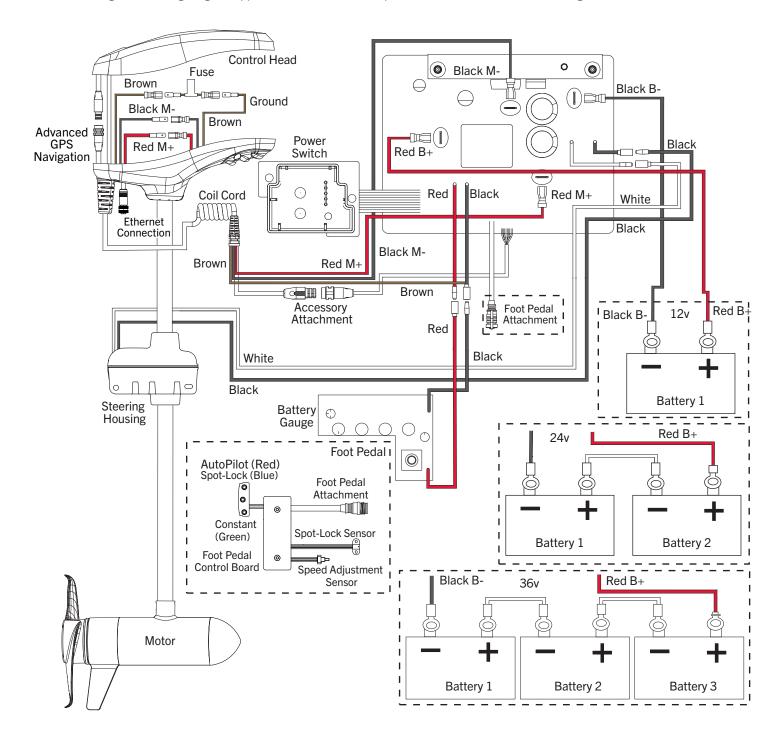
# **MOTOR WIRING DIAGRAM**

#### **TERROVA**

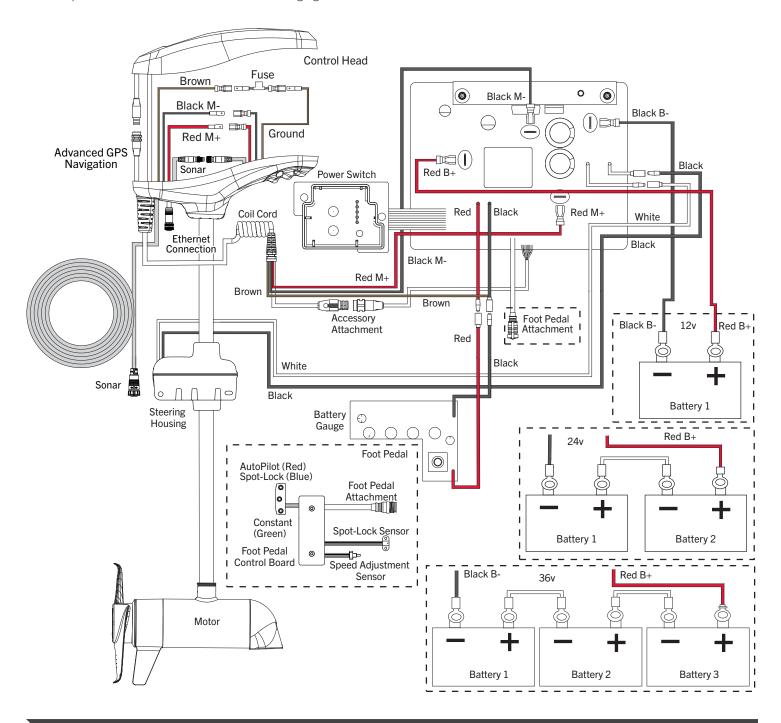
The following Motor Wiring Diagram applies to all Terrova models preinstalled with Advanced GPS Navigation.



**NOTICE:** This is a multi-voltage diagram. Double-check your motor's voltage for proper connections. Over-Current Protection Devices are not shown in this illustration.

#### TERROVA WITH ADVANCED GPS NAVIGATION AND SONAR

The following Motor Wiring Diagram applies to all Terrova models that come factory installed with Advanced GPS Navigation and either Dual Spectrum CHIRP or Built-in MEGA Down Imaging.

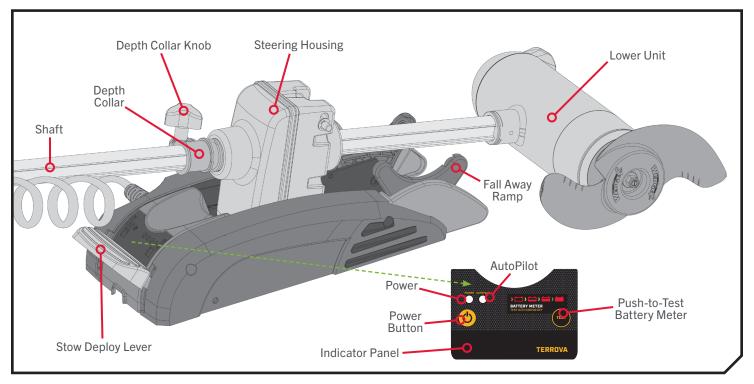


**NOTICE:** This is a multi-voltage diagram. Double-check your motor's voltage for proper connections. Over-Current Protection Devices are not shown in this illustration. This diagram is for reference only and is not to scale.

# **USING & ADJUSTING THE MOTOR**

#### **MOUNT FEATURES**

Become familiar with the features of the motor to maximize the capabilities this product offers.



## Depth Collar & Depth Collar Knob

The Depth Collar is located on the Shaft above the Steering Housing. It functions to hold the motor at the proper depth while deployed. It also functions to hold the Lower Unit in place when stowed while not in use and during transport. The Depth Collar Knob is used to loosen and tighten the Depth Collar so that it can slide up and down the motor shaft.

## > Fall Away Ramps

The Fall Away Ramps hold the Lower Unit when the Motor is stowed and rotate to release the Lower Unit as the unit is being deployed. When the Stow Deploy Lever is pressed it unlocks the position of the Fall Away Ramps and the Ramps rotate to guide the Lower Unit back onto the mount when the motor is stowed.

### Power Button

The Power button (b) is located on the Indicator Panel on the Mount. The Terrova must be manually powered "on" and "off." When the Motor is powered "on," the Power Indicator will be illuminated green . When the Motor is powered "off," the Power Indicator will not be illuminated

# **WARNING**

When the motor is being transported, it is important to place the Depth Collar snug against the Steering Housing and tighten. This provides a secure stow and holds the motor in place during transportation when it is subject to high levels of shock and vibration. Failure to secure the motor may result in injury or damage to the unit.

# **WARNING**

When stowing or deploying the motor, keep fingers clear of all hinge and pivot points and all moving parts.

**NOTICE:** Do not completely remove the Depth Collar Knob from the Depth Collar Assembly. Doing so allows a washershaped spacer to fall out of the Depth Collar. This spacer plays a key role in creating tension for the Depth Collar to clamp and function properly.

#### STOWING AND DEPLOYING THE MOTOR

# **△ CAUTION**

For safety reasons, disconnect the motor from the battery/batteries when the motor is not in use or while the battery/batteries are being charged. If the motor control is left on and the propeller rotation is blocked, severe motor damage can result.

#### AutoPilot

The AutoPilot Indicator is located on the Indicator Panel on the Mount. It is illuminated green when AutoPilot is engaged and it is not illuminated when AutoPilot is not engaged.

## Stow Deploy Lever

The Stow Deploy Lever is located at the top of the mount. The Stow Deploy Lever functions to unlatch the Fall Away Ramps which rotate to guide the Lower Unit. The Stow Deploy Lever is actuated by pressing it down.

#### STOWING AND DEPLOYING THE MOTOR

## > To Deploy the Motor

Loosen the Depth Collar then push firmly down on the Stow Deploy Lever. Slide the motor forward, out from the Fall Away Ramp. Lower the motor to the desired depth. Make sure it clicks into a secure, vertical position. Once at the desired depth, slide the Depth Collar against the Steering Housing and tighten.

#### > To Stow the Motor

Loosen the Depth Collar and depress the Stow Deploy Lever. Raise the motor by pulling up on the Shaft or Control Head. Pull the motor toward the stern until it rests securely on the Fall Away Ramp and the Fall Away Ramps captures the Lower Unit. Slide the Depth Collar down and secure it against the top of the Steering Housing to secure the motor in place and prevent accidental deployment.

#### PUSH-TO-TEST BATTERY METER

This motor is equipped with a Push-to-Test Battery Meter. The LED located on the Indicator Panel on the Mount of the motor. The Battery Meter provides an accurate display of the remaining charge in the battery. It is only accurate when the motor is off. The meter reads as follows:

- One light indicates recharge.
- Two lights indicate low charge.
- · Three lights indicate good charge.
- · Four lights indicate full charge.

# **WARNING**

When stowing or deploying the motor, keep fingers clear of all hinge and pivot points and all moving parts.

# **△ WARNING**

The Control Head will create a pinch point if the Depth Collar Knob is loosened and the Control Head slides to the top of the Depth Collar. Grasp the Shaft and prevent it from sliding all the way down to prevent the pinch point.

Practice proper ergonomics when stowing and deploying the motor to prevent injury.



# **WARNING**

Moving parts can cut or crush. Keep fingers clear of all moving parts.

#### ADJUSTING THE DEPTH OF THE MOTOR

#### MOTOR ADJUSTMENTS

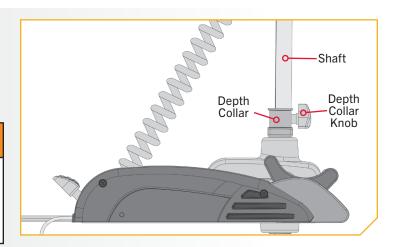
#### ADJUSTING THE DEPTH OF THE MOTOR

Once the boat is on the water, it may be necessary to adjust the Lower Unit up or down to achieve an optimum depth for motor performance. When setting the depth of the motor, be sure the top of the motor is submerged at least 12" below the surface of the water to avoid churning or agitation of surface water.

- a. With the motor in the deployed position, locate the Depth Collar on the Shaft above the Steering Housing.
- b. While holding the Shaft, loosen the Depth Collar Knob until the Shaft can slide up and down freely.

