

QuikVang

The Original High-Performance Vang

INSTALLATION AND OPERATING INSTRUCTIONS

MODEL D-30 MODEL D-40

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INTRODUCTION

Hall Spars & Rigging designed the QuikVang and its accessory items to simplify sailing and improve boat performance.

To increase the benefits of the QuikVang on your boat, please read the following instructions carefully.

IMPORTANT

Contact your dealer or Hall Spars & Rigging if, after reading these instructions, you have any questions about proper installation.

-- SAVE THESE INSTRUCTIONS --

QUIKVANG PERFORMANCE FEATURES

1. BOOM VANG

- Keeps main under control
- Limits rolling
- Optimizes sail shape, projected area

2. ELIMINATES TOPPING LIFT

- Cleans up leech, eliminating topping lift slap
- Keeps boom up during jiffy reefing
- Takes load off leech in light air
- Holds boom up when sail is furled

3. LONG RETURN SPRING

Allows generous range of boom angle without adjustment

4. ADJUSTABLE RETURN SPRING

- Allows optimal settings for a variety of boom configurations
- Allows re-adjustment for new mainsails with different leech lengths

5. SIMPLICITY

- Requires no flopping blocks
- Requires no hydraulic fuss

6. RAPID ADJUSTMENT

- Allows superior powering through puffs without broaching
- Achieves proper vang tension by hand in most conditions

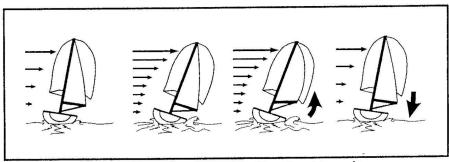


Figure 1. Powering through puffs without broaching.

QUIKVANG DESIGN

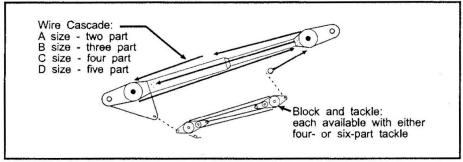


Figure 2. Two-tiered tensioning system achieves maximum mechanical advantage.

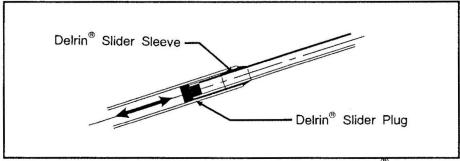


Figure 3. Telescopic action of tube is smooth by virtue of Delrin[®] slide parts.

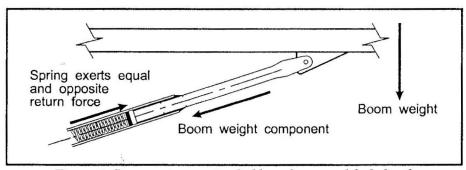


Figure 4. Strong return spring holds up boom and furled sail.

QUIKVANG INSTALLATION

To ensure proper function, the QuikVang requires specific mast and boom fittings. Listed below are the reasons for this requirement:

- Boom fitting required—fixed lug. A conventional bail works only in tension; it will not allow the QuikVang to support the boom weight.
- Mast fitting required—swiveling gooseneck. This will maintain constant tension at each boom swing angle, and will support the boom.

Installation instructions if mast and boom do not have proper fittings:

(If you have the proper fittings, skip this section.)

- 1. Order QuikVang mast and boom fittings through your dealer, properly matching the fittings to the size of your QuikVang.
- 2. Adjust set spring tension adjustment to middle of range.

CAUTION

Never adjust spring tension setting with the vang attached to the boom.

- a) Remove set screws.
- b) Push knob to desired location.
- c) Line up to nearest tapped hole.
- d) Reinsert set screws (tapped holes are at one-inch intervals).

NOTE

Once mast and boom fittings are installed and spring position is confirmed, remove vang, ease tackle, and reinstall set screws with Blue Loctite®

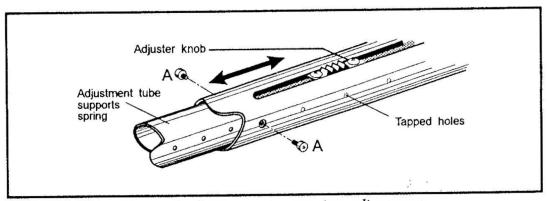


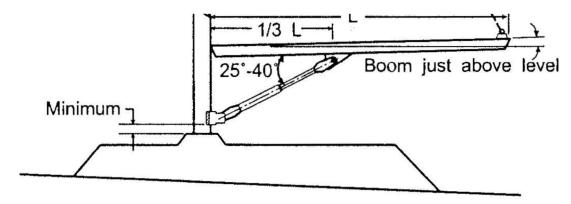
Figure 5. Setting spring tension adjustment.

