

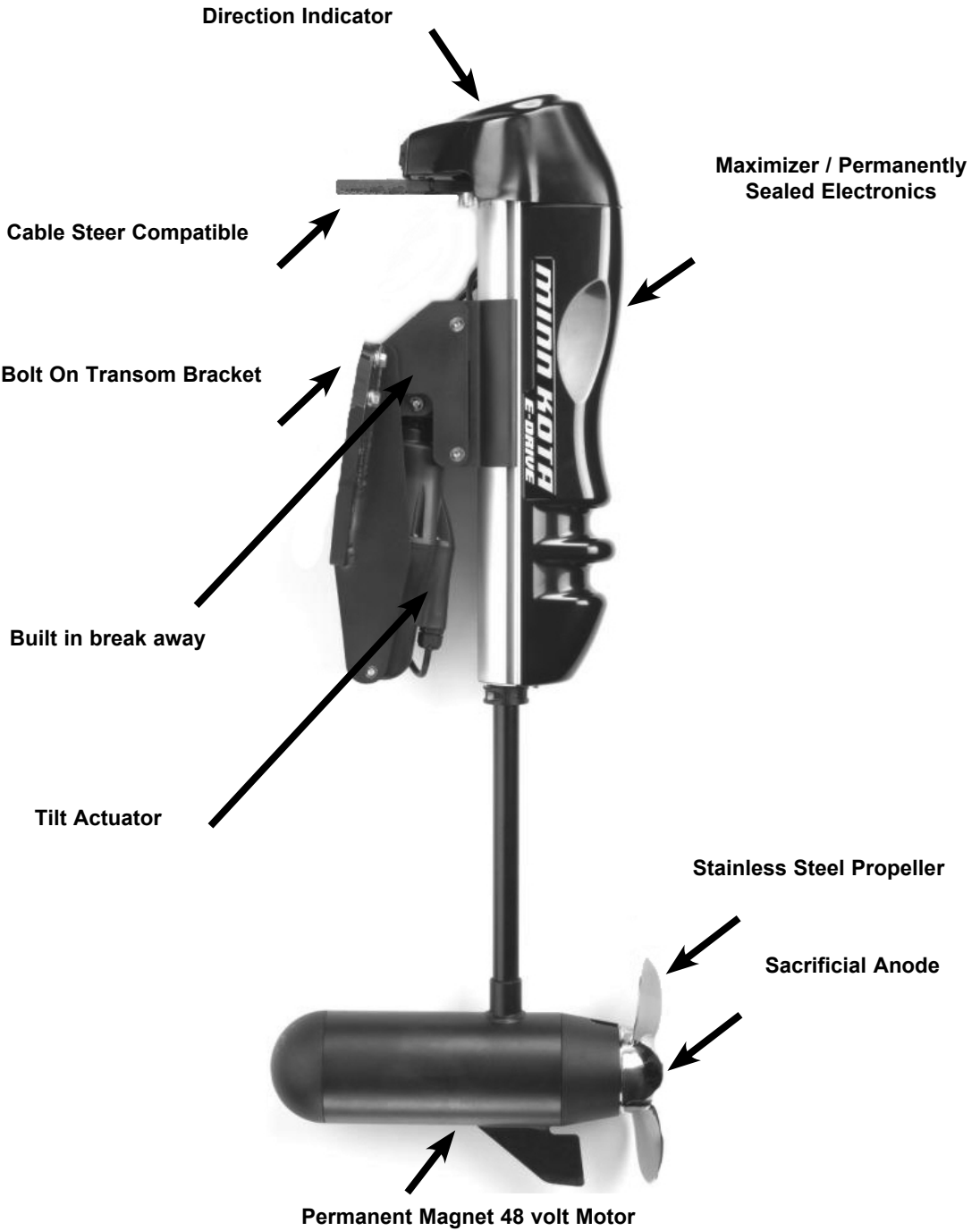


CE Master User Manual for E-DRIVE

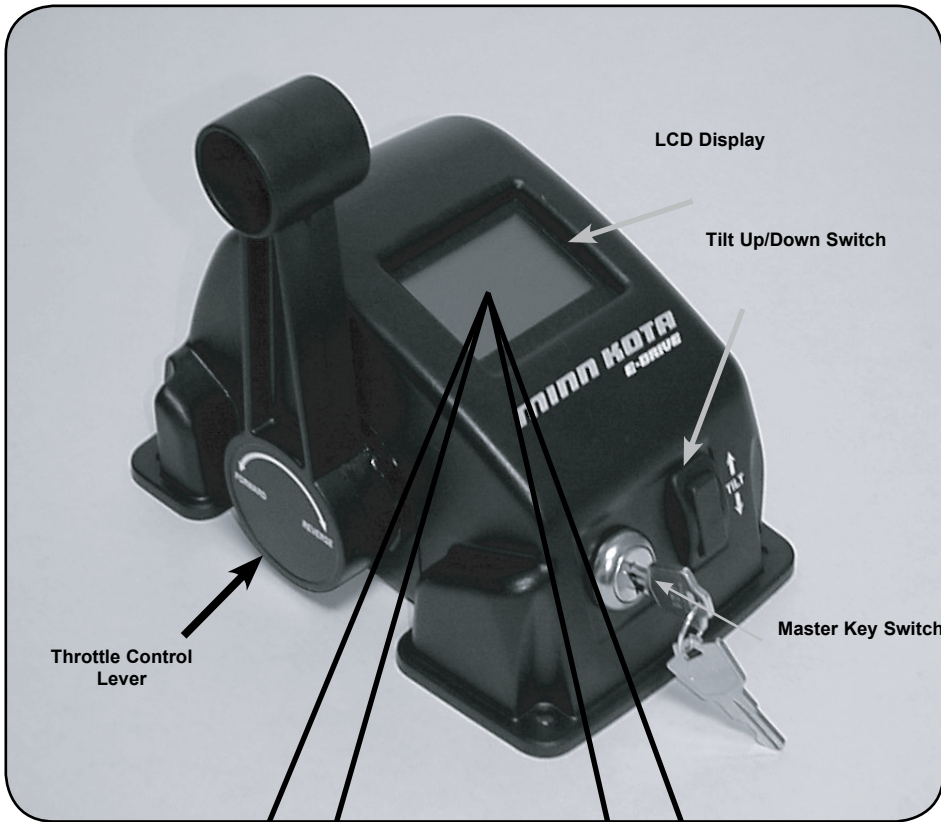
**PRIMARY PROPULSION MOTOR
MOTEUR DE PROPULSION PRIMAIRE**



PLEASE THOROUGHLY READ THIS USER MANUAL. FOLLOW ALL INSTRUCTIONS AND HEED ALL SAFETY & CAUTIONARY NOTICES BELOW. USE OF THIS MOTOR IS ONLY PERMITTED FOR PERSONS THAT HAVE READ AND UNDERSTOOD THESE USER INSTRUCTIONS. MINORS MAY USE THIS MOTOR ONLY UNDER ADULT SUPERVISION.



