

### MKA-58 BOAT DECK REINFORCEMENT KIT 1854058

The MKA-58 Boat Deck Reinforcement Kit is compatible with freshwater and saltwater electric-steer, bow-mount, QUEST series trolling motors, including the Riptide Instinct, Ulterra, Riptide Terrova and Terrova.

Item/ Assembly	Part #	Description	Qty.
2	2371674	PLATE, REINFRCMNT, ANODIZED	1
A Items 4-14	2994957	BAG ASM, REINFORCEMENT KIT	1
4	2383490	SCREW-3/8-16 X 3" PFHCS SS	6
6	2371796	BACKUP BAR 3/16 X 1 X 2	6
8	2383122	NUT 3/8-16 NYLON INST LOCKNUT	6
10	2383497	SCREW,3/8 16x1¾PFHCS NYSHLD *QUICK RELEASE BRACKET*	6
12	2353412	SCREW-3/8-16 X 1.0" HHCS SS *MOTOR*	6
14	2378608	ANTI SEIZE TUBE, 4CC, TALON	1
	2377183	INSTR.SHEET, REINFORCE.KIT	1



▲ Not shown on Parts Diagram.

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#### TOOLS AND RESOURCES REQUIRED >

- #3 Phillips Screwdriver
- #4 Phillips Screwdriver

Needle-nose Pliers

- Drill
- 13/32" Drill Bit
- 9/16" Box End/Open End Wrench
- Awl or similar Marking Tool
- A second person to help with the installation

#### MOUNTING CONSIDERATIONS >

(for Terrova and RT Terrova)

The MKA-58 Boat Deck Reinforcement Kit provides additional strength and stability for mounting Minn Kota QUEST series trolling motors, as well as versatility when choosing a mounting location. There are two options when installing a motor with the Boat Deck Reinforcement Kit:

- 1. Mount the trolling motor directly to the Reinforcement Plate
- Mount the trolling motor in combination with an MKA-56/RTA-55 Quick Release Bracket (1854056 black or 1854055 white) to the Reinforcement Plate. The Inner Plate of the MKA-56/RTA-55 is installed to the Reinforcement Plate, while the Outer Plate is attached to the motor. This allows for easy removal of the motor.



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# \Lambda WARNING

You are responsible for the safe and prudent operation of this product. Minn Kota has designed this accessory to be a reliable and convenient tool. Use only as directed and only for the designed intent of the product. Installation should occur in an area free from hazards and obstacles. This product does not relieve you from the responsibility for safe operation.

The MKA-58 Reinforcement Plate has an assortment of threaded and recessed mounting holes. Each style of mounting hole serves a different purpose for installing the Plate. Become familiar with the application of each style of mounting hole:

- 1. The recessed mounting holes are for installing the Reinforcement Plate to the boat deck.
- 2. The six threaded holes around the outside perimeter of the Reinforcement Plate are for installing the trolling motor base extrusion directly to the Reinforcement Plate.
- The twelve threaded holes around the inside of the Reinforcement Plate are for installing the Inner Plate of an MKA-56/RTA-55 Quick Release Bracket.



When checking motor clearance for a mounting location, please give consideration to the following:

- The MKA-58 is compatible with freshwater and saltwater electric-steer, bow-mount, QUEST series trolling motors, including the Ulterra QUEST, Riptide Instinct QUEST, Terrova QUEST, and Riptide Terrova QUEST. The base extrusion of the trolling motors may vary. Please note the appearance of the base extrusion for each trolling motor.
- It is recommended that the motor be mounted as close to the centerline or keel of the boat as possible. Installation of the Reinforcement Plate requires the use of all six mounting bolts. Mounting bolts spaced furthest apart will create the most stability. Ensure that the mounting location is flat and that the area under the mounting location is clear to drill holes and secure hardware.
- 3. The motor must not encounter any obstructions as it is lowered into the water or raised into the boat when stowed and deployed. In the stowed position, place the motor so that the slot in the Base Extrusion is positioned beyond the boat Gunwale. For proper clearance, the entire slot must be visible beyond the Gunwale. When the motor is deployed, there must be a minimum required distance of 1½" between the Gunwale and the bottom of the Steering Housing and Shaft.
- 4. With the motor in the stowed position, ensure there is enough room for the Shaft and Control Head and that they do not extend off the side of the boat.













