

# MIRAGE – FULL SPECIFICATIONS

Website: [www.photowords.com.au/pages/mirage.html](http://www.photowords.com.au/pages/mirage.html)

## GENERAL SPECIFICATIONS

**Make and model:** Sonata 7.

**Year built:** 1986.

**Victorian registration:** SA183.

**Length:** 7 metres (23 feet).

**Length at waterline:** 6 metres (20 feet).

**Beam:** 2.45 metres (8 feet).

**Draft, swing keel down:** 1.37 metres (4'6").

**Draft, swing keel up:** 0.3 metres (1 foot).

**Displacement:** 1027 kg (sailaway).

## CONSTRUCTION

**Type:** fiberglass.

**Hull protection:** custom epoxy bottom coat so that the boat can be left in the water for extended periods without fear of osmosis.

**Rudder:** NEW 2000 custom solid timber laminated swing rudder, in custom stainless steel rudder box with raising and lowering rod system.

**Keel:** cast iron swing keel with lock-down rope, retracts into internal keel case which is an ideal seat when working at the galley or moving around inside in rough weather.

**Keel ballast weight:** 409 kg

**Keel winch:** heavy duty, with built-in lowering clutch and ratchet wind-up (finger safe operation). NEW 2012 stainless steel keel cable. NEW 2007 custom keel cable turning block allows easy inspection of pulley and replacement of cable.

**Lifelines:** stainless steel stanchions with two wire lifelines, connected to pulpit and twin pushpits.

**Targa bar:** NEW 2002 custom jarrah and stainless steel targa bar with concealed electrical wiring, used for:

- Support of the rear end of the mast when trailering, much stronger than the factory setup.
- Removable 40w solar panel on stainless steel swivel/tilt bracket, with dry plug for power connection.
- Stern light.
- Folding LED anchor light.
- Folding VHF and 27MHz radio aerials.

## ACCOMMODATION:

**Berth arrangement:** largest double V-berth in any trailer sailer up to 8.5m (2m long by 1.9m wide at the widest point). Saloon table drops to form a smaller double. Two quarter berths. All with upgraded 4" foam mattresses and upgraded heavy cloth covers.

**V-Berth mattress:** NEW 2009 4" luxury foam. In 2 pieces for easier access to storage lockers underneath.

**Sleeps:** 6 technically; 5 possible; 4 or less excellent.

**Forward cabin contains:** V-berth with huge storage space under, with custom removable slats to create a raised platform to increase usable storage. Vanity mirror. NEW 2008 12 LED cabin light. NEW 2008 12 LED reading light. NEW 2008 12v power socket. Teak parcel shelf. NEW 2007 zip up storage pockets x3. NEW 2009 privacy curtain. Large opening hatch for light and ventilation, fitted with NEW 2009 curtains.

**Toilet compartment:** in its own alcove, not under any berths. NEW 2013 never used genuine Thetford Porta Potti 165, largest size (10 litre flushing tank, 20 litre holding tank).

**Saloon contains:** dinette with teak table, seats four, drops to form a double berth. Full length parcel shelf with teak railing. Two good size storage lockers. Two very large seat lockers. NEW 2008 30 LED strip light. NEW 2009 acrylic windows. NEW 2009 curtains. NEW 2007 1kg fire extinguisher. Brass ship's clock.

**Galley:** upgraded teak galley with teak crockery storage bays, dedicated mug rack, cutlery hanger, and two teak parcel shelves. Two-burner stainless steel methylated spirits stove, with fiddles to retain pots/kettle in rough weather. Blown foam insulated icebox with NEW 2009 double-insulated lid. Sink with two hand pumps, one NEW 2007 connected to the fresh water tank, the other connected to the base of the icebox so that melt water can be removed without disturbing the food (extends ice life substantially, and extends water capacity since this water can be used for many non-consumption purposes). Two large pot/storage cupboards with shelves and locking doors to retain contents in rough weather. One small storage cupboard. NEW 2008 30 LED strip light. NEW 2007 1kg fire extinguisher. NEW 2007 fire blanket. NEW 2009 acrylic windows. NEW 2009 curtains.

**Pop-top:** provides full standing headroom over saloon/galley. Complete with integrated clears/mesh covers (including companionway) and NEW 2007 custom entire enclosure in sand-fly-proof extra fine mesh.

**Cockpit table:** NEW 2007 varnished timber cockpit table for dining in the cockpit. Doubles as a backrest for the aft dinette seat.

**Companionway:** fitted with lockable storm boards. Storm boards also have lanyards to retain them in place when sailing, should a knock-down occur.

