



AUTOMATIC GEARBOX

QTRONIC

**ALFA
159**



This Supplement describes the main instructions for using the 6-speed QTRONIC automatic gearbox.

For all other information not contained herein, refer to the Owner's Manual this Supplement is attached to.

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USING THE 6-SPEED QTRONIC AUTOMATIC GEARBOX

The car is fitted with a 6-speed automatic gearbox with electronic control. In this type of gearbox, gears are shifted automatically according to the actual car parameters (i.e.: car speed and accelerator pedal position).

It is however possible to shift gears manually by means of the sequential operation.

IMPORTANT To use the 6-speed QTRONIC automatic gearbox in the best possible way, you are recommended to read this supplement right through before taking the road for the first time.

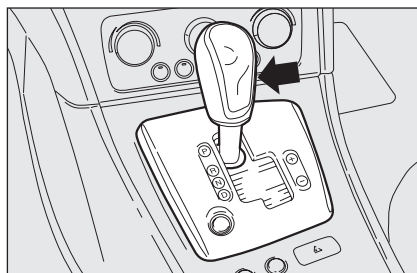


fig. 1

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GEAR STICK fig. 1

P = Parking

R = Reverse

N = Neutral

D = Drive, automatic forward gears

+ = Shift up (sequential operation)

- = Shift down (sequential operation)



fig. 2

A0E0316m



fig. 3

A0E0360m

DISPLAY fig. 2

The display shows the following:

- ☐ in automatic operation, the gear selected (**P, R, N, D**) **fig. 2**;
- ☐ in sequential operation, the manually engaged gear is displayed by showing the relevant figure **fig. 3**.



fig. 4

A0E0317m

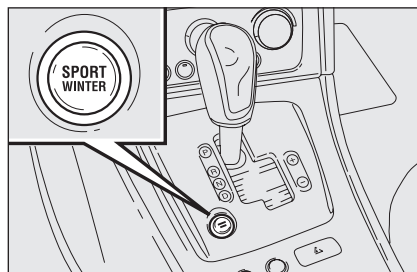


fig. 5

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If provided by the model you have, when in Automatic mode, it is possible to display the words **W** (Winter) or **S** (Sport) **fig. 4**, if requesting the respective modes by pressing the **SPORT/WINTER** button on the gear stick plate **fig. 5**.

GEAR STICK POSITIONS

Parking (P)

Position **P** locks mechanically the driving wheels.

Engage this gear only with the car stationary and pull up the handbrake if required.



Shifting from P to whatever position, with electronic key fitted into the ignition device, shall only be performed by pressing the brake pedal and the gear stick button.

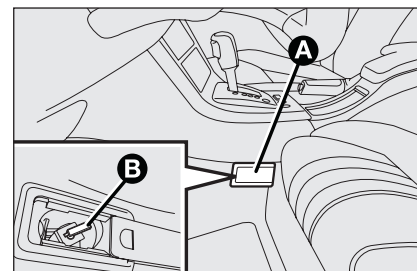


fig. 6

A0E0463m

In emergency (faults, exhausted battery, etc..) it is possible to move the lever from position **P** pulling the lever **B-fig. 6** positioned behind the lid on the left side of the cabinet. To access the lever, open lid **A**, sliding it.

Reverse (R)

With gear stick at **R**, the engine cannot be started.



Engage reverse only with the car stationary, engine idling and accelerator released.



Shifting from R → N or D is free, whereas for shifting R → P it is necessary to press the gear stick button.



To shift the lever from N, remove your foot from the accelerator pedal and wait for the engine to stabilise at idle.



Shifting from N → D is free, whereas for shifting N → R or P it is necessary to press the gear stick button.



Only shift the stick from P to D (P → D), from N to D (N → D) and from R to D (R → D) with the car at a standstill and the engine idling.

Neutral (N)

This position corresponds to the neutral position of a normal mechanical gearbox.

The engine can be started with the gear stick at **N**. Engage neutral **N** when parking.

Drive

(automatic forward gears - D)

Drive position **D** shall be used in normal driving conditions.

STARTING THE ENGINE

The car is fitted with an electronic engine immobilising system. If the engine fails to start, see the Owner's Manual at paragraph "Alfa Romeo CODE system" in section "Dashboard and controls".

IMPORTANT Tampering with the ignition device can cause unrequired steering lock.

IMPORTANT The electronic key shall be fully fitted into the ignition device.

IMPORTANT Never take the electronic key out of the ignition device while the car is running unless you have to carry out an emergency removal (see paragraph "Removing the electronic key from the ignition device in an emergency"), this ensures that steering lock is off when moving the car (e.g.: towing the car).