- 3. Locate mast and boom fitting positions
 - a) Attach mast and boom fittings to QuikVang.
 - b) Attach main halyard to end of boom and lift it to a position slightly above level.
 - c) Locate mast fitting as low as possible while still allowing clearance with other mast fittings, collar, boot, etc.

NOTE

Do not attach mast fitting at this time.

- d) Mark position for mast fitting.
- e) Lift vang until boom fitting contacts the boom while holding the mast fitting in place.
- f) Check the orientation of the vang for best use by positioning vang about 1/3 of boom length from gooseneck and positioning vang angle with boom about 25° to 40°



- g) Check boom swing for potential contact with hatches, dorades, etc.
- h) Reset spring adjustment and repeat sequence, if the QuikVang position does not meet criteria in item 'f' above.
- 4. Attach mast and boom fittings.

QuikVang mast and boom fittings fit a variety of mast and boom sections. However, check the suitability for your particular mast before installation.

NOTE

If fittings do not appear to fit, contact Hall Spars & Rigging for advice.

Hall Spars & Rigging designed and tested mast and boom fitting for tapped screw installation. Inherent in our design assumptions are proper drilling and tapping of holes.

NOTE

We strongly advise hiring a professional rigger if you are unsure of proper drilling and tapping procedures for vang fitting installation.

MAST FITTING

- 1. Mark and check positions of mast and boom fittings.
- 2. Hold mast fitting at position marked.
- 3. Center mast fitting side to side.
- 4. Mark upper-most port and starboard holes.
- 5. Drill and tap two upper-most holes (fastener size 1/4 x 20 x 5/8" flat head machine screw).
- 6. Fasten mast fitting to mast with two top fasteners.

NOTE

Do not tighten fasteners at this stage of installation.

- 7. Center the bottom of the mast fitting.
- 8. Mark carefully for bottom-most holes.
- 9. Drill and tap bottom holes with fitting in place.
- 10. Install fasteners as in step f, above.
- 11. Drill and tap remaining holes.
- 12. Install fasteners while checking fit.
- 13. Remove all fasteners and clean out chips behind mast fittings.
- 14. Install mast fitting while applying Blue Loctite to each fastener.
- 15. Tighten all fasteners.

BOOM FITTING

- 1. Check chosen position.
- 2. Drill and tap fore and aft end holes (fastener size 1/4 x 20 x 1" socket head cap screw).
- 3. Install end fasteners.
- 4. Drill and tap remaining holes.
- 5. Check for proper fit.
- 6. Remove all screws and clean out chips from behind fitting.
- 7. Install fitting while applying Blue Loctite to all fasteners.
- 8. Tighten all fasteners.

Installation Instructions if Mast and Boom Appear to Have Proper Fittings

- 1. Check Fittings to determine that vang fits.
 - a) Hole size: If too small, open up, making sure that "meat" around hole is enough (see diagram).
 - b) Lug thickness: If much smaller than QuikVang jaw opening, contact Hall Spars & Rigging.

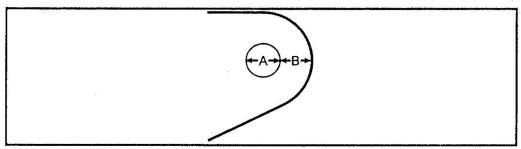


Figure 7. Rule of thumb - B should at least equal A.

- 2. Lift boom up to just above level.
- 3. Measure pin to pin length between boom fitting and mast fitting.
- 4. Remove spring adjuster set screws from vang (see vang adjustment procedure on page 3).
- 5. Set vang at pin to pin length dimension as determined in step 3, above.
- 6. Install spring adjuster set screws in nearest tapped holes.
- 7. Temporarily install QuikVang to check length.
- 8. Remove QuikVang from boom fitting
- 9. Remove set screws and install with Blue Loctite.

NOTE: Do not remove spring adjuster set screws with QuikVang installed

10. Install QuikVang

CAUTION

Beware of over-sheeting the main. If the QuikVang bottoms out while trimming the mainsheet, compression can bend the boom in reverse. This situation can also cause the vang to fail in compression bending.

CAUTION

Never lean on the end of the boom with a furled sail. Your weight creates a great load on the vang if it bottoms out. The same compression failure could occur as discussed in the previous caution note. (See Helpful Hint on next page.)

HELPFUL HINTS

It's always good practice to attach the main halyard to the end of the boom after furling the sail. This procedure allows the tightening of the mainsheet and removes the risk of damage to the QuikVang.

