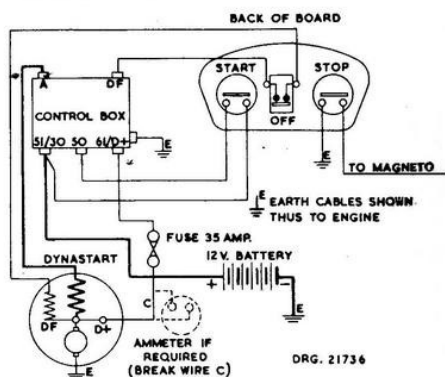


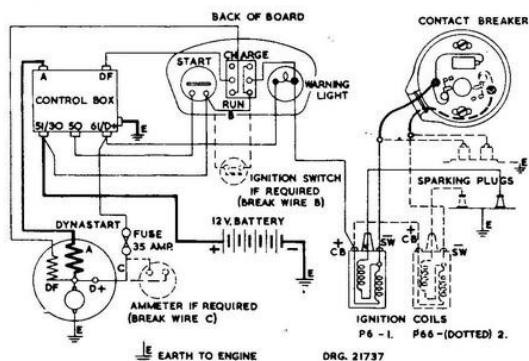
STUART

P Type Marine Engines with SIBA DYNASTART [Mk II]

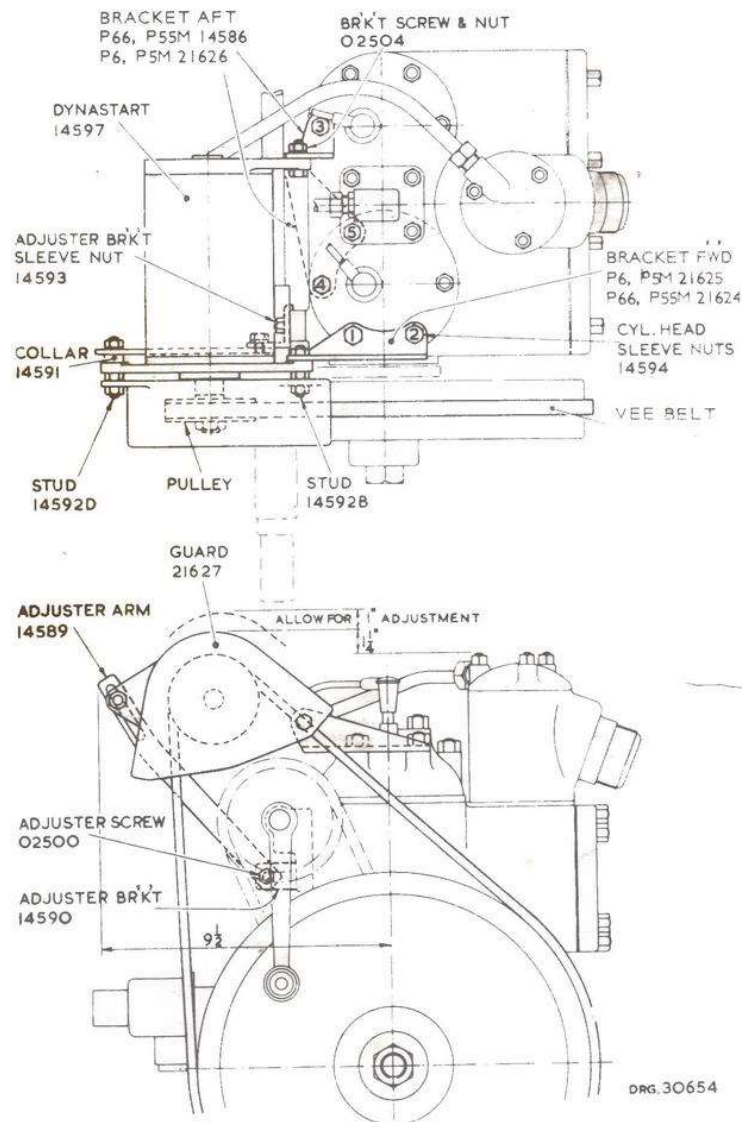
* WIRING DIAGRAM FOR MAGNETO IGNITION



WIRING DIAGRAM FOR COIL IGNITION



Battery must always be disconnected before making or breaking other connections. Wiring is shown for negative earth. For positive earth reverse battery and ammeter connections. Press "start" button to repolarise dynamo.



'P' TYPE DYNASTART (Mk II)

Fitting Instructions

Drain the cylinder block before starting work on the engine.

Remove the cylinder head nuts shown numbered on the drawing: 1, 2, and 3 for twin cylinder engines; 1, 2, 4 and 5 for single cylinder.