# ▲ CAUTION

An incorrectly secured trolling motor may cause injury. Installation of the Reinforcement Plate requires the use of all six mounting bolts. Avoid injury from an incorrectly secured trolling motor by following the installation instructions.

#### INSTALLATION

The process for checking motor clearances will vary depending on if the motor will be installed directly to the Reinforcement Plate or in combination with a Quick Release Bracket. Installation of the Reinforcement Plate involves the following steps:

- 1. Selecting a mounting location
- 2. Choosing a mounting hole pattern for the Reinforcement Plate
- 3. Installing the Reinforcement Plate to the Boat Deck
- 4. Installing the motor directly to the Reinforcement Plate OR

Installing an MKA-56/RTA-55 Inner Plate to the Reinforcement Plate

### Selecting a Mounting Location

a. Make sure that the Power Cables from the battery are disconnected or that the breaker, if equipped, is "off."

### WARNING

Make sure that the Power Cables from the battery are disconnected or that the breaker, if equipped, is "off."

> b. Place the mount on an elevated, level surface such as a workbench or the tailgate of a pickup. The motor should be in the stowed position.

NOTICE: The trolling motor weighs up to 90lbs. Minn Kota recommends having a second person help with the installation.

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**NOTICE:** Removing the motor Sideplates applies only to installations where the trolling motor is mounted directly to the Reinforcement Plate. If mounting the motor in combination with an MKA-56/RTA-55 Quick Release Bracket, the Outer Plate of the bracket must be attached to the motor before completing installation of the MKA-58 Boat Deck Reinforcement Kit. For instructions on installing the Outer Plate to the motor, refer to the manual that was included with the MKA-56/RTA-55.

- c. Remove the four sideplate screws using a #3 Phillips Screwdriver. Two of these screws will be located on each side of the mount.
- d. Remove the Right Sideplate and the Left Sideplate to expose the six mounting holes on the Base Extrusion.







- For Terrova QUEST and Riptide Terrova QUEST e. motors: the center mounting hole on either side of the Base Extrusion is blocked by a Spring. One end of each Spring must be disconnected in order to access the mounting holes.
- f. To disconnect the Spring, take a Needle-nose Pliers and carefully grab the hooked end on the top half of the Spring. Unhook it from the hole in the Side Rail by pulling up. Guide it towards the bottom half of the Spring still attached to the Base Extrusion and gently set it down. Do not disconnect the end of the Spring that is wrapped around a bolt. Unhook both Springs.

# CAUTION

When maneuvering each Spring, carefully handle the Spring to avoid bending it. Do not grab the body of the Spring to avoid pinching between the spring coils. Always grab by the hooked end.

3f 🗅 3e Needle-Nose Spring Pliers Mounting Side Hole Rail Spring Bolt Base Extrusion Mounting Hole

# 🛆 CAUTION

When handling each Spring, always keep the spring tension under control. Abruptly releasing the Spring while there is still tension could damage it and cause it to release unpredictably.

### **ITEM(S) NEEDED**

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- Set the Reinforcement Plate (Item #2) on the bow g. of the boat, with the recessed mounting holes facing up. Position the Plate so that the bow-shaped mounting hole pattern points outboard.
- h. With the help of a second person, place the motor on top of the Reinforcement Plate. Keep the motor and Plate together when determining a mounting location. The motor must be properly aligned with the Plate to ensure accurate measurements.
- If installing the motor directly to the Reinforcement i. Plate, align the mounting holes in the trolling motor Base Extrusion with the six threaded holes around the perimeter of the Plate.







j. If installing the motor with an MKA-56/RTA-55, align the Outer Plate so it is square with the Reinforcement Plate. The Outer Plate of the MKA-56/RTA-55 is the same size as the Reinforcement Plate and should create a flush surface when properly aligned. If desired, the Outer Plate can also be set 1" further outboard on the Reinforcement Plate to provide additional motor clearance.

**NOTICE:** The Outer Plate is used to align the motor for checking clearances but will not be mounted to the Reinforcement Plate. Only the Inner Plate of the MKA-56/ RTA-55 will be attached to the Reinforcement Plate.



k. Ensure that the Handle Assembly (Part #2770916) will not encounter any obstructions on the bow of the boat and can be pulled entirely out to release the Bracket when mounted. Ensure that the motor will not encounter any obstructions when positioning the motor on and off the Bracket. Review the mounting considerations from the manual included with the MKA-56/RTA-55.



