

# BYD G3 AUTO Owner's Manual



BYD AUTO CO.LTD



#### **Preface**

Thank you for choosing BYD G3AUTO. For better use and maintenance of your BYD G3, please do read this manual carefully. BYD G3 adopts electrical fuel injection (EFI) engine with complicated wiring structure. Please do NOT add electrical appliances, such as anti-theft systems, central controlled door locks, power window, audio equipment, etc. to BYD G3 without permission; otherwise any failure caused by it will not be covered by the "Warranty" of BYD.

Please follow strictly the instructions where "Safety Friendly Tips" and "Auto Damage" are indicated in this manual to avoid the possibility of injuries or damages.

The notice types and their purposes are as follows

Tips				
Precautions to avoid vehicle damage or personal injury				

### Note

Precautions to be followed to make maintenance easier

The illustrations provided in this manual are for reference only.



The safety sign indicated by the figure above means "Do NOT do it" or "Do NOT let it happen".

BYD Auto Co., Ltd. reserves the right for revising technical characteristics and contents of this manual without prior notice. Your valuables comments and opinions will be warmly welcomed.



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### Overall Unit Parameters of BYD G3

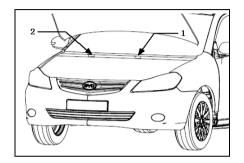
(\* actual fuel consumption depends on factors such as car and road conditions, driver's habit, etc.)

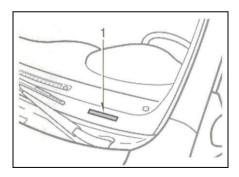
Product Model			QCJ7152A	QCJ7152A3	QCJ7182A3	QCJ7182A4		
	Length	Length mm			4600			
Dimensions	Width	mm		1705				
	Height	mm		1490				
Wheelbase			mm	2610				
Track	Front	mm		1480				
	Rear	mm		1460				
Curb Weight			kg	1180	)	1200		
Gross Weight			kg	1555 1575			75	
Tire Size				195/60 R15 88H				
Approach Angel			0	17				
Departure Angel			0	18				
Front Overhang			mm	975				
Rear Overhang			mm	1015				
Seating Capacity				5				
Maximum speed			km/h	170				
Engine Model				4G15S	BYD473QB	BYD483QA		
Typo				In-line 4-cylinder, 16-vavle,		In-line 4-cylind	er, water-cooled,	
Туре				water-cooled, natural air inflow		DO	OHC	
Displacement			L	1.488 1.839			839	
Engine Rated Power	·		kw	78 79 90		90		
Maximum Gradeability			%	≥30 ≥35				



# Vehicle Identification of BYD G3

**Vehicle Identification Number** 





Two vehicle identification number labels are posted respectively in the engine compartment and on the left upper side of the instrument panel as shown in the above figure. The vehicle identification number, which is used for user registration, is also marked on the manufactory nameplate 2.

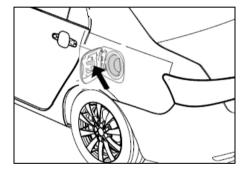
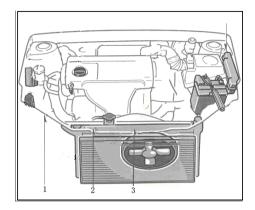
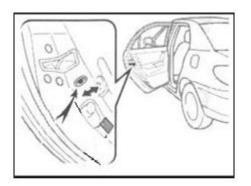


Figure above shows the fuel grade indication sign, which is posted on the inner side of the fuel lid.



- 1. Indication sign of engine coolant
- Warning sign of the air conditioning system
- 3. Warning sign of cooling fan



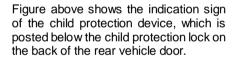
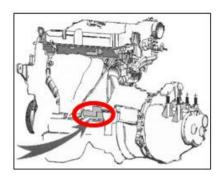




Figure above shows the indication sign of tire pressure, which is posted below lock ring of the left front door.



**Engine Number** 

The engine number is marked on the engine cylinder body as the figure above shows.



# Chapter 1 Section 1

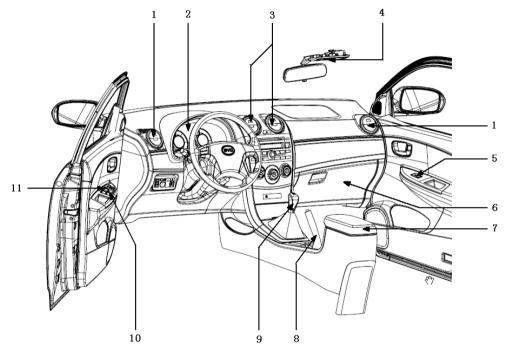
## **Operation of Instruments and Controllers**

### **Instrument Panel Appearance**

Instrument Panel Appearance
Combination Instrument Appearance
Indication Signs on the Combination Instrument



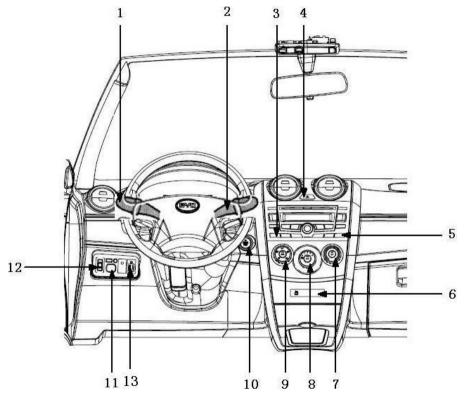
#### **Instrument Panel Appearance**



- 1. Side duct
- 2. Combination Instrument Assembly
- 3. Central Air Outlet
- 4. Front Interior Light and Switch Assemly (optional)
- 5. Power Window Switch (optional)
- 6. Right Glove Box
- 7. Central Glove Box
- 8. Parking Brake Hand grip Assembly
- 9. Gear Shift Handle (MT)
- 10. Window and Door Lock Switch
- 11. Central Door Lock Switch



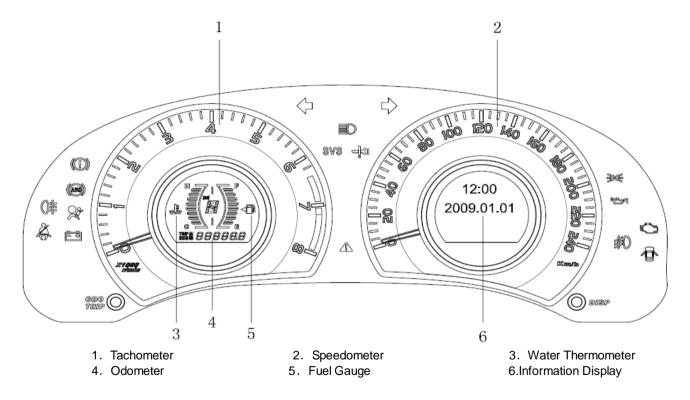
#### Interior Switch Buttons



- 1. Left Combination Switch
- 2. Right Combination Switch
- 3. Number Button 1, 2, 3
- 4. Emergency Warning Light Switch
- 5. Number Button 4, 5, 6
- 6. 1# Switch Group
- 7. Temperature Knob (with rear defrosting button)
- 8. Fan Speed Control Button (with wind input mode selection button)
- 9. Wind Output Knob (with A/C button)
- 10. Starting Button
- 11. Power Exterior Rear-view Mirror Switch
- 12. Rear Fog Light Switch
- 13. Front Headlight Adjustment Switch



#### **Combination Instrument Appearance**





#### Indication Signs on the Combination Instrument

	Braking System Warning Light *		Door Open Warning Indicator*
	Seat Belt Indicator*	OK.	SRS Warning Indicator*
	Battery Discharging Indicator*		Width-indicating Light Indicator
	Low Engine Oil Pressure Indicator *		High Beam Headlight Indicator
	Engine Fault Indicator*	$\Diamond$	Turn Signal Light Indicator
dja	Smart yey System Key Position Indicator*	<b>\$</b> 0	Front Fog Light Indicator
(ABS)	ABS System Indicator *	Q#	Rear Fog Light Indicator
SVS	Service Indicator*	<u> </u>	Main Warning Light*

Items marked with "\*" are maintenance indicators. Refer to "Maintenance indicators and warning buzzers" in Section 1-5 for details.



