



Boating 101

Boat Requirements

&

Safety Equipment



Boat Requirements

HIGHLAND

WOODWORKING

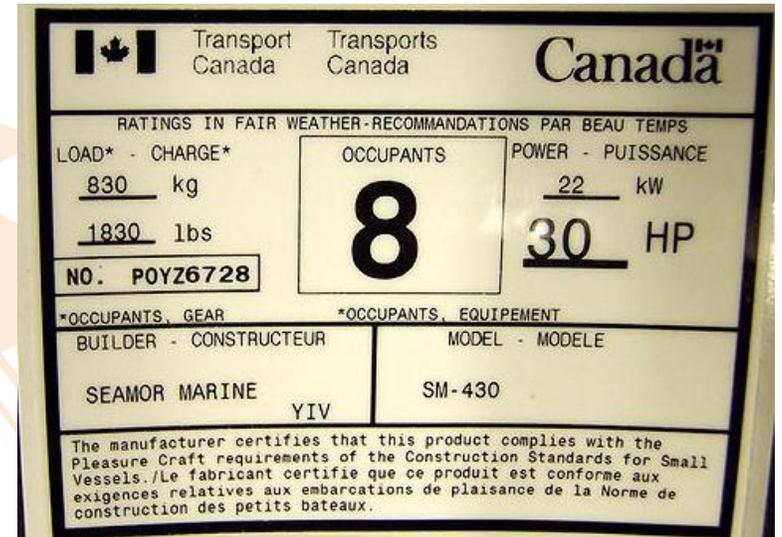
Age & Horsepower Restrictions

AGE	HORSEPOWER RESTRICTIONS
Under 12 years of age with no direct supervision*	May operate a boat with up to 7.5 kW (10 hp)
Ages 12 to under 16 with no direct supervision	May operate a boat with up to 30 kW (40 hp)
Under 16 years of age, regardless of supervision	May not operate a personal watercraft
16 years of age or older	No horsepower restrictions

REMEMBER: Youth must also carry proof of competency to operate any motorized boat, supervised or not.

Compliance Notices/Capacity Plate

- Under 6m long boat & can be fitted with a motor
- states the safe limits for the vessel of;
 - Engine power
 - Number of persons on board
 - Max total load in lbs or kilos
- Confirms built to Canadian government standards
- All others boats display a conformity plate



Boat Licensing (Every 5 years NOW!)

- A Pleasure Craft License (PCL) is a document with a unique number.
- It must be displayed on both sides of the bow (front) of a pleasure craft.
- Like a car's licence plate, it is used for identification but is not proof of ownership.
- It helps police and search and rescue find important information during emergencies.

TRANSPORT CANADA TRANSPORTS CANADA APPLICATION FOR PLEASURE CRAFT LICENCE PROTECTED A (WHEN COMPLETED)

(A) PARTICULARS OF APPLICANT			
Name(s) of new owner(s)			Telephone number
Address			Date of birth (dd-mm-yyyy)
City/prov/state	Country	Postal/Zip code	Date (dd-mm-yyyy)
I HEREBY MAKE APPLICATION FOR A PLEASURE CRAFT LICENCE AND DECLARE AS FOLLOWS:			
(B) PLEASURE CRAFT ALREADY LICENSED	OR	(C) UNLICENSED PLEASURE CRAFT	
Having legally obtained the pleasure craft described in (D) below, which bears licence number:		Having legally obtained the pleasure craft described in (D) below	<input type="checkbox"/> DOMESTIC <input type="checkbox"/> FOREIGN
Reason for the application			
<input type="checkbox"/> New <input type="checkbox"/> Renewal <input type="checkbox"/> Update information <input type="checkbox"/> Transfer <input type="checkbox"/> Duplicate <input type="checkbox"/> Cancellation <input type="checkbox"/> Dealer licence <input type="checkbox"/> Abandoned			
(D) DESCRIPTION OF VESSEL			
Propulsion type			
<input type="checkbox"/> Outboard <input type="checkbox"/> Inboard <input type="checkbox"/> Inboard/Outboard <input type="checkbox"/> Jet drive <input type="checkbox"/> Aux. sailing <input type="checkbox"/> Air propeller <input type="checkbox"/> Manual <input type="checkbox"/> Sail <input type="checkbox"/> None <input type="checkbox"/> Other (specify) _____			
Length (m)		Hull Serial Number	
<input type="checkbox"/> I hereby certify that I cannot locate/obtain the Hull Serial Number		<input type="checkbox"/> Canadian compliance notice attached to vessel	
Pleasure craft built or imported in Canada after August 1, 1981 are required to have a Hull Serial Number (HIN). Home-built pleasure craft are not required to have a HIN if constructed for personal use.			
Hull material		Hull type	
Primary hull colour		Secondary hull colour	
Make and model of pleasure craft			or <input type="checkbox"/> Home-built
(E) PARTICULARS OF PREVIOUS OWNER(S)			
Name(s) of previous owner(s)			
Address			Telephone number
City/prov/state	Country	Postal/Zip code	
(F) SIGNATURE(S) OF NEW OWNER(S)			
_____ Signature(s) of new owner(s)			_____ Date (dd-mm-yyyy)

