# **SERVICE & MAINTENANCE**

#### **BATTERY REPLACEMENT**

#### TOOLS AND RESOURCES REQUIRED >

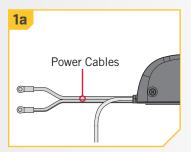
#1 Phillips Screwdriver

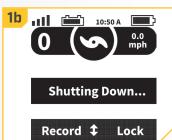
#### INSTALLATION >

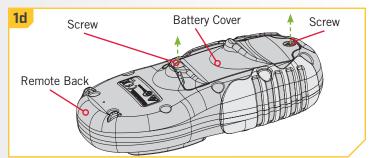
- 1
- a. Disconnect the Motor from the battery or make sure that the Remote is out of range from the receiver before replacing the remote batteries.
- b. Power the Remote off.
- Make sure hands are clean, dry and static free.
   Discharge any static electricity by touching a metal object that is grounded.
- d. Using a #1 Phillips Screwdriver, remove the two screws holding the Battery Cover in place.

# **⚠ CAUTION**

Disconnect the Motor from the battery, or move the Remote out of range from the receiver before replacing the Remote batteries. Discharge static electricity as is can cause damage to the circuit board.



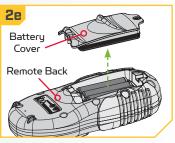


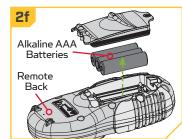


- 2
- e. Lift the Battery Cover from the Remote to gain access to the batteries.
- f. Replace the three Alkaline AAA batteries.

# **△ CAUTION**

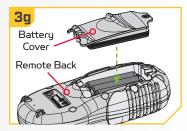
It is recommended to use Alkaline AAA batteries.

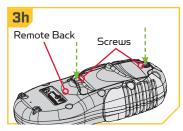




- 3
- g. Make sure the rubber seal on the Battery Cover is seated and replace the cover on the back of the remote.
- h. Replace the two screws and tighten them with a #1 Phillips Screwdriver.

**NOTICE:** Replace the batteries once a year.





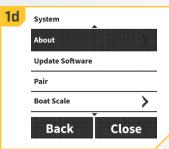
#### **i-PILOT SOFTWARE**

#### CHECKING & UPDATING SOFTWARE >

### Check Remote and Controller Software Version

- 1
- a. Press the Home 6 button.
- Use the Menu Up and Menu Down buttons to find the System menu at the bottom of the display
- c. Use the Right Softkey to select the System menu.
- d. Use the Menu Up and Menu Down buttons to find the About option. Use the Ok button to select it.
- e. The display screen will show the software version for the i-Pilot remote and controller.
- f. Press the Right Softkey or the Home to button to exit the menu.









## Update i-Pilot Remote Software

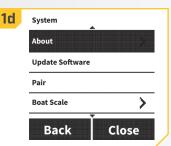


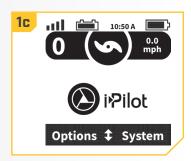
a. Be sure that the software in the Controller is updated before updating the remote. Please see the "i-Pilot App" section of this manual on how to update the Controller.

**NOTICE:** The software update for the remote will come from the Controller. Make sure the remote stays within range of the Control Head, which contains the Controller during the update process.

- b. Once the Controller is up-to-date, press the Home **a** button.
- c. Use the Menu Up and Menu Down buttons to find the System menu at the bottom of the display screen.
- d. Use the Right Softkey to select the System menu.







2

- c. Use the Menu Up and Menu Down buttons to find the Update Software option. Use the Ok button to select it.
- d. If the software is up-to-date, the display screen will read "No New Software Found."
- e. If the software is not up-to-date, the display screen will read "New Software Available" and will list the current version installed and the new version that can be installed.

NOTICE: After selecting the Update Software option on the display screen, take note of the software version that the remote will be updated to. Noting the software version will be helpful to confirm that the software successfully updated after the remote cycles through the update.