We recommend that during the initial period you do not drive to full car performance (e.g.: excessive acceleration, long journeys at top speed, sharp braking, etc.).



When the engine is switched off never leave the electronic key into the ignition device to prevent pointless current absorption from draining the batter.



IMPORTANT
Running the engine in confined areas is extremely dangerous. The engine consumes oxygen and produces carbon monoxide which is a highly toxic and lethal gas.

To start the engine, proceed as follows:

- ☐ Make sure the handbrake is engaged and gear stick is at **P** or **N**: the engine can only be started with the gear stick in one of these positions.
- ☐ With gear stick at **P**: press the brake pedal and fit the electronic key fully into the ignition device to the stop limit; press the **START/STOP**.
- ☐ With gear stick at **N**: press the brake pedal and fit the electronic key fully into the ignition device to the stop limit; press the **START/STOP**.

The starter automatically operates until the engine starts.

With engine off and electronic key inserted in the ignition device, it is possible to operate the automatic ignition briefly pressing the **START/STOP** button and keeping the brake pedal pressed.

For Diesel versions

In the event of cold weather, we recommend to wait for  warning light turn off before operating the starter.

IMPORTANT If with the car running and the gear stick at D or in sequential mode, you press inadvertently button **START/STOP**, the engine will turn off and the gearbox action will fail.

Proceed as follows:

- ☐ **Shift to N and press the brake pedal;**
- ☐ **Re-start the engine by pressing the **START/STOP** button and shifting to D.**

Important Notes

If at starting stage the engine turns off, press the brake pedal and then press the **START/ STOP** button.

Should starting be difficult, do not insist and contact Alfa Romeo Authorised Services.

With car started the electronic key is locked into the ignition device and it can be removed only after switching the engine off. With car running and key locked into the ignition device, forced key removal could damage the ignition device.

Start-up failures, if any, are indicated by a message on the display. In this case contact Alfa Romeo Authorized Services.

Start-up failures

The system can recognise start-up failures.

In the event of failure, the electronic key can be removed from the ignition device to enable the driver to carry out the following operations:

- ☐ turn the instrument panel off by pressing button **START/ STOP** or removing the electronic key from the ignition device;
- ☐ start the engine again by pressing the brake pedal and button **START/STOP**.

IMPORTANT In the event of engine locking while the car is running, due to safety reasons it will not be possible to take the electronic key out of the ignition device. To remove it, press button **START/STOP** with brake pedal (or clutch pedal) released and car stopped.

HOW TO WARM UP THE ENGINE AFTER IT HAS JUST STARTED

Proceed as follows:

- ❑ Drive off slowly, letting the engine turn at medium revs. Do not accelerate abruptly;
- ❑ Do not drive at full performance for the initial kilometres. Wait until the coolant temperature gauge starts moving.

STARTING OFF

To move off, proceed as follows:

- ❑ from **P** position, press the brake pedal;
- ❑ press the gear stick button and shift to the required position (**D** or **R**);
- ❑ accelerate gradually; the car will start to move and gear shifting will be automatic.



IMPORTANT

Never leave children unattended in the car. Always remove the electronic key when leaving the car and take it out with you.



With electronic key fitted into the ignition device, shifting from P is only possible with the brake pedal pressed.

IMPORTANT Take the utmost care with parking brake and brake pedal released, engine idling and gear stick at **D**, **R** or in sequential mode since the car can move off without pressing the accelerator pedal.

The above car condition can be used for parking in narrow spaces on flat ground, paying attention to use the brake pedal only.

SEQUENTIAL OPERATION

In sequential mode the 6-speed QTRONIC automatic gearbox works like a gearbox with fixed ratios controlled in sequence.

Sequential mode

From position **D**, move the gear stick rightwards, in Manual position:

- ☐ gear stick to **+**: shift up;
- ☐ gear stick to **–**: shift down.

The gear engaged is displayed with the corresponding digit on the instrument panel display; errors are excluded since the gearbox control unit monitors shifting continuously.

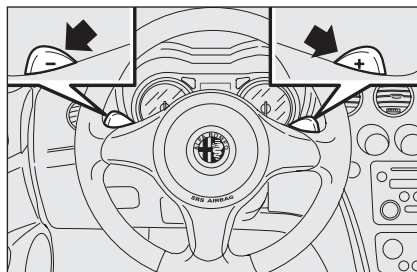


fig. 7

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Sequential mode, where provided, can also be performed using the steering wheel controls **fig. 7** (optional).