# Chapter 1 Section 2

## **Operation of Instruments and Controllers**

### Keys and car door

Keys	
Intelligent Access and Starting System	
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Start Engine	

#### Kevs



#### Intelligent Keys and Mechanical Keys

- 1. Intelligent Key used to open/lock all doors and available in two types: intelligent electronic key and card-type intelligent key. Electronic intelligent kev can be used to open/lock doors, make emergency alarm and search for car at distant place.
- 2. Mechanical key (in electronic intelligent key and car-type intelligent key) - is used to open/lock doors and trunk.

### **Warning**

 People with heart pacemaker and defibrillator shall be kept away from antenna of intelligent access and starting system, as electromagnetic wave may affect normal use of these devices. For information on position of the antenna, please refer to "Antenna Position" in this chapter. Drivers with heart pacemaker and defibrillator and people using other medical electronic devices shall manufacturer about inquire interference posed bv electromagnetic wave to these device. Electromagnetic wave may cause unexpected results to these devices.

#### Note

- Pay attention to the following items when using intelligent keys:
- Do not attach any object which may block electromagnetic wave (such as metal container) to the key. Do not knock the key forcibly

on other projects.

Do not place the intelligent key in high temperature, direct sunlight or on engine hood for long time.

Do not clean the key in water or ultrasonic washer.

♦ Do not put the intelligent key near any device which may produce electromagnetic wave, such as a

#### cell phone.



#### Using Mechanical Key in Electronic Intelligent Key

To use mechanical key in electronic intelligent key, pull down the switch to release the key as shown in the figure. Make sure to put back the mechanical key after use.



# Using Mechanical Key in Card-type Intelligent Key

To use mechanical key in card-type intelligent key, pull out the key as shown in the figure. Make sure to put back the mechanical key after use.



#### **Key Number Plate**

The key number is indicated on the number plate, which shall be kept separately at a safe place.

If the key is lost or you need to make a spare key, BYD service station can reproduce a key according to the key number

It is recommended to take note of the key number and keep it at a safe place.

#### Wireless Remote Control



#### **Electronic Intelligent Key**

- 1. Lock UP Switch
- 2. Unlock Switch
- 3. ( switch
- 4. Mechanical key
- 5. Indicator

Wireless remote control system is designed to open/lock all side doors at a distance of some 1m from the car together with some additional functions. It is available only on electronic intelligent key.

When operating, please press the switch slowly and firmly.

Electronic intelligent key includes electronic components. Please follow the following instructions to avoid any damage to the key.

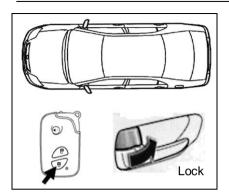
- Do not place the key in high temperature, such as on the instrument panel.
- Do not disassemble it.
- Do not knock the key forcibly and drop it to ground.
- Do not submerge the key in water.

You can register spare keys for the car. For more detailed information, please contact BYD service station.

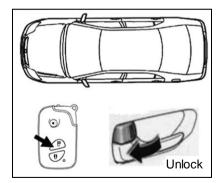
If the electronic key cannot function well in normal operation range, or when the indicator on the key is dim or off:

- Check whether there is radio station or transmitter nearby which may interfere with the key.
- Battery may have depleted. Check the battery in the key. To replace the battery, please see "Replace Battery of Electronic Intelligent Key".

If you lose the electronic intelligent key, please contact BYD service station as soon as possible to prevent the car from stealing.



**Locking Operation** 



**Unlocking Operation** 

To lock/unlock all doors at the same time, press down the switch on the key slowly and firmly.

Lock: press down locking switch to lock up all doors. The turn signal lights will flash once.

Check whether all doors have been locked up firmly.

If any door is still open, use lock-up switch to unlock all door locks. When unlocking, the turn signal lights will not flash but the warning buzzer beeps once.

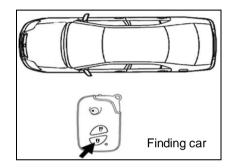
Unlock: press down unlocking switch to unlock all doors. The turn signal lights will flash twice.

If power supply is at ACC or ON, the doors cannot be opened/locked by the key.

When unlocking all doors with electronic intelligent key, even if the doors are not opened, the interior lights will be turned on and remain on for 15 seconds before going out.

When using electronic intelligent key to unlock doors, please pull open a door

manually in 30 seconds. Otherwise all doors will be locked up automatically. If you press and hold the locking/unlocking switch, the key will not function repeatedly. You must release the switch first for repeated operation.



**Finding Car Operation** 

When the car is under anti-theft state, press down locking switch and the car will give out a long sound with the turning signal lights flashing for 15 seconds. When you can not find your car, this function is useful to locate it.

Under searching state, press the locking switch again to enter the search state for the second time.

#### Switch

Long press ( switch for 2 seconds, the car will give out intermittent warning sound with turn signal lights flashing. The warning sound will last for some 30 seconds, if you want to stop warning earlier, press unlocking switch once or long press the switch again. (Do not press this switch in driving.)

# Replace Card-type Intelligent Key Battery

The replacement of card-type key battery is simple and you can do it by yourself. You shall use CR2025 lithium battery or equivalent for replacement.

### **Warning**

Pay close attention to prevent the battery from being swallowed by children.

#### Note

- Only use batteries recommended by BYD service station or their equivalent for replacement.
- Dispose depleted battery according to local laws.

Replace the card-type intelligent key battery in the following steps.

1. Pull out the mechanical key in the arrow direction.



2. Take out battery.



3. Inset the new battery into the intelligent key, and then put back the mechanical key.

#### Note

- Make sure the poles of battery are installed properly.
- Do not operate battery with wet hands, which may cause rusting.
- The card-type key is not waterproof; do not let water enter it.

After battery replacement, check whether the card-type intelligent key can work normally. If it still cannot work, please contact BYD service station.



#### Note

- Without permission, do not alter the emission frequency, increase the emission power (including but not limited to adding emission frequency amplifiers), equip external antenna or use other emission antennas.
- Use of the electronic intelligent key should not produce any harmful interference to any legal wireless communication services; stop use of it immediately if any interference is found and do not use it until the interference has been eliminated.
- When using a micropower radio device, it must withstandby interference of radio services and radiation interference from industrial, scientific and medical devices.
- Do not use the electronic intelligent key near aircrafts or airports.

# Replace Electronic Intelligent Key Battery

Replacement of the battery may damage the key. It is recommended to have BYD service station replace the battery. If you have to replace it by yourself, please use flat screwdriver and CR1632 lithium battery or equivalents.



Pay close attention to prevent the battery or components from being swallowed by children.

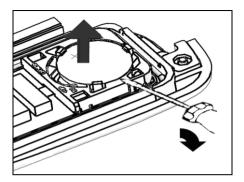
#### Note

- Do not touch the circuit with hands, otherwise the static produced may damage the key.
- Do not leave out any components when replacing the key battery.
- Only use batteries recommended by BYD service station or their equivalent for replacement.
- Dispose depleted battery according to local laws.

Replace the electronic intelligent key battery in the following steps.



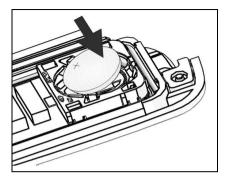
- 1. Pull down release switch and take out mechanical key.
- 2. Open electronic key cover with a flat screwdriver or similar tools.



3. Remove the depleted electronic intelligent key with a flat screwdriver or similar tools. Insert the tool into guide groove and apply force in the direction as shown in the figure above to remove the battery.

#### Note

Do not amend the battery cover to avoid fault.



4. Put the battery with positive terminal (+) on the top into the battery box, then firmly install the key cover and insert the mechanical key into the electronic intelligent key.

- ♦ Make sure the poles of battery are installed properly.
- Do not operate battery with wet hands, which may cause rusting.
- Do not touch or move any component or part inside the electronic key, other its normal function may be affected.
- Pay attention to not bending the terminals when inserting the battery. The battery box shall be free of dust or oil taint.
- Reinstall the key cover firmly.

After battery replacement, check whether the electronic intelligent key can work normally. If it still cannot work, please contact BYD service station.