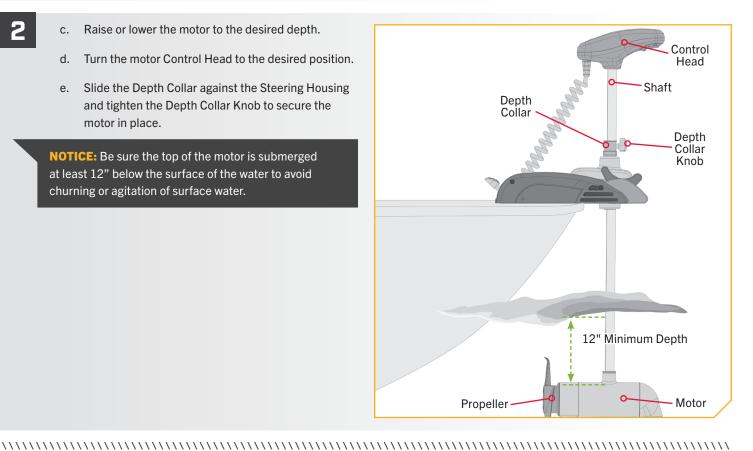
## WARNING

The Control Head will create a pinch point if the Depth Collar Knob is loosened and the Control Head slides to the top of the Depth Collar. Grasp the Shaft and prevent it from sliding all the way down to prevent the pinch point.



- Raise or lower the motor to the desired depth.
- d. Turn the motor Control Head to the desired position.
- e. Slide the Depth Collar against the Steering Housing and tighten the Depth Collar Knob to secure the motor in place.

NOTICE: Be sure the top of the motor is submerged at least 12" below the surface of the water to avoid churning or agitation of surface water.



#### ADJUSTING THE LOWER UNIT FOR A SECURE STOW

#### ADJUSTING THE LOWER UNIT FOR A SECURE STOW

When the Motor is stowed, the Lower Unit should rest on the Fall Away Ramps, a part of the Motor Mount. It is recommended to secure the motor using the following instructions to avoid damage to the motor and shaft from vibrations during transport.

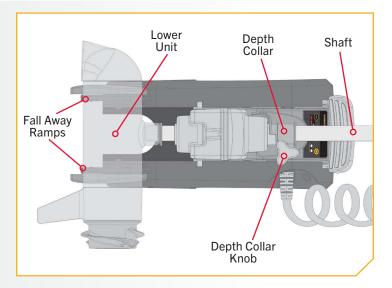
Before transporting the boat over water or land, stow the motor to determine where the Lower Unit rests on the Fall Away Ramps.

**NOTICE:** The correct positioning of the Lower Unit will place it directly on the Fall Away Ramps.

- b. If the Lower Unit does not sit on the Fall Away Ramps, deploy the motor, and stow it again.
- Be sure to press the Stow Deploy Lever and adjust the Motor to allow it to rest on the Fall Away Ramps.

# CAUTION

The Lower Unit should be placed on the Fall Away Ramps every time the motor is transported. If the Lower Unit is improperly placed, damage to the Lower Unit or Shaft will occur. Failure to follow the recommended placement for the Lower Unit will cause damage to the product and void your product warranty.



NOTICE: Slide the Depth Collar down and secure it against the top of the Steering Housing when stowed to secure the motor in place and prevent accidental deployment.

# **⚠ WARNING**

When the motor is stowed, the depth collar must be positioned against the steering housing and tightened in place with the knob to prevent accidental deployment, which may result in injury, or damage to the trolling motor, accessories, or boat.

## WARNING

When the motor is being transported, it is important to place the Depth Collar snug against the Steering Housing and tighten. This provides a secure stow and holds the motor in place during transportation when it is subject to high levels of shock and vibration. Failure to secure the motor may result in injury or damage to the unit.

#### **INSTALLING AN EXTERNAL TRANSDUCER**

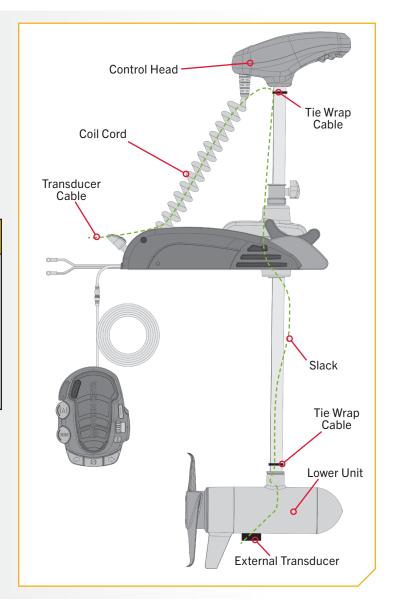
#### INSTALLING AN EXTERNAL TRANSDUCER

An external transducer is not included with your trolling motor. An external transducer can be installed onto motors that have Advanced GPS Navigation or motors that do not have a built-in transducer. Installing an external transducer is not recommended for motors with Built-in MEGA Down Imaging.

- 1
- a. Mount the External Transducer according to directions provided with the transducer.
- Leave enough slack in the Transducer Cable
   between the Lower Unit and Control Head to allow the motor to properly stow and deploy.
- c. Use two tie wrap cables to secure the Transducer Cable to the Shaft just below the Control Head.
- d. Run the Transducer Cable through the Coil Cord to the power supply.

# **CAUTION**

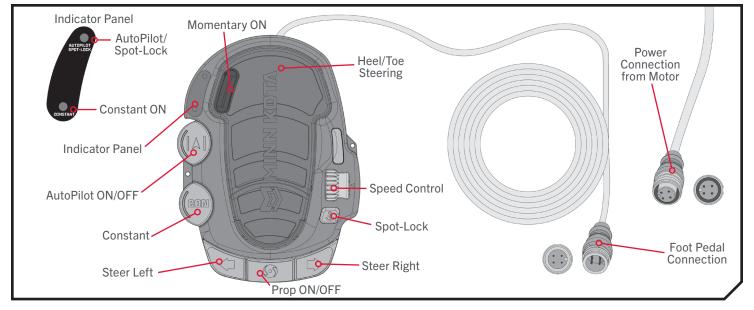
Failure to follow the recommended wire routing for the Advanced GPS Navigation and External Transducer Cables may cause damage to the product and void your product warranty. Take care to test the length and placement of cable to be sure that there is enough slack where needed and that cables are free of being entangled in moving parts. Routing the cables in any way other than directed may cause damage to the cables by being pinched or severed.



# **USING THE FOOT PEDAL**

#### CONTROLLING SPEED & STEERING WITH THE FOOT PEDAL

The foot pedal is used to operate the motor. The controls on the foot pedal are easy to operate by either foot or hand. A light touch is all that is necessary. The motor can also be controlled by the Minn Kota wireless remote, as well as any compatible Minn Kota remote. Please refer to the associated remote manual for respective instructions. To learn more about accessories that are compatible with the Terrova, please visit minnkotamotors.com.



## Motor Speed

The Speed Control knob is located on the right side of the Foot Pedal above the and Spot-Lock button. Turn the Speed Knob forward to increase speed and backwards to decrease speed. The Speed Control knob can be set in a range from 0 to 10. Speed can also be adjusted using the remote.

## Spot-Lock

The Spot-Lock button 🕹 is located on the bottom, right side of the Foot Pedal and is labeled with an anchor symbol. When the Spot-Lock button is pressed, the location of the motor is recorded to a temporary memory location. The blue light next to the Spot-Lock label on the Indicator Panel is illuminated when Spot-Lock is engaged. To engage Spot-Lock press the Spot-Lock button, to disengage, press the Spot-Lock button again. When engaging Spot-Lock, a tone will be emitted. When disengaging Spot-Lock with the Spot-Lock button, no tone will be emitted. Steering the motor with the Foot Pedal or adjusting the speed using the Speed Knob will cancel Spot-Lock and a High-Low, High-Low, High-Low tone will be emitted. Spot-Lock can also be controlled with a Minn Kota remote. For more specific directions on how to use Spot-Lock, please refer to your remote manual.

# **WARNING**

You are responsible for the safe and prudent operation of your vessel. We have designed the Terrova to be an accurate and reliable tool that will enhance boat operation and improve your ability to catch fish. This product does not relieve you from the responsibility for safe operation of your boat. You must avoid hazards to navigation and always maintain a permanent watch so you can respond to situations as they develop. You must always be prepared to regain manual control of your boat. Learn to operate your Terrova in an area free from hazards and obstacles.

Practice proper ergonomics when operating the foot pedal to prevent injury.

#### **USING THE FOOT PEDAL**

## > Steer Right/Steer Left

The Steer Right and Steer Left buttons are located at the bottom of the Foot Pedal. They function to steer right and left. Holding the Steer Right or Steer Left buttons down will continue to steer the motor to the left or right. Small steering changes of less than one degree can be made by quickly tapping the Steer Right and Steer Left buttons. The position and direction of the Steering Head directly corresponds to the position of the motor. The direction of the motor can also be controlled with the remote.

# **△ CAUTION**

The steering system is designed to turn your motor 360 degrees. Be careful to avoid overwrapping the Coil Cord around the trolling motor Shaft. Overwrapping the coil cord will cause damage and prevent operation.

**NOTICE:** The motor will not auto correct to drive straight when it encounters an obstruction.

## > Prop ON/OFF

The Prop ON/OFF 60 button is located in the bottom, middle of the Foot Pedal. It functions to turn the Prop on and off. The Prop will turn on when pressure is applied and turn off when pressure to the button is removed.

#### Constant

The Constant button @OM is located on the left side of the Foot Pedal, towards the bottom, right below the AutoPilot button. It functions to toggle the motor between Constant Motor Operation and Momentary Motor Operation. The green light on the Indicator Panel will be illuminated when the motor is in Constant Motor Operation. In Constant Mode, the propeller will continually run, regardless of whether or not force is being applied to the Momentary button or Prop ON/OFF button. While in Constant Motor Operation, the propeller will run continuously at the speed set by the Speed Control knob, or by the Advanced GPS Navigation remote.

If a propeller encounters an obstruction while either in Momentary or Constant Mode, while the propeller is running, the increased electrical current being generated by the obstruction will signal the motor to decrease the power to the propeller to prevent damage. If the current overload is detected for more than 20 seconds, the prop will be disabled to prevent damage to the motor. In this event, the operator can turn the prop back on after being sure that the obstruction has been cleared.

