

MINN-KOTA®

DeckHand™

Model DH 40

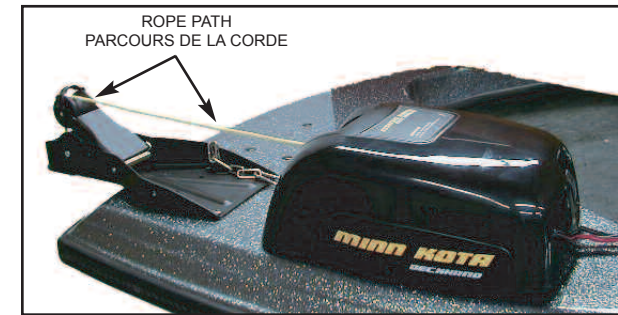


OWNER'S MANUAL

Congratulations on the purchase of your new Deckhand-40 anchor lift. By following the illustrations and instructions in this manual you will learn how to properly install and operate this unit for many years of trouble free use. Before installing this product, read the manual thoroughly because you will need to choose one of three mounting methods and will need to provide electrical wiring from your batteries to the DH-40.

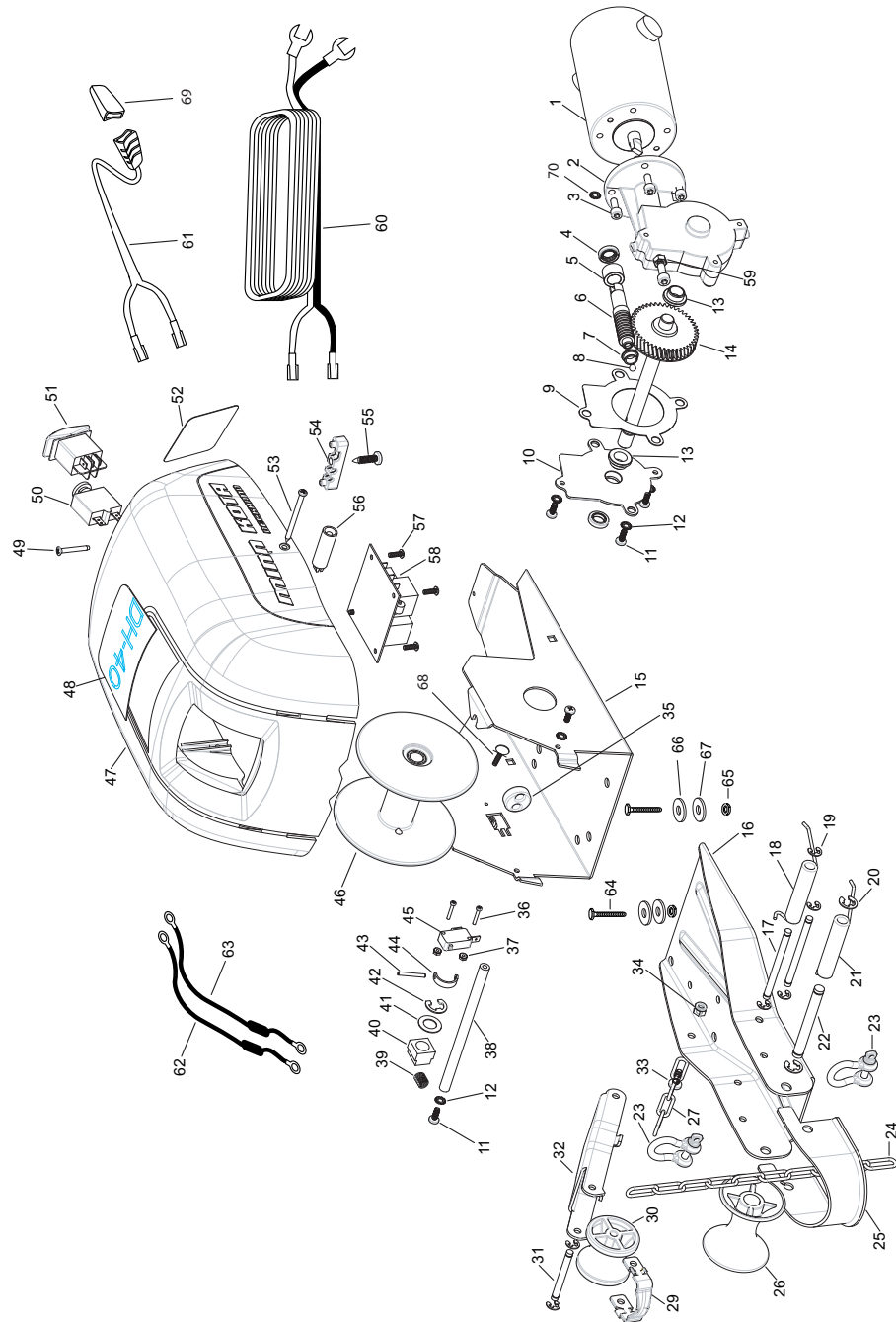
This unit is versatile and can be installed using 3 different methods. The Davit and DH-40 can be combined and mounted directly to the bow, they can be combined and mounted to an optional MKA -16-02 quick release plate which can easily be removed from the bow, or the davit and DH-40 can be separated with the davit mounted directly to the bow and the DH-40 mounted at a remote location. What ever mounting method you choose, there are six basic requirements for a proper installation.

