



Zusatzbetriebsanleitung. Sequenzielles M Getriebe SMG II.

Supplementary Owner's Handbook

Notice complémentaire

Manual de instrucciones adicionales

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Supplementary Owner's Handbook in Arabic

This Supplementary Owner's Handbook contains descriptions of features that are not covered by the main Owner's Handbook for your vehicle.

The high safety and quality standards of BMW vehicles are maintained by unceasing development work on designs, equipment and accessories. As a result, there may be discrepancies between even this Supplementary Owner's Handbook and your own vehicle. Nor can errors be entirely ruled out. Please therefore appreciate that no legal claims can be entertained on the basis of the data, illustrations or descriptions in this handbook.

Symbols used



indicates instructions or precautions that must be followed precisely in order to avoid the possibility of personal injury and serious damage to the vehicle. ◀



contains information that will assist you in gaining the optimum benefit from your vehicle and enable you to care more effectively for your vehicle. ◀



identifies systems or components which the dealer can either activate or adapt to suit an individual driver's requirements ("Car Memory", "Key Memory"). ◀

◀ marks the end of a specific item of information.

* identifies optional extras or specific national-market items of equipment, and also accessories.

Operating principle

The SMG II sequential M gearbox is an automated manual gearbox on which operation of the clutch and gear-changing are performed by an electro-hydraulic system.

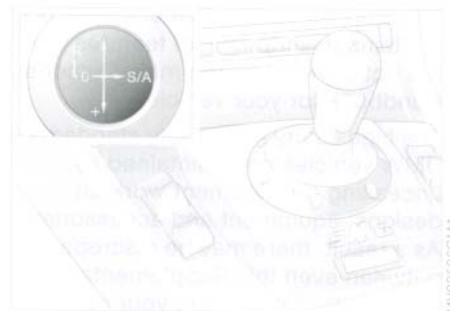
The SMG II is operated via two rocker switches on the steering wheel and the selector lever in the centre console.

It offers you the following functions:

- ▷ Sequential and automated gear shift mode
- ▷ A choice of driving programs (Drive-logic)
- ▷ Gradient assistance
- ▷ Shift lights
- ▷ Acceleration assistance
- ▷ Automated double-declutching
- ▷ Situation-based gear shifts:

The current driving situation (e.g. cornering, hill-climbing, braking) is identified by sensors and taken into account accordingly in the shift characteristics, for instance so that the ideal gear is selected when the vehicle is decelerated and then accelerated again

- ▷ Slip recognition at the rear wheels, for increased driving stability e.g. when shifting down the gears on a slippery surface
- ▷ Operating reliability, with shift error prevention feature.

**Selector lever positions**

R: Reverse

0: Idling position

Forward position with one-touch functions:

- ▷ S: Sequential mode
- ▷ A: Automated mode
- ▷ +: Shifting up in the sequential mode
- ▷ -: Shifting down in the sequential mode

The SMG II is operational in ignition key position 2 and beyond.

For your safety when the vehicle is standing, approx. 2 seconds after the idling position has been engaged, a travel position can only be engaged with your foot on the footbrake (shift-lock function).


Starting the engine and driving off

To start the engine:


- 1 Press the footbrake
- 2 Move the selector lever to the idling position 0
- 3 Start the engine.

To drive off:

- 1 Press the footbrake
- 2 Engage a travel position
- 3 Release the footbrake and slowly accelerate.

 When the engine is running, if the driver's door is opened the shift indicator in the instrument cluster flashes, see page 18, and an acoustic signal is emitted as a reminder that a travel position is engaged.

If you do not operate a pedal, either rocker switch or the selector lever, the gear is automatically disengaged after approx. 4 seconds. It will then be necessary to choose the desired direction of travel again at the selector lever position 0. ◀

 It is not possible to drive off with the engine hood open. ◀



Before getting out of the vehicle with the engine running, move the selector lever to the idling position 0 and apply the handbrake.