#### AutoPilot

The AutoPilot IAI button is located in the middle, on the left side of the Foot Pedal. Pressing the AutoPilot button toggles the feature on and off for motor that are installed with this feature. The red light on the Indicator Panel is illuminated when this feature is engaged. When AutoPilot is initiated from the Foot Pedal, the default AutoPilot mode is determined by the remote. AutoPilot can also be engaged and disengaged using the remote. For more specific directions on how to use AutoPilot, please refer to the Advanced GPS Navigation Manual. The AutoPilot Indicator on the Mount will also be illuminated when AutoPilot is engaged.

## Momentary

In Momentary Motor Operation, the propeller will only run while downward force is applied to the Momentary button. The Momentary button is on the Toe End of the Heel/Toe Steering pedal. Applying downward pressure to the Momentary button will turn the propeller on. The motor will then run at the speed set by the Speed Knob or remote. Removing downward force to the Momentary button will turn the propeller off. No indicator light is associated with the Momentary button. The Momentary button functions very similar to the Prop ON/OFF button.

## > Heel/Toe Steering

Push the Toe End of the Foot Pedal down to turn right and push the Heel End of the Foot Pedal down to turn left. The position and direction of the Control Head directly corresponds to the position of the motor. You must use your foot on the pedal to control the steering direction during manual operation. The direction of the motor can also be controlled with the remote.

## Steering in Reverse

The propeller always turns in the forward direction. You can reverse the direction of thrust by turning the motor 180°.

# **SERVICE & MAINTENANCE**

#### PROPELLER REPLACEMENT

#### TOOLS AND RESOURCES REQUIRED >

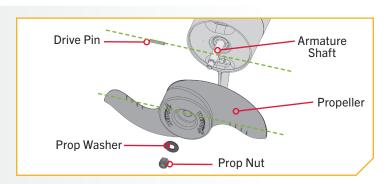
• 9/16" Open End Wrench

Flat-Blade Screwdriver

#### INSTALLATION >

- 1
- a. Disconnect the motor from all sources of power prior to changing the propeller.
- b. Hold the propeller and loosen the Prop Nut with a pliers or a wrench.
- c. Remove the Prop Nut and Prop Washer.

**NOTICE:** If the Drive Pin is sheared or broken, you will need to hold the shaft stationary with a flat -blade screwdriver pressed into the slot on the end of the shaft while you loosen the Prop Nut.



# **△ CAUTION**

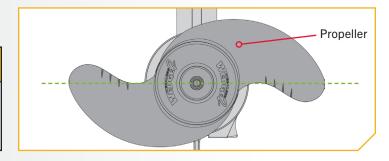
Disconnect the motor from the battery before beginning any prop work or maintenance.

2

d. Turn the old prop to horizontal and pull it straight off. If drive pin falls out, push it back in.

## **⚠ CAUTION**

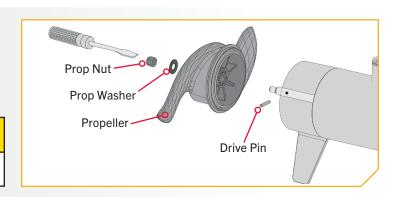
If the prop does not readily slide off, take care to not bend the Armature Shaft while removing the prop by pulling the prop evenly off the Armature Shaft.



- 3
- e. Align the new Propeller with the Drive Pin.
- f. Install the Prop Washer and Prop Nut.
- g. Tighten the Prop Nut 1/4 turn past snug at 25-35 inch-lbs.



Do not over tighten as this can damage the prop.



#### SERVICE & MAINTAINANCE

#### **GENERAL MAINTENANCE**

- After use, the entire motor should be rinsed with freshwater. This series of motors is not equipped for saltwater exposure.
- The composite shaft requires periodic cleaning and lubrication for proper retraction and deployment. A coating of an aqueous-based silicone spray will improve operation.

- The propeller must be inspected and cleaned of weeds and fishing line after every use. Fishing line and weeds can get behind the prop, damage the seals and allow water to enter the motor.
- Verify that the prop nut is secure each time the motor is used.
- To prevent accidental damage during transportation or storage, disconnect the battery whenever the motor is off of the water. For prolonged storage, lightly coat all metal parts with an aqueous-based silicone spray.
- For maximum battery life, recharge the battery(s) as soon as possible after use. For maximum motor performance, restore the battery to full charge prior to use.
- Keep battery terminals clean with fine sandpaper or emery cloth.
- The propeller is designed to provide weed-free operation with very high efficiency. To maintain this top performance, the leading edge of the blades must be kept smooth. If they are rough or nicked from use, restore to smoothness by sanding with fine sandpaper.

#### TROUBLESHOOTING

- 1. Motor fails to run or lacks power:
  - Check battery connections for proper polarity.
  - Make sure terminals are clean and corrosion-free. Use fine sandpaper or emery cloth to clean terminals.
  - · Check battery water level. Add water if needed.
- 2. Motor loses power after a short running time:
  - Check battery charge. If low, restore to full charge.
- 3. Motor is difficult to steer:
  - Loosen the steering tension knob on the bracket.
  - Lubricate the composite shaft.
- 4. You experience prop vibration during normal operation:
  - Remove and rotate the prop 180°. See removal instructions in the "Propeller Replacement" section.
- 5. Experiencing interference with your fishfinder:
  - You may, in some applications, experience interference in your depth finder display. We recommend that you use a separate deepcycle marine battery for your trolling motor and that you power the depth finder from the starting/cranking battery. If problems still persist, call our service department at 1-800-227-6433.

**NOTICE:** For all other malfunctions, visit an Authorized Service Center. You can search for an Authorized Service Center in your area by visiting minnkotamotors.com, or by calling our customer service number at 1-800-227-6433.

#### FOR FURTHER TROUBLESHOOTING AND REPAIR

#### 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 online directly from our website at minnkotamotors.com. From screws to sideplates, you can order replacement parts for your Minn Kota products.



## **Frequently Asked Questions**

Find answers to general inquiries, battery and rigging installation, and networking scenarios. We have FAQs available on our website at minnkotamotors.com to help answer all of your Minn Kota questions.



### 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.



#### Contact Us

You can contact our consumer service department with questions regarding your Minn Kota products. To inquire, visit minnkotamotors.com.



#### **Authorized Service Centers**

Minn Kota has over 800 authorized service centers in the United States and Canada where you can purchase parts or get your products repaired. Please visit our website to locate a service center 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

## Motors with Advanced GPS Navigation

For regulatory information on motors with Advanced GPS Navigation, please refer to the Advanced GPS Navigation Manual online at minnkotamotors.com.

#### 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.

#### **ENVIRONMENTAL RATINGS**

Ambient operating temperature range: -10C to 50C Ambient operating humidity range: 5% to 95% Maximum operating altitude: 10,000 feet

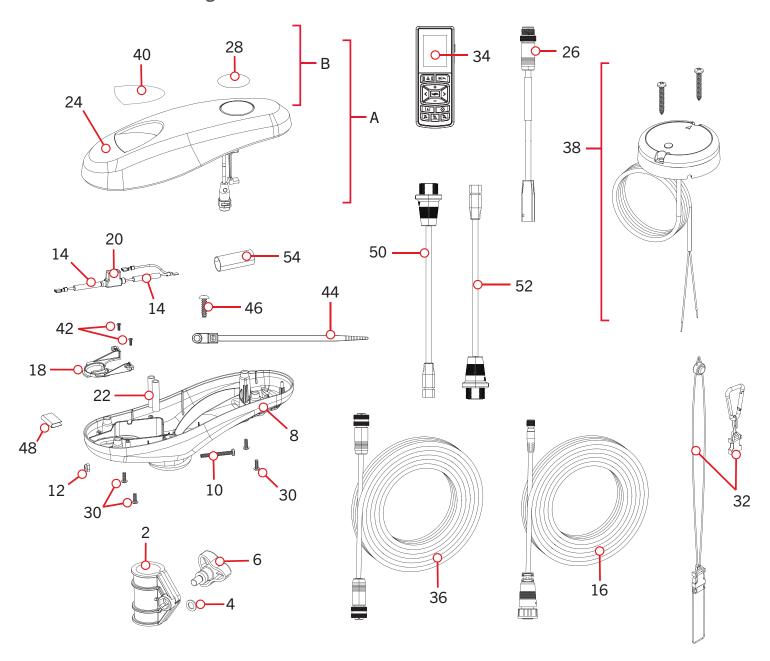


### TERROVA - 55/80/112 LBS THRUST - 12/24/36 VOLT - 45"/54"/60"/72" SHAFT

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.

TERROVA CONTROL HEAD >

## Control Head Parts Diagram



## > Control Head Parts List

Assembly	Part #	Description	Notes	Quantity
А	2774103	CONTROLLER, ADV GPS NAV, TRV/UTX	*DUAL SPECTRUM CHIRP* *BUILT-IN MEGA DOWN IMAGING*	1
В	2770242	CVR KIT, ADV GPS NAV, TRV/UTX		1
Item	Part #	Description	Notes	Quantity
<b>A</b>	×	SEAL,BUNG LOWER		1
<b>A</b>	×	SEAL,BUNG UPPER,FW		1
2	2321500	DEPTH COLLAR 1.30		1
4	2321702	WASHER-FLAT .375 NYLON		1
6	2260905	KNOB-SOFT GRIP, HG/DR, ZNC		1
8	2292500	CONTROL BOX, ULTREX, T2		1
10	2263406	SCREW-#10-24 X 2" S/S PPH		1
12	2333101	NUT-HEX #10-24 UNC-2B NYL SS		1
14	2065400	WIRE INSULATOR-LGE 1-3/4,BLUE		2
10	490507-1	CABLE, ADP-INT MDI 14 M12-120"	*BUILT-IN MEGA DOWN IMAGING*	1
16	490575-3	CABLE, ADPTR, 14 PIN, 110"-DSC	*DUAL SPECTRUM CHIRP*	1
	2256300	TIE WRAP-6.0" BLACK		2
<b>A</b>	2256300	TIE WRAP-6.0" BLACK	*BUILT-IN MEGA DOWN IMAGING 60" 80LB/112LB* *BUILT-IN MEGA DOWN IMAGING 72" 112LB*	4
18	2224706	PLUG, SCREW-DOWN, BLK		1
20	2218201	FUSE HOLDER ASSEMBLY		1
22	2375400	SHRINK TUBE-1/40D X 1-3/4		2
24	2290212	COVER,CTRL BOX iP, PD PRINTED		1
26	490380-1	CABLE, ETHERNET PIGTAIL-700 HD		1
28	2395524	DECAL, DOMED FW		1
30	2372100	SCREW-#8-18 X 5/8 THD (SS)		4
32	2390802	LANYARD w/CARABINR,WIRELESS RMT		1
34	411690-1	TROLLING MOTOR REMOTE	*DUAL SPECTRUM CHIRP* *BUILT-IN MEGA DOWN IMAGING*	1
36	490384-4	CABLE, ETHERNET (M12-M12), 30'		1
38	2996400	HEADING SENSOR ASSEMBLY		1
	2395564	DECAL, PUSH BTN TOP 55# FW	*55LB*	1
40	2395565	DECAL, PUSH BTN TOP 80# FW	*80LB*	1
	2395566	DECAL,PSH BTN TOP 112# FW	*112LB*	1
42	2372103	SCREW. #6 x 3/8 PLASTITE		2
44	2206302	TIE WRAP, SCREW MOUNT 6.3"		1
46	2203441	SCREW-#6 X 1/2" THRD FORM,SSTL		1
48	2215700	LABEL, DI CABLE EXIT LOCATION	*BUILT-IN MEGA DOWN IMAGING 60" 80LB/112LB* *BUILT-IN MEGA DOWN IMAGING 72" 112LB*	1

<sup>▲</sup> Not shown on Parts Diagram.