#### Note

- Without permission, do not alter the emission frequency, increase the emission power (including but not limited to adding emission frequency amplifiers), equip external antenna or use other emission antennas.
- ◆ Use of the electronic intelligent key should not produce any harmful interference to any legal wireless communication services; stop use of it immediately if any interference is found and do not use it until the interference has been eliminated.
- When using a micropower radio device, it must withstandby interference of radio services and radiation interference from industrial, scientific and medical devices.
- Do not use the electronic intelligent key near aircrafts or airports.



## Intelligent Access and Starting System

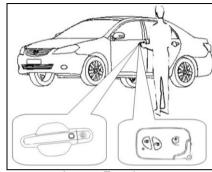
This system has the following function:

- Wireless remote control function (See "Wireless Remote Control" in this Chapter for details.)
- Access function and starting function (see "Access Function and Starting Function" in this Chapter)
- Steering lock function (refer to "Steering Lock Fuction" in this Chapter.
- Button Starting fuction (for details, please see "How to Start Engine" in this Chapter).

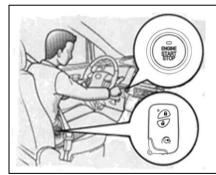
### **A**Warning

- People with heart pacemaker and defibrillator shall be kept away from antenna of intelligent access and starting system, as electromagnetic wave may affect normal use of these devices. For information on position of the antenna, please refer to "Antenna Position" in this chapter.
- Drivers with heart pacemaker and defibrillator and people using other medical electronic devices shall inquire manufacturer about interference posed by electromagnetic wave to these device.

Electromagnetic wave may cause unexpected results to these devices.



Access Function



Starting Function



#### **Access and Starting Function**

Intelligent key (electronic or card-type) can unlock/lock doors and start engine.

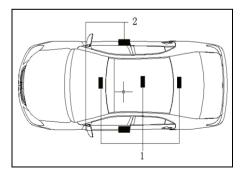
**Access Function** – unlock/lock doors. + For detailed information, please see "Front Door" in this Chapter.

**Starting function** – when intelligent key is in the car, it can switch power supply mode and start engine. For detailed information, please see "*Engine Starting*" in this Chapter.

#### **Steering Lock Function**

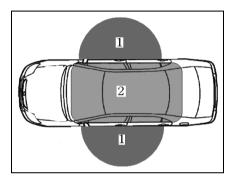
When the doors are locked through wireless remote control or microswitch, the steering wheel will be locked.

When the key is in the car, if you press down "Engine Start Stop" switch, the steerina lock will be released automatically. If green indicator on the "ENGINE START STOP" switch flashes. it means steering lock cannot be released. To release it, press down "Engine Start Stop" switch and shake the steering wheel slightly. If the green indicator still flashes, it means the steering lock has fault and please contact BYD service station for help. For details, please see "Start Engine" in this Chapter.



#### **Antenna Position**

- 1 Antenna in carriage
- 2 Antenna out of carriage





#### **Active Region**

After an intelligent key is registered, the access and starting engine function is available in the active region.

1 Access function active region – some 0.7m m from the handle microswitch of the front outer door. If the key is too close to door handle or window, the access function may not be activated.

2 Starting engine function active region – in carriage.

If the key is on instrument panel or floor, or in trunk or glove box, the starting engine function may not be activated.

In the following cases, intelligent access and engine starting function may not work normally:

- When there are facilities nearby which give out strong electromagnetic wave, such as broadcast tower, power plant, radio station and telecommunication signal tower.
- When you take the intelligent key together with mobile telecommunication devices, such as a two-way radio device or cell phone.

- When the intelligent key is touched or covered by metal objects.
- When you operate the door handle quickly.
- When the intelligent key is close to door handle.
- When somebody else operates wireless remote control function on a car nearby.
- When the battery is depleted. (To replace battery, please see "Replace Card-type Intelligent Key Battery" and "Replace Electronic Intelligent Key Battery" in this Chapter.)
- When the intelligent key is near high voltage devices or noise-generating devices.
- When you take the intelligent key together with a key for intelligent access and engine starting system of another car or other radio devices.
- The intelligent key may not work normally even in the active region due to your location or profile of the car.

If you cannot get in the car when the intelligent access and keyless starting system can not function normally, you can use wireless remote control function to unlock/lock all doors.

When the intelligent key of another car is near to the intelligent key of your car, it may take a longer time to unlock the doors, which is normal.

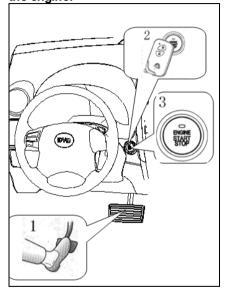
#### **Depleted Intelligent Key Battery**

If the indicator for electronic intelligent key does not flash and its starting function cannot start the engine, the battery may have depleted. You shall replace the battery as soon as possible. (Please see "Replace Battery of Electronic Intelligent Key" in this chapter.) In this case, you can start the engine with card-type intelligent key.

If the card-type intelligent key is not available or also has a depleted battery, you can start the engine in the following steps:

- 1. Step on brake pedal or press down "ENGINE START STOP" switch, the key position indicator of the intelligent key system on the combination instrument will turn on with the buzzer beeping once.
- 2. Put the electronic intelligent key near "ENGINE START STOP" switch within 30 seconds after the buzzer beeps, the buzzer will beeps once again, indicating that you can start the engine.
- 3. Start the engine with 5 seconds after the buzzer beeps.

You can also conduct the procedure above with a card-type intelligent key which has a depleted battery to start the engine.



If you cannot access the car or start the engine with the card-type intelligent key, the battery may have depleted. Please replace the battery as soon as possible. (Please see "Replace Battery of Card-type Intelligent Key" in this chapter.)

#### **Save Battery Power**

The key will communicate with the car even when you are not driving the it. Do not leave the key near the car (within 2m).

If the car is not used for a long time, the on-vehicle battery may deplete. To prevent battery over discharge, please disconnect the negative terminal of the battery.

# To activate intelligent access and starting system again, please make any of the following actions:

a. When the intelligent key is available, press the microswitch on the door handle of the front outer door.

b. Make radio remote control operation. If an intelligent key receives strong electromagnetic wave for long period, the battery will run low quickly. Intelligent key shall be kept at least 1m away from the following devices:

- TV set
- PC
- Cell phone charger
- Lamp holder
- Fluorescent lights

## **A**Warning

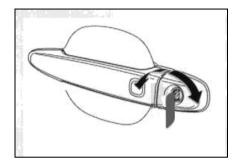
Unauthorized amendment and alteration may result in failure of some devices.

If intelligent access and starting system fails, please contact BYD service station. You shall take all intelligent keys with you, which are required in repairing this system.

#### Note

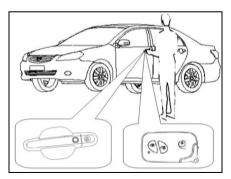
- Without permission, do not alter the emission frequency, increase the emission power (including but not limited to adding emission frequency amplifiers), equip external antenna or use other emission antennas.
- Use of the electronic intelligent key should not produce any harmful interference to any legal wireless communication services; stop use of it immediately if any interference is found and do not use it until the interference has been eliminated.
- When using a micropower radio device, it must withstandby interference of radio services and radiation interference from industrial, scientific and medical devices.
- Do not use the electronic intelligent key near aircrafts or airports.

#### **Front Door**



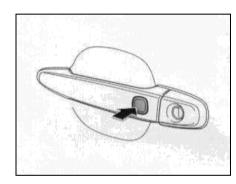
Unlocking/Locking with Mechanical Key Insert the key into lock hole and rotate it.

Lock up: turn the key clockwise. Unlock: turn the key anticlockwise.



#### Lock and Unlock

When you enter active region with a registered intelligent key (electronic or card-type, the former is shown in the figure) for the intelligent access and starting system, you can lock / unlock all doors without using the key.



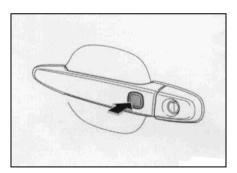


#### **Locking Operation**

Press down the microswitch button on the outer door handle slowly and firmly. All doors will be locked at the same time. The turn signal lights will flash once.

In the following cases the doors will not be locked when pressing the microswitch.

- When any door is not closed.
- Pressing the locking button while opening/closing any door.
- When the engine is not shut down.
- When the power supply is at ACC or ON.