- h. Use the Left Softkey d to select Update.
- i. Once the software has been downloaded, the display screen will reboot and the remote will power up and return to the home screen. To confirm that the software successfully updated, follow the steps in the "To Check Remote and Controller Software Version" section of this manual.









#### PAIRING A REMOTE WITH A CONTROLLER

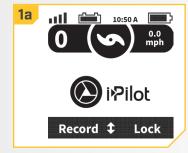
#### PAIRING A REMOTE >

An i-Pilot controller may pair up to 3 remotes. These three remotes can be a combination is standard i-Pilot remotes and Micro remotes. Any additional remotes can be paired using the following steps. Once the maximum number of remotes have been paired, the controller will start replacing a new remote with the oldest paired remote in memory.

1

- a. Press the Home button.
- Use the Menu Up and Menu Down buttons to find the System menu at the bottom of the display screen.

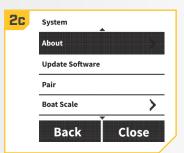
**NOTICE:** Make sure the remote stays within range of the Control Head during the pairing process.

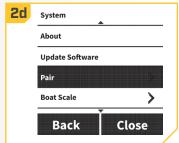


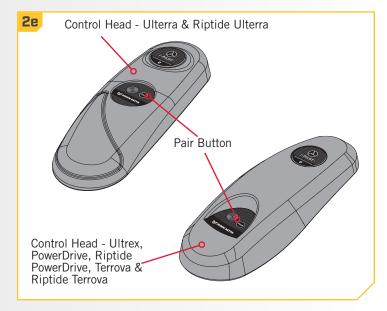


2

- c. Use the Right Softkey to select the System menu.
- d. Use the Menu Up and Menu Down buttons to find the Pair option.
- e. Before selecting the Pair Option, locate the Pair Button on the top of the Control Head. Press and hold the Pair button. A consistent tone will be emitted from the Control Head.
- f. On the remote, use the Ok button to select the Pair option from the System menu. The Remote will scan for the motor. Once successfully paired, 3 longer beeps will be emitted from the Control Head and the remote will be paired.









#### TALON CONTROL

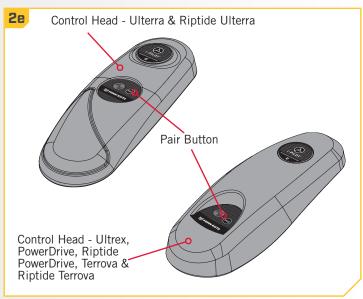
#### PAIRING, CHECKING & UPDATING SOFTWARE >

## Pair i-Pilot to a Single Talon

The i-Pilot system is paired to the Talon using the Control Head and the Pair Buttons on the Talon Indicator Panel.

- 1
- a. Retract the anchor on the Talon by pressing the Up button.
- b. Once the Talon is fully retracted, press and hold the Up ▲ button and the Down ▼ button simultaneously on the Indicator Panel. The Depth Indication LEDs will begin to flash blue. Once the LEDs are flashing, release the buttons on the Indicator Panel.
- c. The Talon will go into Pairing Mode for 20 seconds.
- d. Locate the Pair Button on the top of the Control Head. Press and hold the Pair button. A consistent tone will be emitted from the Control Head.
- e. The Control Head will scan for the Talon. Once successfully paired, 3 longer beeps will be emitted from the Control Head and the Talon will be paired.
- f. If 20 seconds pass while in Pairing Mode and they do not successfully pair, a chirp from the Talon will sound signaling that the Pairing has timed out.
- g. If the Pair is unsuccessful, repeat the process.





## > Pairing i-Pilot with Two Talons

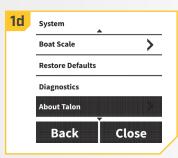
In order for the i-Pilot system to be paired to two Talons, the Talons first need to be paired together. To learn how to pair two Talons together, read the "Pairing Two Talons and Programming the Mounting Location" section of the Talon Manual. Once the Talons are paired together, follow the directions for "Pairing i-Pilot to a Single Talon". Only one Talon needs to be paired with the i-Pilot system.