## DRINKING WATER

**Tank type:** Plastimo collapsible.

**Capacity:** 100 litres.

**Construction:** tasteless, welded PVC inner bladder. Outer envelope is tough plastic-coated canvas which

is abrasion and tear resistant, and fitted with lash-down loops for retention.

**Location:** securely lashed to hard points on the hull, under the V-berth.

**Plumbing:** plumbed to hand-operated water pump at the sink.

**Additional capacity:** there is room next to the rear end of the keel case for a 20 litre jerry can of water, and other storage spaces as well if required. For long trips we typically carried 130 litres of drinking water.

## COCKPIT

**Type:** large self-draining cockpit, 2 metres long.

**Hard point:** **NEW** 2000 cockpit hard point for attaching harness lanyards in rough weather.

**Swim / boarding ladder:** stainless steel, fold up.

**Lockers:** two lockable lockers for fuel tanks, oils, toilet chemicals, methylated spirits etc. Lids are secured with retaining clips when sailing, to retain contents in case of a knock-down. Two coaming lockers for small items such as sunscreen, winch handles, sunglasses etc.

**Cockpit cushions:** **NEW** 2007 full length (2m) closed cell outdoor foam cockpit cushions, with locating studs. Ideal for both sailing and lazing around at anchor.

**Backrests:** **NEW** 2007 six removable cockpit and pushpit padded all-weather backrests.

**Bilge pump:** manual TMC, mounted inside the boat, with concealed operating shaft set flush into the cockpit wall. Removable handle stored in fuel locker. Permanently-installed coil of large diameter hose inside the boat, long enough to reach into all lockers and V-berth.

**Porta potti treatment chemicals:** **NEW** 2013 unused 1 litre of treatment chemicals, in fuel locker.

## AWNINGS AND COVERS

**Pop-top:** full set of snap-on vinyl covers for weatherproofing the pop-top when up, including both clears for wet/cold weather and mesh for hot weather/ventilation/insects. Includes the companionway door.

**Fore hatch:** two complete covers. A low profile vinyl snap-on hatch cover for wet/cold weather, with mesh ventilation panel. **NEW** 2007 black mesh sand-fly-proof snap-on cover big enough to allow the hatch to stay wide open, for hot weather and maximum ventilation.

**Boom tent:** **NEW** 2003 custom high quality, professionally made from marine-grade sunbrella material. Complete with poles, rear zip to allow fitting around backstay, and side attachment lines. Fits over the flaked main sail and extends from the boom to the transom, where it attaches to the targa bar.

**Foredeck awning:** **NEW** 2003 custom marine canvas awning shades the deck forward of the mast when at anchor in hot weather. In wet weather it keeps rain off the forward hatch, allowing better ventilation. Has a

rain water collection fitting and hose for running rain water into the drinking water tank or other container.

**Bimini:** **NEW** 2003 custom professionally made removable shade bimini for cockpit and helm position. Can be fitted at the start of a cruise and left in place the entire time as it is designed to be up when sailing (fits under the boom) and also fits under the boom tent. Made of strong vinyl with a powder-coated frame.

**Mainsail boom cover:** **NEW** 2007 custom marine canvas cover for the mainsail when the sail is flaked on the boom. Protects it from UV, dirt, bird droppings etc. Ideal protection also if the boat is stored mast up and sail on, ready to go.

**Cockpit wind breaks:** **NEW** 2007 custom panels otherwise known as “kidney warmers”. They lash onto the lifelines to provide a solid wind break in cold, draughty weather, either when sailing or at anchor.

**Winches:** **NEW** 2007 covers for all sheet and halyard winches.

**Companionway:** canvas cover for companionway storm boards to protect varnish when in storage.

**Long items storage rack:** **NEW** 2007 custom suspended rack over port quarter berth for storage of boom tent, bimini and boat hook.

## OUTBOARD MOTOR & FUEL

**Type:** Mercury 7.5 hp 2-stroke long shaft with metal 4-blade propeller, pitch properly set for displacement vessel (i.e. not for high-speed planing as fitted to motors for tinnies, which is useless on a yacht).

**Gearbox:** forward, neutral and reverse.

**Year:** 1986. Every time I take the motor for service I enquire about a new one, perhaps a 4-stroke. And every time I come home with my Mercury, after the mechanic services it, tests the compression, and says “what a great motor this is”. Simple, incredibly reliable, low servicing cost, can be stored indefinitely without causing any problems.

**Weight:** 27 kg. Way lighter than a 4-stroke, you will appreciate this when lifting it onto the motor bracket, and when sailing.

**Flushing:** custom flushing fitting for attaching garden hose to the flushing port, allows flushing the engine on dry land.

**Outboard motor lock:** custom solid stainless steel, with padlock.

**Main motor mount:** upgraded counter-balanced mount with numerous height settings. Dual spring-loaded counter-balancing makes raising the motor to sail, and lowering it to start motoring, much easier.