#### **Unlocking Operation**

Press down the microswitch button on the outer door handle slowly and firmly. All doors will be unlocked at the same time. The turn signal lights will flash twice.

When the doors are unlocked, you shall open a door in 30 seconds. Otherwise all doors will be locked up automatically.

When using intelligent access and starting system, check whether the doors are unlocked before pulling the door handle.

#### Anti-theft System



To prevent the car from theft, under anti-theft status, if any door is opened the system will give out alarm sound.

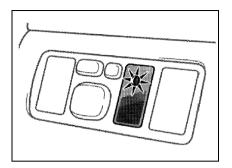
While the alarm system gives out sound, the turn signal lights will flash.

#### **System Settings**

- 1. Shut down the engine.
- 2. All passengers shall get off.
- 3. Lock up all doors.

When all doors are locked, the anti-theft indicator will remains on. The anti-theft system will be set up automatically after 10 seconds. The anti-theft indicator will flash after the system is set up.





4. Make sure the indicator is flashing before you leave the car.

If anyone in the car unlocks the door, the anti-theft system will be activated. So do not leave anybody in the car.

#### **Activate Anti-theft System**

The system will give out alarm sound in the following cases:

- Any door is unlocked when the intelligent key access function is not used.
- The power supply is turned on when the intelligent key starting function is not used.

#### **Disable Anti-theft System**

You can use the following means to disable anti-theft alarm:

- Unlock doors with remote control.
- Unlock doors with microswitch.

#### **Start Engine**

#### **Before Starting Engine**

- Check the environment around the car before getting in.
- Adjust seat position, seatback angle, seat cushion height, head protection device height, steering wheel angle and height.
- Adjust interior and exterior rear-view mirror.
- 4. Make sure all doors are closed.
- Fasten seat belts.

## How to Start Engine (a) Before Staring Engine

- 1. Apply parking brake firmly.
- 2. Shut down all unwanted lights and electrical devices.
- 3. AT: Shift gear shift lever to P or N gear.

MT: shift gear shift lever to Neutral gear.

4. Step brake pedal or clutch pedal to the bottom.

#### Note

- Each starting attempt shall be no more than 5 seconds, or it will cause overheating of engine or wires.
- ◆ Do not let cold engine run at high speed.
- Check the engine immediately if it has difficulty in starting or stalls frequently.

#### (b) Start Engine

#### **Button Starting Function**

When an intelligent key is in the car, press "ENGINE START STOP" switch to start engine.

Before starting, you shall follow instructions in "(a) Before Staring Engine".

#### **Normal Starting Steps**

The engine can be started only when an intelligent key is in the car.

When stepping on brake pedal or clutch pedal, indicator on the "ENGINE START STOP" switch will turn green. Press "ENGINE START STOP" switch slowly to start the engine.

#### If Engine Stops Working

Restart the engine in the normal starting procedure.

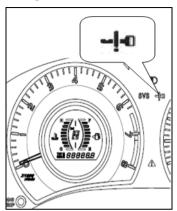
#### Note

When there is grease on your hands, do not touch "ENGINE START STOP" switch.

### **W**Warning

When "ENGINE START STOP" switch fails in operation, stop operating it immediately and contact BYD service station.

#### When Engine Cannot Start



The engine cannot start in the following cases:

- When press down "ENGINE START STOP" switch, if the key position indicator of the intelligent key system is on with the buzzer giving out warning tone and "Key is not detected" is displayed on the right information screen, it means the key is not in place.
- Even the intelligent key is in the car (for example, on floor, in cup holder, trunk or glove box), the engine cannot be started in these cases.

When pressing down "ENGINE START STOP" switch, if the starting function is not normal, the possible causes are:

- If the intelligent key does not function, the key position indicator of the intelligent key system on the combination instrument is on with "Key battery is low" displayed on the right information screen, the key battery may have depleted. Hold the key near "ENGINE START STOP' switch, the engine may start up. (For details, please refer to "Intelligent Access and Starting System" in this chapter.) Please replace intelligent key battery. (Please see "Replace Card-type Intelligent Key Battery" and "Replace Electronic Intelligent Key Battery" in this Chapter.)
- short period.

  Wait for 10 seconds before starting the engine again.

  If starting fails, orange indicator on the "ENGINE START STOP" switch flashes.

The engine is started repeatedly in

 If orange indicator on the "ENGINE START STOP" switch flashes, it means steering lock function may have fault. Please contact BYD service station to check the car and all keys.

In some cases, the intelligent access and keyless starting system cannot function normally due to environment factors. For details, please refer to "Intelligent Access and Starting System" in this chapter.

#### Drive and Parking with Intelligent Access and Starting System Tips on Using Intelligent Access and Starting System

With the Intelligent Access and Starting System, you can start the engine only when an intelligent key is available.

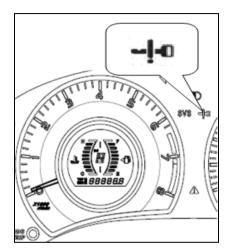
In some cases, the intelligent key may have been brought away by some passenger and thus the engine cannot be started. In addition, the driver may ignore that the power supply switch is not at OFF when leaving the car.

Before leaving and entering the car, the driver shall make sure the intelligent key is on the hand.

# Note Do not touch "ENGINE START STOP" switch in driving.



For emergency stall in driving, please press "ENGINE START STOP" switch for over 3 seconds.



Key Position Indicator of Intelligent Key System

#### **System Function Indicator**

If any of the following warning, please follow the instructions below:

(A) When pressing down "ENGINE START STOP" switch to connect the power, the instrument warning buzzer gives out a tone with "Key is not detected" displayed on the right information display.

It means the driver does not take the intelligent key when entering the car. Key position indicator of intelligent key system on the instrument panel will be on for 8 seconds with "Key is not detected" displayed on the right information screen. Make sure the intelligent key is in the car before operating "ENGINE START STOP" switch.

(B) When pressing down "ENGINE START STOP" switch to connect the power, the instrument warning buzzer gives out a tone with the indicator flashing and "Key battery is low" is displayed on the right information screen.

It means the intelligent key battery is low. Replace intelligent key battery in time to ensure that Intelligent Access and Starting System function normally.

(C) When pressing down "ENGINE START STOP" switch to connect the power, green "ENGINE START STOP" indicator flashes.

It means steering lock is locked up; to release it, pressing down "ENGINE START STOP" switch and shake the steering wheel slightly at the same time.



# Chapter 1 Section 3

## **Operation of Instruments and Controllers**

# Seat, Seatbelt, Steering wheel, Rear-view Mirror and Sunroof

Seats	2
Front Seats	
Seat Belts	
Airbag for Driver and Front Passenger	28
Steering Wheel	
Outer Rearview Mirrors	
nner Rearview Mirror	3
Power Sunroof (optional)	30



#### Seats

In driving, all passengers shall lean on seatbacks which has been adjusted to vertical position, and use seat belts correctly.

#### **Tips**

- The car shall not start until all passengers has been seated well. Do not sit on folded seatback, baggage or in trunk as in emergency braking or collisions, passengers who have not been seated straightly or have not buckled the seat belts may be seriously injured.
- In driving, do not let passengers stand up or move among seats; Otherwise, they may be seriously injured in emergency braking or collisions.

#### **Front Seats**

#### Notice on Seat Adjustment

Adjust the driver seat to include the pedals, the steering wheel and the instrument panel controller into the easy-control range of the driver.

#### Tips

- Do not adjust the seat in driving, as sudden movement of the seat may cause the car out of control.
- In seat adjustment, take care to avoid collision between the seat and passengers or baggage.
- After the seat adjustment, shake it to make sure it is locked up at its position.
- After seat adjustment, lean backward to make sure the seat back is locked up at its position.
- Do not place things under the seat; this may affect the seat lockup mechanism or push the seat adjustment rod randomly, which may cause movement of the seat and result in losing control of the car.
- In seat adjustment, do not put your hand under the seat or near moving parts; otherwise your hand or fingers may be injured.

#### **Adjustment of Front Seats**



1. Adjustment Rod for Seat Longitudinal Position

Hold the rod in the middle and pull it upwards. Move the seat frontward and backward to the desired position with pressure of your body and then release the rod.

