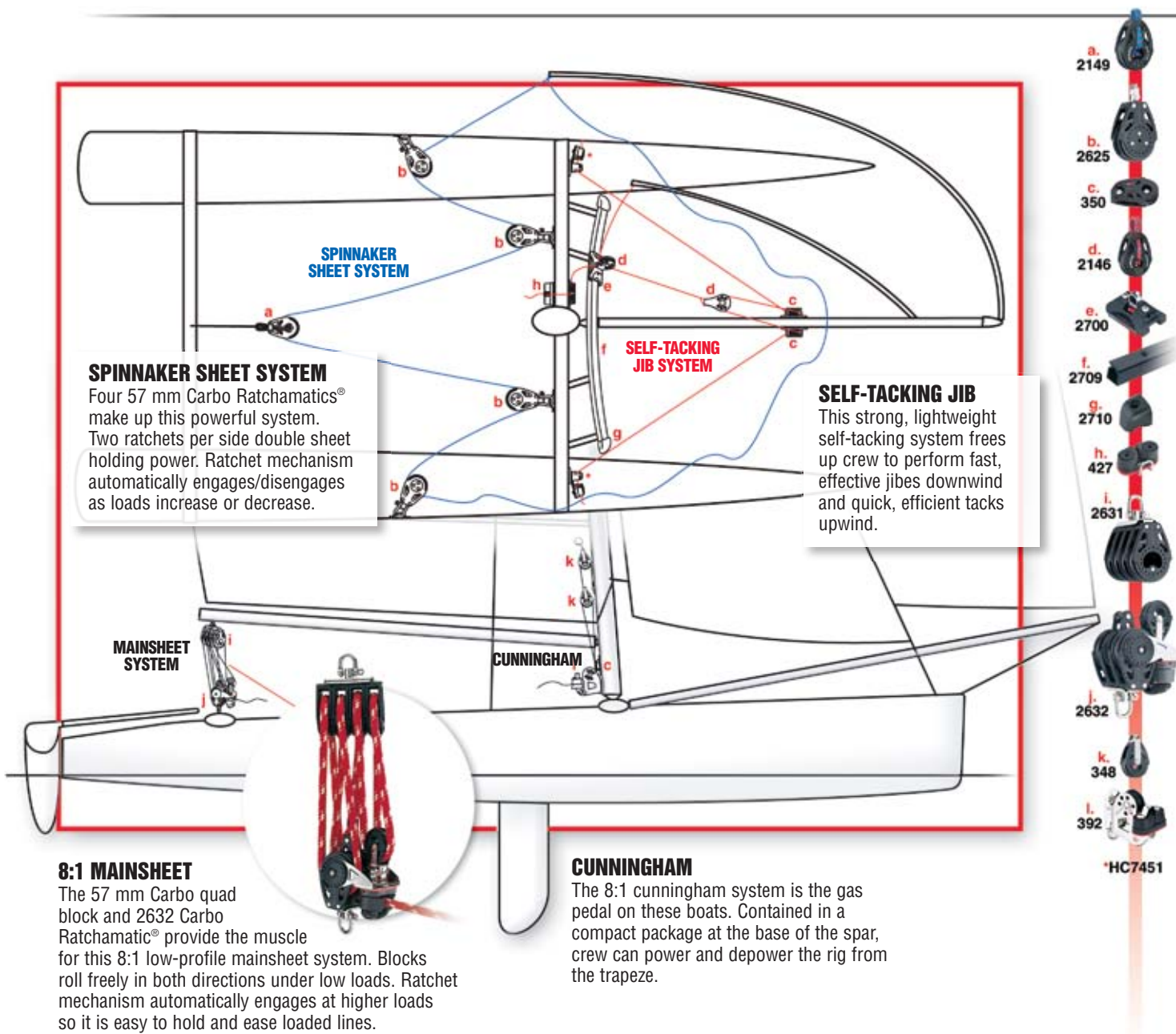


# F18

FORMULA 18 CATAMARAN

### THE INTERNATIONAL FORMULA 18

The Formula 18 fleet is one of the fastest growing in the world. Electrifyingly quick, these double-handed, twin-trapeze and technically exciting speed machines are designed to a box rule that allows a variety of builders to manufacture similar boats with similar performance. Fair racing is insured for male, female and mixed crews by using two sizes of jibs and spinnakers and corrector weights.