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE.



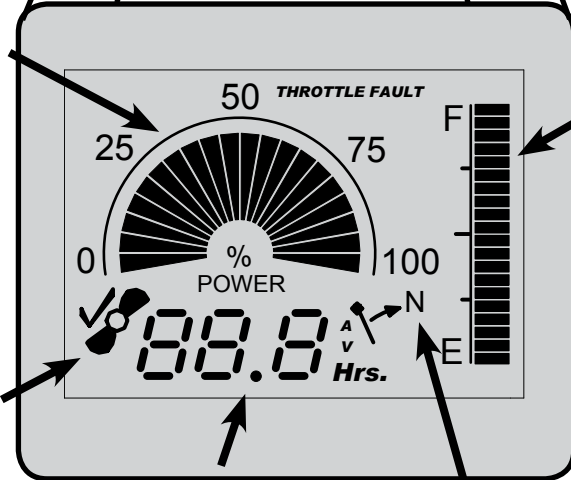
Percentage of Power

Battery Fuel Gauge
Indicateur

Prop Obstructed

Battery Run Time Gauge

Return to Neutral



CONTROLLER FEATURES:

- **Throttle Control Lever:** Has Forward / Neutral / and Reverse positions.
- **Tilt up / down Switch:** Allows the motor to be tilted up or down.
- **Master on/off key Switch:** Turns system on and off.
- **LCD Display:** Displays the following features:
 - **Percentage of Power Icon:** Provides a visual indication of the motor percentage of power/speed settings.
 - **Battery Run Time Gauge:** The motor is equipped with a real time battery gauge. It will dynamically display hours of remaining running time at the current speed setting. The motor does not need to be running for the gauge to display. This gauge is accurate only with four series wired, Group 27, 105 Amp hour deep cycle marine batteries. The running time reading is always displayed when the Master Switch is ON.
 - **Prop Obstructed Icon:** Will appear if propeller is stalled or obstructed in some manner. Return to neutral, tilt motor up, turn Master Switch to OFF position and free obstruction.
 - **“Throttle Fault”:** Return throttle to neutral and system will reset.
 - **“N” icon:** Will display if unit is turned on while the throttle is not in neutral position. Return throttle to neutral and system will reset.
 - **LCD Backlight:** The LCD has a backlight when unit is powered up.
 - **Battery Fuel Gauge:** Visual indication of battery power, “Fuel”, remaining.

COMPONENTS:

Throttle Assembly w/Cable
Drag Link
E-Drive Motor
Motor / Throttle Mounting Templates (two copies are included: Owner's Manual and Throttle Assembly.)
Throttle Assembly Mounting Hardware
Trim Gauge w/Mounting Hardware **OPTIONAL**
E Drive Motor Mounting Hardware
Jumper wire-1' (2)
Jumper wire-4' (1)
Propeller assembly

TOOLS REQUIRED:

1/8" diameter drill bit (For mounting the Throttle Assembly)
3/8" diameter drill bit (For mounting the E-Drive Motor)
1" diameter hole saw (For routing the Throttle Cable plug end)
2 1/16" diameter hole saw (For mounting the Trim Gauge)
Center punch
Hand Drill
#2 Phillips screwdriver
5/8" wrench and/or ratchet and socket. (For mounting the E-Drive Motor Unit)
11/16" wrench and/or ratchet and socket (For mounting the E-Drive Motor Unit)

NOTE: MINN KOTA MOTORS/JOHNSON OUTDOORS IS NOT RESPONSIBLE FOR ANY DAMAGE DUE TO IMPROPER RIGGING OR INSTALLATION OF THE E-DRIVE UNIT.

Mounting the E-Drive unit:

The Motor Mounting Template is printed in two locations. One copy is printed in the Owner's Manual and a second copy is packaged with the Throttle Assembly. (Note, do not photocopy the Mounting Templates as the hole locations and dimensions will not be accurate on the photocopies.) To mount the motor;

- 1). Cut out the Motor Mounting Template desired.
- 2). On the top edge of the transom measure, locate, and mark the center of the transom. Align the top edge of the Template with the top of the transom. Align the centerline of the Template with the center of the transom.
- 3). Tape the Template to the transom.
- 4). Use a center punch to mark the hole locations.
- 5). Using a 3/8" drill bit, drill the four motor mounting holes making sure that the holes drilled are perpendicular to the transom.
- 6). Place the E-Drive Motor on the transom and securely attach it using the four 3/8" x 3 1/2" bolts, washers and locking nuts provided in the Motor Mounting Hardware bag.
- 7). Pass the steering cable of the watercraft through the steering tube on the E-Drive Motor and secure the nut.
- 8). Attach the Drag Link to the steering cable and the E-Drive Motor steering arm.
- 9). Attach the propeller. (See "Propeller Installation / Replacement" in motor manual)

THROTTLE ASSEMBLY INSTALLATION:

CAUTION: WHEN INSTALLING THE THROTTLE ASSEMBLY MAKE SURE THE MOUNTING AREA IS CLEAR OF ANY OBSTRUCTIONS ON THE UNDERSIDE OF THE MOUNTING SURFACE, AND CLEAR OF THE STEERING WHEEL, SWIVELING SEATS, ETC.

SURFACE/BINNACLE THROTTLE MOUNTING:

The Throttle Assembly Mounting Template is also printed in two locations. One copy is printed in the Owner's Manual and a second copy is packaged with the Throttle Assembly. Cut out the Template you intend to use. (Note, do not photocopy the Mounting Templates as the hole locations and dimensions will not be accurate on the photocopies.)

- 1). Place the Template in the area you wish to mount the Throttle Assembly and check for any obstructions. Reposition if necessary.
- 2). Tape the Template in place. Drill a 1" diameter hole for the Throttle Cable where indicated.
- 3). Drill four 1/8" diameter holes to mount the Throttle Assembly.
(Installation Tip: Before mounting the Throttle Assembly you may want to route and attach the Throttle Cable)
- 4). Pass the Throttle Cable plug end through the 1" diameter hole.
- 5). Attach the Throttle Cable to the Throttle Assembly. Rotate the threaded plug collar clockwise to secure the plug connection.
- 6). Place the Throttle Assembly into position and fasten it to the mounting surface using the four #8-18 x fl" throttle mounting screws provided.

SIDE MOUNTING THROTTLE:

A Side Mount Bracket is included with the Throttle Assembly.