2. Hand Wheel for Seat Height Adjustment

Rotate the hand wheel for seat height adjustment to adjust the seat to desired position. (Note: Economic model and Standard model does not have this mechanism.)

## 3. Adjustment Rod for Seat Back Angle

Lean forward and pull the rod upwards, then lean backward to the desired angle and release the rod.

4. Adjustment Button for Headrest Height

#### **Raise Headrest**

Move the headrest to desired height and then release it.

#### **Lower Headrest**

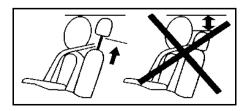
Press and hold the button to lower the headrest to desired position, and then release it.

#### **Remove Headrest**

Press and hold the button, lift up and remove the headrest.

#### **Reinstall Headrest**

Insert the link rod of headrest into the bush, keeping the groove facing forward. Press and hold the button, push down the headrest to desired position, and then release the button.



#### Tips

To reduce the dangerous possibility that the passenger slides down the buckle of seat belt in collision, do not make the seat back over slant. Seat belts can provide the maximum protection in front and rear collision accidents if the driver and passengers sit straight and lean on the seat backs. If the passenger is lean on seat back slantwise, the belt may slide along the hip and pose pressure to abdominal part. In front-collision accidents. over obliquity of the seat may increase the risk of human injuries.

#### **Seat Belts**

#### Notice on Seat Belt:

BYD strongly require that the driver and passenger in the vehicle wear seat belts at any time to reduce the possibility of injuries in accidents.

Seat belts equipped on the vehicle are designed for adults.

Children shall be seated in rear seats with seat belt applied properly. Statistics of accidents

shows that children seated in rear seats are better protected than children seated in front seats.

If a child has to be seated in the front seat, the seat belt shall be properly applied. In accidents, the quickly deployed seat belt may cause severe injury and even death to children if the seat belt is not fastened correctly.

In front seats or rear seats, children shall be prevented from standing up or kneeling down. In emergency braking or crashes, unprotected children may be seriously injured. Similarly, do not seat children on your legs as in this way they can not be sufficiently protected.

#### Tips

In driving, passengers shall be seated on the seats and fasten the seat belts correctly. Otherwise, in emergency braking or crashes, passengers in the car are more prone to be severely injured.



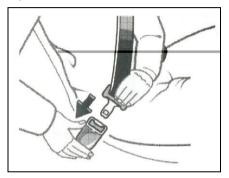
## Follow the instructions below when using seat belt:

- One seat belt shall be applied to one passenger only. It's not allowed that two or more passengers share one seat belt—even for children.
- Do not over slant the seat back. The seat belt provides the best protection when the seat back is in the upright position. (Refer to instructions on seat adjustment)
- Pay attention to not damaging the belt or other part of the seat belt. Prevent them from being caught in the seat or the door.
- Check the seat belt regularly to see whether it is cut, worn or loosen. Damaged parts shall be replaced with new ones. Do not disassemble or modify the system.
- Keep seat belt clean and dry. For cleaning, use neutral soap water or warm water. Bleaching agents, dyes or grinding cleaning agents are not suitable for seat belt cleaning they may severely reduce the protection performance of the seat belt. (See "Interior Cleaning" in the manual).
- After serious crashes, the seat belt system (including bolts) should be replaced, even if the damage is not obvious.

#### Tips

Seat belt is designed for adults, so it is not suitable for child. It is recommended that child be seated in rear seats.

#### 3-point Seat Belt



Adjust the seat according to your demand, and sit upright leaning on the seat back. To fasten seat belt, pull it out of the retractor and insert the tab into the buckle.

A clicking sound indicates well connection of the seat belt.

Length of seat belt can be automatically adjusted according to the passenger figure and the seat position.

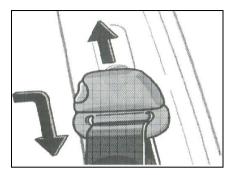
In emergency braking or crashes, the retractor will lock the seat belt. If the body inclines forward fast, it will also be locked. Slow and steady operation can drag out the seat belt so that you can feel free.

#### Tips

- After the tab is inserted, make sure it is locked up to the buckle firmly and the seat belt is not twisted
   Do not leave small objects, such as coins, paper clips, etc. in the buckle, as they may affect the proper connection of the tab and the buckle.
- If seat belt functions abnormally, immediately inform BYD service station. Before repaired, do not sit on the seat with damaged seat belt as it cannot protect passengers and may cause injuries.

If you cannot pull the seat belt out from the retractor, drag to tighten it and then release it. Then, you can pull it out from the retractor.

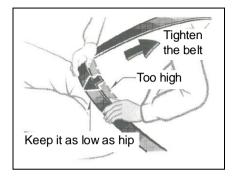
When shoulder safety belt for rear seat is extended fully, retract it slightly and it will be locked at that position prevented from extension. To release the shoulder safety belt once again, retract it completely and then pull it out again.



#### Tips

- Lap belt high above waist and loose safety belt may cause severe injury to the passenger in collision and other accidents when the passenger slip downward. Try to keep lap belt as low as hip.
- For safety, shoulder safety belt shall not be lower than the upper arm.

## Seat Belt with Height Regulating Device



Adjust the height regulating device to fit your body.

Raise: move up the height regulating device.

**Lower**: press down the regulating button of height regulating device, and slide the device downwards.

Make sure the device is locked in place after adjustment is finished.

## Adjust the position of lap belt and should safety belt.

Keep the lap belt as low as hip – it is not allowed to lock it around waist. Move up the shoulder belt through lock plate to adjust the belt to proper position.



To release belt, press the button on the buckle and the belt will retract automatically.

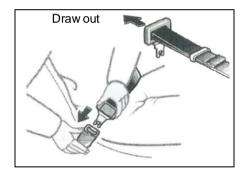
If the seat belt cannot smoothly retract automatically, pull it out to see whether there is any knot or twist. Make sure it is twisted when retracting.



#### Tips

Make sure shoulder safety belt at the middle of your shoulder. Keep the belt away from neck, but also prevent it from falling off the shoulder. Otherwise the belt's protection performance will be reduced in accidents, which may cause severe injury to passengers.

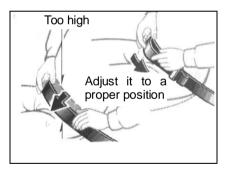
#### 2-point Seat Belt



Sit upright in seat and lean on the seat back. Fasten the seat belt and insert the tab into the buckle.

A clicking sound indicates well connection of the seat belt.

If the seat belt is not long enough, keep the tab perpendicular to the seat belt and pull the tab. Keep the safety belt as low as the hip.



Retract the excessive length of the seat belt and adjust its position.

To shorten the seat belt, pull the unfixed end. Keep the lap belt as low as hip – it is not allowed to lock it around waist, and then adjust its position.

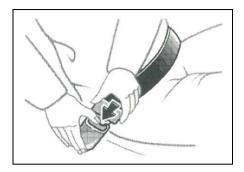
#### Zips

• Lap belt which is high above waist or loose may cause severe injury to the passenger in collision and other accidents when the passenger slip downward. Try to keep lap belt as low as hip.

#### Tips

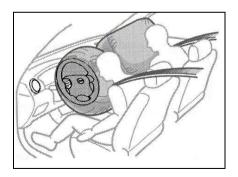
- After the tab is inserted, make sure it is locked up to the buckle firmly and the seat belt is not twisted
- Do not leave small objects, such as coins, paper clips, etc. in the buckle, as they may affect the proper connection of the tab and the buckle.
- If seat belt functions abnormally, immediately inform BYD service station. Before repaired, do not sit on the seat with damaged seat belt as it cannot protect passengers and may cause injuries.





To release belt, press the release button on the buckle.

# Airbags for Driver and Front Passenger

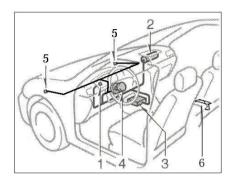


As a supplemental restraint system (SRS), airbag system is a supplement to seat belts. It can provide extra protection for heads and chests of the driver and passenger and reduce casualties in severe frontal crashes

The airbag system cannot take the place of seat belts and is only a part of the whole passive safety protection system of the car. Note that the airbag system has the best protection performance only when working together with fastened seat belts. For the safety of yourself and your family, please pay special attention to the "Tips" and "Notice" in this section.