#### SPINNAKER SHEET SYSTEM

Four 57 mm Carbo Ratchamatics® make up this powerful system. Two ratchets per side double sheet holding power. Ratchet mechanism automatically engages/disengages as loads increase or decrease.

#### SELF-TACKING JIB

This strong, lightweight self-tacking system frees up crew to perform fast, effective jibes downwind and quick, efficient tacks upwind.

#### 8:1 MAINSHEET

The 57 mm Carbo quad block and 2632 Carbo Ratchamatic® provide the muscle for this 8:1 low-profile mainsheet system. Blocks roll freely in both directions under low loads. Ratchet mechanism automatically engages at higher loads so it is easy to hold and ease loaded lines.

#### CUNNINGHAM

The 8:1 cunningham system is the gas pedal on these boats. Contained in a compact package at the base of the spar, crew can power and depower the rig from the trapeze.

- a. 2149
- b. 2625
- c. 350
- d. 2146
- e. 2700
- f. 2709
- g. 2710
- h. 427
- i. 2631
- j. 2632
- k. 348
- l. 392

HC7451

# F18

FORMULA 18 CATAMARAN



Geoff Sobering photo

## MISCHA HEEMSKERK'S RIGGING TIPS

BY DAVID SCHMIDT / ALEMBIC MEDIA, LLC

### RIGGING FOR SPEED

Sailing fast is a combination of time in the boat, practice, time in the boat, practice, time in the boat, and smart rigging.



#### JIB RIGGING SET-UP cascade 1:4:

**Starting at the Jib Clew:** A Harken 29 mm Carbo Ti-Lite block (Part #351) is attached to the jib's clew via a Wichard (2470 HR) snap shackle.

**Jib Traveler:** Use a Harken Small Boat CB car (Part #2732) that's fitted with a Harken 29 mm Carbo Ti-Lite block (Part #351).

**Jib Sheet Hardware and Lead:** The sheet dead-ends at the traveler and is then lead through the block on the clew and then back to the Carbo Ti-Lite block on the traveler. On the

spinnaker pole, at the base of the forestay, is a Harken eyestay (Part #2129), which accepts a strop (and leaves room to mount the compass bracket); at the end of this strop is a Harken 16 mm fixed single block (Part #404). The jib sheet is led

forward from the Carbo Ti-Lite block to the Harken 16 mm fixed single block on the strop. The jib sheet then runs from the Harken 16 mm fixed single block through a pair of Harken swivel bases with Micro Cam-Matic® cam cleats and 16 mm sheaves (Part #462) to port and starboard on the forward beam.

**Jib Sheet Lead:** After the jib sheet leaves the Harken swivel base Micro Cam-Matic cam cleats and 16 mm sheaves (Part #462), traveling abaft, it passes through a block, which is tied to the shackle that supports the shroud. From here, the sheet disappears into the front beam, using a similar tackle system as the cunningham. Note: There are two holes on either end of the crossbeam; the forward hole is for the cunningham system, whereas the jib system runs through the aft aperture.

#### FRONT BEAM:

**Cunningham Set-Up:** A block is attached to the underside of the sail at the luff, directly below the cunningham's cringle (see detail image). A 2:1 cascade purchase system is created by running one end down to the base of the mast where it dead-ends at a clamcleat CL211 MKI that's mounted on both sides of the mast's luff groove; the other end of the 2:1 dead-ends at the top of a separate 8:1 tackle system (see detail image), creating a 16:1 purchase system. The working end of the 8:1 system exits the top of the cascade system and runs down to the base of the mast, on both sides, where it passes through a Spinlock PXR (2-6 mm) cam cleat that's mounted as low as possible on the mast base. From here, the cunningham runs to a Harken 29 mm Carbo fixed block (Part #348), which is attached via a strop to the forward hand's trapeze wire. From the 29 mm Carbo fixed block (Part #348), the continuous cunningham then runs into the front beam. In the front beam, the continuous

## ABOUT MISCHA



For most people, the word “sailboat” evokes a romantic image of one hull, a mast, white sails and—perhaps—some brightwork. Not so for Dutch multihull sailor Mischa Heemskerk; the 36-year-old North American and European Formula 18 champion and Olympic coach has been sailing on two hulls since the age of one. Heemskerk’s self-admitted “need for speed” has seen him post many high-level F-18 finishes including two wins at the Round Texel Race, the world’s biggest catamaran race; multiple National F-18 Championships; a third at the 2008 Formula 18 Worlds; and a fourth in the 2010 F-18 Worlds.



cunningham line, as well as the continuous jib sheet, are pulled in two separate loop take-up systems. Each one uses two Harken 29 mm Carbo fixed block (Part #348) for the line and a Harken 16 mm fixed single block (Part #404) for the bungee.