**Auxiliary motor mount:** **NEW** 2007 custom jarrah and stainless steel mount on pushpit, for carrying another outboard for the dinghy. Suits up to 3.3hp. (Motor and dinghy not included).

**Fuel tanks:** **NEW** 2003 two plastic 23 litre fuel tanks in dedicated stern lockers, one fitted with fuel gauge. **NEW** 2003 duplicated fuel lines and fittings so that

swapping from one tank to the other can be done in an instant.

**Fuel capacity:** 46 litres total.

### **SPARS, RIGGING AND WINCHES**

**Mast:** upgraded black-anodized aluminium. Masthead rig, all controls lead back to the cockpit. Adjustable backstay tension.

**Spreaders:** **NEW** 2002 custom stainless steel spreader bracket. This bracket solves a known problem with spreader failure in the Sonata 7, which has resulted in a number of broken masts. The inadequate factory attachment rod connecting the two spreaders internally through the mast has been removed. A custom stainless steel bracket shaped to fit the curvature of the mast has been manufactured, slid up the outside of the mast, and riveted into place. The bracket has projecting stubs into which the spreaders have been re-fitted, with stress-relieving rubber bushes. Professionally done by expert rigger, and very strong.

**Spreader end tips:** **NEW** 2007. These small but vital cast aluminium components retain the cap shroud rigging wires in the spreader ends.

**Standing rigging:** **NEW** 2012 stainless steel. Not just the wire, the rigging screws are all new as well. Masthead rig.

**Winches:** 4x Barlow, in matching black. Two on the cabin top for halyards etc, two on the cockpit coamings for sheets.

**Winch handles:** three.

**Boom:** upgraded black-anodized aluminium.

**Traveller:** cockpit mounted, with 2:1 control ropes on each side of the car.

**Spinnaker pole:** upgraded black-anodized aluminium.

#### **Running rigging:**

- **NEW** 1999 main halyard, 8mm spectra.
- **NEW** 2012 genoa halyard, 8mm spectra.
- **NEW** 2012 spinnaker halyard, 8mm spectra.
- **NEW** 2003 spinnaker sheets, guys and tweekers.
- **NEW** 2007 uphaul and downhaul for spinnaker pole, 6mm double braid polyester.
- **NEW** 2007 topping lift for boom, 6mm double braid polyester.
- **NEW** 2001 custom downhaul for dropping the headsail without leaving the cockpit.
- Genoa sheets.
- Vang.
- 4:1 Mainsheet and block, doubles for raising the mast.

**Rope tail pockets:** **NEW** 2007. Four: one on each side of the cabin top, for halyards and reefing lines etc; one forward in the cockpit for the mainsheet and traveller; one aft in the cockpit for the backstay connection/tensioner.

### **SAILS & SAIL EQUIPMENT**

**Mainsail:** white, loose-footed, 9.5 sqm.

**Mainsail reefs:** two. Separate luff and leach lines for better shape when reefed down.

**#1 Genoa:** light blue and white, 18.9 sqm.

**#3 Jib:** white, 10.4 sqm.

**#4 Heavy Weather Jib:** **NEW** 2003, white, 7.5 sqm.

**Storm Jib:** dark blue, 4 sqm.

**Spinnaker:** red, white and black, 34 sqm. Cruising spinnaker (three-quarter size) much easier to handle than full spinnaker.

**Tiller lock:** quick release and lock “Tiller Man”, locks tiller in position and frees helmsman to attend to other tasks for short periods when sailing. Also secures tiller and rudder at anchor.

### **GROUND TACKLE & DECK EQUIPMENT**

**Anchor:** **NEW** 2003 over-size 20lb plough.

**Anchor chain:** **NEW** 1999 over-size 8mm, 7.5 metres long.

**Anchor rope:** **NEW** 1999 over-size 12mm nylon, 50 metres long.

**Anchor locker:** good size with room for additional chain. Custom locker lid retainer, to retain contents in case of a knock-down.

**Bow roller:** **NEW** 1999 over-size stainless steel roller with retaining pin.

**Cleats:** bow cross bollard. **NEW** 1999 over-size stainless steel bow cleat and 2x over-size stainless steel stern cleats.

**Hand rails:** two teak hand rails on cabin top.

**Pulpit:** custom stainless steel.

### **ELECTRICS**

**House battery:** sealed Gel. 12 volt 105 amp-hour, deep cycle.

**Battery isolation switch:** **NEW** 2012.

**Battery wiring and fusing:** **NEW** 2008.

**Solar panel:** **NEW** 2003. BP Solar, 40 watts, charging the house battery. With custom stainless steel swivel/tilt bracket (maximises amp-hours collected) for mounting on targa bar. Dry plug and concealed wiring in targa bar. Removable for storage inside boat when travelling.