The personal information provided on this form is collected under the authority of the **Small Vessel Regulations** of the **Canada Shipping Act, 2001**. This information is collected for the purpose of issuing licences in order to identify owners and operators of pleasure craft, as well as to monitor and ensure compliance with the **Small Vessel Regulations**. (Note: A licence document does not establish ownership of a pleasure craft.) Information may be disclosed to parties involved in search and rescue activities, as well as law enforcement agencies for the purpose of carrying out a lawful investigation and enforcing any law of Canada, including the requirement to pay provincial sales tax. The information collected is described in the Personal Information Bank entitled Pleasure Craft Licences (bank number TC PPU 044). Under the provisions of the **Privacy Act**, individuals have the right of access to, and protection of, their personal information. Instructions for obtaining personal information are provided in *Info Source*, a copy of which is available in major public and academic libraries or online at www.infosource.gc.ca

Boat Licensing Continued

- all boats under 15 tons (30,000lb) with 10hp or more including personal watercraft **MUST** be licensed.
- A \$24 Fee
- Displayed in Block Characters, contrast colour, minimum **7.5CM HIGH ON EACH SIDE OF BOW**
- Must carry paper version on board.





BC 2134567



567

7.5 cm

Hull Identification Number (HIN) – Serial Number

- A HIN helps to find lost or stolen boats and identify boats that are subject to a recall
- permanently marked on the outside upper starboard corner of the transom

Current HIN Format

HULL IDENTIFICATION NUMBER FORMATS

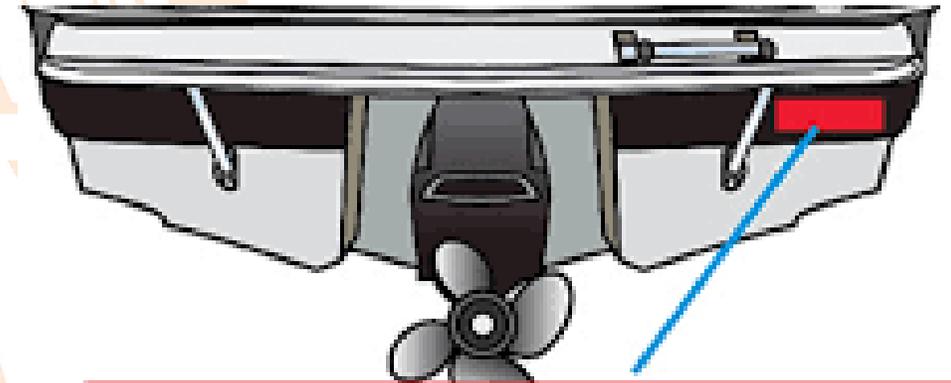
CURRENT FORMAT BMA 45678 H4 85
August 1, 1984

Manufacturers ID Code (MIC)	Production or Serial #	Month Year of Production	Model Year
--------------------------------	---------------------------	-----------------------------	---------------

* Key to month of production for current format:

A - January	D - April	G - July	J - October
B - February	E - May	H - August	K - November
C - March	F - June	I - September	L - December

The CURRENT FORMAT replaced STRAIGHT YEAR and MODEL YEAR formats. The Current Format was optional as of January 1, 1984, but mandatory as of August 1, 1984. Confidential HINs were not required prior to August 1, 1984.



ABC 67689 B6 06

Manufacturer's
Identification
Code
(MIC)

Hull Serial
Number

Date of
Manufacture

Model
Year



Miss Marin

14K 40698



U.S. COAST GUARD

MAXIMUM CAPACITIES

7 PERSONS OR 900 LBS.

1600 LBS, PERSONS, MOTOR, GEAR
135 H.P. MOTOR

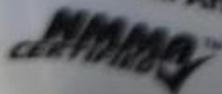
THIS BOAT COMPLIES WITH U.S. COAST GUARD SAFETY
STANDARDS IN EFFECT ON THE DATE OF CERTIFICATION