Never leave the vehicle unattended with the engine running, as this constitutes a major potential hazard. ◀



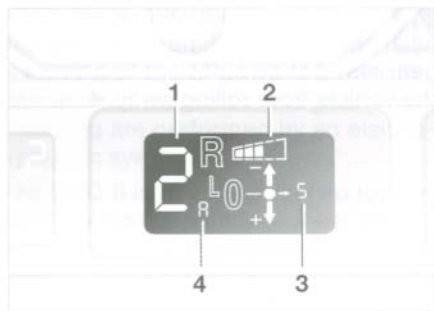
Apply the handbrake when parking on a slope. Engaging a gear may not be sufficient to prevent the vehicle from rolling away. ◀

Stopping the engine

If you turn the ignition key back to position 1 or 0 with the selector lever in the forward or reverse travel position, a gear automatically remains selected.

If you turn the ignition key to position 1 or 0 with the selector lever in the idling position 0, a gong sounds and the shift indicator in the SMG display flashes to remind you that the vehicle is not protected against rolling away.

The warning is switched off after approx. 10 seconds. If you move the selector lever to a forward or reverse position within this time limit, a gear is automatically engaged.



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SMG display in the instrument cluster

The selector lever position, the gear currently engaged and the driving program selected are shown in the instrument cluster.

- 1 Gear engaged
- 2 Driving program selected (as indicated by the number of fields lit up), see page 19
- 3 The shift mode indicated can be entered by pushing the selector lever briefly to the right
- 4 "A" indicates that the automated mode is active.

R - Reverse

Engage only when the vehicle is at a standstill or moving at very low speed, e.g. when attempting to rock the vehicle out of deep snow.

0 - Idling position

Always engage this position before starting the engine.

If necessitated by the driving situation, e.g. when shifting down on a slippery surface, the SMG II automatically disengages and then re-engages the clutch; this renders it unnecessary to engage the idling position manually.

S - Sequential mode

Each time the engine is started, the sequential mode is activated as soon as you move the selector lever to the forward travel position.

Shifting from the automated to the sequential mode:

- ▷ Briefly push the selector lever to the right, in the direction of "S", or
- ▷ Change gear using the selector lever or the rocker switches on the steering wheel.

You do not need to ease off the accelerator before changing gear.



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Changing gear via the rocker switches on the steering wheel:

- ▷ To shift up, briefly pull the right-hand rocker switch "+"
- ▷ To shift down, briefly pull the left-hand rocker switch "+".

▷ Various widths of rocker switches to match the size of your hands are available from BMW Service. ◀

Changing gear via the selector lever:

- ▷ To shift up, briefly press the selector lever back in the "+" direction
- ▷ To shift down, briefly pull it forwards in the "-" direction.

No automatic upshifts occur in the sequential mode.

To accelerate from higher gears, e.g. for overtaking, shift down manually.

In the following situations, when in the sequential mode the SMG II "anticipates" your intentions:

- ▷ Upshifts and downshifts are only performed at a suitable engine or road speed; for example, it will not shift down if the resulting engine speed would be too high
- ▷ If the vehicle is brought to a standstill, it always shifts down to first gear; this means that if you are waiting at traffic lights, for example, you simply operate the accelerator when it is time to move off again
- ▷ When slowing down, shortly before you reach the minimum speed for the gear that is selected, the gearbox automatically shifts down.

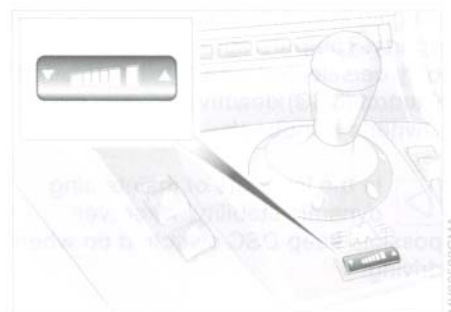
A - Automated mode

All forward gears are selected automatically in the automated mode.

To switch from the sequential to the automated mode, briefly press the selector lever to the right, in the direction of "A". Note the display in the instrument cluster, see page 18.

To accelerate rapidly, e.g. for overtaking, press the accelerator pedal fully down (kick-down position). A downshift that depends on the driving program selected will take place.

Even in the automated mode, you can influence when a gear shift takes place: provided the minimum speed for a specific gear has been exceeded, you can shift up a gear by slowly easing off the accelerator. The prevailing driving situation is identified by sensors and taken into account.



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Drivelogic

Drivelogic gives you access to a variety of driving programs.


Press the Drivelogic Control button as often as necessary until the desired driving program appears in the SMG display in the instrument cluster, see page 18.

In the automated mode, there are five driving programs to choose from, ranging from relaxed to sporty/highly dynamic.