#### Check Talon Software Version



- a. Press the Home @ button.
- Use the Menu Up and Menu Down buttons to find the System menu at the bottom of the display screen.
- c. Use the Right Softkey to select the System
- d. Use the Menu Up and Menu Down buttons to find the About Talon option. Use the Ok button to select it.
- e. The display screen will show information about the paired Talon, including Talon length, Port or Starboard location and Talon Software Version.
- f. Press the Right Softkey or the Home to button to exit the menu.









# Forget the Talon(s) on the i-Pilot System

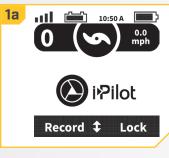


- a. Press the Home 6 button.
- Use the Menu Up and Menu Down buttons to find the System menu at the bottom of the display screen.
- c. Use the Right Softkey to select the System menu.
- d. Use the Menu Up and Menu Down buttons to find the Forget Talon option. Use the Ok button to select it. A warning message will appear about the Pair being forgotten.

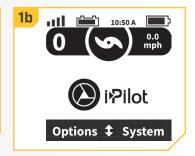


You will need to pair with your BT Talon if you want to reconnect this device.

e. Select the Left Softkey d to Forget the Talon(s).







Warning: You will need to pair with your BT Talon if you want to reconnect this device.

Back Close

#### **GENERAL MAINTENANCE**

- Connect the motor to a power source to power up the control head before use.
- Check the remote batteries each time the remote is powered up.
- Inspect the Remote and Control Head before each use to make sure that they are not obstructed. Having a clear view from the Control Head to the sky and an unobstructed sight line between the Remote and Control Head will allow for proper communication.

- Keep the Control Head and Remote away from metal objects including aluminum. Metal objects will cause interference.
- Power down the Remote and disconnect the motor from a power source after each use.
- Verify that the Prop on the Trolling motor is unobstructed when running/ Obstructions can lead to interference and vibration of the compass in the Control Head.

#### TROUBLESHOOTING

- 1. The motor is making erratic steering corrections while in AutoPilot, Spot-Lock or Track to Start/End.
  - Be sure to keep all ferrous metallic objects away from the i-Pilot controller as they will have an impact on the built-in compass. Such objects include: anchors, metal framework, etc.
- 2. When a button on the remote is pressed the motor doesn't always respond.
  - Check if the low battery indicator is on. If so, replace the remote's battery. Check for large obstructions between the remote and the motor.
- 3. I press a button on the remote and nothing happens.
  - Make sure that the remote is powered on. Only pressing the OK button will power the remote "on".
  - Could be a dead battery in the remote. If the battery was just replaced, open the remote case and verify that all the internal components were properly reinstalled.
  - If the display shows the keypad is locked, unlock the keypad.
- 4. i-Pilot won't let me turn on certain features like: Advanced AutoPilot, Record, GO TO, Cruise Control or Spot-Lock.
  - Verify that the GPS Signal Strength icon on the LCD shows at least one bar. If there are no bars, i-Pilot will not allow these GPS-based features to be enabled.
- 5. The remote LCD backlighting will not come on.
  - Check if the low battery indicator icon is on. Backlighting is disabled when a low battery level is detected. Replace the battery.
  - Make sure the backlight is adjusted to the desired brightness. See the "To Adjust the Backlight Brightness" section of this manual for details.

**NOTICE:** For all other malfunctions, visit an Authorized Service Center. You can search for an Authorized Service Center in your area by visiting our Authorized Service page, found on-line at minnkotamotors.com, or by calling our customer service number at 800-227-6433.

#### FOR FURTHER TROUBLESHOOTING AND REPAIR

We offer several options to help you troubleshoot and/or repair your product. Please read through the options listed below.



### **Buy Parts Online**

You can buy parts on-line directly from our website at minnkotamotors.com. Orders confirmed by 12 Noon Central Time, with Overnight Shipping selected, should ship the same business day if the parts are in stock. All other orders should ship within the next 3 business days, depending on the shipment method chosen, and if the parts are in stock.