MANUFACTURER: TROPHY MARINE EVERETT, WA 98206

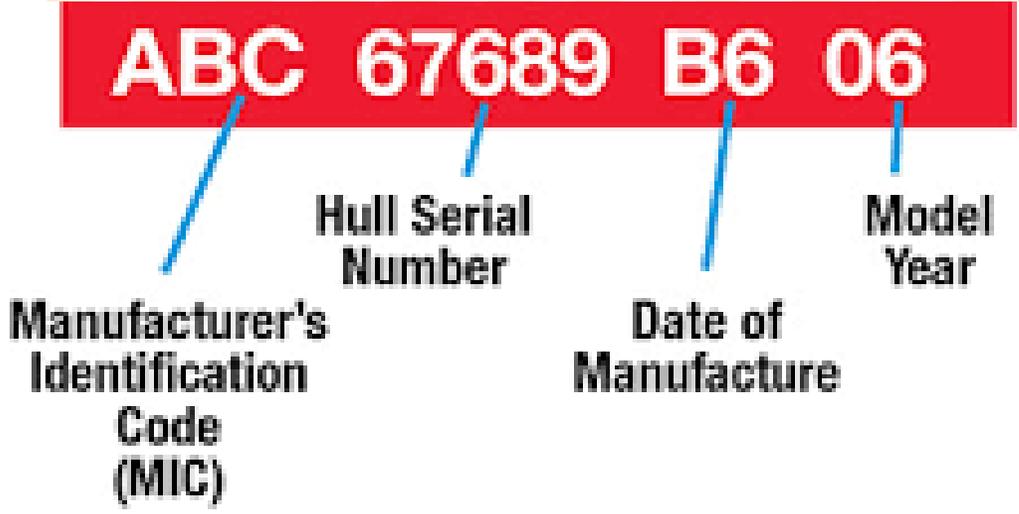
MODEL: 1802 WA

DESIGN COMPLIANCE WITH NMMA REQUIREMENTS BELOW IS VERIFIED.
MANUFACTURER RESPONSIBLE FOR PRODUCTION CONTROL.

LOAD AND H.P. CAPACITY * LEVEL FLOTATION
STEERING, FUEL AND ELECTRICAL SYSTEMS
COMPARTMENT VENTILATION * MANEUVERABILITY
NAVIGATION LIGHTS



NATIONAL MARINE MANUFACTURERS ASSOCIATION



Boat Registration

- Is your boat a commercial vessel with a gross tonnage of 15 or more and powered by motors totaling 7.5 kW (10 horsepower) or more?
- Does your boat need a reserved name? A unique name on bow, name of port of registry on stern.
- Will your boat be traveling outside of Canada?





Safety Equipment

HIGHLAND

WOODWORKING

Life Jackets and Personal Floatation Device - PFD

- Must have one for each person on board a vessel
- Appropriate size, snug fit, allow freedom to move.
- Check for buoyancy regularly by wading into chest-deep water, bend knees and see if you float with chin above water.
- Dry in open air, not constantly exposed to direct sunlight, not close to direct heat.



Standard PFD



Inflatable PFD



Lifejacket



Child Lifejacket

PFD and Life Jacket Con't

- Kept readily accessible in a dry, well-ventilated area
- Approved status is **VOID** if repaired or altered
- Cleaned with mild soap and water
- Lifejackets come in orange, red, yellow for visibility. PFD come in a range of colours...



Lifejackets



Standard PFDs

PFD and Life Jacket Con't

Who should wear it?

- all operators of pleasure craft

What is reality?

- Most people **DON'T**.

COMMON SENSE – night, bad weather, can't swim, alone.....



Floatation Suit



Cold Water immersion Suit

Safety Equipment on a boat (Size Matters!)



A Basic Safety Kit for a small boat

Make sure you have the Mandatory safety equipment.



Correct Size Lifejackets



15 Metre Floating Rope



A Sound Signaling Device



Bailing Bucket



Marine Flashlight



Paddle



BOAT TYPE AND LENGTH	PERSONAL LIFESAVING APPLIANCES	VISUAL SIGNALS	VESSEL SAFETY EQUIPMENT	NAVIGATION EQUIPMENT	FIRE FIGHTING EQUIPMENT
<ul style="list-style-type: none"> • Paddleboats • Watercycles • Sealed-Hull and Sit-on-Top Kayaks 	<ol style="list-style-type: none"> 1. One (1) lifejacket or PFD for each person on board* 2. One (1) reboarding device (See Note 1) 3. One (1) buoyant heaving line at least 15 m (49'3") long 	<p>If boat is over 6 m</p> <ol style="list-style-type: none"> 4. One (1) watertight flashlight 5. Six (6) flares of type A, B or C (See Note 2) 	<ol style="list-style-type: none"> 6. One (1) bailer OR One manual bilge pump (See Note 3) OR Bilge-pumping arrangements 	<ol style="list-style-type: none"> 7. One (1) sound-signalling device or appliance 8. Navigation lights (See Note 4) 9. One (1) magnetic compass (See Note 5) 10. One (1) radar reflector (See Note 6) 	None
<p>*If everyone on board is wearing a lifejacket or a PFD of appropriate size, you are only required to carry</p> <ul style="list-style-type: none"> • 1) a sound-signalling device; and • 2) a watertight flashlight if the boat is used after sunset or before sunrise or in periods of restricted visibility. 					
<ul style="list-style-type: none"> • Canoes • Kayaks • Rowboats • Rowing Shells • Other Human-Powered Boats 	<ol style="list-style-type: none"> 1. One (1) lifejacket or PFD for each person on board 2. One (1) reboarding device (See Note 1) 3. One (1) buoyant heaving line at least 15 m (49'3") long 	<p>If boat is over 6 m</p> <ol style="list-style-type: none"> 4. One (1) watertight flashlight 5. Six (6) flares of type A, B or C (See Note 2) 	<ol style="list-style-type: none"> 6. One (1) bailer OR One manual bilge pump (See Note 3) OR Bilge-pumping arrangements 	<ol style="list-style-type: none"> 7. One (1) sound-signalling device or appliance 8. Navigation lights (See Note 4) 9. One (1) magnetic compass (See Note 5) 10. One (1) radar reflector (See Note 6) 	None
<ul style="list-style-type: none"> • Sailboards • Kiteboards 	<ol style="list-style-type: none"> 1. One (1) lifejacket or PFD for each person on board* 2. One (1) reboarding device (See Note 1) 3. One (1) buoyant heaving line at least 15 m (49'3") long 	None	<ol style="list-style-type: none"> 5. One (1) manual propelling device OR One (1) anchor and at least 15 m (49'3") of cable, rope or chain in any combination 6. One (1) bailer or manual bilge pump (See Note 3) 	<ol style="list-style-type: none"> 7. One (1) sound-signalling device or appliance 8. Navigation lights (See Note 4) 9. One (1) magnetic compass (See Note 5) 10. One (1) radar reflector (See Note 6) 	None
<p>*If everyone on board is wearing a lifejacket or a PFD of appropriate size, you are only required to carry :</p> <ul style="list-style-type: none"> • 1) a sound-signalling device; and • 2) a watertight flashlight if the boat is used after sunset or before sunrise or in periods of restricted visibility. <p>NOTE: Kiteboarders and sailboarders should not wear a lifejacket or PFD that is fitted with an automatic inflator.</p>					