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

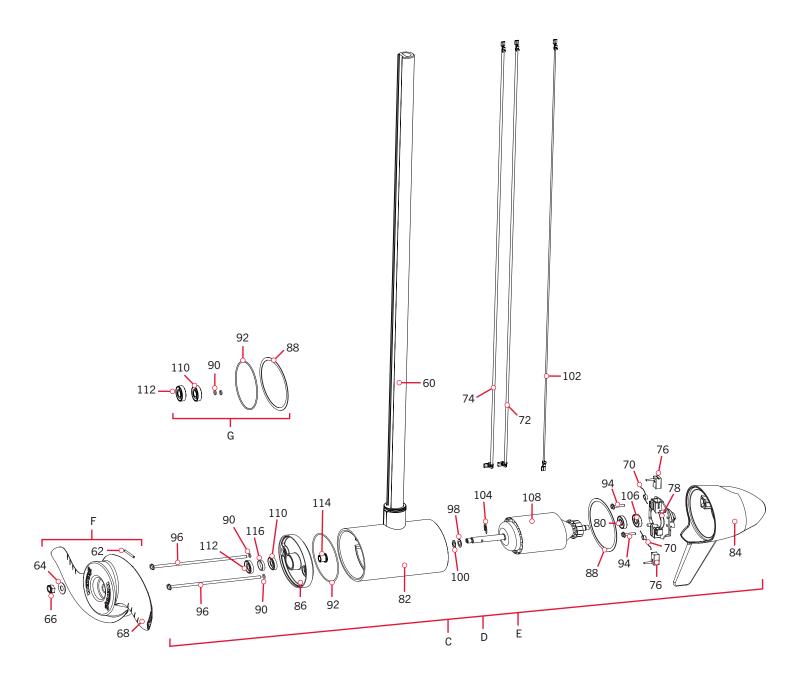
Item	Part #	Description	Notes	Quantity
50	2994961	BAG ASM, CABLE,ADPTR, 490537-2	*490537-2* *MKR-MI-1* *DUAL SPECTRUM CHIRP* *BUILT-IN MEGA DOWN IMAGING*	1
52	2994960	BAG ASM, CABLE,ADPTR, 490518-1	*490518-1* *MKR-MDI-2* *DUAL SPECTRUM CHIRP* *BUILT-IN MEGA DOWN IMAGING*	1
54	2205412	SHRINK TUBE75 ID X 2"		1
<b>A</b>	2206301	TIE WRAP, LOW PROFILE 8"		1
	2996300	TIE WRAP ASM, 60"	*DUAL SPECTRUM CHIRP* *BUILT-IN MEGA DOWN IMAGING* *45"* *54"* *60"*	1
<b>A</b>	2996300	TIE WRAP ASM, 60"	*DUAL SPECTRUM CHIRP* *BUILT-IN MEGA DOWN IMAGING* *72"*	2
<b>A</b>	2327134	MANUAL, TERROVA 3 PM		1
<b>A</b>	2327136	MANUAL-INSTLL GUIDE T3 PM		1
<b>A</b>	2397110	MANUAL, iPILOT 4.0		1
<b>A</b>	2397115	GUIDE-QUICK REFERENCE iP 4.0		1
<b>A</b>	2394900	INSTRUCTIONS, HEADING SENSOR		1
<b>A</b>	2297165	MANUAL - DISCLAIMER, DOWNLOAD INFO		1
<b>A</b>	2015800	HANG TAG "CAUTIONTILT HINGE"		1
<b>A</b>	2294950	INSTRUCTIONS,OBN & REMOTE PAIR		1
<b>A</b>	2207131	STANDARD QS SETUP GUIDE		1

<sup>▲</sup> Not shown on Parts Diagram.

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

TERROVA MOTOR >

# > 12 Volt 3.625" Motor Parts Diagram



## > 12 Volt 3.625" Motor Parts List

Assembly	Part #	Description	Notes	Quantity
С	2119021	MTR ASY 12V 3.62 VARS 55# CB	*54"* *NON-SONAR*	1
D	2777191	MTR/TUBE ASM 12V DSC 45"	*45"* *DUAL SPECTRUM CHIRP*	1
E	2777192	MTR/TUBE ASM 12V DSC 54"	*54"* *DUAL SPECTRUM CHIRP*	1
F	1378170	PROP KIT 2091170 PWR PRP GENII		1
G	2888460	SEAL & O-RING KIT		1
Item	Part #	Description	Notes	Quantity
60	×	TUBE-COMP,BLK,45",1/4" WALL	*45"*	1
60	×	TUBE-CMP,BLK,54",1/4" WALL	*54"*	1
62	2092600	PIN-DRIVE 1.06" LG (SS)		1
64	2151726	WASHER-5/16 STD (S/S)		1
66	2053101	NUT-PROP,NYLOC (MED) 5/16 SS		1
68	2091170	PROP-PWR (3 5/8") REAMED		1
70	975-040	SPRING - TORSION		2
70	640-028	LEADWIRE BLK 10 AWG 58.5 XLP	*45"*	1
72	640-009	LEADWIRE BLK 10 AWG 65 GPT	*54"*	1
7.4	640-128	LEADWIRE RED 10AWG 60.5" GPT	*45"*	1
74	640-108	LEADWIRE RED 10 AWG 67 GPT	*54"*	1
76	188-036	BRUSH ASSEMBLY 3.625		2
78	738-036	BRUSH PLATE WITH HOLDER 3.625		1
80	725-050	PAPER TUBE - BRUSH RETENTION		1
82	×	CTR HSG ASY 3.62 FW-MAGNET CB		1
0.4	×	BRUSH END HSG 3.625, PTD	*DUAL SPECTRUM CHIRP*	1
84	×	HSG BRSH END 3.62 FW	*NON-SONAR*	1
86	2-400-101A	PLAIN END HSG ASY 3.625		1
88	337-036	GASKET		1
90	701-008	O-RING	*THRU-BOLT*	2
92	701-081	0-RING		1
94	830-007	SCREW, # 8-32		2
96	830-008	THRU BOLT 10-32 x 9.205		2
98	990-067	WASHER - STEEL THRUST		1
100	990-070	WASHER - NYLATRON		1
102	640-315	LEADWIRE BROWN 18 AWG 62" GPT	*45"* *DUAL SPECTRUM CHIRP*	1
102	640-316	LEADWIRE BROWN 18 AWG 71" GPT	*54"* *DUAL SPECTRUM CHIRP*	1
104	788-015	RETAINING RING		1
106	140-010	BEARING - BALL		1
108	2-100-146	ARM ASY 12V 3.62 55#CB/LS		1

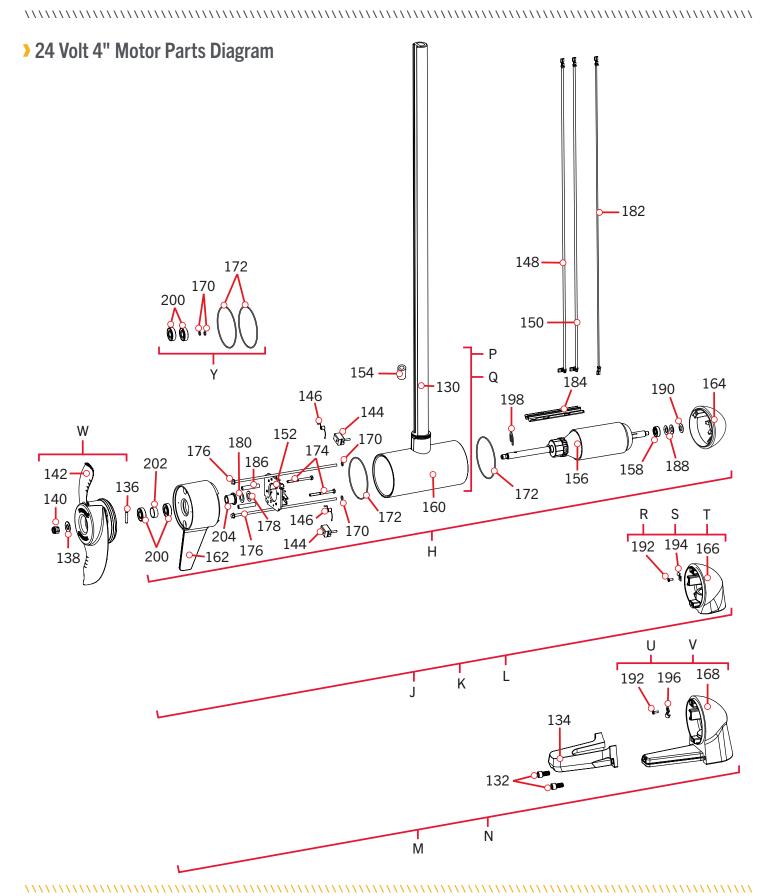
<sup>▲</sup> Not shown on Parts Diagram.

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

Item	Part #	Description	Notes	Quantity
110	880-003	SEAL		1
112	880-006	SEAL WITH SHIELD		1
114	144-049	BEARING - FLANGE		1
116	725-035	PAPER TUBE - SEAL BORE		1
_	×	DSC XD UCER ASSY 67" HW T	*45"* *DUAL SPECTRUM CHIRP*	1
<b>A</b>	×	DSC XDUCER ASSY 73" HW T	*54"* *DUAL SPECTRUM CHIRP*	1
<b>A</b>	×	SCREW-#6-20 X 1/2 THD CUTS,RIE	*DUAL SPECTRUM CHIRP*	3

<sup>▲</sup> Not shown on Parts Diagram.