- Please keep the seat belt fastened in driving.
- Please keep sitting in correct posture so that the protection effect of the seat belt and airbag system can be taken into full play.
- Children shall be seated in rear seats.
- Do not dismount parts of the airbag without permission.

#### **System Components**



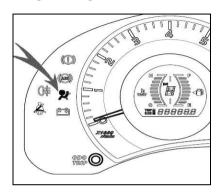
SRS airbag consists of the following components and their positions are shown in the figure below:

- 1. SRS warning light
- 2. Front passenger airbag assembly (airbag and air charging system)
- 3. Airbag electronic control unit (ECU)
- 4. Driver's airbag assembly (airbag and air charging system)
- 5. Impact sensor
- 6. Safety belt warning sensor (optional)

Airbag ECU consists of a safety sensor and an airbag sensor.



#### **Airbag Warning Indicator**



Airbag system is monitored by ECU and integrates self-diagnosis function. Its status is indicated by warning indicator on instrument panel.

- Airbag warning light will be on for 5 seconds after turning on ignition switch, then it will goes out and remains for over 5 seconds, which indicates that the system is normal.
- If the airbag is disabled by BYD service station, the warning indicator still functions as described in the above procedure, but it does not provides protection any more.

This warning indicator is intended to monitor airbag ECU, impact sensor, air charging device, warning light, connecting wire and power supply. (For details, please refer to "Maintenance of Indicators and Warning Buzzer" in Section 1-5))

#### Note

If any of the following conditions, airbag system may have trouble:

- The indicator is not on after turning on the ignition switch.
- 5s after the ignition switch is turned on, the warning light won't go out or, after going out, flashes and turns on again.
- The indicator is on after turning off the ignition switch.
- The indicator turns on or flashes in driving.

#### Tips

If any trouble with airbag system, please send the car to BYD service station for check and repair. Or in case of an accident, the airbag system can not provide protection as designed.

## Indicator for Unfastened Front Passenger Seat Belt (optional)



If BYD G3 comes with a seat belt warning sensor, on the 1# switch group of central control panel on the console, you will see an indicator for unfastened front passenger seat belt. It works together with the seat belt, when the front passenger seat is occupied with the seat belt unfastened, this indicator will turn on with warning tone for reminding. When the front seat belt is fastened, this indicator turns off. This indicator shall be off when the front passenger seat is not occupied. If any difference from the above description. there is abnormality with the airbag system.



#### **Airbag Triggering Conditions**

The airbag is designed to be triggered under the following conditions: severe frontal collision accidents and some special collision accidents.

In case of minor front collision, side collision, rear collision or roll-over, generally airbag system won't be triggered. In such accidents, the seat belt, if fastened, can protect the driver and passenger in the normal way.

The decisive factor for triggering the airbag system is the result of judgment through comprehensive intelligent comparison of the deceleration curve, which is produced in a collision and acquired by the electronic control unit (ECU), with the set value. If the signals, such as deceleration, produced and detected in the collision is lower than the set reference value in the ECU, the airbag won't be triggered even though the car may have been severely deformed in the accident.

ECU setting of BYD airbag system has taken various common misuse and domestic road conditions into full consideration. However, as causes and conditions of crashes are widely variable, for the sake of your safety, please strictly abide by this manual to use the car correctly and avoid misuse; otherwise, the expected protection effect of the airbag cannot be ensured.

#### **Protection Principle of Airbag**

Once the airbag system is triggered, air will be immediately inflated into the airbag and make it expand rapidly in front of the driver and the passenger. The occupants will fall into the expanded airbag and the forward inertia is reduced, thereby reducing the severity of injury to their heads, necks and chests.

The specially designed airbag can, after expansion, absorb energy when pressed by the body of the driver and the passenger in an accident, and discharge the air out at a certain rate so as to reduce the force applied by the airbag on the occupants, further relieving injuries to them. After accident, the airbag is deflated as air in the bag is discharged, so the front view of the driver is not affected.

The airbag can be expanded within a few fractions of a second so as to provide extra protection for the driver and the passenger in accidents.

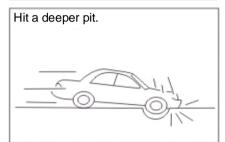
Airbag expansion can produce a rather loud noise but, in general, won't cause injuries (the possibility of ear ringing or temporary deafness exists, but these problems can recover soon). The gas produced in deployment of the airbag may have some smell but won't lead to occupant poisoning. Normally a little smoke will be emitted after the airbag is deployed. This is not indication of a fire, so please do not worry about it.

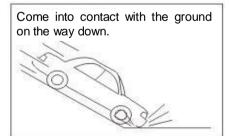


## **Conditions to Trigger Airbag**

Hit bulges on the side of the road, safety strips or stones on the street.

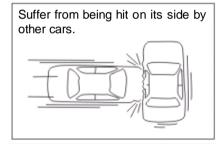


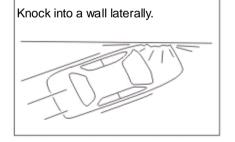


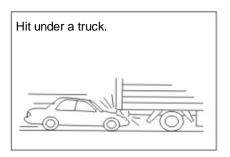


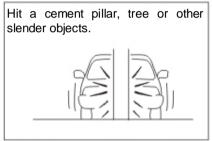
- In case of the conditions described in the figures above, SRS airbag may be deployed.
- If the car is subject to severe impact from the bottom, SRS airbag may be deployed.

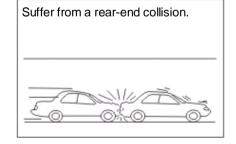
Conditions That Cannot Trigger Airbag



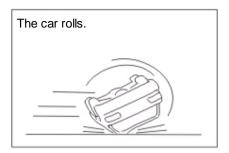












• In case of the conditions described in the figures above, SRS airbag may not be deployed.

#### Note

- The airbag is designed to match certain vehicle models, any variation in suspension, tire size, bumper, chassis and other original equipments may adversely affect the function of the airbag. In addition, it is strictly prohibited to apply any airbag parts to other vehicle models; otherwise it might lead to airbag system failure, resulting in personal injuries.
- In driving, please wear the seat belt properly and maintain a correct sitting posture. In driving, if you do not wear the seat belt and lean forward or sit in an incorrect posture,

airbag deployment may increase the risk of injuries in accidents.

- It's very important for the driver to maintain a distance of at least 25cm between the chest and the steering wheel, which allows maximum protection when the airbag system is triggered. That is to say, it's necessary to adjust the front seats and the headrest according to the figure of each occupant; in addition, the driver's arms shall only bend slightly, stretching nearly straight.
- Do not paste or cover the surface of the steering wheel lid or the surface near the airbag on the right of the instrument panel with any objects; and do not make any other decorative treatment at such places. There two places shall be cleaned only with dry or slightly wetted cloth, and it is prohibited to knocked at such places violently.
- It is prohibited to let child sit in the front seat without protection. If a collision triggers the air bag, the child passenger may get seriously injured or even killed.
- Don't leave any person, animal or object between the driver/front seat passenger and the air bag deployment range. It is extremely dangerous for an adult to hold a child

on the lap.

- Any accessories, such as phone holder, cup holder and ashtray, shall not be installed on airbag decoration lid or within airbag deployment range. Otherwise in airbag deployment there may be increased risk of personal injury.
- Don't make any modification to any part of the airbag system, including labels.
- All operation to the airbag, including removal of airbag required for repairing other parts (such as detachment of the steering wheel), can only be made by BYD authorized service stations.
- The airbag system must be replaced in a BYD authorized service station within 15 years as of the date of delivery (manufacture date indicated in the quality certificate and Repair Manual). If the airbag is replaced before that date, it shall be recorded in the Repair Manual.
- The airbag can only provide protection in one accident. Once the air bag is triggered or damaged, the system must be replaced.
- Please hand over all material supplied with the car to the next owner when transferring the car.

Please note that if the airbag is



disabled, the material shall be handed over to the next owner as well.

- When disposing the car or the airbag system parts, please comply with applicable safety regulations and disposal procedures. BYD service stations have a good knowledge of these regulations and the detailed disposal procedure is also available on Repair Manual.
- The air bag system has strong resistance capacity against the surrounding electromagnetic interference. However, to avoid accidents, please do not use the vehicle beyond the electromagnetic environment specified by national laws.
- The airbag system of BYD G3 has taken various misuses and road conditions into full consideration. However, avoid serious impact at the bottom of the car and do not drive toughly in poor road conditions in order to prevent accidents.