1. The davit must always be mounted so it overhangs the bow by approximately 9 inches. This leaves room for the anchor to clear the boat and properly pivot in the davit.
2. The DH-40 must be mounted so the rope enters straight into the unit at a right angle to the spool shaft. Failure to do this will cause the spool to wrap unevenly. If the DH-40 is mounted remotely from the davit and the rope path does not come straight into the spool, pulleys or rollers can be placed in the rope path for proper alignment. *SEE ILLUSTRATION BELOW.*



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.



3. A 12 VDC electrical connection point must be made available near the placement of the DH-40 unit. An optional quick connect plug MKR-12 is available for this connection when the unit is attached to a quick release plate.
4. The unit is designed to lift a 20lb.(min) to 40lb.(max) anchor.
5. The wiring from the battery to the unit must be 10 gauge minimum.
6. If the Davit and DH-40 are mounted more than 2 feet apart, the rope stop will need to be adjusted. Failure to do so may cause the rope to completely unwind and rewind on to the spool backwards. This will cause the unit to operate opposite the switch markings and will damage the gear system in the DH-40. Read the section "Adjusting the Rope Stop" for instructions.

Note: Numbers in () are item numbers referring to parts diagram.

WINCH AND DAVIT MOUNTED TOGETHER

1. Remove the DH-40 cover (47) by removing cover screws (49 & 53)
2. Carefully place the DH-40 base on the deck of the boat near the bow.
3. Place the davit so the two rear holes line up with the two front holes of the DH-40 base. The rear of the davit lies just inside and on top of the base.
4. Position the DH-40 and davit on the boat deck so the davit overhangs the boat edge by approximately 9".
5. The DH-40 base and the davit have been predrilled with the same mounting holes as were used on the DH-35. They may be used when replacing a previous model or when applicable.
6. If mounting the DH-40 for the first time, mark the four outer most holes in the base and the davit for drilling. Keep in mind with this mounting method the davit and base share the two middle holes.



7. Check for any under deck obstructions directly below the DH-40 and davit. If obstructions exist reposition the units.
8. Using a 11/32" bit, drill the two most rearward holes (the ones that align with the most rearward holes in the DH-40 base) and temporarily place 2 of the mounting bolts (64) through the DH-40 base and the boat deck.
9. Now with the unit aligned to the boat, drill the remaining mounting holes.
10. Now remove the two mounting bolts, DH-40 base, and davit from the deck surface. Place a 1 inch rubber mounting washer (66) over each of the drilled holes on the deck surface. Position the DH-40 base and davit on top of the rubber washers aligning the mounting holes.
11. Insert the mounting bolts at this time.
12. Under the boat deck place a flat washer and locking nut on each bolt and tighten.
13. Replace DH-40 cover.
14. Make electrical connection to battery.

WINCH AND DAVIT MOUNTED TOGETHER ON OPTIONAL MKA-16-02 PD/AP QUICK RELEASE BRACKET.

The DH-40 can be mounted onto the PD/AP Quick Release plate available from any MinnKota retailer.

1. Remove the DH-40 cover (47) by removing the cover screws (49 & 53).
2. Place the DH 40 on the slide plate of the Quick Release bracket making sure you align the 2 rear holes with the 2 rear holes in the plate.
3. Mark the location of the 2 front holes in the DH 40 base on the Quick Release bracket slideplate.
4. Drill the 2 additional marked holes in the slide plate using a 11/32" drill bit. The slide plate should now have 6 holes.