This set-up ensures that all extra cunningham is immediately cleared from the deck and pulled into the front beam where it can’t get in the way. More importantly, by rigging the cunningham this way, the forward hand or the helm can easily make adjustments while out on either the port or starboard wire. To make it easier to trim the cunningham, mount trim stickers on either side of the mast (see detail image).



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**Jib Sheet Cleat:** The jib sheet cleat—a pair of Harken swivel bases with Micro Cam-Matic cam cleats and 16 mm sheaves (Part #462)—should be riveted to the port and starboard sides of the front beam, in between the two jib track-support struts on either side of the mast. Mounting

the dual Harken swivel bases with Micro Cam-Matic cam cleats and 16 mm sheaves (Part #462) directly abaft the jib traveler track allows the track itself to protect the swivel cleats; it also makes it nearly impossible for the spinnaker sheet to accidentally get caught under the cleats.



**Spinnaker Blocks:** After the spinnaker sheet exits the deck-mounted Harken 57 mm Carbo Ratchamatic® block (Part #2625) that’s on the deck, it runs through a Harken 40 mm Carbo Ti-Lite block (Part #2651) that’s fitted to the front beam via some lashing line and a Harken eyestrap (Part #2129). Note: this eyestrap should be fitted to the front beam, just inboard of the hiking strap (see detail image).

### MAST AND MAST ROTATION:

**Spinnaker Halyard Cleat:** Mount a Harken Pivoting Exit Big Bullet block (Part #140) with 150 cam cleat (with aluminum jaws) at the front center of the mast so that the cleat turns towards the crew when the mast is rotated. The spinnaker halyard runs straight up the center of the mast, reducing friction.



**Mainsheet:** Use a five-sheave Harken Carbo top block (Part #HC7668) that attaches to the boom via a webbing strop, where it is held fast by a shackle and a pull-pin. On the traveler car are two blocks. The bottom one—a triple-sheave Carbo block with becketts above the center sheave—is oriented parallel to

the back beam; the top block—a double-sheave unit with a becket above one block—attaches to the lower block so that the axes of the two blocks are perpendicular (see detail image). The mainsheet is dead-ended to the uppermost becket on the lower mainsheet blocks; it then runs through the blocks, yielding a 10:1 purchase system. The mainsheet itself tapers from 8 mm line in the cockpit to 3 mm line in the tackle to save weight and minimize bending resistance in the rope.



**Spinnaker Halyard:** To reduce friction and windage aloft, the spinnaker halyard should be just 3 mm Dyneema® in diameter for the majority of its length, starting from where it attaches to the sail before expanding to wider-diameter cordage just before it gets cleated (the wider-diameter material grips better in the cleat). At the top of the mast is a 29 mm Carbo fixed block (Part #348). The halyard runs from the head of the sail, up through the 29 mm Carbo fixed block (Part #348) and then down the length of the mast on its starboard profile, through the Harken Bullet cleat (Part #140) on the mast, before continuing to a Harken 29 mm Carbo AirBlock® (Part #349) that’s attached to the rear profile of the front beam. From here the spinnaker halyard is redirected aft to a Harken 29 mm Carbo fixed block (Part #348) that’s floating on a bungee cord that’s led through two holes in the trampoline, just forward of the three-point hiking strap. The spinnaker halyard is then redirected forward to a Harken 29 mm Carbo AirBlock (Part #349) that’s attached to the trampoline, just abaft the mast and port of centerline. The halyard finally disappears through a cringle in the trampoline trough the spinnaker bag, which is beside the spinnaker pole. The halyard terminates at the spinnaker, becoming the kite-retrieval line in order to pull the spinnaker into its bag.