- 1). Place the Side Mount Bracket in the area you wish to mount the Throttle Assembly and check for any obstructions. Reposition if necessary. Mark the four mounting hole locations.
- 2). Drill four 1/8" diameter holes to mount the Throttle Assembly.
- 3). Fasten the Side Mount Bracket to the mounting surface using the four #8-18 x fl" throttle mounting screws provided.
(Installation Tip: Before mounting the Throttle Assembly on the Side Mount Bracket, you may want to route the Throttle Cable.)
- 4). Pass the Throttle Cable plug end through the 1" diameter hole in the Side Mount Bracket. Attach the Throttle Cable to the Throttle Assembly. Rotate the threaded plug collar clockwise to secure the plug connection.
- 5). Fasten the Throttle Assembly to the Side Mount Bracket using the four #6-32 screws and nuts provided.

THROTTLE CABLE ROUTING/INSTALLATION AND MOTOR CONNECTION:

Plan the routing of the Throttle Cable so it will enter the right side of the E-Drive Motor. (As viewed when facing toward the front of the watercraft while standing behind the E Drive Motor Unit.)

To attach the Throttle Cable to the E Drive Motor Unit:

- 1). Align the throttle cable motor plug end (7/8" diameter male plug) with the corresponding 7/8" female plug end on the short throttle cable attached to the E-Drive motor unit.
- 2). Push the plug ends together and rotate the threaded plug collar clockwise to secure the throttle cable plug connection. (Note: this is a waterproof connection. No additional sealant or grease is required.)

TILT GAUGE INSTALLATION

CAUTION: Disconnect the battery during installation. Tighten nuts on the backclamp only slightly more than you can tighten with your fingers. **Six inch-pounds** of torque is sufficient. Over tightening could result in damage to the instrument and may void your warranty.

- 1). The tilt sending unit included with the Minn Kota E-Drive electric outboard motor is equipped with a 2 conductor lead, 20 ft in length. This 2 conductor leads provides the tilt gauge signal.
- 2). For all connections to the tilt gauge, be sure to use stranded, insulated wire of at least 18 awg that is approved for marine use. Use insulated ring type terminals for all gauge connections except the internal lighting which requires a 1/4" female blade terminal.
- 3). Disconnect the battery.
- 4). Cut a 2-1/16" diameter hole in the dash and mount the tilt gauge with the backclamp supplied.
- 5). Connect the **BLUE** wire, (from the 2 conductor tilt gauge lead), to the stud marked "S" (signal) and secure with a nut and lock washer.
- 6). Connect the **BLACK** wire, (from the 2 conductor tilt gauge lead), to the stud marked "GND" (ground). To this same stud, attach a wire that is connected to the watercrafts -12 volt (ground) accesory circuit. If the watercraft does not have it's own -12 volt accesory circuit, connect this wire to the negative post of battery #1 of the 4 -12 volt batteries that are series connected to provide power for the Minn Kota E-Drive electric outboard. Secure both wire terminals with a nut and lock washer.

- 7). Connect a wire to stud marked "I" (ignition) and secure with a nut and lock washer. Connect the opposite end of this wire to the +12 volt side of the watercraft's switch controlled accessory circuit, if the watercraft is so equipped. Otherwise, connect this wire to the +12 volt positive battery post, of battery #1 of the 4-12 volt batteries that are series connected to provide power for the Minn Kota E-Drive electric outboard.
- 8). For internal gauge backlighting, connect a wire from the 1/4" blade terminal to the +12 volt switched accessory circuit of the watercraft, if the watercraft is so equipped. Otherwise, connect this wire to the stud marked "I".

NOTE: To change light bulb, twist black socket assembly one-eighth turn counter clockwise until it pops out. Bulb pulls out of socket assembly. It is a GE No. 161 instrument lamp.

WARNING: Different tilt gauge manufacturers may not use the same tilt sender resistance values as those supplied by the tilt sender installed on the Minn Kota E-Drive electric outboard motor. If you are not using the tilt gauge supplied with the E-Drive electric outboard, be sure the gauge used is compatible with a tilt sender that will provide 0-100 ohms of resistance.

Attention:

- Avoid running your motor with the propeller outside of the water. This may result in injuries from the rotating propeller.
- It is recommended to set the speed selector to zero and place the motor in the deployed position prior to connecting power cables. Disconnect power cables prior to stowing.
- Always ensure that the power cables are not twisted or kinked; and that they are securely routed to avoid a safety or trip hazard. Ensure cables are unobstructed in all locations to avoid damaging the wire insulation. Damage to the insulation could result in failure or injury.
- Always inspect the insulation of the power cables prior to use to ensure they are not damaged.
- Disregarding these safety precautions may result in an electrical short of the battery(s) and/or motor. Always disconnect the motor from the battery(s) before cleaning or checking the propeller.
- Avoid submerging the complete motor as water may enter the lower unit through control head and shaft. Water in the lower unit may cause an electrical short and damage the lower unit. This damage will not be covered by warranty.

Caution!

- Always operate the motor in a safe distance away from obstructions. Never approach the motor when the propeller is running. Contact with a spinning propeller may endanger you or others.
- Always exercise safe practices when using your motor; stay clear of other watercrafts, swimmers, and any floating objects. Always obey water regulations applicable to your area of operation.
- Never operate the motor while under the influence of alcohol, drugs, medication, or other substances which may impair your ability to safely operate equipment.
- This motor is not suitable for use in strong currents exceeding the thrust level of the motor.

The constant noise pressure level of the motor during use is less than 70dB(A). The overall vibration level does not exceed 2,5m/sec².

BATTERY INFORMATION:

The motor requires a 48 volt power source. Four 12 Volt, Group 27, 115 Amp hour Deep Cycle batteries connected in series must be used. The circuitry that monitors battery life for the LCD is based on that specific wiring configuration. Using any other wiring configuration to provide 48 volts will result in inaccurate running time and battery life readings. Maintain batteries at full charge. Failure to recharge lead-acid batteries (within 12 - 24 hours) is the leading cause of premature battery failure. For best results, use a variable rate, Minn Kota charger to avoid overcharging.