To use the steering wheel controls, the gear stick must be in Manual position:

- ☐ steering wheel stalk to **+**: shift up;
- ☐ steering wheel stalk to **–**: shift down.

Shifting up or down is only enabled if engine rpm allows it.

If stopping the car with a speed higher than 1st one, the gearbox will set automatically to 1st speed.

AUTOMATIC OPERATION

When in sequential operation, **D** can be selected under whatever driving condition.

When passing from sequential operation to **D**, the electronic gearbox control will select the best gear to engage according to engine rpm (accelerator pedal position).

For fast pick-up, press the accelerator beyond the hard point. This will operate the kick-down feature to obtain top performance (pick-up and acceleration).

IMPORTANT Avoid using the kick-down function on snow and ice, etc.

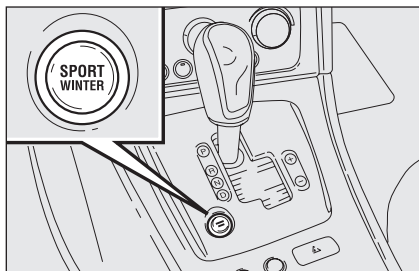


fig. 8

A0E0394m

Driving modes (where provided)

The different driving modes can be selected using the **SPORT/WINTER** button located on the gearbox plate **fig. 8**.

Driving modes are the following:

- ☐ **NORMAL**: shifting at low engine rpm, this mode enhances driving comfort and curtails exhaust emissions
- ☐ **SPORT**: shifting at high engine rpm, this mode enhances sporty driving

- ☐ **WINTER**: for starting the car under poor grip conditions or on roads covered with snow, ice or mud. Under poor grip conditions, the electronic gearbox control could restart the car by engaging a gear higher than 1st one to prevent wheel slipping: this is not a fault.

When turning the instrument panel on, the gearbox will set to **NORMAL**.

With the gear stick at **D**, the following driving modes can be selected:

- ☐ **NORMAL** => **SPORT**, press briefly the **SPORT/WINTER** button
- ☐ **NORMAL** => **WINTER**, press the **SPORT/WINTER** button for over 2 seconds
- ☐ **SPORT** => **WINTER**, press the **SPORT/WINTER** button for over 2 seconds
- ☐ **SPORT** => **NORMAL**, press briefly the **SPORT/WINTER** button
- ☐ **WINTER** => **NORMAL**, just press the **SPORT/WINTER** button.

The mode selected will be active until next pressing or the button or until turning the engine off.

IMPORTANT To protect the gearbox in case of excessive oil temperature (see paragraph "Warning lights and messages"), the electronic control intervenes by aborting the sequential mode and activating the automatic mode. Sequential operation will be resumed as soon as regular operating temperatures are restored.

STOPPING THE CAR

To stop the car, proceed as follows:

- ☐ release the accelerator pedal;
- ☐ press the brake pedal.

IMPORTANT Keep the car still when on a slope and the engine is running with the brake pedal only. Do not press the accelerator pedal.

When parked, with engine running and gear stick at **D**, **R** or sequential mode, keep the brake pedal pressed to prevent the car moving off.

For longer stops, shift the gear stick to **P**.

PARKING

Pull the handbrake and select position **P**. Leave the wheels steered. Block the wheels with a wedge or a stone if the car is parked on a steep slope.

Do not leave the electronic key into the ignition device to prevent discharging the battery. Always remove the electronic key from the ignition device when getting out of the car.

STOPPING THE ENGINE

With car stopped press button **START/STOP**. When the engine is off it will be possible to remove the electronic key from the ignition device.



IMPORTANT

*In an emergency and also for safety reasons, the engine can be turned off while the car is running by pressing repeatedly (three times in 2 seconds) or by pressing and keeping pressed the **START/STOP** button for a few seconds. In this event the power steering cannot be engaged.*

IMPORTANT After a taxing drive, you should allow the engine to “catch its breath” before turning it off by letting it idle to allow the temperature in the engine compartment to fall.

IMPORTANT Turning the engine off will obtain deactivation of safety electronic systems and turning off of external lights.

IMPORTANT In the event of engine locking while the car is running, due to safety reasons it will not be possible to take the electronic key out of the ignition device. To remove it, turn the instrument panel on and off by pressing button **START/STOP** with brake pedal released and car stopped.

If the gear engaged when turning the engine off is other than **P**, it will not be possible to remove the electronic key from the ignition device.



A quick burst on the accelerator before turning off the engine serves absolutely no practical purpose, it wastes fuel and is damaging especially to turbocharged engines.