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



## > 24 Volt 4" Motor Parts List

Assembly	Part #	Description	Notes	Quantity
Н	2777002	MTR/TUBE ASSY 80# 60" TERROVA	*NON-SONAR*	1
J	2777124	MTR/TUBE ASM 24V DSC 45"	*DUAL SPECTRUM CHIRP* *45"*	1
K	2777128	MTR/TUBE ASM 24V DSC 60"	*DUAL SPECTRUM CHIRP* *60"*	1
K	2777127	MTR/TUBE ASM 24V "M" DSC 60"	*DUAL SPECTRUM CHIRP* *60"* *EUROPE ONLY*	1
L	2777129	MTR/TUBE ASM 24V DSC 72"	*DUAL SPECTRUM CHIRP* *72"*	1
М	2777046	MTR/TUBE ASM 24V MDI 60"	*BUILT-IN MEGA DOWN IMAGING* *60"*	1
N	2777044	MTR/TUBE ASM 24V MDI 45"	*BUILT-IN MEGA DOWN IMAGING* *45"*	1
Р	2777196	CTR HSG, CB, 80#, FW, UP TO 60"		1
Q	2777197	CTR HSG, CB, 80#, FW, 72" TUBE		1
R	2993020	PLN END HSG/TRDCR 4.0 DSC	*DUAL SPECTRUM CHIRP* *45"*	1
S	2993025	PLN END HSG/TRDCR 4.0 DSC	*DUAL SPECTRUM CHIRP* *60"*	1
T	2993027	PLN END HSG/TRDCR 4.0 DSC	*DUAL SPECTRUM CHIRP* *72"*	1
U	2993051	PLN END HSG/TRNDCR 4.0 MDI	*BUILT-IN MEGA DOWN IMAGING* *45"*	1
V	2993053	PLN END HSG/TRNDCR 4.0 MDI	*BUILT-IN MEGA DOWN IMAGING* *60"*	1
W	1378132	PROP IND 2331160 WDLS WDG II		1
Υ	2889460	SEAL & O-RING KIT		1
Item	Part #	Description	Notes	Quantity
Item	Part #	Description TUBE-COMP,BLK,45",1/4" WALL	*45"*	Quantity 1
Item	ļ			
	×	TUBE-COMP,BLK,45",1/4" WALL	*45"*	1
Item	*	TUBE-COMP,BLK,45",1/4" WALL TUBE-CMP,BLK,45",1/4",DI,	*45"*  *45"**BUILT-IN MEGA DOWN IMAGING*	1
	* *	TUBE-COMP,BLK,45",1/4" WALL TUBE-CMP,BLK,45",1/4",DI, TUBE-COMP,BLK,60",1/4" WALL	*45"*  *45"**BUILT-IN MEGA DOWN IMAGING*  *60"**M SKU*	1 1 1
	* * * * * * * * * * * * * * * * * * *	TUBE-COMP,BLK,45",1/4" WALL  TUBE-CMP,BLK,45",1/4",DI,  TUBE-COMP,BLK,60",1/4" WALL  TUBE-COMP,BLK,60",1/4" WALL	*45"*  *45"* *BUILT-IN MEGA DOWN IMAGING*  *60"* *M SKU*  *60"* *DUAL SPECTRUM CHIRP* *NON-SONAR*	1 1 1
	* * * * * * * * * * * * * * * * * * *	TUBE-COMP,BLK,45",1/4" WALL  TUBE-CMP,BLK,45",1/4",DI,  TUBE-COMP,BLK,60",1/4" WALL  TUBE-COMP,BLK,60",1/4" WALL  TUBE-CMP,BLK,72",1/4"WALL	*45"*  *45"**BUILT-IN MEGA DOWN IMAGING*  *60"**M SKU*  *60"**DUAL SPECTRUM CHIRP**NON-SONAR*  *72"*	1 1 1 1 1
130	* * * * * * * * * * * * * * * * * * *	TUBE-COMP,BLK,45",1/4" WALL  TUBE-CMP,BLK,45",1/4",DI,  TUBE-COMP,BLK,60",1/4" WALL  TUBE-COMP,BLK,60",1/4" WALL  TUBE-CMP,BLK,72",1/4"WALL  TUBE-CMP,BLK,60",1/4",DI	*45"*  *45"* *BUILT-IN MEGA DOWN IMAGING*  *60"* *M SKU*  *60"* *DUAL SPECTRUM CHIRP* *NON-SONAR*  *72"*  *60"* *BUILT-IN MEGA DOWN IMAGING*	1 1 1 1 1 1
130	*  *  *  *  *  *  *  *  *  *  *  *  *	TUBE-COMP,BLK,45",1/4" WALL  TUBE-CMP,BLK,45",1/4",DI,  TUBE-COMP,BLK,60",1/4" WALL  TUBE-COMP,BLK,60",1/4" WALL  TUBE-CMP,BLK,72",1/4"WALL  TUBE-CMP,BLK,60",1/4",DI  SCREW-5-16-18 X 5/8 SHCS SS	*45"*  *45"**BUILT-IN MEGA DOWN IMAGING*  *60"**M SKU*  *60"**DUAL SPECTRUM CHIRP**NON-SONAR*  *72"*  *60"**BUILT-IN MEGA DOWN IMAGING*  *BUILT-IN MEGA DOWN IMAGING*	1 1 1 1 1 1 2
130 132 134	*  *  *  *  *  *  *  *  *  *  830-110  792-001	TUBE-COMP,BLK,45",1/4" WALL  TUBE-CMP,BLK,45",1/4",DI,  TUBE-COMP,BLK,60",1/4" WALL  TUBE-COMP,BLK,60",1/4" WALL  TUBE-CMP,BLK,72",1/4"WALL  TUBE-CMP,BLK,60",1/4",DI  SCREW-5-16-18 X 5/8 SHCS SS  GUARD, TRANSDUCER, PNT 4.0 DI	*45"*  *45"**BUILT-IN MEGA DOWN IMAGING*  *60"**M SKU*  *60"**DUAL SPECTRUM CHIRP**NON-SONAR*  *72"*  *60"**BUILT-IN MEGA DOWN IMAGING*  *BUILT-IN MEGA DOWN IMAGING*	1 1 1 1 1 1 2
130 132 134 136	*  *  *  *  *  *  *  830-110  792-001  2262658	TUBE-COMP,BLK,45",1/4" WALL  TUBE-CMP,BLK,45",1/4",DI,  TUBE-COMP,BLK,60",1/4" WALL  TUBE-COMP,BLK,60",1/4" WALL  TUBE-CMP,BLK,72",1/4"WALL  TUBE-CMP,BLK,60",1/4",DI  SCREW-5-16-18 X 5/8 SHCS SS  GUARD, TRANSDUCER, PNT 4.0 DI  PIN-DRIVE 1" X 3/16" S/S	*45"*  *45"**BUILT-IN MEGA DOWN IMAGING*  *60"**M SKU*  *60"**DUAL SPECTRUM CHIRP**NON-SONAR*  *72"*  *60"**BUILT-IN MEGA DOWN IMAGING*  *BUILT-IN MEGA DOWN IMAGING*	1 1 1 1 1 1 2 1
130 132 134 136 138	*  *  *  *  *  *  *  *  *  830-110  792-001  2262658  2091701	TUBE-COMP,BLK,45",1/4" WALL  TUBE-CMP,BLK,45",1/4",DI,  TUBE-COMP,BLK,60",1/4" WALL  TUBE-COMP,BLK,60",1/4" WALL  TUBE-CMP,BLK,72",1/4"WALL  TUBE-CMP,BLK,60",1/4",DI  SCREW-5-16-18 X 5/8 SHCS SS  GUARD, TRANSDUCER, PNT 4.0 DI  PIN-DRIVE 1" X 3/16" S/S  WASHER-PROP (LARGE)	*45"*  *45"**BUILT-IN MEGA DOWN IMAGING*  *60"**M SKU*  *60"**DUAL SPECTRUM CHIRP**NON-SONAR*  *72"*  *60"**BUILT-IN MEGA DOWN IMAGING*  *BUILT-IN MEGA DOWN IMAGING*	1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1 1
130 132 134 136 138 140	*  *  *  *  *  *  830-110  792-001  2262658  2091701  2093101	TUBE-COMP,BLK,45",1/4" WALL  TUBE-CMP,BLK,45",1/4",DI,  TUBE-COMP,BLK,60",1/4" WALL  TUBE-COMP,BLK,60",1/4" WALL  TUBE-CMP,BLK,72",1/4"WALL  TUBE-CMP,BLK,60",1/4",DI  SCREW-5-16-18 X 5/8 SHCS SS  GUARD, TRANSDUCER, PNT 4.0 DI  PIN-DRIVE 1" X 3/16" S/S  WASHER-PROP (LARGE)  NUT-PROP,NYLOC,LG, 3/8 SS	*45"*  *45"**BUILT-IN MEGA DOWN IMAGING*  *60"**M SKU*  *60"**DUAL SPECTRUM CHIRP**NON-SONAR*  *72"*  *60"**BUILT-IN MEGA DOWN IMAGING*  *BUILT-IN MEGA DOWN IMAGING*	1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1
130 132 134 136 138 140 142	*  *  *  *  *  *  *  *  *  *  830-110  792-001  2262658  2091701  2093101  2331161	TUBE-COMP,BLK,45",1/4" WALL  TUBE-CMP,BLK,45",1/4",DI,  TUBE-COMP,BLK,60",1/4" WALL  TUBE-CMP,BLK,60",1/4" WALL  TUBE-CMP,BLK,72",1/4"WALL  TUBE-CMP,BLK,60",1/4",DI  SCREW-5-16-18 X 5/8 SHCS SS  GUARD, TRANSDUCER, PNT 4.0 DI  PIN-DRIVE 1" X 3/16" S/S  WASHER-PROP (LARGE)  NUT-PROP,NYLOC,LG, 3/8 SS  PROP-WW2 4" WELDED	*45"*  *45"**BUILT-IN MEGA DOWN IMAGING*  *60"**M SKU*  *60"**DUAL SPECTRUM CHIRP**NON-SONAR*  *72"*  *60"**BUILT-IN MEGA DOWN IMAGING*  *BUILT-IN MEGA DOWN IMAGING*	1 1 1 1 1 1 2 1 1 1 1 1 1 1 1 1 1 1 1 1
130 132 134 136 138 140 142 144	*  *  *  *  *  *  830-110  792-001  2262658  2091701  2093101  2331161  188-094	TUBE-COMP,BLK,45",1/4" WALL  TUBE-CMP,BLK,45",1/4",DI,  TUBE-COMP,BLK,60",1/4" WALL  TUBE-COMP,BLK,60",1/4" WALL  TUBE-CMP,BLK,72",1/4"WALL  TUBE-CMP,BLK,60",1/4",DI  SCREW-5-16-18 X 5/8 SHCS SS  GUARD, TRANSDUCER, PNT 4.0 DI  PIN-DRIVE 1" X 3/16" S/S  WASHER-PROP (LARGE)  NUT-PROP,NYLOC,LG, 3/8 SS  PROP-WW2 4" WELDED  BRUSH W/TERMINAL	*45"*  *45"**BUILT-IN MEGA DOWN IMAGING*  *60"**M SKU*  *60"**DUAL SPECTRUM CHIRP**NON-SONAR*  *72"*  *60"**BUILT-IN MEGA DOWN IMAGING*  *BUILT-IN MEGA DOWN IMAGING*	1 1 1 1 1 1 2 1 1 1 1 1 1 2 2 1 1 1 2
130 132 134 136 138 140 142 144	*  *  *  *  *  *  *  *  *  *  830-110  792-001  2262658  2091701  2093101  2331161  188-094  975-041	TUBE-COMP,BLK,45",1/4" WALL  TUBE-CMP,BLK,45",1/4",DI,  TUBE-COMP,BLK,60",1/4" WALL  TUBE-CMP,BLK,60",1/4" WALL  TUBE-CMP,BLK,72",1/4"WALL  TUBE-CMP,BLK,60",1/4",DI  SCREW-5-16-18 X 5/8 SHCS SS  GUARD, TRANSDUCER, PNT 4.0 DI  PIN-DRIVE 1" X 3/16" S/S  WASHER-PROP (LARGE)  NUT-PROP,NYLOC,LG, 3/8 SS  PROP-WW2 4" WELDED  BRUSH W/TERMINAL  SPRING - TORSION	*45"*  *45"**BUILT-IN MEGA DOWN IMAGING*  *60"**M SKU*  *60"**DUAL SPECTRUM CHIRP**NON-SONAR*  *72"*  *60"**BUILT-IN MEGA DOWN IMAGING*  *BUILT-IN MEGA DOWN IMAGING*	1 1 1 1 1 1 2 1 1 1 1 2 2 1 1 2 2 2 2