BOAT RIGGING AND MOTOR INSTALLATION:

An over-current protection device (circuit breaker or fuse) must be used with this motor. Coast Guard requirements dictate that each ungrounded current-carrying conductor must be protected by a manually reset, trip-free circuit breaker or fuse. The type (voltage and current rating) of the fuse or circuit breaker must be sized accordingly to the trolling motor used. The following breaker sizes are recommended guidelines:

Maximum thrust Voltage Recommended circuit breaker rating

30# to 45# 12V 50A @ 12VDC

50# to 55# 12V 60A @ 12VDC

65# to 70# 24V 50A @ 24VDC

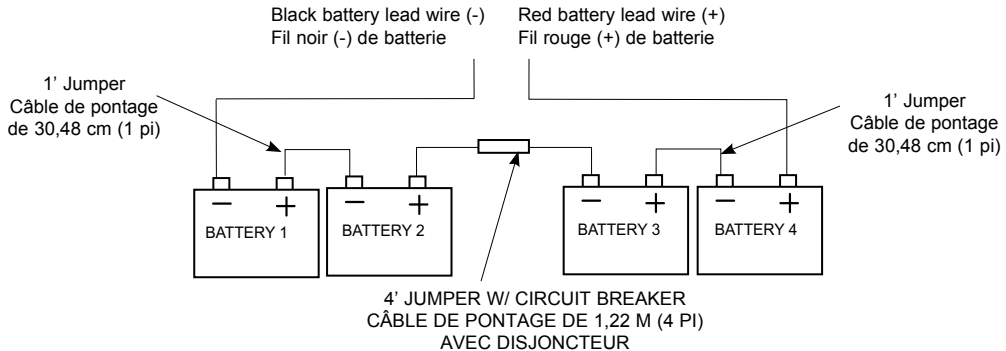
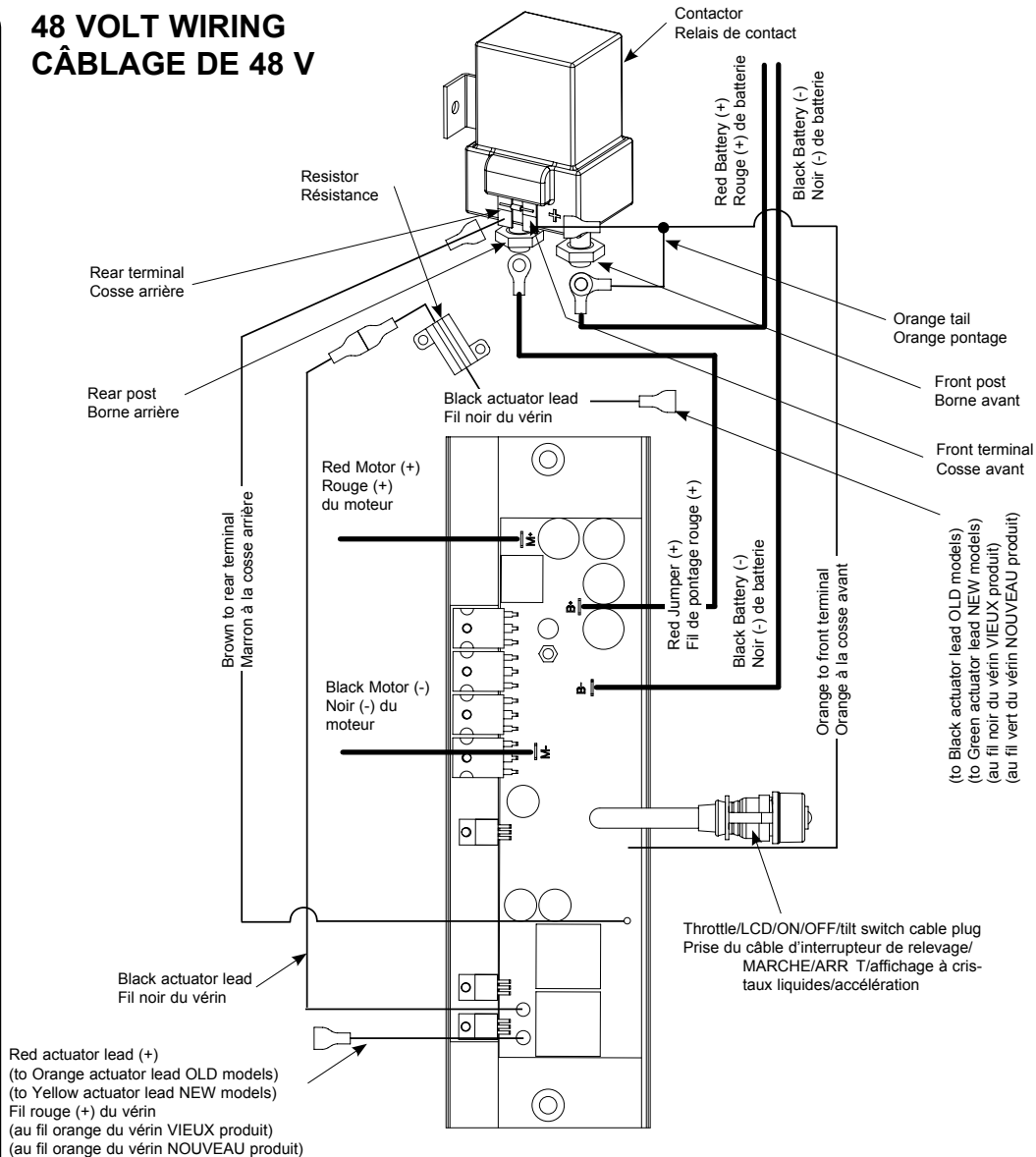
80# 24V 60A @ 24VDC

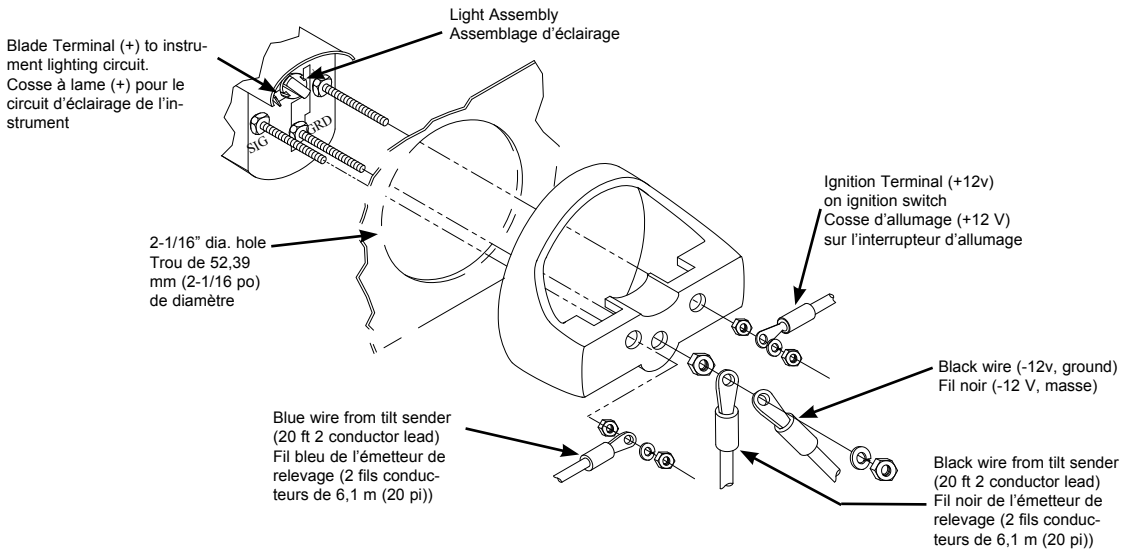
101# 36V 50A @ 36VDC

E-Drive 48V 40A @ 48VDC

The appropriate wire size needed to connect your trolling motor to the trolling motor batteries varies depending on the length of cable needed and voltage of the motor. For additional information, please consult appropriate ABYC (American Boat and Yacht Council) and Coast Guard requirements.