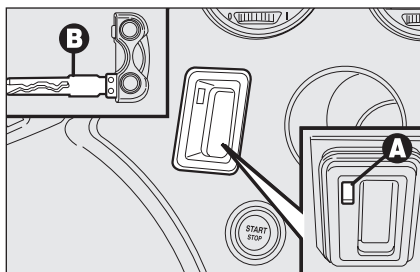


fig. 9

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REMOVING THE ELECTRONIC KEY FROM THE IGNITION DEVICE IN AN EMERGENCY

In the event of a failure at engine switching off system or at electronic key unlocking system proceed as follows:

- ☐ press the unlocking button to remove the metal insert (see the Owner's Manual at paragraph "Electronic key" in section "Dashboard and controls");
- ☐ fit the metal insert **B**-fig. 9 of the electronic key into the slot **A**;
- ☐ remove the electronic key from the ignition device.

IMPORTANT Only fit the metal insert **B** of the electronic key into slot **A**-fig. 9.

IMPORTANT Stop the car before performing emergency removal. If emergency removal is carried out with the engine running, the engine and the instrument panel will be turned off and the steering lock will not be engaged.

BUZZERS

A buzzer and the flashing of letter **P** on the display for a few seconds will warn the driver that the engine has been turned off with a gear engaged and gear stick in a position other than **P**.

The electronic key can only be removed from the ignition device with **P** position selected.

TOWING THE CAR

IMPORTANT Comply with current local law regulations for towing the car.

If the car is to be towed, observe the following recommendations:

- ☐ if possible, transport the car on a wrecking car floor;
- ☐ if this is not possible, tow the car with driving (front) wheels raised.

Towing shall be performed with gear stick at **N**.



Do not start the engine when towing the car.



Failing to observe the above instructions could seriously damage the automatic gearbox components.

VDC SYSTEM (Vehicle Dynamics Control) (where provided)

HBB system (Hydraulic Brake Boost)

This system, which cannot be cut out, provides hydraulic interlocking during braking thus increasing efficient brake system operation efficiency.

Failure indication

Failures, if any, will be indicated by the turning on at the same time of warning lights (ⓘ) and (ABS) on the instrument panel.

System operation

System operation is indicated by warning light Ⓐ flashing on the instrument panel and also by a slight pulsation of the brake pedal with the typical noise.

WARNING LIGHTS AND MESSAGES



AUTOMATIC GEARBOX FAILURE

AUTOMATIC GEARBOX EXCESSIVE OIL TEMPERATURE

Automatic gearbox failure

The symbol will flash on the display (together with the relevant message and the buzzer) to indicate a 6-speed QTRONIC automatic gearbox failure.



In the event of a gearbox failure, contact Alfa Romeo Authorised Services as soon as possible to have the system checked.

Automatic gearbox excessive oil temperature

The warning light on the display turns on with fixed light (together with the relevant message and the buzzer) when the 6-speed QTRONIC automatic gearbox oil temperature is too high.



Stop as soon as possible, switch the engine off and let the automatic gearbox cool down.



HBB FAILURE (red) (amber)



In the event of a failure, the HBB system will deactivate automatically and the warning lights (ⓘ) and (ABS) will turn on at the same time on the instrument panel. In this case contact Alfa Romeo Authorised Services as soon as possible.

CAR MAINTENANCE

SERVICE SCHEDULE

In addition to the checks and servicing operations described yet (see the Owner's Manual at section "Car Maintenance"), the Service Schedule envisages also to check and to top up, if required, the 6-speed QTRONIC automatic gearbox oil every 35.000 km.

TECHNICAL SPECIFICATIONS

ENGINE CODES - BODYWORK VERSIONS

Versions	Engine code	Bodywork version
1.9 JTDm 16v	939A2000	939AXC12 23E 939BXC12 24E (*) 939AXC12 23F (□) 939BXC12 24F (*) (□)
2.4 JTDm 200 HP	939A3000	939AXD12 25B 939BXD12 26B (*)
3.2 JTS	939A000	939AXG22 32B 939BXG22 33B (*)

(*) Sportwagon version

(□) For specific markets

TRANSMISSION

	1.9 JTDm 16v - 2.4 JTDm 200 HP	3.2 JTS
Gearbox	6-speed automatic	6-speed automatic
Drive	Front drive	Four-wheel drive

PERFORMANCE

SALOON VERSIONS

	Top speed km/h	Acceleration from 0-100 km/h sec.	Kilometer with standing start sec.
1.9 JTDm 16v	209	9.5	30.7
2.4 JTDm 200 HP	225	8.3	29.0
3.2 JTS	244	7.2	27.5