BOAT TYPE AND LENGTH	PERSONAL LIFESAVING APPLIANCES	VISUAL SIGNALS	VESSEL SAFETY EQUIPMENT	NAVIGATION EQUIPMENT	FIRE FIGHTING EQUIPMENT
<ul style="list-style-type: none"> • Personal Watercraft (PWC) 	<ol style="list-style-type: none"> 1. One (1) lifejacket or PFD for each person on board* 2. One (1) reboarding device (See Note 1) 3. One (1) buoyant heaving line at least 15 m (49'3") long 	<ol style="list-style-type: none"> 4. One (1) watertight flashlight OR Three (3) flares of type A, B or C (See Note 2) 	<ol style="list-style-type: none"> 5. One (1) manual propelling device OR One (1) anchor and at least 15 m (49'3") of cable, rope or chain in any combination 6. One (1) bailer or manual bilge pump (See Note 3) 	<ol style="list-style-type: none"> 7. One (1) sound-signalling device or appliance 8. Navigation lights (See Note 4) 9. One (1) magnetic compass (See Note 5) 10. One (1) radar reflector (See Note 6) 	<ol style="list-style-type: none"> 11. One (1) 5BC fire extinguisher
<p>*If every person on board a personal watercraft is wearing a lifejacket or a PFD of an appropriate size, you are only required to carry:</p> <ul style="list-style-type: none"> • 1) a sound-signalling device; • 2) a watertight flashlight or three pyrotechnic distress signals other than smoke signals; • 3) a magnetic compass if the personal watercraft is navigated out of sight of navigation marks; and • 4) navigation lights if the personal watercraft is used after sunset or before sunrise or in periods of restricted visibility. 					
<p>NOTE: Lifejacket or PFD must be inherently buoyant.</p>					
<ul style="list-style-type: none"> • Sail and Power Boats up to 6 m (19'8") 	<ol style="list-style-type: none"> 1. One (1) lifejacket or PFD for each person on board 2. One (1) reboarding device (See Note 1) 3. One (1) buoyant heaving line at least 15 m (49'3") long 	<p>If boat is equipped with a motor</p> <ol style="list-style-type: none"> 4. One (1) watertight flashlight OR Three (3) flares of type A, B or C (See Note 2) 	<ol style="list-style-type: none"> 5. One (1) manual propelling device OR One (1) anchor and at least 15 m (49'3") of cable, rope or chain in any combination 6. One (1) bailer or manual bilge pump (See Note 3) 	<ol style="list-style-type: none"> 7. One (1) sound-signalling device or appliance 8. Navigation lights (See Note 4) 9. One (1) magnetic compass (See Note 5) 10. One (1) radar reflector (See Note 6) 	<ol style="list-style-type: none"> 11. One (1) 5BC fire extinguisher if equipped with an inboard engine, a fixed fuel tank of any size, or a fuel-burning cooking, heating or refrigerating appliance
<ul style="list-style-type: none"> • Sail and Power Boats over 6 m and up to 9 m (19'8" - 29'6") 	<ol style="list-style-type: none"> 1. One (1) lifejacket or PFD for each person on board 2. One (1) reboarding device (See Note 1) 3. One (1) buoyant heaving line at least 15 m (49'3") long OR One (1) lifebuoy attached to a buoyant line at least 15 m (49'3") long 	<ol style="list-style-type: none"> 4. One (1) watertight flashlight 5. Six (6) flares of type A, B or C (See Note 2) 	<ol style="list-style-type: none"> 6. One (1) manual propelling device OR One (1) anchor and at least 15 m (49'3") of cable, rope or chain in any combination 7. One (1) bailer or manual bilge pump (See Note 3) 	<ol style="list-style-type: none"> 8. One (1) sound-signalling device or appliance 9. Navigation lights (See Note 4) 10. One (1) magnetic compass (See Note 5) 11. One (1) radar reflector (See Note 6) 	<ol style="list-style-type: none"> 12. One (1) 5BC fire extinguisher if equipped with a motor 13. One (1) 5BC fire extinguisher if equipped with a fuel-burning cooking, heating or refrigerating appliance