**Solar panel regulator:** **NEW** 2003 Morningstar SunSaver-6. Six amp regulator with settings for charging different battery types. Has charging indicator and built-in diode to prevent discharge at night.

**Main 12v switch panel with indicator lights & fuses:**

- “Cabin lights”. All internal lights except the V-berth reading light.
- “Running lights”. **NEW** 2003 stern light; **NEW** 2007 port and starboard navigation lights.
- “Instruments”. Log and depth sounder.
- “Radio”. 27 MHz radio (VHF radio is separately fused).

**NEW 2003 additional 12v switch panel with indicator lights and fuses:**

- “Electronics”. **NEW** 2003 two 12v power sockets under the companionway (we used these for GPS and laptop computer, for electronic navigation – not included). Could also be used for a cockpit light or anything else.
- “Anchor”. **NEW** 2003 LED anchor light, folding, mounted on targa bar.
- “Bilge Pump”. Spare, not connected.
- “Power 12V”. **NEW** 2008 V-berth LED reading light and adjacent 12v power socket. Ideal for charging phones etc.

**INSTRUMENTS**

**Depth sounder:** **NEW** 2007 Navman D40.

**Log:** VDO Sumlog speed and distance.

**Compass:** Suunto.

**Wind direction indicator:** **NEW** 2007 Hawk, masthead mounted, removable for transport.

**VHF radio:** **NEW** 2003 GME GX548. Aerial mounted on targa bar, foldable for transport.

**VHF radio external speaker:** **NEW** 2003 mounted in cockpit coaming locker so that the radio can be heard when sailing.

**27MHz Radio:** **NEW** 2003 GME GX294. Aerial mounted on targa bar, foldable for transport.

**DOCUMENTATION**

Extensive ship’s documentation folder with data sheets and manuals for onboard equipment.

**SAFETY**

**V-Sheet:** yes.

**Flares:** **NEW** 2013.

**Life ring & holder:** **NEW** 2012.

**Jackstays:** **NEW** 2007. These are webbing straps running up the deck from the stern cleat to the bow cleat, on both sides of the boat. Harness lanyard is clipped to one of these when going forward in rough weather.

**Fire extinguishers:** **NEW** 2007. Two 1 kg powder.

**Fire blanket:** **NEW** 2007.

**TRAILER**

**Type:** Mackay tilt trailer, galvanized, in good condition.

**Springs:** **NEW** 1998 upgraded galvanized springs each fitted with an extra leaf for better load carrying capacity (7-leaf).

**Hubs:** **NEW** 1998.

**Tyres:** **NEW** 2012 six 175x13 light truck tyres (two spares).

**Wheels:** six 13” rims (2 spares, one **NEW** 2009).

**Brake system:** hydraulic over-ride, full service November 2012.

**Master cylinder & hydraulic lines:** **NEW** 1998.

**Brake disks:** **NEW** 2001.

**Brake callipers:** **NEW** 2012.

**Wheel bearings:** **NEW** 2012.

**Wobble rollers:** **NEW** 2004.

**Wheel brace:** yes.

**Trailer winch:** PowerWinch 812 12 volt electric, with clutch and brake for controlled launching. Fitted with quick connect studs for instant connection and removal from trailer post (saves it from getting nicked). **NEW** 2000 winch cable fitted with heavy duty block to allow double line pull, giving a pull rating of 1.6 tons.

**Tie-down strap:** ratchet type, retains rear of boat on the trailer when towing.

**MISCELLANEOUS**

**Barbeque:** Magma stainless steel kettle BBQ. Rail mount. Runs on heat beads. It barbeques, roasts and bakes. Includes easy release mounting arm and starter chimney.

**Rain water collection hose:** connects to a fitting in fore-deck awning and directs rain water into the drinking water tank.

**Boat hook:** custom made, extra long.

**Fenders:** two.

**Mooring lines:** five.

**Barge board:** for protecting the side of the boat when moored up against piles or a non-floating jetty.

**Anti-fatigue matting:** **NEW** 2007 on cockpit floor.

**Fishing net holder:** **NEW** 2007 mounted on pushpit.

**SPARES**

- Assorted globes and fuses.
- High current fuse for PowerWinch.
- Keel case inspection plate and O-ring.
- Keel cables x2.
- Drinking water pump.
- Trailer globes.
- Trailer wheel nuts.
- Trailer wheel bearing kits x2.
- Trailer wheel bearing seal kits x3.
- Axle nut split pins.
- Bearing buddy x1.