48 VOLT WIRING CÂBLAGE DE 48 V





TESTING:

When the rigging and mounting is complete, the motor should be tested to make sure everything is operating properly. Follow these steps:

- 1). Make sure that all objects and people are away from the prop.
- 2). Turn the master switch to the on position and visually confirm the LCD display is on. Slowly move the throttle forward to a slow running position. If everything is hooked up correctly, the prop will turn clock-wise as you view the motor from inside the boat.
- 3). Now move the throttle lever to the center detent position to stop the prop rotation.
- 4). Slowly move the lever to a slow reverse position. If everything is hooked up correctly, the prop will turn counter-clockwise as you view the motor from inside the boat.
- 5). Now move the throttle lever to the center detent position to stop the prop rotation.
- 6). Test the tilt up/down switches to verify function.
- 7). Turn master to the off position.
- 8). Do not operate tilt switch while propeller is turning. This can cause premature failure of the actuator.

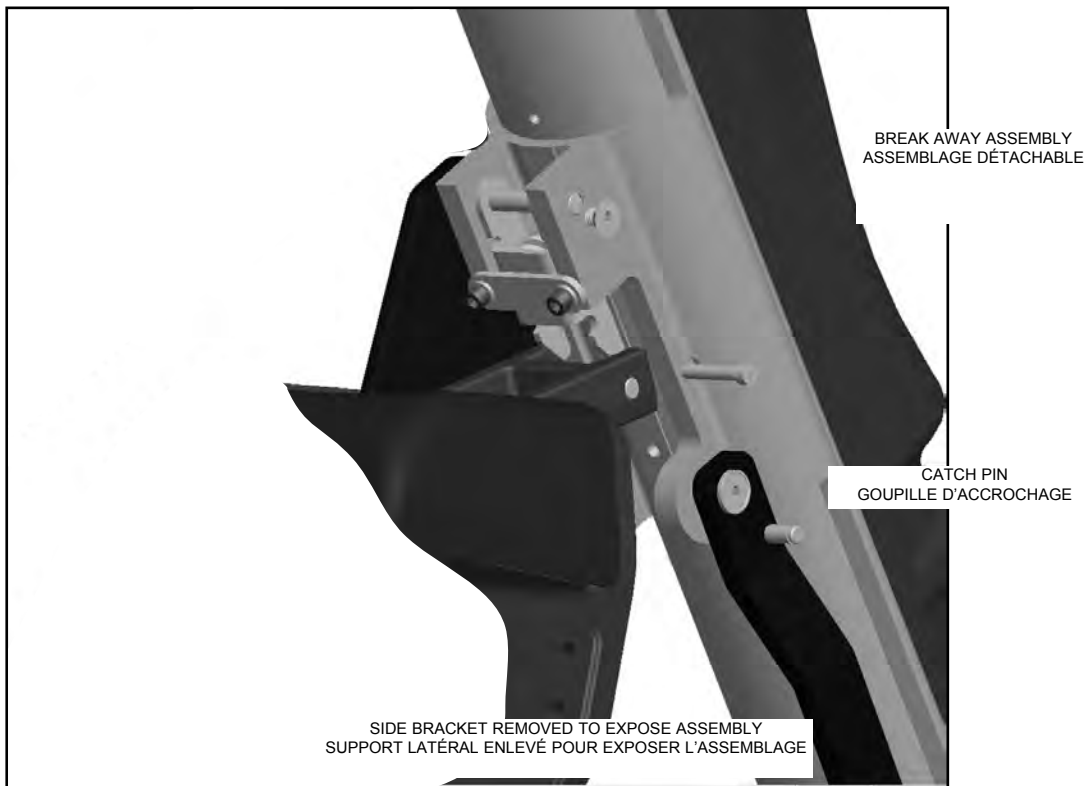
OPERATION:

- 1) Turn the master switch to the ON position.
- 2) Using the tilt up/down switch, raise the motor up, disengage tilt lock arm and lower motor for use.
- 3) Select either a forward or reverse direction and slowly move the throttle away from neutral.
- 4) Steering is easy. Use your boats steering wheel to turn the e-drive motor left or right.
- 5) To stop the propeller, you may either place the throttle lever in the neutral position or turn the master switch to the off position.
- 6) When not in use, the master switch should be turned to the OFF position to completely shut the motor down. With the master switch on, a very small amount of electricity is always being drawn. To reduce the drain on the batteries, the off position on the master switch should be used.

NOTE: WHEN THE BATTERY VOLTAGE FALLS BELOW 38V, THE BATTERY E, F FUEL GAUGE ICON WILL FLASH AND THE HOURS WILL READ 0.0.
WHEN BATTERY VOLTAGE FALLS BELOW 36V, THE LOWER UNIT WILL SHUT OFF. THE LCD WILL GO BLANK AND ONLY THE E, F FUEL GAUGE ICON WILL FLASH.

BREAK AWAY FEATURES:

The E-Drive electric outboard features a built-in break away system. If, while moving forward, the E-Drive motor lower unit contacts an underwater obstruction, the break away system will release and allow the the motor unit to swing up and over the obstruction preventing damage to the E-Drive motor shaft, lower unit, and propeller. In most instances, the break away system will automatically reset when the motor clears the underwater obstruction and is again exerting forward thrust on the watercraft. If the break away system does not automatically reset, place the throttle control lever in the neutral position, raise the motor lower unit out of the water by using the tilt up switch, and turn off master switch. Exert downward pressure on the lower unit to re-engage the break away catch and pin. (SEE PHOTO)



TRANSPORTING THE E-DRIVEUNIT:

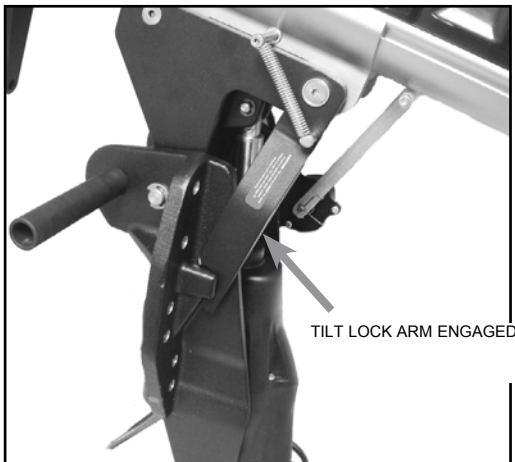
CAUTION: TILT LOCK ARM **MUST** BE USED IF BOAT IS TRAILERED WITH MOTOR RAISED. FAILURE TO USE TILT LOCK WILL DAMAGE LIFT ACTUATOR AND VOID WARRANTY.