SPORTWAGON VERSIONS

	Top speed km/h	Acceleration from 0-100 km/h sec.	Kilometer with standing start sec.
1.9 JTDm 16v	207	9.7	31.0
2.4 JTDm 200 HP	223	8.5	29.3
3.2 JTS	242	7.3	27.9

WEIGHTS

SALOON VERSIONS

Weights (kg)	1.9 JTDm 16v	2.4 JTDm 200 HP	3.2 JTS
Weight empty (including fluids, 90% fuel in the tank and no optional)	1495	1605	1630
Maximum admitted load (*)			
— front axle	1150	1220	1220
— rear axle	1050	1050	1050
— total	2045	2155	2180
Payload including the driver (**)	550	550	550
Towable loads	1500	1500	1700
Maximum load on tow hitch	75	75	75
Maximum load on roof	50	50	50

(*) Loads not to be exceeded. The driver is responsible for arranging the loads so that they comply with these limits.

(**) If special equipment is fitted (sunroof, tow hitch etc.) the unladen weight increases, thus reducing the payload as specified in the maximum weight allowed.

SPORTWAGON VERSIONS

Weights (kg)	1.9 JTDM 16v	2.4 JTDM 200 HP	3.2 JTS
Weight empty (including fluids, 90% fuel in the tank and no optional)	1545	1655	1680
Maximum admitted load (*)			
— front axle	1150	1220	1220
— rear axle	1050	1050	1100
— total	2095	2205	2230
Payload including the driver (**)	550	550	550
Towable loads	1500	1500	1800
Maximum load on tow hitch	75	75	75
Maximum load on roof (***)	80	80	80

(*) Loads not to be exceeded. The driver is responsible for arranging the loads so that they comply with these limits.

(**) If special equipment is fitted (sunroof, tow hitch etc.) the unladen weight increases, thus reducing the payload as specified in the maximum weight allowed.

(***) Lineaccessori Alfa Romeo roof/ski racks, max. carrying capacity: 50 kg.

CAPACITIES

		1.9 JTD _M 16v	2.4 JTD _M 200 HP	3.2 JTS	Recommended products and genuine lubricants
Fuel tank: — including a reserve of	litres litres	70 ○ 10 ○	70 ○ 10 ○	70 ● 10 ●	● Unleaded petrol with no less than 95 R.O.N. (EN228 Specification) ○ Diesel fuel for motor vehicles (EN590 Specification)
Engine cooling system	litres	7.5	7.35	10.3	Mixture of 50% water and PARAFU^{UP}
Engine greasing system	litres	4.6 □	6.4	5.4 ■	■ SELENIA S_tAR □ SELENIA WR
Windscreen and headlight washer fluid reservoir	litres	6.0	6.0	6.0	Mixture of water and TUTELA PROFESSIONAL SC 35
6-speed Q _{TRONIC} automatic gearbox	litres	—	—	—	TUTELA GI/VI

FLUIDS AND LUBRICANTS

RECOMMENDED PRODUCTS AND THEIR SPECIFICATIONS

Use	Fluid and lubricant specifications for correct car operation	Genuine fluids and lubricants	Applications
Lubricants for transmission	Special lubricant for 6-speed automatic transmissions with controlled torque converter. FIAT 9.55550-AV2 qualification	TTUTELA GI/VI Contractual Technical Reference N° F336.G05	6-speed automatic gearbox

FUEL CONSUMPTION

FUEL CONSUMPTION ACCORDING TO EUROPEAN DIRECTIVE IN FORCE (litres x 100 km)	Urban	Extra-urban	Combined
1.9 JTDm 16v	9,5 (*)/9,6 (**)	5,2 (*)/5,3 (**)	6,8 (*)/6,9 (**)
2.4 JTDm 200 HP	11.4 (*)/11.6 (**)	5.8 (*)/5.9 (**)	7.9 (*)/8.0 (**)
3.2 JTS	18.2 (*)/18.3 (**)	8.5 (*)/8.6 (**)	12.1 (*)/12.2 (**)

(*) Saloon versions

(**) Sportwagon versions

CO₂ EMISSIONS

The CO₂ emission levels shown in the following table refer to combined cycle.

CO₂ EMISSIONS ACCORDING TO EUROPEAN DIRECTIVE IN FORCE (g/km)

1.9 JTDm 16v	2.4 JTDm 200 HP	3.2 JTS
180 (*)	208 (*)	286 (*)
182 (**)	210 (**)	288 (**)

(*) Saloon versions

(**) Sportwagon versions



SERVICE

CUSTOMER SERVICES

TECHNICAL SERVICES - SERVICE ENGINEERING

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