<sup>▲</sup> Not shown on Parts Diagram.

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

Item	Part #	Description	Notes	Quantity
	640-117	LEADWIRE RD 10A 51.25 XLP	*45"*	1
150	640-133	LEADWIRE RED 10AWG 66-1/4 XLP	*60"*	1
	640-125	LEADWIRE RED 10AWG 79-1/2 XLP	*72"*	1
<b>A</b>	×	BRUSH HOLDER		2
152	738-004	BRUSH PLATE-4"		1
<b>A</b>	2260730	CONNECTOR 1/4 MALE TAB QD		2
154	×	BEAD-FERRITE	*M SKU* *BUILT-IN MEGA DOWN IMAGING*	1
156	2-100-214	ARM ASSY 24V 4" 80# (WW2)		1
158	140-010	BEARING - BALL		1
160	×	CTR HSG ASY 4.0 FW MGNTZ		1
162	2-300-170	BRUSH END HSG ASY 4.0 FW		1
164	421-276	HSG PLN END 4" PAINTED FW BS	*NON-SONAR*	1
166	421-286	PLN END 4.0"US2.5/DSC PNT	*DUAL SPECTRUM CHIRP*	1
168	421-107	PLAIN END HSG, PNT 4.0 DI	*BUILT-IN MEGA DOWN IMAGING*	1
170	701-009	O-RING	*THRU-BOLT*	2
172	701-043	O-RING		2
174	830-027	SCREW - SELF-THREAD 10-32X2.25		2
176	830-095	THRU BOLT 12-24 x 9.79		2
178	990-051	WASHER - STEEL THRUST		1
180	990-052	WASHER - NYLATRON		1
	640-315	LEADWIRE BROWN 18 AWG 62" GPT	*45"*	1
182	640-316	LEADWIRE BROWN 18 AWG 71" GPT	*60"*	1
	640-317	LEADWIRE BROWN 18 AWG 86" GPT	*72"*	1
184	582-013	CLIP, RETAINING SHORT		1
186	973-025	SPACER - BRUSHPLATE		2
188	992-010	WASHER - BELLEVILLE		2
190	990-045	SPACER - THRUST		1
192	2302104	SCREW-#6-20 X 3/8 THD CUTS	*DUAL SPECTRUM CHIRP* *BUILT-IN MEGA DOWN IMAGING*	1
194	230-038	CABLE CLAMP	*DUAL SPECTRUM CHIRP*	1
196	230-040	CABLE CLAMP, 1/4" STEEL	*BUILT-IN MEGA DOWN IMAGING*	1
198	788-040	RETAINING RING		1
200	880-025	SEAL		2
202	725-095	PAPER TUBE, SEAL		1
204	144-017	BEARING, FLANGE		1
<b>A</b>	×	RIVET25"		6
	×	DSC XDUCER ASSY 62" HW T	*45"* *DUAL SPECTRUM CHIRP*	1
<b>A</b>	×	DSC XDUCER ASSY 79" HW T	*60"* *DUAL SPECTRUM CHIRP*	1
	×	DSC XDUCER ASSY 91" HW T	*72"* *DUAL SPECTRUM CHIRP*	1

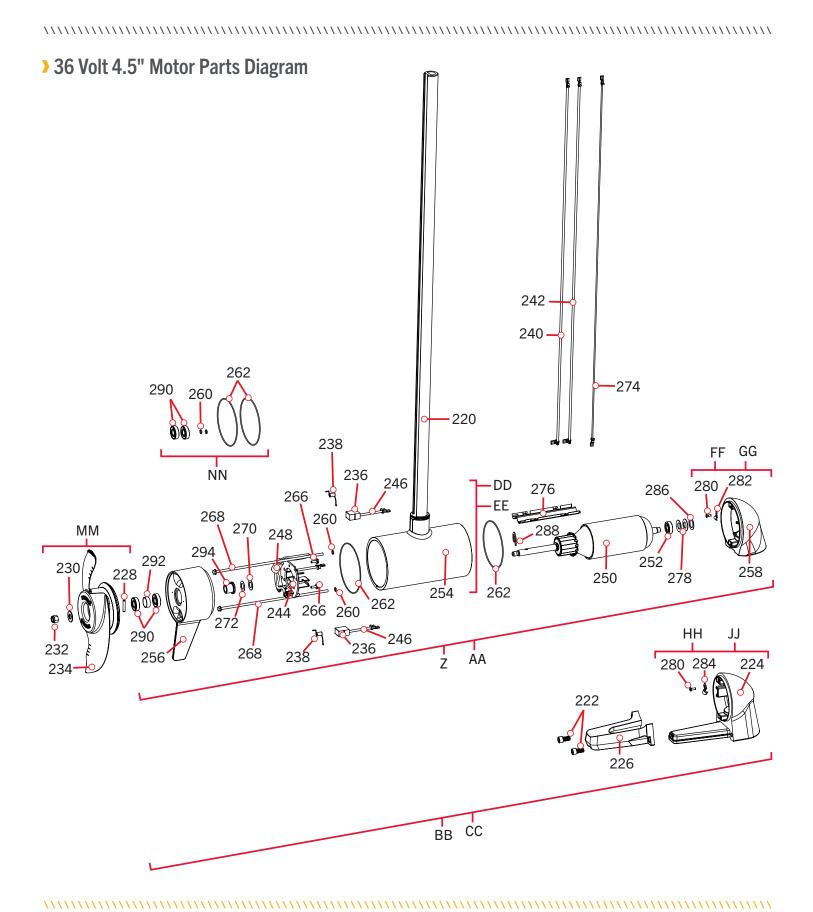
<sup>▲</sup> Not shown on Parts Diagram.

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

Item	Part #	Description	Notes	Quantity
	*	BUILT- IN MDI 63", SW	*45"* *BUILT-IN MEGA DOWN IMAGING*	1
	*	BUILT- IN MDI 74", SW	*60"* *BUILT-IN MEGA DOWN IMAGING*	1
<b>A</b>	×	SCREW-#6-32X1/2"TORX PH SS		3

<sup>▲</sup> Not shown on Parts Diagram.