Fit the forward and aft dynastart mounting brackets, using the special $\frac{3}{8}$ " sleeve nuts (14594) making these finger-tight only.

Remove the lower nut from the starting shaft bracket and assemble the adjuster bracket and arm, using the special $\frac{5}{16}$ " sleeve nut (14593) making this finger-tight only.

Remove the nuts and spring washers from the dynastart pivot studs (14592B & 02504) and mount the unit on the brackets previously fitted. Tighten the nuts firmly.

Tighten all cylinder head nuts and again slacken the dynastart pivot nuts. (This procedure ensures correct alignment of the unit with its brackets).

Remove the nut, washers and collars from the remaining dynastart lug and fit the adjuster arm to it, with collar between arm and lug. Tighten the nut firmly.

Then tighten the adjuster bracket sleeve nut (14593) and again slacken the lug nut on stud 14592D.

Place the vee belts over the pulley and flywheel.

Remove the nuts from the forward ends of the dynastart lugs and assemble the guard, tightening the nuts fully.

Lever the dynastart upwards so that belts can be moved only about $\frac{1}{2}$ " when pressed inwards, at mid-length, with the thumb.

Tighten the top adjuster nut, bottom adjuster screw and the three dynastart lug nuts. (Replace the H.T. lead clip under the nearest cylinder head nut). Re-check all nuts for tightness.

PULLEYS AND BELTS			
Type	Flywheel	Pulley (dia.)	Belt (Length)
P5M	12"	14585 (3")	14595 (51")
P5MA	12"	14585 (3")	14595 (51")
P55M	13"	14585 (3")	14596 (53")
P55MA	12"	14585 (3")	14595 (51")
P6 (before March 1970)	12	14585 (3")	14595 (51")
P6 (after March 1970)	12"	15142 (3 $\frac{3}{4}$ ")	15143 (52")
P66	12"	14585 (3")	14595 (51")

Fitting Instructions (contd.)

Complete the wiring as shown on the diagram overleaf. The large screwed terminal on the back of the dynastart, marked 'A', connects to the round terminal lug on the harness. The two push-on connectors are fitted to the projecting tongues, D+ and DF on the machine, the thicker wire connecting to D+. Make battery and control box earth connections to suitably positioned nuts on the engine; on no account earth to any screw on the magneto. The terminal lugs are stamped at the other end of the harness, corresponding to the control box marking.

The Switch Assembly Box contains the comparatively sensitive and delicate equipment necessary to ensure the correct charging of the battery under a wide range of operating conditions. It is recommended that the mounting position is either (a) with the plane of the feet horizontal, or (b) with the plane of the feet vertical, and the "Siba" trademark the right way up. When installing the Switch Assembly Box, take care not to distort the feet, or to strain the terminals unduly. Failure to observe these precautions may result in damage and/or malfunction of the regulator. Cables should not be positioned close to the resistor, which is mounted beneath the Switch Assembly Box.

On boats, the position of the engine is often not ideal; in many cases water drips on to the engine, or the bilge water washes around the engine and the electrical components. With this sort of installation it is particularly desirable to fuse the D+ circuit, say, 35/50 amps. (see wiring diagrams for location of fuse) and a continual effort should be made to keep all electrical components and connections free of water and damp. Some of the proprietary waterproofing sprays may be found helpful, but should be used with discretion, particularly around the ignition components, which should preferably be washed clean regularly to remove salt and other harmful deposits.

Batteries between 36 and 90 A.h. may be used dependent on the duty required. The smaller capacity battery needs a shorter but more frequent charge; the larger needs a longer charge less regularly. The charge rate varies according to the condition of the battery, reducing as the battery becomes charged. Auxiliary lighting should be limited to a few lights, using a battery of 71 A.h. or more, connections being made between the 51/30 terminal of the control box and earth.

Battery cables should be 37/.036 and kept as short as possible; other cables 28/.012 or 3/.029.

The maximum dynastart speed is 10,000 r.p.m., corresponding to an engine speed of 2360 r.p.m. (12" flywheel) or 2150 r.p.m. (13" flywheel). The dynastart can be damaged beyond repair if speed is allowed to rise above these figures, so that care is necessary to prevent overspeeding in neutral, or when changing gear from the engaged to neutral position.

General Data

Voltage: 12 D.C.

Battery: 36 to 90 A.h. charge begins: P6, P5MA, P5M } 750 r.p.m.
P66, P55MA }

Charge Rate: 8 amps (reducing as battery becomes charged). P55M 700 r.p.m.

Dynastart speed: P6, P66 P5MA, P55MA 6985 at 1650 Engine r.p.m.
P5M 6350 at 1500 engine r.p.m. P55M 6900 at 1500 engine r.p.m.

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