Put a knot in the tackle line at the maximum open position. This is the position just before the wire dead end of the purchase reaches its turning sheave. This way, the wire will not jam in the turning sheave when releasing the vang.

MAINTENANCE

As with any marine fitting, especially when exposed to salt water, the QuikVang requires regular maintenance and inspection. On a semi-annual basis, the following maintenance should be performed:

CAUTION

All maintenance should be done on the vang only after it is removed form the bottom and the tackle is totally relaxed.

Remove all screws and lubricate with FEL PRO C5-A or similar anti-seize lubricant.

Left alone, stainless screws will freeze themselves in aluminum parts.

Regularly check all screws (especially spring tension set screws) to ensure they are not backing out.

Lubricate surface of spring with Lubriplate or similar grease to eliminate creaking of spring. Very little lubricant is required—do not over do.

Regularly check to make sure all sheaves rotate freely and lubricate with WD 40.

Regularly check wire cascade for wear. If frayed, replace at once.

SPECIAL INSTRUCTIONS D-40 QuikVang

Since the D-40 is designed for a variety of installations, all of which require deck fittings, customer-supplied parts are required to complete the installation.

Figure 8 illustrates the tackle supplied with the QuikVang, and Figure 9 highlights three sample installations requiring customer-supplied parts.

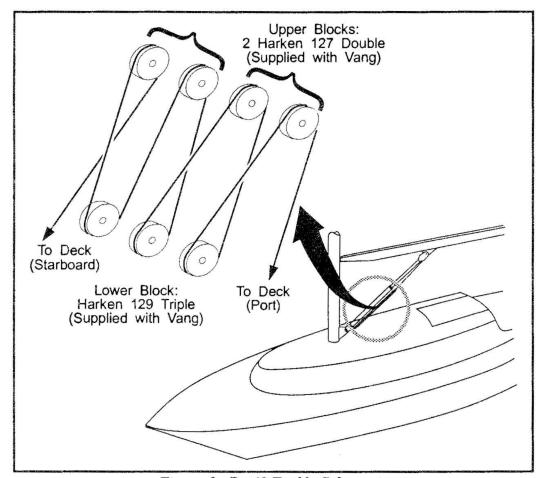


Figure 8. D- 40 Tackle Schematic

There are many other D-40 installations possible using other blocks, stoppers and/or winches. The sketches in Figure 9 are only provided as a guide.

If you have any questions regarding this information, please call Hall Spars & Rigging at (401) 253-4858 before proceeding.

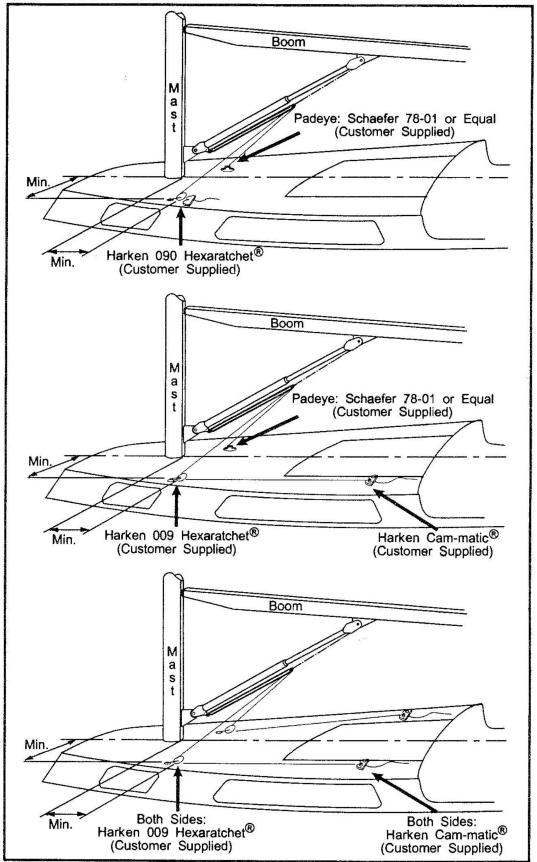
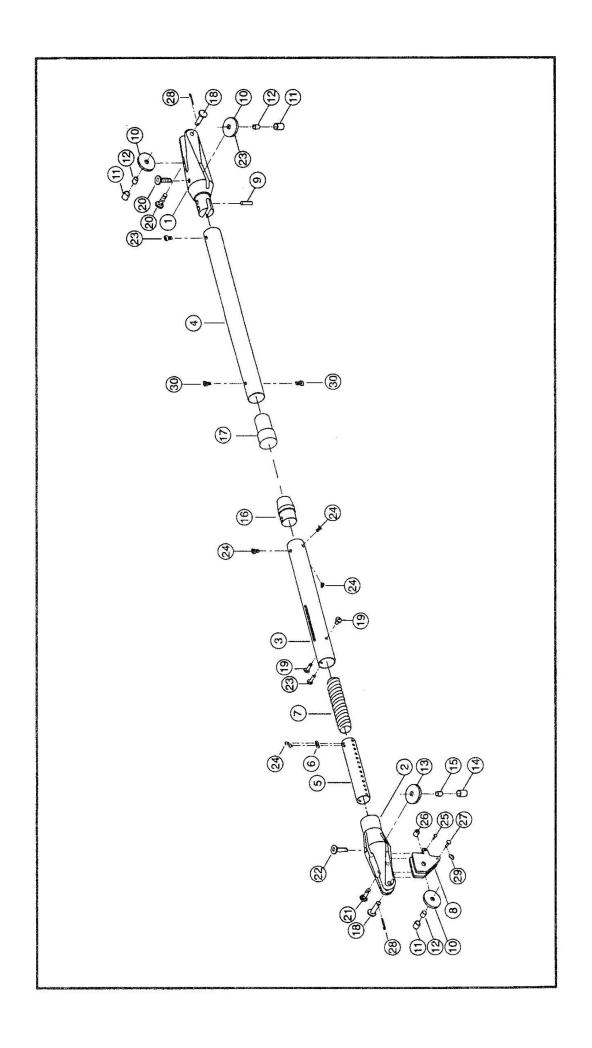