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



## > 36 Volt 4.5" Motor Parts List

Assembly	Part #	Description	Notes	Quantity
Z	2777068	MTR/TUBE ASM 36V DSC 60"	*60"* *DUAL SPECTRUM CHIRP*	1
AA	2777069	MTR/TUBE ASM 36V DSC 72"	*72"* *DUAL SPECTRUM CHIRP*	1
ВВ	2777071	MTR/TUBE ASM 36V MDI 60"	*60"* *BUILT-IN MEGA DOWN IMAGING*	1
CC	2777072	MTR/TUBE ASM 36V MDI 72"	*72"* *BUILT-IN MEGA DOWN IMAGING*	1
DD	2777241	CTR HSG, CB, 112#, FW, UP TO 60"	*45"* *60"*	1
EE	2777242	CTR HSG, CB, 112#, FW, 72" TUBE	*72"*	1
FF	2993024	PLN END HSG/TRDCR 4.5 DSC	*60"* *DUAL SPECTRUM CHIRP*	1
GG	2993028	PLN END HSG/TRDCR 4.5 DSC	*72"* *DUAL SPECTRUM CHIRP*	1
НН	2993056	PLN END HSG/TRNDCR 4.5 MDI	*60"* *BUILT-IN MEGA DOWN IMAGING*	1
JJ	2993055	PLN END HSG/TRNDCR 4.5 MDI	*72"* *BUILT-IN MEGA DOWN IMAGING*	1
MM	1378160	PROP KIT 2341160 112# WW2		1
NN	2881450	SEAL & O-RING KIT		1
Item	Part #	Description	Notes	Quantity
	×	TUBE-COMP,BLK,45",1/4" WALL	*45"*	1
	×	TUBE-COMP,BLK,60",1/4" WALL	*60"* *DUAL SPECTRUM CHIRP* *BUILT-IN MEGA DOWN IMAGING*	1
000	×	TUBE-COMP,BLK,60",1/4" WALL	*60"* *M SKU*	1
220	×	TUBE-CMP,BLK,72",1/4"WALL	*72"* *DUAL SPECTRUM CHIRP*	1
	×	TUBE-CMP,BLK,45",1/4",DI,	*45"* *BUILT-IN MEGA DOWN IMAGING*	1
	×	TUBE-CMP,BLK,60",1/4",DI	*60"* *BUILT-IN MEGA DOWN IMAGING*	1
222	830-110	SCREW-5-16-18 X 5/8 SHCS SS	*BUILT-IN MEGA DOWN IMAGING*	2
224	421-112	PLAIN END HSG, PNT 4.5 DI	*BUILT-IN MEGA DOWN IMAGING*	1
226	792-005	GUARD, TRANSDUCER, PNT 4.5 DI	*BUILT-IN MEGA DOWN IMAGING*	1
228	2262658	PIN-DRIVE 1" X 3/16" S/S		1
230	2091701	WASHER-PROP (LARGE)		1
232	2093101	NUT-PROP,NYLOC,LG, 3/8 SS		1
234	2341161	PROP-WW2 4.5" WELDED		1
236	188-095	BRUSH		2
238	975-045	SPRING - TORSION		2
240	640-044	LEADWIRE BLK 10AWG 72 1/4" GPT	*60"*	1
240	640-048	LEADWIRE BLK 10AWG 84 1/4" GPT	*72"*	1
242	640-144	LEADWIRE RED 10AWG 71" GPT	*60"*	1
242	640-148	LEADWIRE RED 10AWG 83" GPT	*72"*	1
<b>A</b>	×	BRUSH HOLDER		2
244	738-011	BRUSH PLATE		1

<sup>▲</sup> Not shown on Parts Diagram.

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

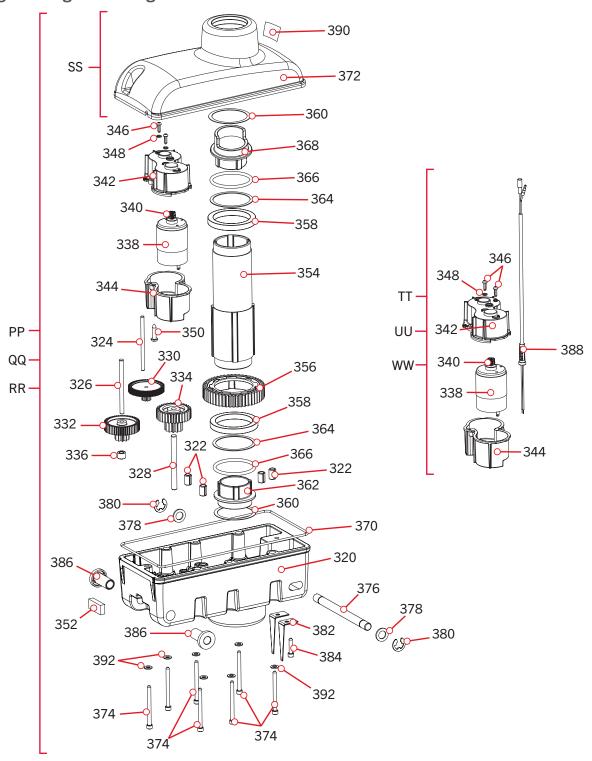
Item	Part #	Description	Notes	Quantity
246	2260731	TERMINAL 1/4" MALE TAB-THREE		2
248	2307312	BEAD-FERRITE		1
250	2-100-245	ARMATURE ASY 4.5"LWR UNIT		1
252	140-014	BEARING-BALL 6000		1
254	×	CTR HSG ASY 4.5" MAG FW CB		1
256	2-300-175	BRUSH END HSG 4.5" FW		1
258	421-246	PLN END 4.5"US2.5/DSC PNT	*DUAL SPECTRUM CHIRP*	1
260	701-009	O-RING	*THRU-BOLT*	2
262	701-098	O-RING, 98MM X 2MM		2
266	2053410	SCREW-#8-32 X 1/2 TRI-LOBE HEX		2
268	830-094	THRU BOLT 12-24 X10.31		2
270	990-051	WASHER - STEEL THRUST		1
272	990-052	WASHER - NYLATRON		1
074	640-316	LEADWIRE BROWN 18 AWG 71" GPT	*60"*	1
274	640-317	LEADWIRE BROWN 18 AWG 86" GPT	*72"*	1
276	582-016	CLIP-RETAINING, SONAR		1
278	992-011	WASHER - BELLEVILLE		2
280	2302104	SCREW-#6-20 X 3/8 THD CUTS	*DUAL SPECTRUM CHIRP* *BUILT-IN MEGA DOWN IMAGING*	1
282	230-038	CABLE CLAMP	*DUAL SPECTRUM CHIRP*	1
284	230-040	CABLE CLAMP, 1/4" STEEL	*BUILT-IN MEGA DOWN IMAGING*	1
286	990-011	WASHER-SHIM OD 1",ID.630"SS		1
288	788-040	RETAINING RING		1
290	880-025	SEAL		2
<b>A</b>	×	RIVET25"		6
292	725-095	PAPER TUBE - SEAL BORE		1
294	144-017	BEARING, FLANGE		1
	×	DSC XDUCER ASSY 79" HW T	*DUAL SPECTRUM CHIRP* *60"*	1
<b>A</b>	×	DSC XDUCER ASSY 91" HW T	*DUAL SPECTRUM CHIRP* *72"*	1
	×	BUILT- IN MDI 80", SW	*BUILT-IN MEGA DOWN IMAGING* *60"*	1
	×	BUILT- IN MDI 92", SW	*BUILT-IN MEGA DOWN IMAGING* *72"*	1
<b>A</b>	×	SCREW-#6-32 X 1/2" TORX PH SS		3

<sup>▲</sup> Not shown on Parts Diagram.

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

#### TERROVA STEERING HOUSING >

## > Steering Housing Parts Diagram



## Steering Housing Parts List

Assembly	Part #	Description	Notes	Quantity
PP	2997053	STR HSG ASM w/BSHG 12V FW	*55LB*	1
QQ	2997054	STR HSG ASM w/BSHG 24V FW	*80LB*	1
RR	2997055	STR HSG ASM w/BSHG 36V FW	*112LB*	1
SS	2776561	STEERING HSG TOP FW/GEAR KIT		1
TT	2777060	STEERING MOTOR KIT, 12V T2	*55LB*	1
UU	2777061	STEERING MOTOR KIT, 24V T2	*80LB*	1
WW	2777062	STEERING MOTOR KIT, 36V FW T2	*112LB*	1
Item	Part #	Description	Notes	Quantity
320	2326566	HOUSING-STEERING, BTM, FW		1
322	2302605	PIN-ROLL 5/16" X 1/2"		4
324	×	SHAFT-GEAR, FIRST CLUSTER		1
326	×	SHAFT-GEAR,INTERMED.CLUSTER		1
328	×	SHAFT-GEAR, THIRD CLUSTER		1
330	2322210	GEAR & PINION, DR.HSG, STAGE 2		1
332	2302250	GEAR & PINION, DR. HSG, STAGE 3		1
334	2302255	GEAR & PINION, DR. HSG, STAGE 4		1
336	2321730	SPACER, GEAR CLUSTER		1
	2327060	MOTOR, STEERING 12V T2	*55LB*	1
338	2327061	MOTOR, STEERING 24V T2	*80LB*	1
	2327062	MOTOR, STEERING 36V FW T2	*112LB*	1
340	2322215	GEAR-PINION, DR.HSG, STAGE 1		1
342	2322520	CASE-MOTOR, STEERING HSG, TOP		1
344	2322525	CASE-MOTOR,STEERING HSG,BTM,T2		1
346	2053422	SCREW-M35 X 10 PPH, ZPS		2
348	2051710	LOCKWASHER-SPLIT, 3MM, ZP		2
350	2043412	SCREW-#8-18 X 3/4 TY AB SS PPH		1
352	2308601	BREATHER FILTER, DR.HOUSING		1
354	2322030	TUBE-OUTPUT, MACHINED		1
356	2322200	GEAR-OUTPUT		1
358	2327308	BEARING-BALL,SEALED		2
360	2321704	WASHER-THRUST, STEERING		2
362	2321510	COLLAR-DRIVE,BOTTOM		1
364	2321720	SHIM,O-RING		2
366	2324608	O-RING,224,PD PRO STR HSG		2
368	2321515	LINER OUTPUT TUBE		1
370	2324604	O-RING, CASE SEAL		1

<sup>▲</sup> Not shown on Parts Diagram.

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

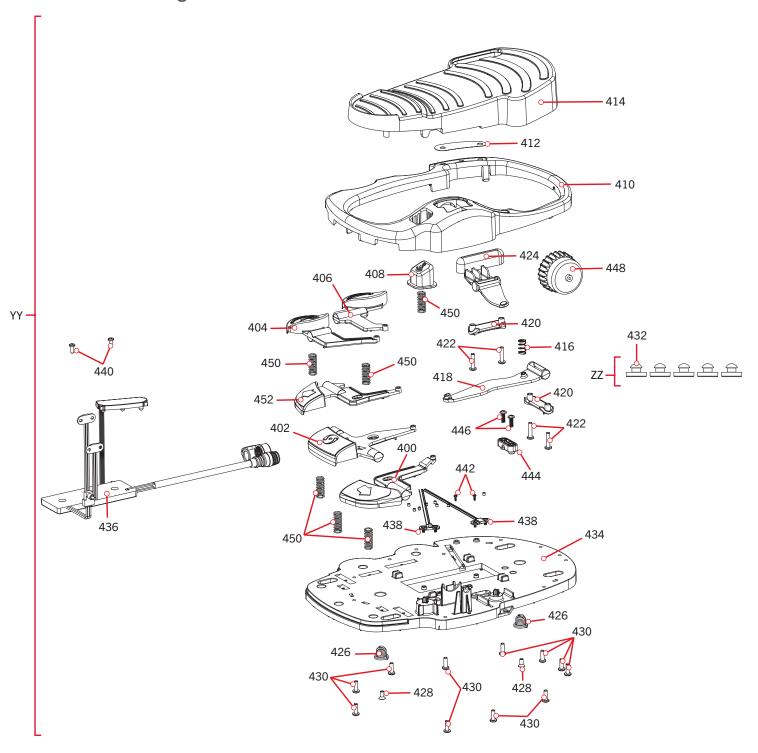
Item	Part #	Description	Notes	Quantity
372	×	HOUSING-STEERING, TOP, FW		1
374	2323408	SCREW-#8-32 X 2.0 SHCS SS		7
376	2322600	PIN-LATCH, ZP		1
378	2321702	WASHER-FLAT .375 NYLON		2
380	2263011	E-RING 3/8 DIA. SHAFT*		2
382	2322702	SPRING, LATCH PIN SS		2
384	2323410	SCREW-#8-32 X .75 SHCS SS		1
386	2327310	BUSHING, STEERING HSG PIVOT, FW		2
388	×	LEADWIRE, STEERING MOTOR		1
390	2325503	DECAL,STOW/DEPLOY,TRV3 PM		1
392	3394602	WASHER-FLAT #8 SS		7

<sup>▲</sup> Not shown on Parts Diagram.