In the first automated driving program, the vehicle moves away in second gear; this is recommended for wintery road conditions (ice and snow).

In the sequential mode, you have six driving programs to choose from,

ranging from balanced dynamic to pure sporty. The pure sporty program can only be selected with Dynamic Stability Control (DSC) deactivated, see main Owner's Handbook.

 In the interests of maintaining dynamic stability, wherever possible keep DSC switched on when driving. ◀

Every time you switch between the sequential and the automated mode, the driving program last selected for each mode is active. Exception: if the last driving program used in the sequential mode was program 6, program 5 is activated.


 Your vehicle is preset in such a way that the last driving program selected for each shift mode is stored automatically in your key, and called up when you start the engine. ◀

Gradient assistance


The gradient assistance feature enables you to drive off uphill with virtually no rolling back. It can be activated in the sequential and automated modes with the vehicle at a standstill, and can be

used for both forward and reverse travel.

- 1 Press the footbrake while the vehicle is at a standstill
- 2 Activate gradient assistance by pulling the left-hand rocker switch for at least 0.5 seconds. The engine speed rises as an indication that gradient assistance is active


 Pull the left-hand rocker switch again briefly to deactivate gradient assistance. ◀

- 3 Release the footbrake and drive away within 2 seconds.

 The vehicle may roll back slightly before it is held by the gradient assistance and after the footbrake is released. Two seconds after the footbrake has been released, the vehicle will begin to roll, as it is no longer held by the gradient assistance. ◀

The gradient assistance must be activated again each time it is required.

Indicator light


 The gearbox indicator light in the instrument cluster goes out after the engine has been started.


- ▶ If it does not go out or if it comes on during a journey, there is a fault. This may mean that certain functions are unavailable. Proceed carefully, keeping the Dynamic Stability Control (DSC) active. Have the system checked by the nearest BMW Service
- ▶ If the indicator light flashes during a journey, the system is overloaded. Avoid high loads until the indicator light remains permanently on again.



Acceleration assistance*

The acceleration assistance assures optimum acceleration of motor sport standards on surfaces affording a sufficiently good grip.

 Use of the acceleration assistance feature will cause certain components to wear out prematurely, as this function subjects the vehicle to very high loads. ◀

 In the interests of maintaining dynamic stability, wherever possible keep DSC switched on when driving, see main Owner's Handbook. ◀

Shift lights

To achieve the best possible acceleration in the sequential mode for sports driving, shift lights in the instrument cluster indicate the optimum gearshift point shortly before the maximum engine speed is reached.

- 1 When you are approaching the maximum engine speed, a succession of orange sections (shift lights) in the revolution counter light up as an indication that the upshift point is approaching
- 2 Shift up no later than the last shift light (red).

- 1 Switch off the Dynamic Stability Control (DSC), see main Owner's Handbook
- 2 Select the sequential mode with driving program 6
- 3 With the vehicle at a standstill, press the selector lever forwards in the direction of "-" and hold it there
- 4 Press the accelerator pedal fully down. The optimum engine speed for moving away is established
- 5 The vehicle accelerates when the selector lever is released. Keep the accelerator pedal pressed fully down.

The acceleration assistance takes a few minutes to regain its full performance capacity.

Tyre changing, snow chains

After changing a tyre or wheel and after fitting or removing snow chains, the slip monitoring feature of the SMG II must be allowed to adjust to the modified status.

Initialise the system again:

- 1 On a straight road, driving at a speed of more than 30 km/h (20 mph), move the selector lever to the idling position 0
- 2 Pull both rocker switches for approx. 2 seconds.

If you do not perform the initialising routine, the system will gradually "learn" the modified status automatically, as you drive. You will notice this by the clutch being briefly disengaged and engaged.

Cruise control

The cruise control, see main Owner's Handbook, is automatically interrupted:

- ▷ When braking
- ▷ By a gear change in the sequential mode
- ▷ If the vehicle exceeds the speed setting for a lengthy period (for example when the driver depresses the accelerator) or fails to reach it.

Tow-starting and towing away

To push or tow away the vehicle: engage selector lever position 0.