## **Disable Airbag**

According to applicable regulations, airbags for the driver and the front passenger can only be disabled in the cases below:

- When it is impossible to keep a 25cm distance between the center of the steering wheel and the chest of the driver even though the driver seat is adjusted properly.
- When special equipment needs to be installed for the disabled within the range of the steering wheel.
- When adjustment of the front seat is required for specific reasons, the seat cannot be kept within the scope set by the manufacturer.

Disabling of the airbag system shall be conducted by a BYD authorized service station. After a certain airbag is disabled, the BYD authorized service station will paste a label on the corresponding position and make a record in *Repair Manual*.

## Tips

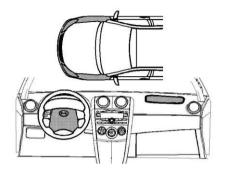
If the air bag system needs to be disabled on special occasions, please have it done in a BYD authorized service station. Otherwise, it may cause serious injuries or death!

After disabling the airbag, please recover the airbag protection function in a BYD authorized service station as soon as possible,



## **Supplemental Information**

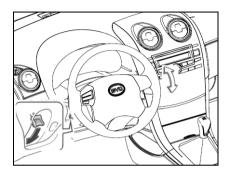
- Please read this manual thoroughly. If you want to sell or dismantle the car, please notify the owner or the demolition unit that the car is equipped with airbag system, and recommend them to read the manual carefully.
- After the airbag system is deployed, please don't touch any part of the airbag module to avoid burning, and ask a BYD authorized service station to remove it. Once the air bag system has deployed, please install a new airbag system as soon as possible.
- The airbag system only functions in case of serious frontal collisions. It doesn't mean that the airbag system has problems when it doesn't respond to the collision, but improper maintenance or failure to repair faulty parts may affect the normal performance of the airbag system.



If any of the following cases, please contact BYD service station:

- SRS Airbag is inflated.
- There is collision at the front part of the car (dashed part in the figure above) which is not severe enough to trigger the deployment of the airbag.
- Cushion of steering wheel or cover of front passenger airbag (dashed part in the figure above) is scratched, cracked or has other damage.

## **Steering Wheel**



To change angle of steering wheel, hold the steering wheel and press down the steering wheel adjusting handle, then adjust the steel wheel to desired angle and finally release the handle.

## ZaiT

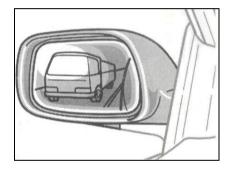
- Do not adjust steering wheel in driving. It may cause wrong operation of the car and result in an accident.
- After adjustment, shake the steering wheel to make sure it is locked firmly.



# Steering Wheel Main Switch (optional)

Under Radio mode, press "  $\wedge$  " and "  $\vee$  " on the main switch of the steering wheel to search for radio channel; press "MUTE" button for mute mode.

### **Outer Rearview Mirrors**

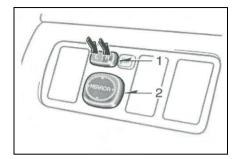


Adjust the outer rearview mirrors to an angle where you can just see side view of the car.

## Tips

 Do not adjust rear-view mirror in driving. It may cause wrong operation of the car and result in an accident.

## **Outer Rear-view Mirror Controller**



# Adjust the rear-view mirror with this switch.

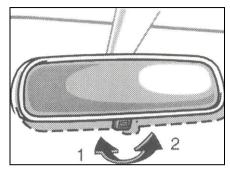
- Selection switch it is used to select which rear-view mirror shall be adjusted. Press the switch to select L (left) or R (right).
- 2. Control switch it is used to adjust the rear-view mirror.

Press switch as per your demand. When ignition switch is at "ACC" or "ON", you can adjust the mirror.

## Note

If the rear-view mirror is frozen, do not manipulate the controller or scrape the surface of the rearview mirror. Use a spraying deicer to remove the ice on the surface of the rearview mirror.

### Inner Rearview Mirror



# Adjust the inner rearview mirror to an angle where you can just see the rear of the vehicle in it.

In night driving, you can adjust the adjusting rod toward yourself to weaken the dazzle caused by headlights of the following vehicle.

Daytime driving——the rod is in position 1.

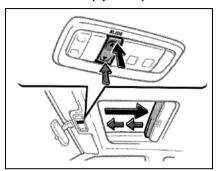
At this position, reflection in the rearview mirror has good clarity.

Night driving——the rod is in position 2. Note that the rearview clarity may be reduced by some extent to weaken glare at night.

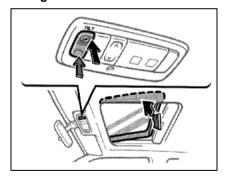
Inner rearview mirror has direction indication function (optional), which will activated when:

Ignition switch is on ACC/ON position.

## **Power Sunroof (optional)**



## Sliding



**Tilting** 

Use the switch beside the front interior light to operate the sunroof.

The ignition switch shall be on "ON". The guard plate of sunroof can be opened/closed manually.

## Slidina

Open" press "SLIDE" side of the switch. The sunroof guard plate will open together with the roof.

Close: press the opposite side of "SLIDE" of the switch.

As preventive measure, the roof will stop at semi-close position before closing completely. So you shall press the switch for a second time after releasing it to close the roof completely.

## **Tilting**

Tilt upwards: press "UP" side of the switch.

Tilt downwards: press the opposite side of "UP" of the switch.

You can stop the power sunroof at any desired position. The roof will move when you press down the switch and stop when you release the switch.

## Tips

- In driving, any part of the body, such as head, hand, shall be kept away from sunroof when it is open.
   Otherwise, severe injury may be caused in emergency braking or accident.
- Before closing the sunroof, make sure that no part of the body, such as head, neck and hand, will be trapped, or it may cause severe injury.
- When the intelligent key is left in the car, do not let any passenger (especially child) stay in alone. Otherwise he/she may be trapped by sunroof when operating it. Unattended passenger (especially child) is exposed to severe danger under this condition.



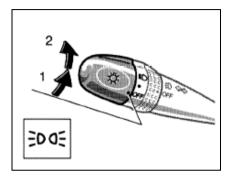
# Chapter 1 Section 4

## **Operation of Instruments and Controllers**

## **Lighting, Wiper, Defroster and Others**

Headlight and Turn Signal Lights	38
High Mount Brake Light	40
Emergency Light	40
Front Fog Light (optional)	
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# Headlight and Turn Signal Lights (When auto light control is not available)



## Headlight

# Turn on the following lights: rotate headlight/ turn signal light knob.

Position 1 – width-indicator lights, number plate light and combination instrument background light, etc.

The green indicator on the combination instrument indicates that the width-indicator lights are turned on.

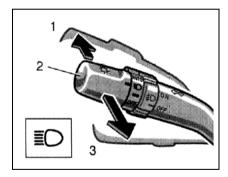
Position 2 – headlight and all above mentioned lights.

## **Buzzer Light Indicator**

If you open driver's door when the width-indicator lights are turned on, the buzzer will give warning reminding you to turn off the lights.

## Note

To prevent the battery from over discharge, when the engine is not running, do not keep lights on for long time.



**High/Low Beam** – rotate the light adjustment knob to headlight gear, to use low beam, push the rod to position 2; to use high beam, turn on the headlight and push the rod downwards (position 3) to the side away from the steering

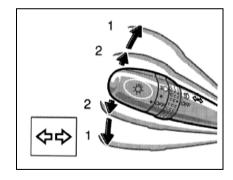
wheel.

The blue indicator for high beam headlight on the combination instrument indicates that the headlights are turned on.

**Headlight High Beam Flashing (position 1)** — push the rod upwards (position 1), when releasing the rod, the high beam flashing will be turned off.

The blue indicator on the combination instrument indicates that the high beam headlights are turned on.

Turning the knob to "OFF" can also make the high beam headlights flash.





## **Turn Signal Lights**

# To give out turn signal, push the light handle forward/backward to position 1.

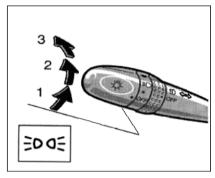
The ignition switch shall be on "ON".