BOAT TYPE AND LENGTH	PERSONAL LIFESAIVING APPLIANCES	VISUAL SIGNALS	VESSEL SAFETY EQUIPMENT	NAVIGATION EQUIPMENT	FIRE FIGHTING EQUIPMENT
<ul style="list-style-type: none"> Sail and Power Boats over 9 m and up to 12 m (29'6" – 39'4") 	<ol style="list-style-type: none"> One (1) lifejacket or PFD for each person on board One (1) reboarding device [See Note 1] One (1) buoyant heaving line at least 15 m (49'3") long One (1) lifebuoy attached to a buoyant line at least 15 m (49'3") long 	<ol style="list-style-type: none"> One (1) watertight flashlight Twelve (12) flares of Type A, B, C or D, only six (6) can be Type D [See Note 2] 	<ol style="list-style-type: none"> One (1) anchor and at least 30 m (98'5") of cable, rope or chain in any combination One (1) manual bilge pump [See Note 3] OR Bilge-pumping arrangements 	<ol style="list-style-type: none"> One (1) sound-signalling device or appliance Navigation lights [See Note 4] One (1) magnetic compass [See Note 5] One (1) radar reflector [See Note 6] 	<ol style="list-style-type: none"> One (1) 10BC fire extinguisher if equipped with a motor One (1) 10BC fire extinguisher if equipped with a fuel-burning cooking, heating or refrigerating appliance
<ul style="list-style-type: none"> Sail and Power Boats over 12 m and up to 24 m (39'4" – 78'9") 	<ol style="list-style-type: none"> One (1) lifejacket or PFD for each person on board One (1) reboarding device [See Note 1] One (1) buoyant heaving line at least 15 m (49'3") long One (1) lifebuoy equipped with a self-igniting light or attached to a buoyant line at least 15 m (49'3") long 	<ol style="list-style-type: none"> One (1) watertight flashlight Twelve (12) flares of Type A, B, C or D, only six (6) can be Type D [See Note 2] 	<ol style="list-style-type: none"> One (1) anchor and at least 50 m (164'1") of cable, rope or chain in any combination Bilge-pumping arrangements 	<ol style="list-style-type: none"> One (1) sound-signalling appliance. Two required if the boat is 20 m and over that meets the applicable standards set out in the Collision Regulations Navigation lights [See Note 4] One (1) magnetic compass that meets the requirements set out in the Navigation Safety Regulations [See Note 5] One (1) radar reflector [See Note 6] 	<ol style="list-style-type: none"> One (1) 10BC fire extinguisher at all of the following locations: <ul style="list-style-type: none"> at each access to any space where a fuel-burning cooking, heating or refrigerating appliance is fitted; at the entrance to any accommodation space; and at the entrance to the machinery space. One (1) axe Two (2) buckets of at least 10 L each
<ul style="list-style-type: none"> Sail and Power Boats over 24 m (78'9") 	<ol style="list-style-type: none"> One (1) lifejacket or PFD for each person on board One (1) reboarding device [See Note 1] One (1) buoyant heaving line at least 30 m (98'5") long Two (2) SOLAS lifebuoys, of which: <ul style="list-style-type: none"> one (1) is attached to a buoyant line at least 30 m (98'5") long; and one (1) is equipped with a self-igniting light. Lifting harness with appropriate rigging 	<ol style="list-style-type: none"> One (1) watertight flashlight Twelve (12) flares of Type A, B, C or D, only six (6) can be Type D [See Note 2] 	<ol style="list-style-type: none"> One (1) anchor and at least 50 m (164'1") of cable, rope or chain in any combination Bilge-pumping arrangements 	<ol style="list-style-type: none"> Two (2) sound-signalling appliances that meets the applicable standards set out in the Collision Regulations Navigation lights [See Note 4] One (1) magnetic compass that meets the requirements set out in the Navigation Safety Regulations [See Note 5] One (1) radar reflector [See Note 6] 	<ol style="list-style-type: none"> One (1) 10BC fire extinguisher at all of the following locations: <ul style="list-style-type: none"> at each access to any space where a fuel-burning cooking, heating or refrigerating appliance is fitted; at the entrance to any accommodation space; and at the entrance to the machinery space. One (1) power-driven fire pump located outside the machinery space, with one fire hose and nozzle that can direct water into any part of the boat Two (2) axes Four (4) buckets of at least 10 L each

Note 1 – Reboarding Device

A reboarding device is only required if the vertical height that a person must climb to reboard the boat from the water (freeboard) is over 0.5 m (1'8").

Note 2 – Flares

Flares were previously referred to as Type A, B, C, and D. These terms may still be found in some product literature. The table below explains the relationship.

FORMER TYPE DESIGNATION	NEW DESCRIPTION
Type A	Rocket parachute flare
Type B	Multi-star flare
Type C	Hand flare
Type D	Smoke signal

Flares are not required for a boat that:

- is operating on a river, canal or lake in which it can never be more than one (1) nautical mile (1.852 km) from shore; or
- has no sleeping quarters and is engaged in an official competition or in final preparation for an official competition.