## **Frequently Asked Questions**

We have FAQs available on our website to help answer all of your Minn Kota questions. Visit minnkotamotors.com and click on "Frequently Asked Questions" to find an answer to your question.



# Call Us (for U.S. and Canada)

Our consumer service representatives are available Monday – Friday between 7:00 a.m. – 4:30 p.m. CST at 800-227-6433. If you are calling to order parts, please have the 11-character serial number from your product, specific part numbers, and credit card information available. This will help expedite your call and allow us to provide you with the best consumer service possible. You can reference the parts list located in your manual to identify the specific part numbers.



#### **Email Us**

You can email our consumer service department with questions regarding your Minn Kota products. To email your question, visit minnkotamotors.com and click on "Support".



### **Authorized Service Centers**

Minn Kota has over 800 authorized service providers in the United States and Canada where you can purchase parts or get your products repaired. Please visit our Authorized Service Center page on our website to locate a service provider in your area.



# **COMPLIANCE STATEMENTS**

#### **ENVIRONMENTAL COMPLIANCE STATEMENT**

It is the intention of JOME to be a responsible corporate citizen, operating in compliance with known and applicable environmental regulations, and a good neighbor in the communities where we make or sell our products.

#### WEEE DIRECTIVE

EU Directive 2002/96/EC "Waste of Electrical and Electronic Equipment Directive (WEEE)" impacts most distributors, sellers, and manufacturers of consumer electronics in the European Union. The WEEE Directive requires the producer of consumer electronics to take responsibility for the management of waste from their products to achieve environmentally responsible disposal during the product life cycle.

WEEE compliance may not be required in your location for electrical & electronic equipment (EEE), nor may it be required for EEE designed and intended as fixed or temporary installation in transportation vehicles such as automobiles, aircraft, and boats. In some European Union member states, these vehicles are considered outside of the scope of the Directive, and EEE for those applications can be considered excluded from the WEEE Directive requirement.

This symbol (WEEE wheelie bin) on product indicates the product must not be disposed of with other household refuse. It must be disposed of and collected for recycling and recovery of waste EEE. Johnson Outdoors Inc. will mark all EEE products in accordance with the WEEE Directive. It is our goal to comply in the collection, treatment, recovery, and environmentally sound disposal of those products; however, these requirements do vary within European Union member states. For more information about where you should dispose of your waste equipment for recycling and recovery and/or your European Union member state requirements, please contact your dealer or distributor from which your product was purchased.

#### DISPOSAL

Minn Kota motors are not subject to the disposal regulations EAG-VO (electric devices directive) that implements the WEEE directive. Nevertheless never dispose of your Minn Kota motor in a garbage bin but at the proper place of collection of your local town council.

Never dispose of battery in a garbage bin. Comply with the disposal directions of the manufacturer or his representative and dispose of them at the proper place of collection of your local town council.

#### REGULATORY COMPLIANCE INFORMATION

i-Pilot System: 2994060, 2994051, 2994061, 2994052, 2994162, 2994159

#### CONTROLLER

• Contains IC: 216Q-1316 • Contains FCC ID: T7V1316

#### REMOTE

• Contains IC: 5123A-BGTBLE121LR Contains FCC ID: QOQBLE121LR













#### **FCC COMPLIANCE**

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions:

- 1. This device may not cause harmful interference.
- 2. This device must accept any interference that may be received, including interference that may cause undesired operation.

Changes or modifications not expressly approved by Johnson Outdoors Marine Electronics, Inc. could void the user's authority to operate this equipment.

**NOTICE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### INDUSTRY CANADA COMPLIANCE

This product meets the applicable Industry Canada technical specifications. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

Changes or modifications not expressly approved by Johnson Outdoors Marine Electronics, Inc. could void the user's authority to operate this equipment.

