

## GRP ENGINE BREAK-IN

To guarantee long life and top performance, each engine needs to be broken in, bearing in mind that the more careful the break in, the longer the engine will give its best performance.

Break-in must be done carefully with the engine installed on the model, in the following way:

- Fill up the tank with fuel.
- Remove the glow plug temporarily to check that, when connected to the battery, the wire heats up and becomes incandescent (Orange/yellow). Put the plug back into the engine.
- Switch on the transmitter and receiver and set the throttle slightly open from the idle position.
- Place the model on the starter box and rotate so that the fuel flows from the tank to the carburetor. If the engine is not rotating due to the piston being tight, do not force the starter box, but release the engine, using a screwdriver on the flywheel.
- When you see through the transparent fuel tube that the fuel is reaching the carburetor, connect the glow plug starter to heat the wire and start the engine. PLEASE NOTE: It is extremely important not to accelerate the engine for a long period of time when the car model is not in contact with the ground (i.e. model resting on the starter box) because it would quickly overheat, causing serious damages.
- When you start the engine, leave it running a few minutes with rich carburation, with the glow plug starter connected and with the wheels turning freely off the ground. Under these conditions, the oily carburation perfectly lubricates all the engine's internal parts. To know whether the carburation is sufficiently rich, abundant smoke should be emitted from the exhaust pipe. Repeat the operation until all the fuel in the tank has been used up.
- Disconnect the glow plug starter and try to run the car on the track. If the carburation is too rich, slowly increase the speed to keep the engine running as long as possible. If it stops because carburation is too rich, turn the high speed needle clockwise by a third of a turn and try again.
- If the engine continues to run even when carburation is very rich, continue to use the model until you have consumed at least 3 fuel tanks. Then close the high speed needle by a further third of a turn and consume another 2 fuel tanks. Repeat the procedure until you have consumed at least 6 tanks of fuel. However the exhaust pipe should continue emitting abundant smoke.
- To stop the engine, close the throttle completely using the throttle lever on the transmitter, then press your thumb on the carburetor air filter, or pinch the fuel pipe to the carburetor. Never try to stop the engine by slowing down the flywheel with your fingers or other objects.

NOTE: Whenever any major components of the engine are replaced, such as piston, sleeve, crankshaft, bearings, etc., or if you change fuel, the complete break in procedure must be repeated.

### WARNING!

Never touch rotating parts, the engine or the exhaust pipe after stopping the engine because engine or exhaust pipe is very hot and any contact could cause severe burns.