- Position the motor and Reinforcement Plate as close Ι. to the centerline or keel of the boat as possible. Determine if the motor will be mounted on the Port or Starboard side of the bow. Review the mounting considerations at the beginning of this document.
- m. With a mounting location determined and all clearances confirmed, use an Awl or similar tool to mark the side and rear edges of the Reinforcement Plate on the bow of the boat.





### Choosing a Mounting Hole Pattern for the Reinforcement Plate

- a. Set the motor aside and align the Reinforcement Plate with the marks made on the Bow. Ensure that the recessed holes face up and that the bow-shaped mounting hole pattern points outboard.
- b. Determine the mounting hole pattern to be used for installing the Reinforcement Plate. There are a variety of mounting hole options, to provide flexibility and account for variance in boat shape. All six mounting bolts must be used, with three on each side of the Reinforcement Plate. Ideal installation allows for all six holes along the outside perimeter of the Plate to be used.



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- c. Start with the end of the Plate that is furthest inboard. There are four mounting holes along the edge of the Plate, with two holes on each side. Mark one of the two holes on each side of the Plate. The pattern does not need to be symmetrical, as long as there is at least one mounting bolt used on each side.
- In the center of the Plate, there are another four mounting holes, with two on each side of the Plate.
   Mark one of the two holes on each side of the Plate.
   The pattern does not need to be symmetrical, as long as there is at least one mounting bolt used on each side.





e. Finish with the end of the Plate that is furthest outboard. When selecting a mounting hole pattern, note that at least one outside mounting hole must always be used. Depending on the available space of the bow, there are three potential mounting hole patterns:

**Option #1:** Mark both outside mounting holes, one on each side of the Plate. This installation is ideal.

**Option #2:** Mark the outside mounting hole on the starboard side. Mark one of the three inner mounting holes on the port side.

**Option #3:** Mark the outside mounting hole on the port side. Mark one of the three inner mounting holes on the starboard side.

**NOTICE:** The two center mounting holes are for additional security only and should not be used for the primary installation of the Reinforcement Plate.

f. With all six mounting locations marked, set aside the Reinforcement Plate. Use a Drill with a 13/32" Drill Bit to drill on the marked locations.



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### Installing the Reinforcement Plate to the Boat Deck



**NOTICE:** To prevent seizing of the stainless steel hardware, do not use high-speed installation tools. Wetting the screws or applying an anti-seize (Item #14) may help prevent seizing.

- Reposition the Reinforcement Plate over the drilled a. holes. Use six 3/8-16 X 3" Flat Head Screws (Item #4), six Backup Bars (Item #6), and six Nylock Nuts (Item #8) to secure the Reinforcement Plate to the boat deck. Apply anti-seize (Item #14) to all hardware. The Screws should be inserted from the top down, passing through the Reinforcement Plate and into the boat deck.
- b. Place a Backup Bar on each Screw and secure with a Nylock Nut. While holding each Nylock Nut with a 9/16" Box End or Open End Wrench, use a #4 Phillips Screwdriver to tighten each Screw. Make sure all hardware is secure.



### Installing the Motor directly to the Reinforcement Plate

**ITEM(S) NEEDED** 



**NOTICE:** To prevent seizing of the stainless steel hardware, do not use high-speed installation tools. Do not use anti-seize on the Hex Head Cap Screws, as it may cause them to loosen over time.

- Place the motor on top of the Reinforcement Plate. a. Align the Mounting Holes in the Base Extrusion with the threaded holes around the edges of the Reinforcement Plate.
- b. Use six Hex Head Cap Screws (Item #12) to secure the Motor to the Reinforcement Plate. The Screws should insert from the top down, through the Base Extrusion and into the Reinforcement Plate. Tighten to 120 in-lbs with a 9/16" Box End or Open End Wrench. Make sure all hardware is secure.



**NOTICE:** Use extra care to avoid pinching and damaging the sensor wires that run alongside the Base Extrusion while installing and tightening the mounting hardware.

For Terrova QUEST and Riptide Terrova QUEST motors: reassemble the Springs that were disconnected. Use a Needle-nose Pliers to grab the hooked end of the loose Spring. Reconnect it by pulling it upwards and hooking it in the hole on the Side Rail. The curved end of the Spring should be reattached from the top down. Make sure the Spring is not twisted when reattaching it. Reattach the Spring on both the right and left side of the Base Extrusion.