CAUTION: IF TOWING THE BOAT ON THE WATER BECOMES NECESSARY, MAKE SURE MOTOR IS TRIMMED OUT OF THE WATER OR TOWED AT LESS THAN 5MPH. TOWING WITH THE MOTOR IN THE WATER AT GREATER THAN 5 MPH FORCES THE PROPELLER TO ROTATE AT HIGH RPM AND COULD RESULT IN CIRCUIT BOARD FAILURE.

CAUTION: TILT MECHANISM IS DESIGNED FOR TILTING MOTOR WHEN THE PROPELLER IS NOT TURNING. TILTING THE MOTOR WHILE THE PROPELLER IS TURNING CAN CAUSE PREMATURE FAILURE OF THE ACTUATOR.

To engage the tilt lock arm - Tilt motor up until it stops, manually move arm to the engage position as shown in illustration. Tilt motor down until it stops and release tilt switch.

To disengage the tilt lock arm - Tilt motor up until it stops, manually disengage arm and tilt down for use.

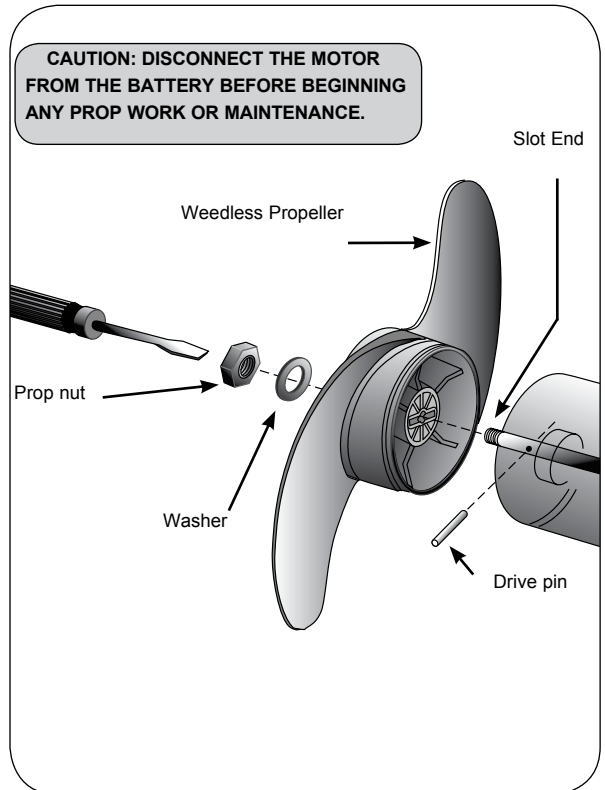


MAINTENANCE:

- 1 After use, rinse the unit with fresh water and allow to dry. Then, wipe it down with a cloth dampened with an aqueous based silicone spray. The E-Drive series is not intended for salt water use. Use in salt water will void your warranty.
2. The propeller must be cleaned of weeds and fishing line. The line can get behind the prop, wear away the seals and allow water to enter the motor. Disconnect battery and check this after every 20 hours of operation.
3. To prevent accidental damage during trailering or storage, disconnect the battery whenever the watercraft is not on the water. For prolonged storage, lightly coat all metal parts with an aqueous based silicone spray.
4. For maximum performance, restore battery to full charge immediately and before each use.
5. To prevent damage during trailering, the motor must be in the vertical position or tilted up with the lock arm engaged as shown in illustration on page 16.

PROPELLER REPLACEMENT:

- Disconnect motor from battery prior to changing the propeller.
- Hold the propeller and loosen the prop nut with a pliers or a wrench.
- Remove prop nut and washer. If the drive pin is sheared/broken, you will need to hold the shaft steady with a screwdriver blade pressed into the slot on the end of the shaft.
- Turn the old prop to horizontal (as illustrated) and pull it straight off. If drive pin falls out, push it back in.
- Align new propeller with drive pin.
- Install prop washer and prop nut.
- Tighten prop nut 1/4 turn past snug. [25-35 inch lbs.] Be careful, over tightening can damage prop.



TROUBLESHOOTING:

- 1) Motor fails to run or lacks power:
 - Check battery connections for proper polarity.
 - Insure all batteries are fully charged.
 - Make sure terminals are clean and corrosion free. Use fine sandpaper or emery cloth to clean terminals.