#### RADIO OPERATION

#### CONTROLLER

- Frequency band: 2402 MHz to 2480 MHz
- Maximum RF power transmitted: +10 dBm

#### REMOTE

- Frequency band: 2402 MHz to 2480 MHz
- Maximum RF power transmitted: +10 dBm

#### **TRADEMARKS**

Minn Kota®, Riptide®, i-Pilot®, AutoPilot™, CoPilot™, Link™, PowerDrive™, Terrova™, Ulterra™ are trademarked by or registered trademarks of Johnson Outdoors Marine Electronics, Inc.

The Bluetooth® word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Johnson Outdoors Inc is under license. Other trademarks and trade names are those of their respective owners.

#### CE MASTER USER MANUAL (FOR CE CERTIFIED MODELS)

# PARTS DIAGRAM & PARTS LIST

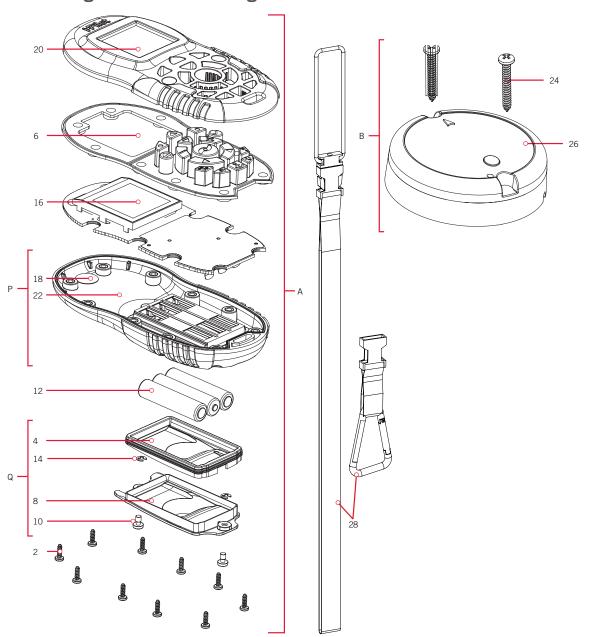
#### i-PILOT

#### POWERDRIVE, RIPTIDE POWERDRIVE, TERROVA, RIPTIDE TERROVA, ULTERRA, RIPTIDE ULTERRA & ULTREX

The parts diagram and parts list provides Minn Kota® WEEE compliance disassembly instructions. For more information about where you should dispose of your waste equipment for recycling and recovery and/or your European Union member state requirements, please contact your dealer or distributor from which your product was purchased. Tools required, but not limited to: flat head screwdriver, Phillips screwdriver, socket set, pliers, wire cutters.