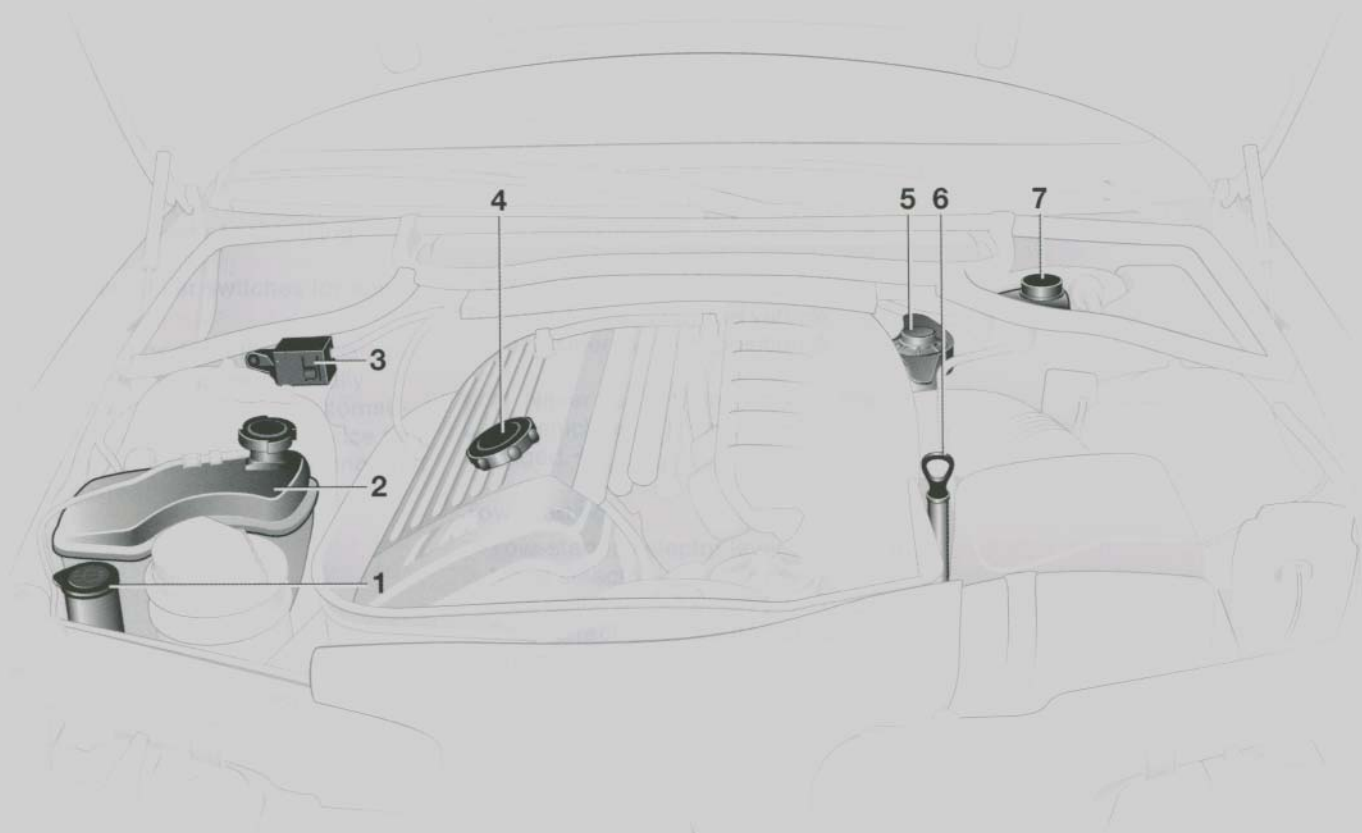
Never perform any work on the vehicle with a travel position engaged. ◀

Tow-starting:

- ▷ Tow-start in selector lever position 0
- ▷ Move selector lever to position "S", then pull it to "+" within 2 seconds. The correct gear is automatically engaged and the clutch let out.

For further notes on tow-starting, towing away and jump-starting, see the main Owner's Handbook for your vehicle.

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Sequential M gearbox* SMG II

- 1 Filler neck for windscreen washer and headlight cleaning system
- 2 Coolant level-equalising tank
- 3 Jump-starting point (positive terminal)
- 4 Engine oil filler cap
- 5 Level-equalising tank for SMG hydraulic unit (for checking fluid level; if necessary, have topped up by BMW Service)
- 6 Engine oil dipstick
- 7 Filler neck for brake fluid reservoir