

British Seagull "The best Outboard motor for the World"

Arne Lagerholm, Sweden. Updated 2008-04-08



If you have seen a British Seagull outboard engine on a boat you may think it looks very antique and old. This is often not true because British Seagull is from the beginning made after a specific philosophy and for safe service under difficult conditions at sea.

Many letters from happy owners were written to the factory in England. This classical letter is from a sales folder in 1985.

"..it was left under a bush at the bottom of the garden for 23 years wrapped in a plastic type bag and forgotten about...without even changing the spark plug it went on approximately the 12th pull".

Living with this and other positive testimonials from their owners British Seagull has become almost an institution among sailors all over the world. Since the first Seagull was manufactured in 1931 few basic things have been changed.

The engine was at first made by the Sundbeam Motor Company and John Marston Ltd., who built the famous Sundbeam motorcycles in Wolverhampton. The first engines were named "Marston Seagull" and its cone shaped silencer looked much like a motorcycle one.

The engine was developed over the years and made for different duties with different propeller sizes and gearing. Many engine parts can be changed between the models. The same spare part can also be used for different models. The design of the engine is simple and rugged and it demands a minimum of service and can be dismantled by simple tools. It is made of pure marine grade materials and for service in salt water and will last for many years. It is not uncommon to find a Seagull after 40 years of use to be as new after cleaning up.

All Seagull engines are made for use at boats with displacement hull. Boats that goes through the water and not more or less above it.

The engines have no bearings but large bronze bushes which means that an engine can by accident go overboard and still be saved. The propeller is large and made for modest rpm.

During WW II the British Admiralty ordered a "rough and tough" version of "Model 102" for use at light boats. At least 10.000 engines were made in a short time. Some of these engines only made one single journey to destruction but a lot were saved and used until our days.

After some years Marston Seagull production rights was bought out by the two engineers and entrepreneurs John Way-Hope and Bill Pinningner. The two men had earlier worked at the engineering department at Sundbeam Motor Company developing the Seagull engines. The production was moved to Poole and the new company renamed the engines to:

British Seagull "The Best Outboard Motor for the World".

John Way-Hope has written the very enjoyable, readable and useful, today classical manuals about how to use and maintain your British Seagull. In his very special way generations of owners with minor technical know-how learned how to best use their engines.

"Quotes from: "Operating instructions for the Models 40 & 100 Seagulls"

- Your "Seagull" does not ask for very much, and there is no difficulty in giving it what it requires...we do not write this book for fun, we do it because it is vital for your own pleasure, security and peace of mind.

- Do not do your first trip with a new engine under rush conditions, in front of a large audience. For instance, avoid a vital trip, catching the last of the tide, in a small dinghy, laden to the gunwales with gear and people, in half a gale in the pouring rain...this sounds silly, but it is exactly what people do only too frequently.

- Choose fine weather conditions...a useful, and, if possible, seamanlike and mechanical companion...a quiet and secluded spot, where success or otherwise does not matter much...take your time, and see that the engine is fitted exactly as laid down in these instructions, and get set thoroughly with the new mechanism before starting serious business.

- It is absolutely essential that the fundamentals in life is provided for a motor, and almost all the ailments attached to outboard motoring can be accounted for by the attitude of "It does not matter...any old plug will do...any old fuel...any oil that is available...mixed in any proportions...no need to read the instructions, I know all about engines...never mind about fixing the engine on the boat properly, we are in a hurry...this will do...that will do," etc., etc., "ad nauseam". Let us say at once, this will not do...and is asking for trouble.

1. **The Seagull is a pure-bred marine engine**, for a hard life on salt water.

2. **It is designed for a rich oil mixture** to provide not only unlimited life, but adequate oil protection from the internal corrosion always associated with the long periods of idleness inseparable from service at sea.

Lubrication of the gearbox. You must not use grease. Oil only must be used. Any good quality gear oil will do, of approximately S.A.E. 140 viscosity. From 1978/1979 models, EP 90 was recommended. Fill up to filler plug hole measured with engine in upright position.

The sparking plug. Nearly 90% of engine failure is due to plug trouble, and yet, plug trouble is almost entirely avoidable. Use the right plug "Champion D16" or equivalent. Points gap 0.020 in. (0,5 mm). For later models with breakerless ignition 0.035 in (0,9 mm), not less. Always carry a spare, good, plug...not just another plug which has probably been rejected faulty on some previous occasion!

If the engine cuts out suddenly or do not start after three or four pulls it is ten chances to one that it is plug trouble. Whip out the plug at once and check.