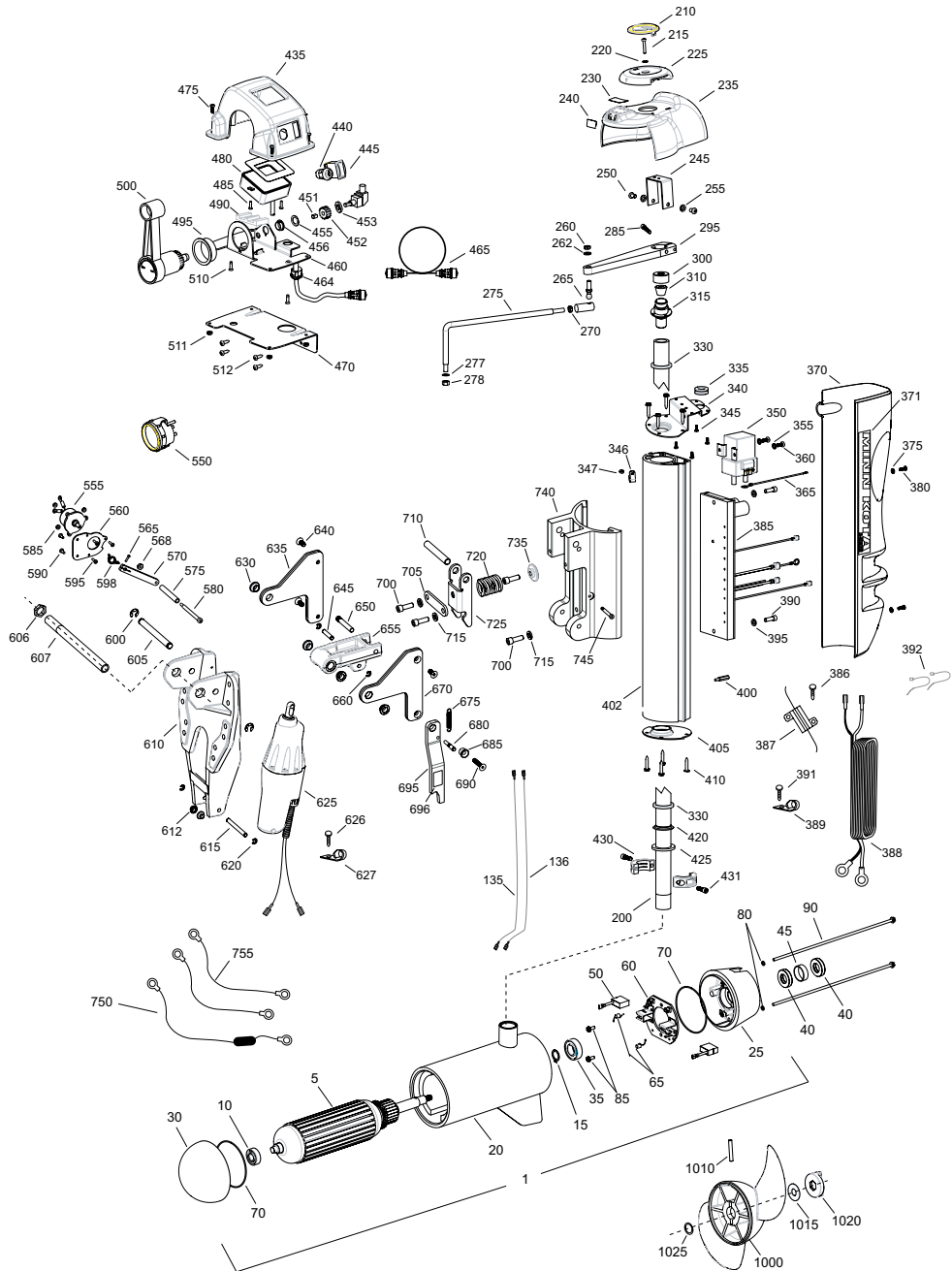
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WHEN BATTERY VOLTAGE FALLS BELOW 36V, THE LOWER UNIT WILL SHUT OFF. THE LCD WILL GO BLANK AND ONLY THE **E, F** FUEL GAUGE ICON WILL FLASH.

- 2) Motor stops running during use:
 - The motor has reached its current limit (possibly the propeller is blocked - system LCD will show prop obstruction icon if this occurs). Move throttle control lever to neutral, tilt motor up, turn master switch OFF, free obstruction, turn Master Switch ON, lower motor and move throttle control lever to forward or reverse position.
 - Check fuses or circuit breaker in boat.
- 3) Motor does not respond to controller commands.
 - Make sure master switch is in the "ON" position.
 - "N" Icon displayed on LCD when Master Switch is turned "ON". Throttle control lever is not in neutral position. Place throttle control lever in neutral position to reset system.
- 4) Motor loses power after a short running time:
 - Check battery charge, if low, restore to full charge.
- 5) The lower unit does not fully deploy:
 - Check for shallow water or underwater obstructions.
- 6) Motor runs, but prop does not turn.
 - Check shear pin, replace if broken.

E-Drive Remote Steer

This page provides MinnKota® 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 screw driver, Phillips screw driver, Socket set, Pliers, wire Cutters.



| Item | P/N | Description | Qty | Item | P/N | Description | Qty |
|------|-----------|---------------------------------|-----|------|---------|------------------------------------|-----|
| 1 | 2357000 | Motor Assembly | 1 | 360 | 2223454 | Screw, 10-32 x 1/2 | 2 |
| 5 | 2-100-210 | Armature assembly | 1 | 365 | 2040600 | Wire, connecting 10 ga red | 1 |
| 10 | 140-011 | Bearing, plain end | 1 | 370 | 2050220 | Shield, extrusion, vantage | 2 |
| 15 | 788-075 | Retaining ring | 1 | 371 | 2045611 | Decal, shield, E-drive | 1 |
| 20 | 2-200-220 | Center housing assembly | 1 | 375 | 2371715 | Lockwasher, #8 | 2 |
| 25 | 2-300-210 | Brush end housing assembly | 1 | 380 | 2332101 | Screw, 8-32 x 1/2 | 2 |
| 30 | 421-310 | Plain end housing assembly | 1 | 385 | 2044009 | Control Board, E-drive | 1 |
| 35 | 140-013 | Bearing, brush end | 1 | 386 | 2043418 | Screw, 4-40 x 3/8 | 2 |
| ■ | 2884460 | Seal & Oring Kit (40, 70, & 80) | | 387 | 2994071 | Resistor, E-drive | 1 |
| 40 | 880-027 | Seal | 2 | 388 | 2040605 | Leadwire, prime power | 1 |
| 45 | 725-097 | Paper tube | 1 | 389 | 2263201 | Cable clamp, 9/16 | 1 |
| 50 | 188-096 | Brush | 2 | 390 | 9954533 | Screw, 1/4-20 x 3/4 SHCS | 2 |
| 60 | 2-600-210 | Brush plate assembly | 1 | 391 | 2053415 | Screw, 8-32 x 3/8 | 1 |
| 65 | 975-041 | Brush spring | 2 | 392 | 9950433 | Tie wrap | 4 |
| 70 | 701-044 | O-ring, motor | 2 | 395 | 9950357 | Lockwasher, 1/4 | 2 |
| 80 | 701-009 | O-ring, thru-bolt | 2 | 400 | 2042911 | Stand-off | 1 |
| 85 | 2053410 | Screw, 8-32 | 2 | 402 | 2046510 | Extrusion, main, E-drive | 1 |
| 90 | 830-096 | Thru-bolt | 2 | 405 | 2040200 | Cap-bottom, E-drive | 1 |
| 135 | 640-030 | Leadwire, black | 1 | 410 | 2053413 | Screw 10-16 x 1 type AB | 8 |
| 136 | 640-130 | Leadwire, red | 1 | 420 | 2266115 | Bearing cone | 1 |
| 200 | 2042011 | Tube, Motor | 1 | 425 | 2041700 | Washer 1 3/16 x 1 3/4 | 1 |
| 210 | 2056700 | Pointer | 1 | 430 | 2261622 | Collar half, alum | 2 |
| 215 | 2263447 | Screw, #8 | 1 | 431 | 2263453 | Screw, 1/4-20 x 1 SHCS | 2 |
| 220 | 2371715 | Lockwasher, #8 | 1 | ■ | 2770217 | Throttle assembly [435-512] | 1 |
| 225 | 2050110 | Pointer knob | 1 | 435 | 2040215 | Throttle cover | 1 |
| 230 | 2045600 | Decal, top | 1 | 440 | 2044025 | Switch, key | 1 |
| 235 | 2050211 | Shroud | 1 | 445 | 2044020 | Switch, tilt | 1 |
| 240 | 2045610 | Decal, side | 1 | 451 | 2042705 | Spring knob | 1 |
| 245 | 2041910 | Bracket, indicator | 1 | 452 | 2042200 | Gear, potentiometer | 1 |
| 250 | 2043416 | Screw, 1/4-28 BHCS | 2 | 455 | 2043110 | Nut, speed | 1 |
| 255 | 9950357 | Lockwasher, 1/4 | 2 | 456 | 2047315 | Bearing, nyloner | 1 |
| ■ | 2774211 | Drag link assy | 1 | 460 | 2041915 | Base, throttle | 1 |
| 260 | 2383104 | Nut, 3/8-24 nylock | 1 | 464 | 2042900 | Strain relief | 1 |
| 262 | 9909003 | Lockwasher, 3/8 | 1 | 465 | 2047412 | Cable, throttle | 1 |
| 265 | 2383515 | Quick disconnect | 1 | 470 | 2041930 | Bracket, mounting | 1 |
| 270 | 2263105 | Nut, 3/8-24 | 1 | 475 | 2332101 | Screw, #8-32 | 4 |
| 275 | 2044211 | Drag link | 1 | 480 | 2044014 | LCD/Cable assy [465] | 1 |
| 277 | 990-067 | Washer, thrust | 1 | 485 | 2302100 | Screw, #6 | 2 |
| 278 | 2263105 | Nut, 3/8-24 | 1 | 490 | 2042701 | Spring, handle | 1 |
| 285 | 2263453 | Bolt 1/4-20 x 1 | 1 | 500 | 2880900 | Throttle handle w/ decal | 1 |
| 295 | 2044200 | Arm, steering | 1 | 510 | 2043408 | Screw, #8 | 2 |
| 300 | 9950339 | Cap, motor fitting | 1 | 511 | 2303112 | Nut, #8-32 | 4 |
| 310 | 2382900 | Grommet, split | 1 | 512 | 2043412 | Screw, #8-18 | 4 |
| 315 | 2046201 | Bearing race, main E-drive | 1 | 550 | 2044030 | Tilt gauge | 1 |
| 325 | 2042620 | Pin, spring | 1 | ■ | 2778407 | Tilt send assy w/o gauge [555-598] | 1 |
| 330 | 2266000 | Beaing, steel ball | 1 | 555 | 2998405 | Potentiometer assy | 1 |
| 335 | 2042905 | Grommet | 1 | 560 | 2041937 | Tilt bracket | 1 |
| 340 | 2040207 | Cap-top | 1 | 565 | 2043402 | Screw, #4 | 1 |
| 345 | 2372100 | Screw, 8-18 x 5/8 | 5 | 568 | 2013110 | Nut, #10-24 | 1 |
| 350 | 2040701 | Contactoer | 1 | 570 | 2044221 | Tilt sender arm | 1 |
| 355 | 2261718 | Washer, lock - #10 | 2 | 575 | 2042005 | Roller tube | 1 |