# CAUTION

When maneuvering each Spring, carefully handle the Spring to avoid bending it. Do not grab the body of the Spring to avoid pinching between the spring coils. Always grab by the hooked end.



#### CAUTION

When handling each Spring, always keep the spring tension under control. Abruptly releasing the Spring while there is still tension could damage it and cause it to release unpredictably.

- d. With the motor secured to the Reinforcement Plate, the Sideplates can be reattached.
- e. Replace the Right Sideplate and Left Sideplate.
- f. Replace the four Sideplate Screws using a #3 Phillips Screwdriver. Two of these screws will be located on each side of the mount.



### Installing an MKA-56/RTA-55 Inner Plate to the Reinforcement Plate

At this point in the installation, the Outer Plate should be attached to the trolling motor. For instructions on installing the Outer Plate, refer to the manual that was included with the Quick Release Bracket. Review the mounting considerations for the MKA-56/RTA-55.

NOTICE: This installation requires the use of hardware included with the MKA-56 (1854056) or RTA-55 (1854055) Quick Release Bracket. The Inner Plate (Part #2371695/#2371696), Stiffener Plate (Part #2371686/#2371687), Handle Assembly (Part #2770916), and Hair Clip Pin (Part #2260800) will be needed.

- Take the Inner Plate Assembly of the MKA-56/ RTA-55. The Stiffener Plate (Part #2371686/ #2371687) is flush with the Inner Plate (Part #2371695/#2371696) and may not be immediately noticeable when removing the Quick Release Bracket from the box. The top surface of the Inner Plate is recessed to accommodate the placement of the Stiffener Plate. This surface should face up.
  - b. Take the Stiffener Plate and place it into the recessed surface of the Inner Plate. The Stiffener Plate should be set on the Inner Plate so the recessed holes for the Flat Head Screws are facing upwards.
  - c. Take note of the position of the Inner Plate Assembly in relation to the Reinforcement Plate to ensure proper mounting.

## CAUTION

Failure to follow proper product installation may lead to injury from product failure. To avoid injury from a damaged product, ensure that the Stiffener Plate is present on the Inner Plate before installing mounting hardware. Do not install the Inner Plate without the Stiffener Plate.

- When mounting the Inner Plate to the MKA-58 d. Reinforcement Plate, there are two possible installation positions. The Inner Plate can be installed so that the Quick Release Bracket is square with the Reinforcement Plate, or the Inner Plate can be installed 1" further outboard to provide additional motor clearance.
- e. Once a position for the Inner Plate has been decided, set it on the Reinforcement Plate. Align the mounting holes in the Inner Plate Assembly with the threaded holes in the center of the Reinforcement Plate.





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Mounting Holes

ITEM(S) NEEDED

**NOTICE:** Images are a graphical representation only and may vary from your mounting position.

## **NOTICE:** To prevent seizing of the stainless steel hardware, do not use high-speed installation tools.

- f. Use six 3/8-16 x 1¾ Screws (Item #10) to secure the Inner Plate Assembly to the Reinforcement Plate. The Screws should insert from the top down, through the Stiffener Plate and Inner Plate that make up the Inner Plate Assembly, and then into the Reinforcement Plate. Tighten with a #4 Phillips Screwdriver. Make sure all hardware is secure.
- g. Place the Outer Plate and motor onto the Inner
   Plate that was mounted to the Reinforcement Plate.
   Insert the Handle Assembly to secure the Quick
   Release Bracket.
- h. Insert the Hair Clip Pin (Part #2260800) into the Padlock Pin to complete the assembly. The straight prong of the Hair Clip should pass through the center of the Padlock Pin, with the curved prong wrapped around the outside of the Padlock Pin. The Padlock Pin should sit in the middle arch of the Hair Clip Pin.

## A CAUTION

Before using or transporting the trolling motor, always make sure that the Handle Assembly is fully inserted and retained by the Hair Clip Pin. Failure to insert and secure the Handle Assembly may result in injury from a falling motor.

**NOTICE:** A padlock can be used in place of the Hair Clip Pin to prevent motor theft. The diameter of the Padlock Pin is 1/4".









For warranty information, please visit minnkota.johnsonoutdoors.com.



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