKITIGN.OEM         16         82212         67         N20803S         100           87111         70         6360CRN         30         82312         67         N20803W         100           87161         70         6360CRN.OEM         30         83011         69         N20804CAP         100           87180         70         6360CRNX         36         83012         69         N20804RING         100           87181         70         6360CRNXPK         36         83081         69         N20804S         100           87200         70         6361CRN         30         83082         69         N20804W         100           88000         71         6364CRN         30         83111         69         N20890         100								Y503-2-30	26
87110     70     6353RCDKITIGN.OEM     16     82212     67     N20803S     100       87111     70     6360CRN     30     82312     67     N20803W     100       87161     70     6360CRN.OEM     30     83011     69     N20804CAP     100       87180     70     6360CRNX     36     83012     69     N20804RING     100       87181     70     6360CRNXPK     36     83081     69     N20804S     100       87200     70     6361CRN     30     83082     69     N20804W     100       88000     71     6364CRN     30     83111     69     N20890     100								Y504-2-30	26
87111     70     6360CRN     30     82312     67     N20803W     100       87161     70     6360CRN.OEM     30     83011     69     N20804CAP     100       87180     70     6360CRNX     36     83012     69     N20804RING     100       87181     70     6360CRNXPK     36     83081     69     N20804S     100       87200     70     6361CRN     30     83082     69     N20804W     100       88000     71     6364CRN     30     83111     69     N20890     100							100	Y504-2-503	26
37161     70     6360CRN.OEM     30     83011     69     N20804CAP     100       37180     70     6360CRNX     36     83012     69     N20804RING     100       37181     70     6360CRNXPK     36     83081     69     N20804S     100       37200     70     6361CRN     30     83082     69     N20804W     100       38000     71     6364CRN     30     83111     69     N20890     100		6353RCDKITIGN.OEM	16	82212	67	N20803S	100	Y504-2-504	26
87180     70     6360CRNX     36     83012     69     N20804RING     100       87181     70     6360CRNXPK     36     83081     69     N20804S     100       87200     70     6361CRN     30     83082     69     N20804W     100       88000     71     6364CRN     30     83111     69     N20890     100	70	6360CRN	30	82312	67	N20803W	100		
87180     70     6360CRNX     36     83012     69     N20804RING     100       87181     70     6360CRNXPK     36     83081     69     N20804S     100       87200     70     6361CRN     30     83082     69     N20804W     100       88000     71     6364CRN     30     83111     69     N20890     100	70	6360CRN.OEM	30	83011	69	N20804CAP	100		
87181     70     6360CRNXPK     36     83081     69     N20804S     100       87200     70     6361CRN     30     83082     69     N20804W     100       88000     71     6364CRN     30     83111     69     N20890     100									
87200 70 6361CRN 30 83082 69 N20804W 100 88000 71 6364CRN 30 83111 69 N20890 100									
38000 71 6364CRN 30 83111 69 N20890 100									
28001 71 6264CDN OFM 20 02412 CO N20040 404	71								
38005 71 6365CRN 30 83181 69 OEM# 20 38010 71 6365CRN.OEM 30 83182 69 P-11D03 60									

# Ingress Protection (IP) Ratings Guide

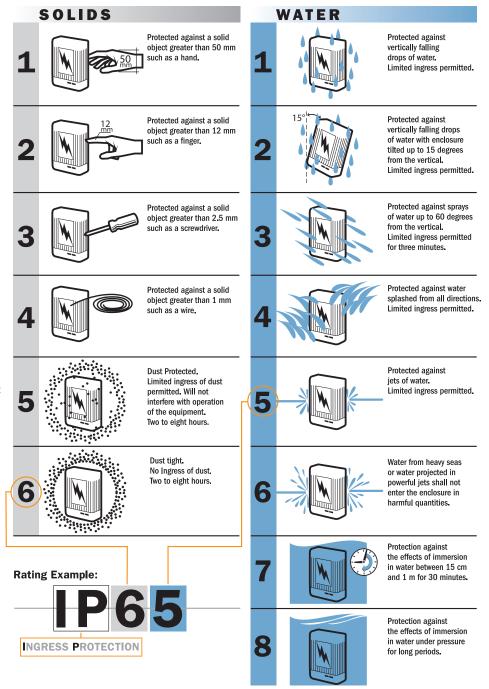
#### Example:

An IP65 rating can be determined using the adjacent table and example:

- The first number of the rating example,
  6, in the gray column means the enclosure is dust tight
- The second number of the rating example,
  5, in the blue column means the enclosure is protected against jets of water

The IP rating system was established by the International Electrotechnical Commission (IEC), an organization for international standards and conformity assessment. The IEC collaborates closely with the International Organization for Standardization (ISO). A complete description of the IP ratings and associated tests is found in IEC Publication 529. Although these ratings were initially developed as a way to classify enclosures, they now provide a convenient, practical way to compare levels of sealing. Many electrical products have an Ingress Protection (IP) rating which identifies the environmental factors needing consideration prior to the product's installation.

This is important when deciding when to mount products in a dry and clean environment versus a wet and/or dusty environment. The IP rating indicates the degree of protection provided. The numbers following IP represent levels of sealing and can range from no protection to full protection against dust and water. The table provides a description of the protection at each level.









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