Item	Part	Description
■	2997816	MOTOR/GEAR ASSEMBLY (Includes items 1-10,13,14)
*1	2377802	MOTOR
*2	2376502	GEAR BOX
3	2373448	SCREW M6X1.0 X16mm [5 EA.]
4	880-026	SEAL [2 EA.]
5	2370041	BRONZE BUSHING
*6	2372238	WORM GEAR
7	2377300	BRONZE BUSHING 3/8" SHAFT
*8	2376000	BALL-THRUST
9	2376915	GASKET
10	2376515	GEAR BOX COVER
11	2223455	SCREW #10-32 X 1/2" [6 EA.]
12	2261718	WASHER-#10 EXT. LW [6 EA.]
13	2227304	BRONZE BUSHING 1/2" SHAFT [2 EA.]
*14	2372254	GEAR SHAFT
15	2371901	BASE
■	2998410	DAVIT ASSEMBLY (Includes items 16-22, 25-34)
*16	2376505	DAVIT CHASSIS
17	2372607	HINGE PIN [2 EA.]
18	2372712	TORSION SPRING
19	2013000	E-RING [6 EA.]
20	2263010	E-RING [2 EA.]
21	2372713	TORSION SPRING
22	2372606	AXLE PIN
23	2370806	SHACKLE [2 EA.]
24	2370820	CHAIN
25	2371613	LOWER LINE GUIDE
26	2372311	ROLLER-LARGE
27	2370801	SAFETY LANYARD
29	2371614	UPPER LINE GUIDE
30	2372306	ROLLER-SMALL
31	2372601	AXLE PIN
32	2374210	LIFTING ARM
33	2373402	SCREW-1/4-20X5/8"
34	2263103	NUT- 1/4" NYLOC
35	2373200	ROPE STOP
36	2372130	SCREW-#4-40 X 3/4" [2 EA.]
37	2373100	NUT-#4-40 KEPS [2 EA.]
38	2371612	LINE GUIDE
39	2372700	COIL SPRING
40	2370001	SPOOL BEARING
41	990-051	WASHER
42	788-040	E-RING
43	2092601	DRIVE PIN
44	2372630	PIN KEEPER
45	2374010	SWITCH
46	2377901	SPOOL W/ROPE
47	2370202	COVER
48	2375505	DECAL-TOP COVER
49	2372123	SCREW-#8-32 X 1.25"
50	2378203	CIRCUIT BREAKER
51	2374019	SWITCH
52	2375504	DECAL- MFR. NOTICE
53	2372122	SCREW-#10-16 X 2 1/2" [2 EA.]
54	2222905	STRAIN RELIEF
55	2373446	SCREW- 1/4-20 X 1" [2.EA]
56	2372920	STANDOFF [2 EA.]
57	2372100	SCREW- #8-10 X 5/8"[4 EA.]
58	2378225	CIRCUIT BOARD ASSEMBLY
59	2373105	HEX NUT M6X1.0
60	2090601	LEADWIRE
61	2370703	CONTROL CORD
62	2370704	JUMPER WIRE #20GA BLUE
63	2370706	JUMPER WIRE #10GA RED
■	2994853	BAG ASSEMBLY
64	2153501	5/16" -18 BOLT [8 EA.]
65	2153100	NUT- 5/16-18" [8 EA.]
66	2301720	WASHER RUBBER [8 EA.]
67	2151726	WASHER 5/16" [8 EA.]

* This item is part of an assembly. This item cannot be sold separately due to machining and /or assembly that is required.

MAINTENANCE

- After use, rinse unit in fresh water and wipe down unit with a damp cloth. This unit is not intended for saltwater use. Saltwater use will void your warranty.
- For prolonged storage, lightly coat metal parts with silicone spray or similar product.
- Avoid spraying switch components with any cleaning, lubricating or moisture absorbing compounds. Check rope periodically for frays or cuts and replace if necessary.

TROUBLESHOOTING

1. Unit fails to operate or lacks power:
 - Check circuit breaker, be sure button is pressed. If circuit breaker is tripped, investigate the cause of the problem before resetting.
 - Check battery charge and connections. Be sure terminals are clean and corrosion free. Use a fine grade of sandpaper or emery cloth to clean terminals.
 - Check your battery water level. Add water if needed. If connections are good and battery has a full charge, obtain service as instructed.
2. Alternate Anchors:
 - The DH 40 is designed for use with other types of anchors that weigh between 20lbs. (min) and 40lbs. (max).
3. Anchor does not go down:
 - Check circuit breaker, be sure button is pressed.
 - Check battery connections.
 - Unit will not function properly if anchor is less than 20 lbs.

