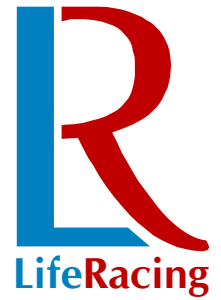


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Life Racing Sequential Gearshift System

This pneumatically operated gearshift system is designed for use with any sequential gearbox and consists of the following supplied parts (with approximate weights and dimensions):

Actuator Assembly (x1)	730g	152 x 75 x 59mm
Throttle Blipper (x1)	267g	113 x 47 x 27mm
Solenoid Valve (x4)	110g	60 x 57 x 22mm
Accumulator (x1)	1136g	260 x ϕ 100mm
Compressor (x1)	1850g	128 x 108 x 63mm
Electronic Control Unit (x1)	475g	178 x 122 x 36mm
Driver Paddle Switches (x1)	124g	119 x 36 x 34mm

(plus wiring harness and pneumatic pipework / fittings)

The stroke of the gearshift actuator is ~32mm; an installation specific bracket is also supplied in order to mount the actuator to the gearbox casing. The maximum stroke of the throttle blipper is ~20mm.

The Life Racing GCU controls the actuator and associated components, when the driver requests a gearshift via the steering wheel mounted switches; the throttle blipper is actuated on downshifts, in order to equalise the gearbox shaft speeds during the change. On upshifts, engine power is cut momentarily, in order to remove loading from the dogs; the driver does not need to remove his foot from the throttle pedal.

All Life Racing ECUs are able to control both the engine and gearbox in most applications or can operate as a standalone gearshift controller (GCU), with appropriate interfaces to an existing engine ECU.

The benefits over a manual gearshift system include:

- Reduced gearshift time
- Enhanced actuation consistency
- Minimised driver effort and distraction
- Prevention of engine damage during downshifts