| Item | P/N | Description | Qty | Item | P/N | Description | Qty |
|------|---------|---------------------------------|-----|------|-----|-------------|-----|
| 580 | 2043500 | Shoulder bolt | 1 | | | | |
| 585 | 2043112 | Nut, #6 | 3 | | | | |
| 590 | 2053415 | Screw #8 | 2 | | | | |
| 595 | 2043400 | Screw #6 | 3 | | | | |
| 598 | 2042711 | Torsion spring | 1 | | | | |
| 600 | 2043000 | E-ring, .500 | 2 | | | | |
| 605 | 2042614 | Pin, pivot, upper | 1 | | | | |
| 606 | 9950825 | Nut, steering, hex | 1 | | | | |
| 607 | 2042000 | steering tube | 1 | | | | |
| 610 | 2041981 | Bracket, machined | 1 | | | | |
| 612 | 2047323 | Bushing, I-Glide | 2 | | | | |
| 615 | 2042612 | Pin, lower, actuator | 1 | | | | |
| 620 | 2263006 | E-ring 5/16 | 4 | | | | |
| 625 | 2992804 | Actuator assy w/ terminals | 1 | | | | |
| 626 | 2053415 | Screw, 8-32 x 3/8 | 2 | | | | |
| 627 | 2040721 | Clamp, cable 3/8 | 2 | | | | |
| 630 | 2047302 | Bearing, flange | 4 | | | | |
| 635 | 2770801 | Link, upper, right side | 1 | | | | |
| 640 | 2043420 | Screw, 5/16-18 x 3/4 | 3 | | | | |
| 645 | 2042610 | Pin, upper, actuator | 1 | | | | |
| 650 | 2042618 | Pin, latch, breakaway | 1 | | | | |
| ■ | 2774305 | Arm assy [655, 630(2)] | 1 | | | | |
| 655 | 2044301 | Arm- actuator, machined | 1 | | | | |
| 660 | 2263006 | E-ring, 5/16 | 4 | | | | |
| 670 | 2770802 | Link, upper, left side | 1 | | | | |
| 675 | 2042722 | Spring, extension | 1 | | | | |
| 680 | 2042624 | Pin, stabilizer | 1 | | | | |
| 685 | 2047320 | Bushing, tilt arm | 1 | | | | |
| 690 | 2043428 | Screw, 5/16-18 x 1 1/2 | 1 | | | | |
| 695 | 2774309 | Arm, stabilizer [695-696] | 1 | | | | |
| 696 | 2045630 | Warning Decal | 1 | | | | |
| 700 | 9954533 | Screw, 1/4-20 x 3/4 SHCS | 4 | | | | |
| 705 | 2041940 | Plate, latch, breakaway | 1 | | | | |
| 710 | 2042616 | Pin, upper, breakaway | 1 | | | | |
| 715 | 9950357 | Lockwasher 1/4 | 4 | | | | |
| 720 | 2042715 | Spring, breakaway | 1 | | | | |
| 725 | 2047200 | Latch, breakaway | 1 | | | | |
| 735 | 2041500 | Shim washer, breakaway | 1 | | | | |
| 740 | 2041810 | Extrusion, breakaway | 1 | | | | |
| 745 | 2043504 | Bolt, shoulder 1/4-20 x 1 1/4 | 1 | | | | |
| 750 | 2998200 | Circuit breaker assy | 1 | | | | |
| 755 | 2340610 | connector cable | 2 | | | | |
| ■ | 1378140 | Propeller kit | 1 | | | | |
| 1010 | 2352602 | Drive pin | 1 | | | | |
| 1015 | 2091701 | Washer, prop | 1 | | | | |
| 1020 | 2198401 | Nut, nylock, prop, Anode | 1 | | | | |
| 1025 | 2374611 | O-ring, prop | 1 | | | | |
| ■ | 2994882 | Mounting bag kit (3/8 hardware) | 1 | | | | |

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