5. Place the DH 40 on the slide plate again, lining up the holes.
6. Place bolts in the rear 2 holes, bolts must be inserted up from the bottom.
7. Place 2 of the flat washers 215-1726 on top of the front holes of the Quick Release slide plate.
8. Mount the davit by setting it into the base and on top of the steel washers being careful to line up the holes without moving the washers.
9. Install the remaining mounting bolts in, from the bottom of the slide plate, to complete the assembly.
10. Tighten mounting hardware securely. Replace the cover (1) at this time. See "Function Test" section.
11. Check for any under deck obstructions directly below the Quick Release base plate. Reposition if necessary.
12. Mount the base of the release plate to the boat with the provided instructions making sure the davit is positioned with a 9 inch overhang from boat.
13. Slide the DeckHand assembly together with the release plate top into the release plate bottom from the rear.
14. Use the thumb screw and lock washer to secure the plates together.
15. Make electrical connection to battery.

NOTE: IF THE MOUNTING SURFACE OF BOAT IS NOT FLAT, EXTRA RUBBER WASHERS HAVE BEEN PROVIDED SO THEY CAN BE USED TO MAKE UP THE DIFFERENCE BETWEEN THE BASE/DAVIT AND THE BOAT DECK. USE THESE ACCORDINGLY.

WINCH AND DAVIT MOUNTED SEPARATE

NOTE: If the davit is placed remotely from the base the rope stop will need to be adjusted. (See "Adjusting the Rope Stop" section in the manual).

1. Remove the DH-40 cover (47) by removing the cover screws (49 & 53).
2. For remote mounting, place the DH-40 base in your desired location. It is very important that the base is orientated correctly. Be sure that the rope comes straight into the unit at a right angle to the spool shaft. If the rope doesn't come into the unit at a right angle the spool will not load evenly. Pulleys and rope guides (not provided) in the rope path can be used to achieve the straight in requirement
3. Place the davit in the desired location. It should overhang the boat edge by approximately 9".
4. Check for any under deck obstructions directly below the DH-40 base or davit. Reposition if necessary.
5. After positioning the DH-40 base and davit in the desired locations mark the 4 outer most holes in both the base and davit and drill them with an 11/32 drill bit.
6. Place a 1 inch rubber mounting washer (66) over each of the drilled holes on the deck surface. Carefully place the DH-40 base and davit on top of the rubber washers aligning the mounting holes and inserting mounting bolts.
7. Under the boat deck place a flat washer and locking nut on each bolt and tighten.
8. Replace DH-40 cover.



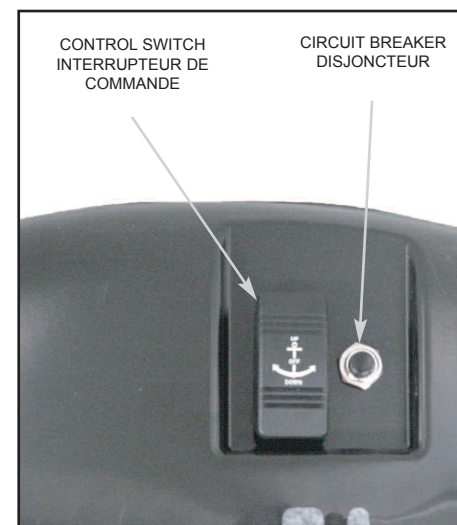
CIRCUIT BREAKER OPERATION

The power control circuitry and gear motor are protected by a manual resettable circuit breaker. Should an operational situation occur where a prolonged overload is present the circuit breaker will disconnect the battery positive supply in approximately ten seconds. The circuit breaker needs to be manually reset by pushing the small black button on the side. Repeated tripping of the circuit breaker indicates an operational or equipment fault that requires correction.

REPLACING ROPE

Replacement rope may be purchased direct from Minn Kota or authorized Minn Kota Service Centers. Should you decide to replace with an alternate rope, it is recommended to use a 3/16" diameter diamond braid polyester or nylon rope.

1. Remove existing rope.
2. Remove cover
3. Thread new rope through davit and window opening in cover.
4. Remove rope stop from old rope, thread rope through rope stop as done on old rope and position rope stop as described in "Adjusting Rope Stop" section.
5. Thread end of new rope through hole in spool and tie knot near end of rope.
6. With match flame melt both ends of rope to prevent rope from fraying.
7. Re-attach anchor.



CONTROL SWITCH OPERATIONS

WARNING: Keep fingers clear of rope and base when operating. Do not operate in normal use with cover off.

Three position rocker control switch has UP, DOWN and OFF positions. DOWN powers the anchor down. The gear motor automatically stops when anchor touches bottom. With the control switch in DOWN position, the electronic anti-drag system lets out necessary slack to prevent anchor drag. The OFF position locks gear motor and rope. The UP position powers anchor up and retracts anchor into the davit. Releasing the control switch automatically switches to OFF and secures anchor and anchor rope.

