



GPA/GPR PACKAGE - VERSION MIGRATION

GPA/GPR Package Version Migration July 2015 to February 2016

→ Migration to the new Package requires a new Licence for the February 2016 version (GPA Part 23061, GPR Part 23072). There is no charge for the new Licence.

Many improvements have been made to the GPA and GPR Packages since July 2015.

This Technical Note details the improvements, added features and the strategy to migrate to the February 2016 version.

Legend

Name in July 2015 version Name in February 2016 version Parameter value

▶ IMPROVED FEATURES

The February 2016 Package provides the following improved features:

- Switched outputs now support inverted polarities.
- Coolant fans: Duty cycle minimum/maximum values can be specified.
- Fuel injectors: If located before the throttle, the reference pressure can be further specified as either ambient or boost pressure.
- The number of supported forward gears has been increased from 6 to 7.
- **GPR only:** [Driver Gear Shift Switch](#) : Can be used to manually disable gear shift support with cuts/blip. If no switch is allocated, the Default value must be [On](#) for gear shifts to be processed.
- **GPR only:** [Gear Lever Diagnostic](#) has been added. Make sure [Gear Lever Diagnostic Delay](#) is greater than zero.
- **GPR only:** [Gear Shift Throttle Aim Minimum Duration](#) has been introduced.
- **GPR only:** [Gear Shift Throttle Aim Clutch Lockout](#) can be used to allow throttle blips when the clutch is disengaged. To achieve the same behaviour as with the previous Package, this parameter must be set to [Enabled](#) .
- **GPR only:** As stated in the **Data Migration** section, the process for handling shifts has been modified slightly, especially for power off upshifts. It is advisable to read the help on [Gear Shift State](#) to compare against the previous Package.
- [Inlet Air Temperature Sensor Trim](#) can be used for simple sensor correction (for example, when experiencing heat soak problems at engine start).
- Added - [Nitrous](#) system with two activation stages and additional fuel pumps, bottle heater control and pressure sensor.
- Added - [Transmission Brake](#) control ('bump') functionality for perfect positioning of cars.
- Added - [Turbocharger Wastegate Pressure](#) control with pressure sensor and two PWM outputs.
- Added - [Transmission Pressure](#) sensor.
- Added - [Turbocharger Inlet/Outlet Temperature](#) sensors.
- Added - [Turbocharger Wastegate Position](#) sensor.
- Wheel circumferences can be changed using a [Driver](#) switch, to support wet/dry tyres for example.

▶ DATA MIGRATION

In addition to auto-migration ([Tools > Migrate Package](#)) the following manual adjustments are necessary to achieve the same behaviour as with the July 2015 version.

New parameters that are not mentioned in the list that follows must remain at their initial value (0). Tune migration summary warnings can be ignored when following this procedure.

⇒ Objects will be shown as different in the M1 Tune Migration window if their names are different, even if their values have been successfully migrated (new Packages now have a function that allows migration of data from predecessor objects with different names).

GPA: No manual migration is necessary.

GPR: The following tables require manual migration since axis channels have changed:

- [Gear Shift Timing](#)
- [Gear Shift Ignition Cut Main](#)
- [Gear Shift Fuel Cut Main](#)
- [Gear Shift Ignition Timing Retard](#)

The process for [Upshift Power Off](#) has also been changed (see help on [Gear Shift State](#)), so the timings for this type must be adjusted.