The number of flares required may be reduced by 50 percent (the number of smoke signals cannot exceed 50% of the number of smoke signals given in the tables above) if the boat has one of the following:

- A means of two-way communication*;
- A 406 MHz personal locator beacon** that is worn by the boat operator; or
- A 406 MHz emergency position-indicating radio beacon***.

* The means of two-way communication may include a Very High Frequency (VHF) marine radio, a satellite telephone or a cellular telephone (if the VHF radio or the cellular telephone is located in a coverage area.)

** A 406 MHz personal locator beacon (PLB) must meet the requirements under the *Radiocommunication Act*. All Canadian coded PLBs should be registered with the Canadian Beacon Registry at <https://www.cbr-rcb.ca/cbr/> or by calling 1-877-406-7671 (toll free). Registering a beacon is free of charge. Canadian coded beacons cannot be registered elsewhere.

*** A 406 MHz emergency position-indicating radio beacon (EPIRB) must meet the requirements of the Ship Station Radio Technical Regulations and must also be registered with the Canadian Beacon Registry. See above.

Ensuring that your 406 MHz PLB, or EPIRB is registered, as well as updating the information regularly, will facilitate the task for search and rescue personnel in the event of a distress situation.

For further information regarding VHF radios or EPIRBs please visit: <https://www.tc.gc.ca/eng/marinesafety/oep-navigation-radiocomms-faqs-1489.htm>

Note 3 – Bailer and Manual Bilge Pump

A bailer or manual bilge pump is not required for a boat that cannot hold enough water to make it capsize or a boat that has watertight compartments that are sealed and not readily accessible.

Note 4 – Navigation Lights

Navigation lights are only required if you operate the boat after sunset, before sunrise or in periods of restricted visibility (fog, falling snow, etc.).

Note 5 – Magnetic Compass



A magnetic compass is not required if the boat is 8 m (26'3") or less and you operate it within sight of navigation marks.

Note 6 – Radar Reflector

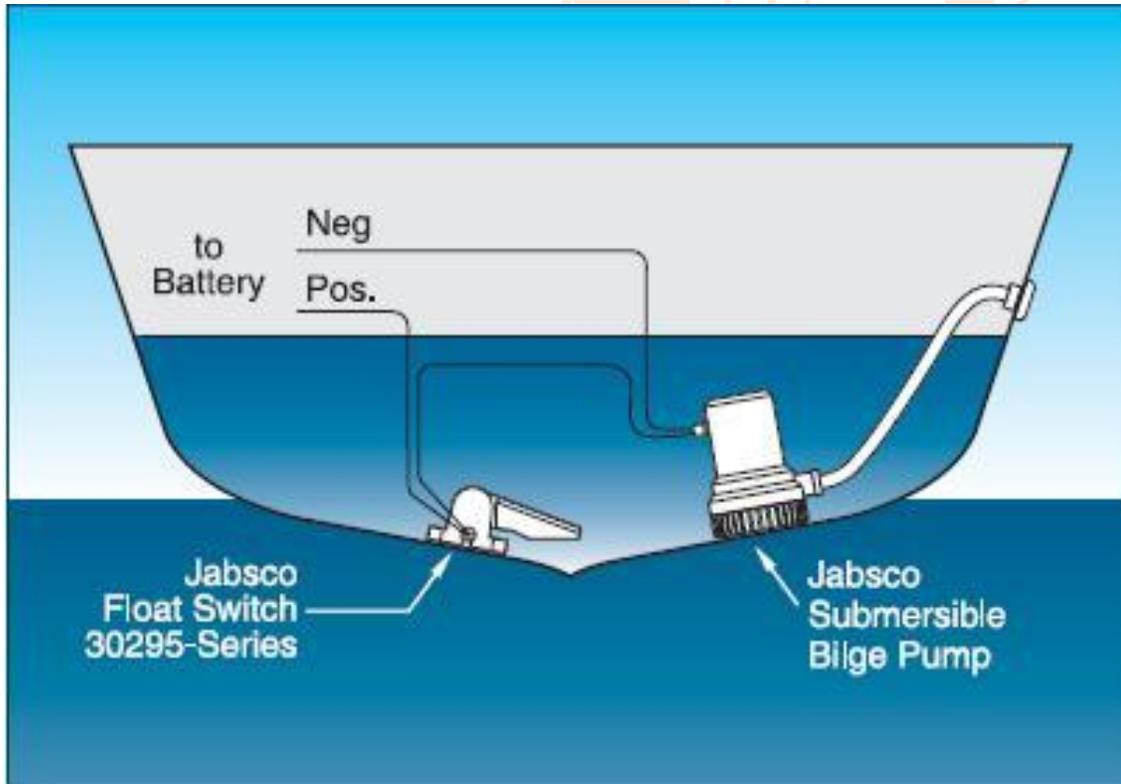
Radar reflectors are required for boats under 20 m (65'7") and boats built of mostly non-metallic materials. A radar reflector is not required if:

- the boat is used in limited traffic conditions, daylight and favourable environmental conditions, and where having a radar reflector is not essential to the boat's safety; or
- the small size of the boat or its operation away from radar navigation makes it impossible to install or use a radar reflector.