The boat and speed. Now as regards obtaining maximum speed from the whole outfit: First of all, in any displacement dinghy, that is to say one which goes through the water, as opposed to a speed dinghy which planes on top of it, maximum possible speed of the boat is governed entirely by the length of the boat and not by the power exerted by the engine. To some this may be surprising but it is a fact. As a rough guide, a 9-foot hull will reach 4.5 knots and a 16-footer 6 knots; other lengths in proportion. Always remember, however, that it is a waste of effort to try and drive a boat above its calculated maximum referred to above.

Do not use a scrap more throttle opening than is necessary. The most economical cruising speed is with the throttle lever a third open approximately in line with the tiller.

Technical data and useful information about British Seagull engines.

The following is from a folder was published by the former distributor in Sweden, AB Motor Reimers in Stockholm and dated from 1. January 1957.

Model 40 (Code SJM). This engine is for 6-9 foot dinghies with low transom and in the category 1-1.5 hp. An easy motor to handle and liked by ladies and children. Space: 851x267x318 mm.

Model Super 40 Plus (Code SJP). This engine gives about 2.5 hp and is the ideal engine for 8-12 foot dinghies, 4-5 m rowing boats and as stand by power for smaller sail boats. Space: 953x267x318 mm.

Model Super 40 Plus, Long (Code SJP-L). For boats as above with higher transom this engine is 150 mm longer but gives the same gear reduction and has a large 4-bladed propeller. Space: 1105x267x318 mm.

Model 100 Century (Code LLS). This is the latest engine in the Seagull family. It is developed with a detachable cylinder head (square cylinder head), lower fuel consumption and larger gear reduction. Space: 953x267x318 mm.

Model 100 Century, Long (Code LLS-L). Same as above but 150 mm longer. Ideal stand by power engine for larger sail boats. Space: 1105x267x318 mm.

Model 102 (Code TC). This engine gives about 3.5-4 hp at ca. 3.800 rpm. With the right boat it will make up to 7 knots. Space: 1054x330x305 mm.

Model 102, Long (Code TC-L). For boats with higher transom you can use this engine which is 150 mm longer than TC. Space: 1210x330x305 mm.

Modell 102 Plus (Code THC). This engine gives more power than the above, large gear reduction and has 4-bladed propeller with high thrust and can tow sailboats of 8-20 tons displacement in calm weather. Space: 1150x330x305 mm.

Model 102 Plus, Long (Code THC-L). Same engine as above but for boats with higher transom. Space: 1300x330x305mm.

Note! British Seagull never claimed effect in hp for their engines but talked about the propeller thrust it gives as this is a better measure for displacement boats. The hp categories given above are based on theoretical calculations. By different diameters of the propeller and different gearing the engines were optimised for their respective use. Letter "C" in code are clutch models. Letter "L" in code means long shaft model.

British Seagull. Some technical data and important notes.

Code	Bore mm	Stroke/cc	RPM max	Gear/Propeller	Length*)mm
SJM	45	40/64	3.500	2,1:1/160mm	355
SJP	45	40/64	4.000	3,5:1/230mm	410
SJP-L	45	40/64	4.000	3,5:1/230mm	560
LLS	57	40/102	3.800	3,5:1/230mm	410
LLS-L	57	40/102	3.800	3,5:1/230mm	560
CP	57	40/102	4.000	4,0:1/300mm	410
CP-L	57	40/102	4.000	4,0:1/300mm	560
CPC	57	40/102	4.000	4,0:1/300mm	410
CPC-L	57	40/102	4.000	4,0:1/300mm	560
TC	57	40/102	3.800	3,0:1/230mm	425
TC-L	57	40/102	3.800	3,0:1/230mm	575
THC	57	40/102	4.000	4,0:1/330mm	425
THC-L	57	40/102	4.000	4,0:1/330mm	575mm

Distance*) between bracket and water line: *SJM=355 mm, SJP=410-425 mm, SJPL=555-565 mm, LLS=410-425 mm, LLSL=555-565 mm, TC & THC=410-425 mm, TCL & THCL=555-575 mm.

Recommended gearbox oil: EP 90, gear oil for models: FS, EFS, FPC, EFPC, SC, ESC, EFNR, ENC, EN. SAE 140, gearbox oil is unsuitable for: FS, EFS, 55, 75, 90, 125 and 170 models. Change gearbox oil at least every season. Check correct level often. It is normal for a small amount of water to enter the gearbox. This will not harm the gears or bearings.

Useful spares and tools: Extra spark plug, propeller safety spring and split pin, starting cord, combination spanner and screwdriver.

Model identification. The model identification is the first group of letters of the serial number on the crankcase. This group may have the letter "L" on the end which denotes a long shaft engine.

Petrol/oil 25:1 4% petrol/oil ratio. All engines manufactured from January

1978 are designed to operate on a 25:1 petrol/oil ratio. Use low octane fresh commercial grade petrol and mineral outboard motor oil. The oil ratio /must not/ be cut below this. Older engines can be converted to this ratio if some modifications are made. Older engines must have 10:1 petrol/oil ratio.