REMOTE SWITCH

The remote switch is available as an accessory at your Minn Kota retailer. It allows convenient mounting and operation from nearly anywhere in the boat.

1. Remove the cap from the accessory plug that exits the DH 40 unit near the power cord.
2. Plug remote connector into DH-40 plug
3. Mount switch in remote location.



ATTACHING THE ANCHOR

After mounting the DH-40 and davit to the boat you are ready to attach the anchor. To prevent loss of the anchor it is very important that you use the short length of chain and shackle (provided) and a Figure "8" knot (see illustration). It is also good practice to periodically cut the knot and about 12 inches of rope and re-tie the knot. The fresh cut end of the rope should be melted with a match flame to prevent rope fraying.

1. Remove the DH-40 cover if rope end is not accessible.
2. Put the switch in the "DOWN" position and pull off about 4 feet of rope.
3. Route rope through cover window, through davit roller and guide (see illustration).
4. Put the switch back to the "OFF" position.
5. Attach chain to rope with special knot as shown.
6. Shackle is used to attach the anchor to the chain.
7. Replace the cover.

SAFETY LANYARD OPERATION

The davit is equipped with a safety lanyard. The shackle is to be installed when ever trailering or traveling in rough water. In the instance of extreme conditions or long and rough roads, we suggest lowering the anchor and putting it into the boat.

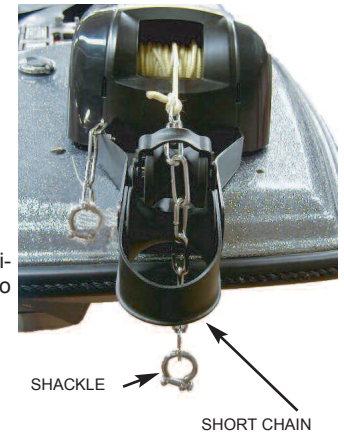


FIGURE "8" KNOT



BATTERY CONNECTIONS

1. Center control switch in "Off" position.
2. Connect DeckHand leadwire to 12V battery. If additional lead wire length is needed, use a minimum of 10 gauge wire. Connect red (+) to positive (+) battery terminal. Black (-) to negative (-) battery terminal.

CAUTION:

- Improper polarity hook-up of battery leadwire could cause severe damage to gear motor.
- The DeckHand is provided with a sealed control switch and manual resettable circuit breaker. Substituting switches or installing multiple switches other than those provided will void manufacturers warranty.

FUNCTION TEST

1. With anchor attached and hanging below davit, push control switch to "UP" position. Anchor should retract into davit. Release control switch when anchor has rotated davit and is fully seated.
2. Push control switch to "DOWN" position. Anchor should lower automatically. Gear motor will shut off when anchor comes in contact with ground surface.
3. With control switch still in "DOWN" position, pull on rope. Rope should automatically feed out. This is the electronic anti-drag system.
4. Place control system in the "OFF" position with the anchor still on the ground and repeat the pull test. Rope should not feed out. The control switch must be placed in the "OFF" position to prevent rope feed when anchored.
5. If your DH-40 does not operate properly through function test, recheck wire connections to insure proper hook-up.

ADJUSTING THE ROPE STOP

The DeckHand is equipped with a rope stop near the end of the rope inside the spool. This device will come in contact with the davit, rope pulley or other obstruction and stop deploying the rope before the spool is completely empty. It is critical that the spool does not empty completely. If the spool does empty completely, the rope will be wound backwards on the spool. This will cause severe wear on the gear system and the unit will not operate correctly. A correctly wrapped spool has the rope exiting the spool from the top of the spool. If the davit is placed remotely from the base the rope stop will need to be adjusted.

1. Put the switch in the down position. The anchor will lower until it comes in contact with the ground. The unit should stop. If the anchor is not yet attached go to step 2.
2. With the switch still in the "down" position grasp the rope and pull on it. The DH-40 will feed out additional rope. As long as there is a pulling force on the rope it will continue to feed out rope. Keep pulling out the remainder of the rope until the rope stop appears in the cover window.
3. Place the switch in the "OFF" position.
4. Loosen the knot on the rope stop and feed the rope through the stop. Slide the stop along the rope towards the anchor until it comes in contact with the first obstruction. The obstruction can be the upper davit roller and the upper line guide or a rope pulley if applicable. Be sure that there are approximately 5 wraps of rope remaining on the spool when the rope stop is in full contact with the obstruction. The unit may have to be operated in the "up mode to obtain 5 wraps of rope on spool.
5. Holding the switch in the "UP" position, allows the spool to fill with rope. Apply slight tension on the rope to insure smooth, even refilling of the spool.