REMEMBER: Boating laws change from time to time, so make sure you have the most current information. If the *SAFE BOATING GUIDE* differs from the regulations, remember that it is always the current regulatory text that applies. To learn more about regulations, use the direct links in the CONTACT INFORMATION AND REFERENCES section of this guide.

Bailer, Manual Pump, Bilge

- Under 9m– one Bailer or Manual Bilge Pump
 - Kayak/Canoe VS Pleasure Boat?
- 9m and over – efficient bilge pumping system



Heaving line

- Buoyant line 15m long (Floats)
 - Up to 24m boat
 - 50m for bigger boats



Light signal

- over 6m – watertight flashlight or 3 flares*
- 6m to 9m – flashlight and 6 flares*
- over 9m – 12 flares*

*Flares - not required if on a river, lake where not more than 1 mile from shore or a vessel that is not power driven



Sound Signal

- under 20m – whistle or horn with a range of $\frac{1}{2}$ a mile or 800m
- over 20m – 2 of bell/whistle/horn which are compressed gas or electrical



Manual Propelling Device (Paddle)

- under 9m
- oars, paddle anything used to propel a boat (water ski?).
- 1 on the boat

OR

- An anchor with 15m of rope, chain
 - Over 12m – 30m rope/chain
 - Over 24m – 50m rope/chain