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

TERROVA FOOT PEDAL 🔪

## > Foot Pedal Parts Diagram



## > Foot Pedal Parts List

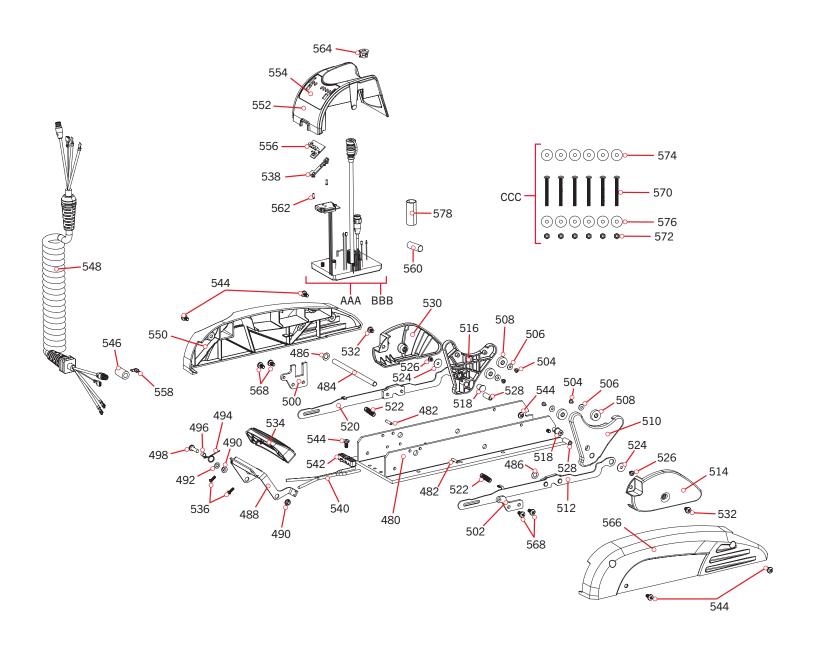
Assembly	Part #	Desctiption	Notes	Quantity
YY	2994733	FT PEDAL ASM TRV 3 PM		1
ZZ	2994859	BAG ASY-TERROVA/V2,RUB.BUMPERS		1
Item	Part #	Desctiption	Notes	Quantity
400	2323731	BUTTON, RIGHT STEER, TERROVA		1
402	2323735	BUTTON, MOMENTARY, TERROVA		1
404	2323715	BUTTON,MOM/CON,FT PEDAL		1
406	2323726	BUTTON, AP FOOT PEDAL		1
408	2203720	BUTTON, SPOT LOCK,ULTERRA/TRRV		1
410	2320240	COVER,FT PEDAL,TRV3 BL		1
412	2325655	DECAL, 3 INDICATORS, TERROVA		1
414	2324401	PEDAL,HEEL/TOE FOOT PEDAL		1
416	2322714	SPRING (LEE #LC-029E-4-S) SS		1
418	2328600	FLEX FINGER, FOOT PEDAL		1
420	2321300	CLAMP-LEFT, FT PEDAL		2
422	2223430	SCREW-#8x3/4 PPH,TYPE 25,SS		4
424	2323710	BUTTON,MOM LEFT,FT PEDAL		1
426	2322706	SPRING-BARREL SS		2
428	2323420	SCREW-#8-18 X 3/8" PFH SS TY B		2
430	2301310	SCREW-#8-18 X 1/2 (SS)*		11
432	2325110	PAD, FOOT PEDAL		5
434	2204501	BASE PLATE, FOOT PEDAL		1
436	×	MAIN ASSY, FOOT PEDAL, TERROVA		1
438	2373440	SCREW-#4-24 X 1/4 PHCR SS TY B		4
440	2372103	SCREW-#6 X .375 PLASTITE SS		2
442	2302100	SCREW-#6-20 X 1/2 THD CUTS		2
444	2322900	STRAIN RELIEF, FOOT PEDAL		1
446	2372100	SCREW-#8-18 X 5/8 THD* (SS		2
448	2320100	KNOB-SPEED, FOOT PEDAL		1
450	2322704	SPRING, LARGE SHORT SS		6
452	2323730	BUTTON, LEFT STEER, TERROVA		1

<sup>▲</sup> Not shown on Parts Diagram.

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

TERROVA MOUNT 🔪

## Mount Parts Diagram



## Mount Parts List

Assembly	Part #	Desctiption	Notes	Quantity
AAA	2324062	CONTROL BRD ASY, MAIN, 12V, IP	*55LB*	1
BBB	2324063	CTRL BRD,MAIN,24/36V,IP	*80LB* *112LB*	1
CCC	2994864	BAG ASSY-TERROVA/V2,MNTG HDW		1
Item	Part #	Desctiption	Notes	Quantity
480	2321907	BASE, EXTRUSION, MACHINED		1
482	2322912	PIN-ROLL .1875 X 1.000 SS		2
484	2322602	PIN-PIVOT, ZP		1
486	2013100	NUT-SPEED		2
488	2320405	HANDLE, RELEASE, FW		1
490	2322604	BUSHING,HANDLE		2
492	2071716	WASHER-FLAT SS .253 x .470		1
494	2322701	SPRING, TORSION		1
496	2301700	SPACER-RELEASE LEVER-BRASS		1
498	2073408	SCREW-1/4-20 X 7/8 PPH S/S		1
500	2321940	BRACKET, STRAIN RELIEF FW		1
502	2321950	BRACKET, SIDEPLATE FW		1
504	2323412	SCREW-#8-18 X .25 PPH SS TY B		4
506	2321706	WASHER-FLAT #8 .50 OD/.188 SS		4
508	2325115	PAD, RUBBER REST, BLACK		4
	2323910	RAMP-MOTOR, RIGHT 3-5/8"	*55LB*	1
510	2323930	RAMP-MOTOR, RIGHT 4"	*80LB*	1
	2323931	RAMP-MOTOR, RIGHT 4.5"	*112LB*	1
512	2994204	ARM/SUPPORT BLOCK ASSY,R,FW		1
E1/	2321920	PLATE-SKID, RIGHT FW	*55LB* * 80LB*	1
514	2321922	PLATE-SKID, RIGHT FW	*112LB*	1
	2323915	RAMP-MOTOR, LEFT 3 5/8"	*55LB*	1
516	2323935	RAMP-MOTOR, LEFT 4"	*80LB*	1
	2323936	RAMP-MOTOR, LEFT 4.5"	*112LB*	1
518	2324705	INSERT-MOTOR RAMP, METAL, ZP		2
520	2994202	ARM/SUPPORT BLOCK ASSY,L,FW		1
522	2322716	SPRING, EXTENSION, T2		2
524	2321700	WASHER #10 SS		2
526	2323422	SCREW-#10-24 X .25" PPH SS MCH		2
528	2322920	STAND-OFF, ALUMINUM PLAIN		2

<sup>▲</sup> Not shown on Parts Diagram.

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

Item	Part #	Desctiption	Notes	Quantity
530	2321925	PLATE-SKID, LEFT FW	*55LB* * 80LB*	1
	2321927	PLATE-SKID, LEFT	*112LB*	1
532	2323403	SCREW-1/4-20 X.375 MCH SS CRPH		2
534	2320217	COVER, HANDLE COSMETIC FW		1
536	2383446	SCREW-#8-16 X .50" PLASTITE SS		2
538	2320830	LOCKING TAB, PWR/BAT. METER		1
<b>A</b>	2323406	SCREW-#10-24 X .50 CRPH SS		2
540	2090651	LEADWIRE,10 GA		1
542	2321310	STRAIN RELIEF		1
544	2323405	SCREW-1/4-20 X 1/2" MCH SS		7
546	2307313	BEAD-FERRITE	*80LB* *112LB*	1
548	2991272	COIL CORD ASY 54"/60" U.SONAR	*54"* *60"*	1
	2991276	COIL CORD ASSY 72" U.SONAR	*72"*	1
	2991274	COIL CORD ASSY 45"/48" U.SONAR	*45"*	1
	2991271	COIL CORD ASY 54"/60" NON-US2	*54"* *NON-SONAR*	1
550	2323927	SIDEPLATE-LEFT, TERROVA		1
552	2326530	HOUSING-CENTER, TERROVA		1
554	2325636	DECAL-PWR SWTCH,T3PM,FW		1
556	2074070	BATTERY METER, 12V, FW	*55LB*	1
	2074071	BATTERY METER, 24V, FW	*80LB*	1
	2074072	BATTERY METER, 36V, FW	*112LB*	1
558	2320710	TERMINAL-AMP (T-TAB)		1
560	2325401	SHRINK TUBE-3/4 ID X 2" W/ADHS		1
562	2383428	SCREW-#4-24 X 3/8 HI-LO SS		2
564	2322901	STRAIN RELIEF, HEYCO P/N 1852		1
566	2323922	SIDEPLATE-RIGHT, TERROVA		1
568	2323404	SCREW-1/4-20 X 1/2" T-L ZP		4
570	2263462	SCREW-1/4-20 X 2" S/S PPH ADJT		6
572	2263103	NUT-1/4-20 NYLOCK SS		6
574	2301720	WASHER-MOUNTING - RUBBER		6
576	2261713	WASHER-1/4 FLAT 18-8 SS		6
578	2205412	SHRINK TUBE75 ID X 2"		1
<b>A</b>	2377179	INSTR.SHEET, MKA-60 STABILIZER	*72"*	1

<sup>▲</sup> Not shown on Parts Diagram.

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

# 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.







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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.



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