i-PILOT REMOTE & HEADING SENSOR >

# > Remote & Heading Sensor Parts Diagram



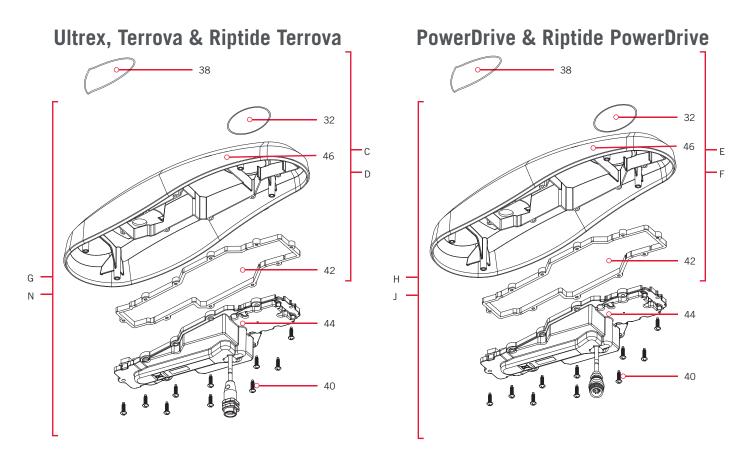
# > Remote & Heading Sensor Parts List

Assembly	Part #	Description	Quantity
А	2994075	REMOTE ASY, IPILOT	1
В	2996400	HEADING SENSOR ASSEMBLY	1
Р	2882557	CASE BTM, WINDOW ASM & VENT DCL	1
Q	2886423	BATTERY DOOR, SEAL, SCREW KIT	1
Item	Part #	Description	Quantity
2	2373443	SCREW-2.5MMx8MM DELTA PT TORX	10
4	2374647	SEAL, BATTERY DOOR, IPILOT 1.6	1
6	2375134	KEYPAD, iPILOT 1.6 REMOTE	1
8	2376423	DOOR, BATTERY, iPILOT 1.6	1
10	2383442	SCREW-3MM X .5 PPH MACHINE	2
12	×	BATTERY AAA, iPILOT 1.6	3
14	2393000	E-CLIP, 3MM, SS	2
16	*	PCB ASY, iPILOT 1.6 REMOTE	1
18	*	DECAL, VENT PATCH, 1/2" OD	1
20	2992552	CASE TOP w/WINDOW ASSY	1
22	×	CASE BTTM w/WINDOW ASSY	1
24	2393400	SCREW-#8-18X1-1/2 PPH TY AB SS *STAINLESS STEEL*	2
26	*	HEADING SENSOR	1
28	2390800	LANYARD, REMOTE W/ CARABEENER	1

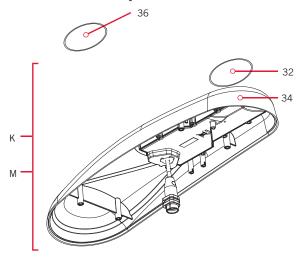
<sup>\*</sup> This part is included in an assembly and cannot be ordered individually.

i-PILOT CONTROL HEAD >

# > Control Head Parts Diagram



# **Ulterra & Riptide Ulterra**



## > Control Head Parts List

Assembly	Part #	Description	Quantity
С	2770233	COVER KIT, IPLT 1.6 TRV,ULTREX *TERROVA* *ULTREX* *FRESHWATER*	1
D	2770235	COVER KIT, IPLT 1.6 RT TERROVA *RIPTIDE TERROVA* *SALTWATER*	1
E	2770218	COVER KIT, IPLT 1.6 POWERDRIVE *POWERDRIVE* *FRESHWATER*	1
F	2770219	COVER KIT,IPLT 1.6 RT PWRDRIVE *RIPTIDE POWERDRIVE* *SALTWATER*	1
G	2774178	MOTOR KIT, IPLT 1.6 RT TERROVA *RIPTIDE TERROVA* *SALTWATER* *CONTROLLER* *NO REMOTE*	1
Н	2774125	MOTOR KIT, IPLT 1.6 POWERDRIVE *POWERDRIVE* *FRESHWATER* *CONTROLLER* *NO REMOTE*	1
J	2774126	MOTOR KIT,IP 1.6 RT POWERDRIVE *RIPTIDE POWERDRIVE* *SALTWATER* *CONTROLLER* *NO REMOTE*	1
K	2774119	MOTOR KIT, IPILOT 1.6 ULTERRA *ULTERRA* *FRESHWATER* *CONTROLLER* *NO REMOTE*	1
M	2774116	MOTOR KIT, IPLT 1.6 RT ULTERRA *RIPTIDE ULTERRA* *SALTWATER* *CONTROLLER* *NO REMOTE*	1
N	2774176	MOTOR KIT, IPLT 1.6 TRV,UTREX *ULTREX* *FRESHWATER* *CONTROLLER* *NO REMOTE*	1
Item	Part #	Description	Quantity
	2395545	DECAL, DOMED IPILOT FW *FRESHWATER* *ULTERRA* *I-PILOT* *POWERDRIVE* *ULTREX* *TERROVA*	1
32	2395546	DECAL, DOMED IPILOT SW *SALTWATER* *RIPTIDE ULTERRA* *I-PILOT* *RIPTIDE TERROVA* *RIPTIDE POWERDRIVE*	1
34	×	CTRL HEAD ASY, IPILOT 1.6 ULT *FRESHWATER* *ULTERRA*	1
34	×	CTRL HEAD ASY, IP 1.6 RT ULT *SALTWATER* *RIPTIDE ULTERRA*	1
36	2205534	DECAL-GENERIC, PUSH BTN TOP FW *FRESHWATER* *ULTERRA* *PUSH BUTTON*	1
30	2205535	DECAL-GENERIC, PUSH BTN TOP SW *SALTWATER* *RIPTIDE ULTERRA* *PUSH BUTTON*	1
38	2315730	DECAL-GENERIC, PUSH BTN TOP FW *TERROVA* *ULTREX* *POWERDRIVE* *FRESHWATER*	1
30	2315731	DECAL-GENERIC, PUSH BTN TOP SW *RIPTIDE TERROVA* *RIPTIDE POWERDRIVE* *SALTWATER*	1
40	2383473	SCREW-#6 X .5 BRASS HI-LO*FRESHWATER* *SALTWATER* *RIPTIDE TERROVA* *POWERDRIVE* *RIPTIDE POWERDRIVE* *TERROVA*	10
42	2376940	GASKET,COMP-GPS MODULE *FRESHWATER* *SALTWATER* *RIPTIDE TERROVA* *POWERDRIVE* *RIPTIDE POWERDRIVE* *TERROVA*	1
4.4	×	CTRL ASY, IPILOT 1.6 TER/UTX *SALTWATER* *RIPTIDE TERROVA* *FRESHWATER* *ULTREX* *TERROVA*	1
44	×	CTRL ASY, IPILOT 1.6 PD *FRESHWATER* *POWERDRIVE* *SALTWATER* *RIPTIDE POWERDRIVE*	1
	×	COVER,CTRL BOX IP, UTX, T2, V3 *FRESHWATER* *ULTREX* *TERROVA*	1
46	×	COVER,CTRL BOX IP, ST/T2,SP/V3 *RIPTIDE TERROVA* *SALTWATER*	1
	×	COVER,CTRL BOX IP, V3 PRINTED *FRESHWATER* *POWERDRIVE*	1
	×	COVER,CTRL BOX IP,RT/V3 PRINTD *RIPTIDE POWERDRIVE* *SALTWATER*	1

