

PRODUCT INFORMATION BULLETIN

Sequential 6-speed gear system for Subaru Impreza SU-6S6GSEQ-GA

Pfitzner Performance Gearboxes has developed a high-performance, 6-speed sequential dog-engagement gear set for Subaru Impreza models fitted with an OEM 6-speed gearbox. The PPG gear set is designed to cope with the demands of top-level motorsport and incorporates the latest technology, including a Gill Sensors Blade 360° non-contact rotary gear position sensor.

PPG's unique system requires less effort to use than any other sequential gearbox and therefore provides faster shift-speeds and a more positive change. This, combined with PPG's legendary reliability, delivers unrivalled performance and durability at a realistic price.

The new SU-6S6GSEQ-GA 6-speed gear set can be used for race, rally, sprint, hill climb and Time Attack applications and meets regulations for Open Class, USA & Canada Rally Championships, World Time Attack and a range of domestic series' in various countries.



Fit and function

Designed to directly replace the internal workings of a standard 6-speed Subaru Impreza gearbox, the SU-6S6GSEQ-GA 6-speed system fits inside the original OE casings. Its *Micro-barrel* selector system allows for extremely compact packaging of the internal components and the Gill Blade 360° rotary position sensor provides accurate gear indication on a proprietary LED display.

Actuation is performed using a unique low-friction dual ball-bearing billet aluminium gear lever, which is universally designed to fit in either LHD or RHD configurations and installed close to the steering wheel. The lever is connected via a rod system enabling positive and effortless gearshifts, operating via a load cell that operates in both tension and compression modes to give a flat up-shift and a throttle-blip during down-shift.

Quality comes as standard

Pfitzner Performance Gearbox has earned a reputation for producing the most durable automotive gear sets in the world. This accolade has been achieved through innovative design coupled with technologically advanced engineering and manufacturing.

Before every product is offered for sale, each is put through an extensive test and development programme. This has seen participation in demanding conditions, such as those encountered in Endurance sports car racing, the World Rally Championship, Drag racing and Time Attack - plus a range of other motor sports where durability is the key to success.

PPG is proud of its reputation for using only the best quality materials. This includes high-grade aerospace quality steel and its carefully guarded method of heat-treating surfaces - a process that gives PPG components their unique and outstanding virtues.

Pfitzner's continuous reinvestment and ISO 9001-2008 accreditation ensures it maintains the quality of its products throughout its manufacturing processes, features that endorse the company's envied position as the world's leading supplier of high performance gear sets.

Benefits of fitting a PPG sequential system

- Fast gear-change means minimal drop in RPM
- · Positive selection reduces risk of missed gears
- Less driver effort required
- Integration with OE components
- Compatible with motorsport ECU systems

Gear set specification

- 6-speed sequential, motorsport configuration: R-N-1-2-3-4-5-6
- Shot-peened steel billet gear-shift forks and gears
- Billet gear shift lever assembly, including mount
- Billet aluminium mid-plate
- Precision engineered straight-cut tooth profile
- Gear set drops into manufacturer's gearbox casing
- PPG proprietary 6-dog ring design, for fast and precise shifting
- Motorsport grade steel used for all gears, heat treated for strength, durability and longevity

Ratios: 1st: 3.077/2nd: 2.077/3rd: 1.579/4th: 1.277/5th: 1.074 6th: 0.923 / Reverse: 3.154









Gearshift specification

- Gill Sensors Blade 360° non-contact rotary gear position sensor
- Geartronics LED display
- Gear shift via rod operation, with integrated reverse detent lock out
- Low-mass billet T606 aluminium H-section gear stick, with integrated reverse lever
- Low-friction dual ball-bearing shifter pivot
- Unique reversible design compatible with LHD and RHD installations
- Optional motorsport load cell for flat up-shift and throttle blipping

Options

- Motorsport gearshift load cell: 0-5Vdc output @ 0-N 2.5v
- Sequential conversion kit for version 3.1 H-pattern 6-speed gearbox