Figure 9. Three sample installations requiring customer-supplied parts.



ITEM	PART NUMBER	DESCRIPTION
ITEM 1	PR-8871	Outboard End
2	PR-8872	Inboard End
3	PR-8873	Lower Tube
4	PR-8874	Upper Tube
5	PR-8879	Adjuster Tube
6	PR-8672	Slider Knob
7	PR-8878	Charged Spring
8	PR-8875	Anchor Plate (2)
9	HAY-RP38114	Dead End Pin
10	PR-8876-D	Sheaves 3" dia. (3)
11	CJ-10E-14-4	CJ Bearing 5/8" x 7/8" x 1/2" (3)
12	SCH-25-020-15	Spacer (3)
13	PR-8554	Sheave 2-1/4"
14	CJ-08E-10-3	CJ Bearing 1/2" x 5/8" x 3/8"
15	PR-11184	Spacers SK 5955
16	PR-8822	Slider Sleeve
17	PR-8823	Slider Plug
18	CP-58134	Clevis Pin 5/8" dia. (2)
19	HSM-3/8X1/2	Hex Socket Machine 3/8-16 x 1/2" (2)
20	HSM-3/8X1-3/4	Hex Socket Machine 3/8-16 x 1-3/4" (2)
21	HSM-3/8X2	Hex Socket Machine 3/8-16 x 2"
22	HSM-5/16X1-3/4	Hex Socket Machine 5/16-18 x 1-3/4"
23	HSM-1/4X1/4	Hex Socket Machine 1/4-20 x 1/4" (3)
24	HRM-10NFX3/8	Hex Round Machine 10-32 x 3/8" (3)
25	PPM-10X1	Phillips Pan Head Machine 10-24 x 1
	LN-10	Lock Nut
26	SCH-25-007-06	Spacer
27	JOH-CP-6-26	Clevis Pin 3/8"
28	JOH-C-4-4	Cotter Pin 5/32 x 1-1/4 (2)
29	SCH-94-93-PK	Ring Pin 5/16"
	HR-QV-D-SPECTRA	QuikVang Line - Spectra
30	PTM-1/4X1/2	Phillip Truss Screw 1/4-20 x 1/2"
	JOH-C-4-4	Cotter Pin
QuikVang D-30 6:1 Purchase		
	HAR-129	Harken Block
	HAR-190SNP	Harken Block
	HR-QV-C24-ROPE	Custom Yale Dacron Braid 5/16"
0.137	HSI-QV-D-30	Whole Unit
QuikVang D-40 8:1 Purchase HAR 127 Harkon Block (2)		
	HAR-127	Harken Block (2)
	HAR-129	Harken Block
	HR-QV-D-ROPE SCH-98-03	Custom Yale Dacron Braid 5/16" Clevis Pin 1/4" (3)
	SCH-94-92-PK	Cotter Ring (3)
	PR-10653	Triangle Plate (2)
	HAR-2110	Shackle, 6mm Bow
	HSI-QV-D-40	Whole Unit
	П31-QY-D-40	whole Offit