See "British Seagull, Service Manual" for further information.

Engine mounting. The motor must be fitted upright (vertically) with the exhaust outlet only an inch or so below the surface of the water. Deeper immersion will affect both quick starting and performance.

Water pump and cooling system. The Seagull water pump is valveless and seldom gives any trouble. When the water is circulating correctly it will be seen flowing from the outlet. The motor can be run at low speeds for a minute or so without the water flowing and then speeded up to circulate water.

Laying-up procedure. *Wash with fresh water. Flush the cooling system. Drain all water from the cooling system by standing the motor in a vertical position. Drain all fuel in tank and fuel pipe. Remove the spark plug and inject some two-stroke oil through the plug hole and carburettor intake. Spin the motor to distribute the oil. Replace the spark plug loosely. Drain and refill the gear box. Brush the external surfaces of the engine with a light penetrating oil. Store the motor in upright position in a warm dry place.

Finally. Do not forget to attach your motor by the casing tube (not bracket) to the boat with a lanyard.

Literature, important to study: British Seagull, Owners handbook. British Seagull, Service manual. British Seagull, Spares List. Always quote your engine number for questions and when ordering spares.

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PETROL/OIL RATIO. All motors manufactured from January 1978 are designed to operate on a 25:1 petrol/oil ratio.

Motors manufactured before January 1978 are designed for 10:1 petrol/oil ratio but can satisfactorily use this ratio, providing the following modifications are made:

FORTY FEATHERWEIGHT and FORTY PLUS MODELS - F & FP series fitted with the Seagull-Villiers carburettor. The No. 3 taper needle at present fitted should be replaced with a No. 2 needle (Part No. V654/2) Taper needle adjustment setting is standard.

FORTY FEATHERWEIGHT and FORTY PLUS MODELS - GF & GFP series fitted with the Seagull-Bing carburettor. No modifications required.

SILVER CENTURY and SILVER CENTURY PLUS MODELS - WS & WSP series fitted with the Seagull-Amal carburettor. The No. 45 power jet should be replaced with the slightly smaller No. 40 jet (Part No. S7/062/40).

Use a good quality two-stroke oil.

The small screw in the top of the throttle valve piston controls the adjustment. The standard setting is flush or one full turn above the top of the piston.

**British Seagull
REMOVAL OF FLYWHEEL MAGNETOS.**

THE MAGNETO FLYWHEEL should never be removed except for major overhaul or repair after submersion, accident, etc. To adjust the contact breaker points, it is only necessary to remove the flywheel nut and starter-pulley-plate on top of the magneto. Make adjustments through the exposed apertures in the flywheel.

Flywheel removal should only be undertaken by a mechanic with a well fitting spanner, and an assistant supporting the flywheel. IT'S A TWO-MAN JOB. UNDER NO CIRCUMSTANCES SHOULD AN EXTRACTOR BE USED. Such an instrument will cause distortion, or fracture.

(1) Unscrew the dome nut (anti-clockwise) and remove starter-pulley-plate.

(2) Squirt penetrating oil, thinners, or a suitable solvent down the keyway slot, and leave for about five minutes.

(3) Replace the dome nut, and screw it down fully.

(4) THIS IS VITAL: Remove the spark plug and rotate the flywheel until the piston is furthest away from the spark plug hole. Carefully retaining this position, get an assistant to lift up, and keep the flywheel lifted with both hands (two people are essential - the operation cannot be achieved single-handed). Then strike the dome nut a good hard blow with a medium hammer. This will release the flywheel from the crankshaft. Light blows with a light hammer only damage the dome nut and crankshaft threads.

(5) Remove the dome nut and lift off the flywheel.

(6) To remove the baseplate assembly, as well as the flywheel merely slacken off the slotted base-screw (Part No. M.242) several tuns, and lift off. The fit is fairly tight.

(7) RE-ASSEMBLY. When replacing the magneto baseplate, see that this slotted screw engages in the timing hole in the crankcase spigot. This screw should be secured firmly, but not overtightened.

(8) Before replacing the flywheel and starter-pulley-plate by hand, grease the taper. Carefully locate the keyway over the crankshaft key, and screw down the dome nut really tightly. Use a well fitting spanner in conjunction with a hammer to harden down.

(9) The contact breaker points should be adjusted to .020 inch (0.5 m.m.) before refitting the starter-pulley-plate etc.

N.B. The position in paragraph 4 must be retained throughout, particularly whilst the hammer is used, otherwise, the crankshaft may be distorted and the main bearings misaligned.

For more "British Seagull" information: WWW.LAGERHOLM.COM