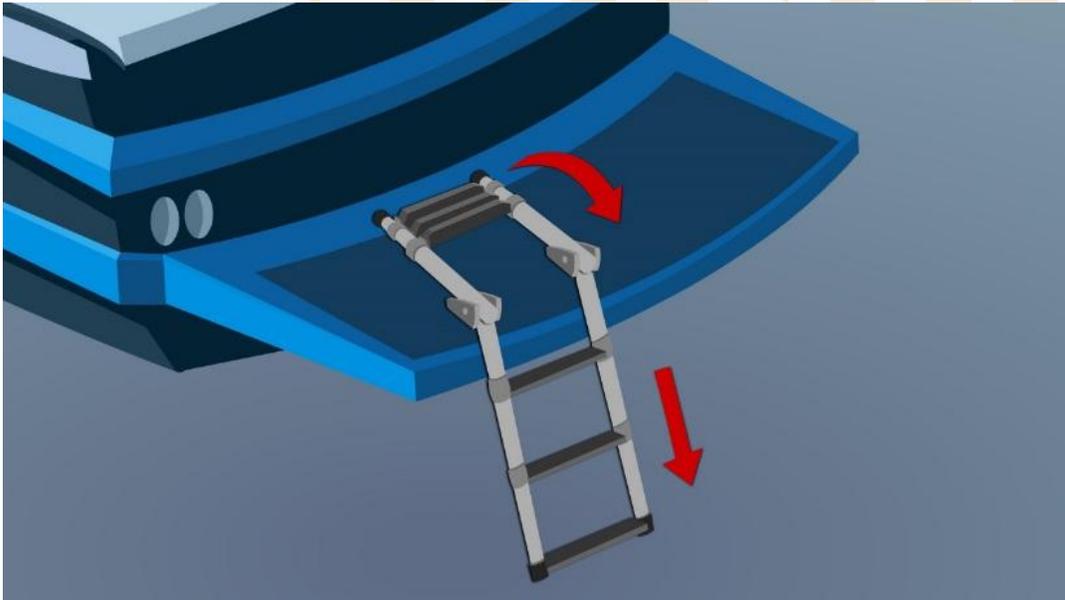
Life buoy

- Over 9m with 15m heaving line
- over 12m needs a self igniting light



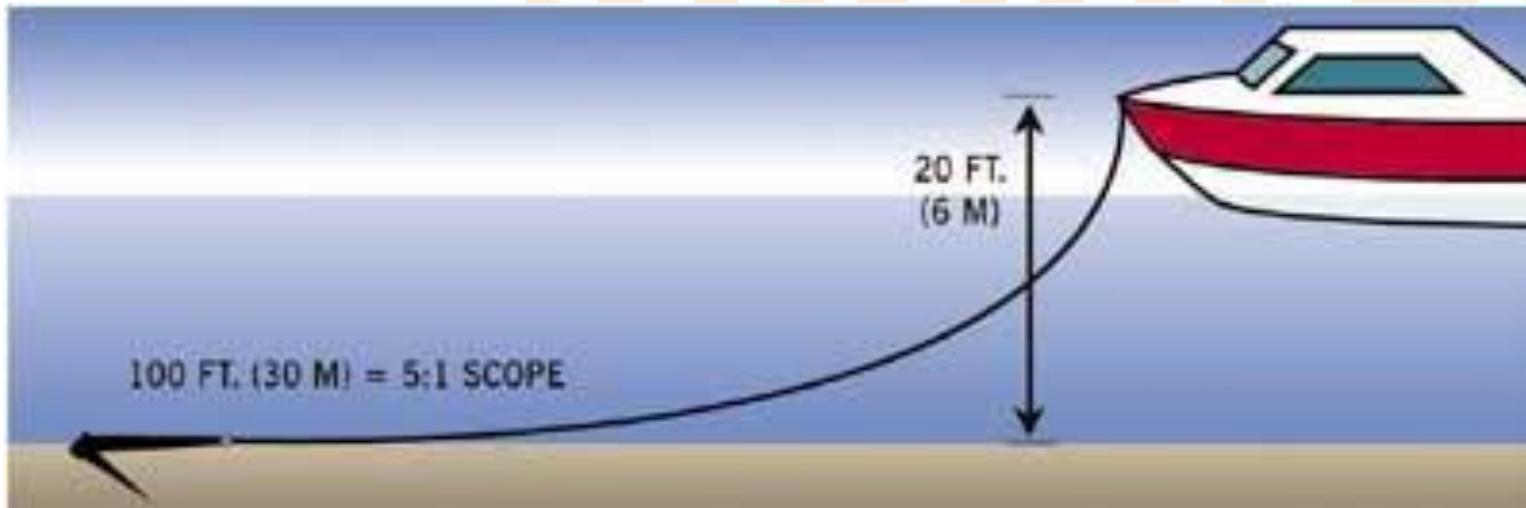
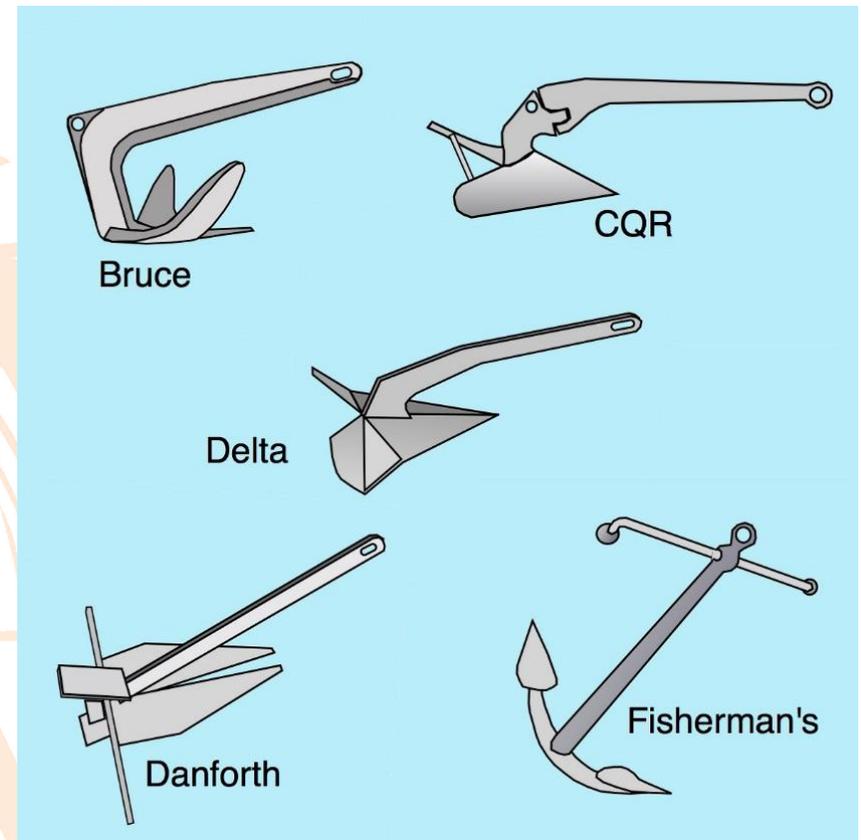
Reboarding Device

- under 12m only if freeboard exceeds .5m
- over 12m required
- over 20m lifting harness



Anchor

- Under 9m needs 15m of cable, chain, rope
 - NOT necessary if a manual propelling device...
BUT...
- Over 9m needs 30m
- Over 12m needs 50m



Fire Extinguishers

(3 class types)

(Buy one for all 3!)

A – combustible solids (Materials that burn)

B – combustible liquids ((Gas, Oil, Grease)

C – electrical

- inspect regularly

Check gauge, do not shake/invert.

- under 6m -

1 - 5bc for inboard engines, fixed fuel tank, fuel burning appliance

- between 6-9m

1 - 5bc for inboard engine, a 2nd 5bc for appliances

- Between 9m-12m

1 - 10bc for engine, 2nd 10bc for appliances



Navigation lights on boats

- Required to operate between sunset and sunrise or poor visibility
- Various combinations with red/green light for side lights.
- White for rear (different types/layouts)
(Mast Head, All Around, Stern Light)
- red on port, green on starboard.
(Remember: Red/Port have less letters than Green/Starboard)



Visual distress

- flashlight, mirrors, flags, smoke flares, flares, flames on deck, arm signal, dye marker.



Optional and Recommended equipment

- Emergency kit
- Food/water
- Binoculars, charts, gps, radio, compass, depth sounder, fenders, dry/extra clothes, shear pin/cotter pin, prop, radar reflector, etc.