<sup>\*</sup> This part is included in an assembly and cannot be ordered individually.

# NOTES

# RECOMMENDED ACCESSORIES

#### ON-BOARD & PORTABLE BATTERY CHARGERS

**Stop buying new batteries and start taking care of the ones you've got.** Many chargers can actually damage your battery over time – creating shorter run times and shorter overall life. Digitally controlled Minn Kota chargers are designed to provide the fastest charge that protect and extend battery life.







### TALON SHALLOW WATER ANCHOR

**Introducing the all-new, sleek redesigned Talon.** Talon is the only shallow water anchor with up to 15' of anchoring depth, multiple anchoring modes, and control from the bow, transom, console, remote or mobile device.



#### BUILT-IN WORK LIGHT

Lets you tie lines and work from the transom any time of day or night. Includes both white and blue LED lights with three brightness settings.



#### BLUETOOTH® CONNECTIVITY

Lets you control Talon from your mobile device and easily update it. Also opens up communication to other control options.



#### UP TO 15' DEEP

Control more water and catch more fish with the first 15' shallow water anchor.



# MORE CONTROL OPTIONS

- Control Panel
- Wireless Remote
- Mobile App
- · Wireless Foot Switch
- Humminbird® Connectivity

ECN 38528

i-Pilot® &
 i-Pilot Link™ Remote



## MINN KOTA ACCESSORIES

We offer a wide variety of trolling motor accessories, including:

- 60-Amp Circuit Breaker
- Mounting Brackets
- Stabilizer Kits
- Extension Handles
- Battery Connectors
- Battery Boxes
- Quick Connect Plugs





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Minn Kota Consumer & Technical Service Johnson Outdoors Marine Electronics, Inc. PO Box 8129 Mankato, MN 56001 121 Power Drive Mankato, MN 56001 Phone (800) 227-6433 Fax (800) 527-4464



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