After the vehicle has finished turning, the handle will reset to its original position automatically; but in lane changes, you must reset it manually.

To give out lane change signal, push the handle upwards/downwards to position 2 and hold there.

If the green turn signal indicator on the combination instrument flashes at a higher speed than normal, it means front or rear turn signal bulb is burnt out.

# Headlight and Turn Signal Lights (if auto light control system is available)



## Headlight

# Turn on the following lights: rotate light adjustment knob.

Position 1 – width-indicator lights, number plate light and combination instrument background light, etc.

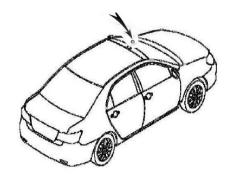
The green indicator on the combination instrument indicates that the width-indicator lights are turned on.

Position 2 – headlight and all above mentioned lights.

Position 3 ("Auto") – headlight and/or all light (same with position 2)

These lights will turn on/off according to environment brightness automatically.

If you need to turn on lights when entering dark places, such as tunnel, garage, rotate the light adjustment knob to position 2 to turn on headlight.



Illumination intensity sensor is located on the top of driver's instrument panel.

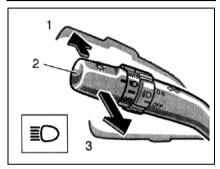
Do not leave any objects within this area or stick any object on the windshield around this area to avoid shutting light from the sensor.

If you open driver's door when ignition switch is on "ACC", "LOCK" or removed and when headlight switch is turned on, the headlights will go out automatically. To turn on the light again, turn the ignition switch to "ON" and turn on the headlight switch. If the car will be parked for over one week, make sure headlight switch is turned off.



### Note

To prevent the battery from over discharge, when the engine is not running, do not keep lights on for long time.

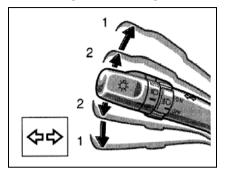


High/low beam – to use high beam, turn on the headlight and push the handle outwards (position 1). To use low beam, push the handle to yourself (position 2).

The blue indicator for high beam headlight on the combination instrument indicates that the headlights are turned on.

High Beam Headlight Flashing (position 3) – push the handle backwards fully. When release the handle, the headlight will be turned off.

Turning the knob to "OFF" can also make the high beam headlights flash.



## **Turn Signal Lights**

To give out turn signal, push the headlight/turn signal light handle upwards/downwards to position 1.

The ignition switch shall be on "ON". After the vehicle has finished turning, the handle will reset to its original position automatically; but in lane changes, you must reset it manually.

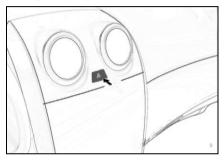
To give out lane change signal, push the handle upwards/downwards to position 2 and hold there.

IF the green turn signal indicator on the combination instrument flashes at a higher speed than normal, it means front or rear turn signal bulb is burnt out.

## **High Mount Brake Light**

When you step on brake pedal, the light will be turned on together with the rear brake light, giving warning that the car is in braking to prevent accidents.

## **Emergency Light**



## To turn on emergency light, press down this switch.

All turn signal lights will turn on and flash. To turn the lights off, just press this switch.

When you had to park the car at a place where parking may cause an accident, you shall turn on the emergency lights to give warning to other drivers.

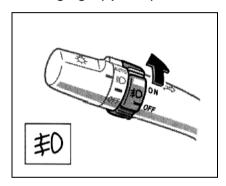
Try to park the car far away from road. When emergency lights are turned on, switch for turn signal lights do no function.



#### Note

To prevent the battery from over discharge, when the engine is not running, do not leave the switch at ON position on for long time.

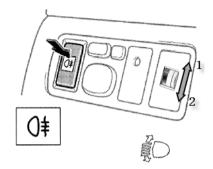
## Front Fog Light (optional)



To turn on the front fog lights, rotate the ring knob around the headlight/turn signal light switch handle. When width-indicators lights are turned on, the front fog lights will also be turned on.

The front fog light indicator on the combination instrument indicates that the front fog light is turned on.

# Rear Fog Light and Headlight Adjustment



To turn on rear fog lights, press down this switch. Rear fog light will be turned on in the following cases:

When front fog lights are turned on – when headlight or width indicator lights are turned on, the rear fog lights will be turned on.

When front fog light switch is turned off — when the headlights are turned on, the rear fog lights will be turned on. When rear fog lights are turned on, the rear fog light switch on the instrument

panel will give out light.

When headlights are turned off, even if you turn on the headlight switch again, the rear fog lights won't be turned on.

When all other lights are turned off, rear fog lights will go out automatically. To turn on the rear go lights, press the switch again under the condition mentioned above.

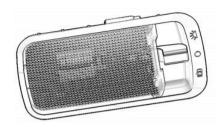
Headlight beam direction adjustment knob can be used to adjust the beam direction according to the actual load state of the car.

5 positions are available on the adjustment knob.

Passenger and	Cargo Load	Knob
in the Car		Position
Passengers	Trunk load	
Driver	N/A	0
Driver + front	N/A	0
passenger		
All seats are	N/A	0.5
occupied		
All seats are	Max. trunk	2
occupied	load	
Driver	Max. trunk	3
	load	



## **Rear Interior Light**



Slide the switch when you need to turn on rear interior light.

The following positions are available on the rear interior light switch:

Always on

O - Off

Turn on the light when any door is open. When all doors are closed, this light will go out.

## **Lighting Access System**

When the switch is at "DOOR" position, the light will be turned on if any door is opened. When all doors are closed, the light will remain on for some 30 seconds before going out.

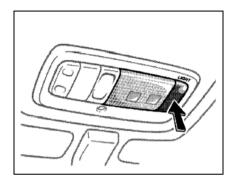
But in the following cases the light will go out immediately:

- When ignition switch is at "ON" and all doors are closed.
- Using wireless remote control to close and lock all doors.

When all doors are unlocked with wireless remote control, rear interior light and ignition switch indicator light will remain on for some 30 seconds before going out.

To enable/disable this function, please refer to section 1-2 "Settings of Optional Functions".

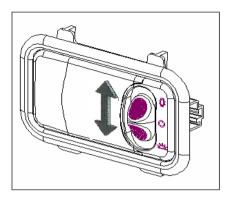
# Front Interior Light(With sunroof control switch)



To turn on front interior light, press the switch. To turn off front interior light, press the switch again.

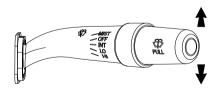


# Front Interior Light(Without sunroof control switch)



• Functional positions of front reading light switch is shown in the figure above.

## Front Windshield Wiper and Washer



This switch is used to control the operation of front windshield wiper and washer, with 5 functional positions:

MIST: Mist mode

OFF: turn off the wipers and washers INT: intermittent operation

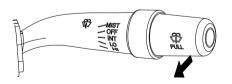
Low: continuous operation at low speed

HI: continuous operation at high speed To select a functional position, just push the control handle upwards/downwards.

At LO and HI mode, the wiper will wipe continuously.

To set the wiper to MIST mode, push the control handle upwards from OFF position. The wiper will wipe at high speed until you release the control handle. In this way the windshield can be cleaned quickly.

At INT mode, the wiper will wipe once each 3-4 seconds, which is suitable for lightly rainy days.



To spray cleanser, push the control handle to yourself. The cleaner will spray cleanser with the wiper wiping. When releasing the switch, the cleaner stops spraying cleanser and the wipers stop after several cycles.

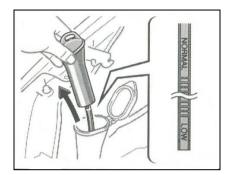
In freezing weather, before using cleaner you shall warm up the windshield with defroster, which can prevent the cleanser from freezing on windshield and affecting the front view.

## Note

When the windshield is dry, do not use wiper or the glass may be scratched.

## [Add Cleanser]

If the cleaner does not function, the cleanser tank may be empty. Please check the cleanser level. If the cleanser level is below "LOW" mark, you shall refill the cleanser.



Remove the fill cap of cleanser tank, and check the cleanser level on the fluid level gauge If the level is near "LOW" mark, please add cleanser until it reaches "HI" mark on the fluid level gauge.

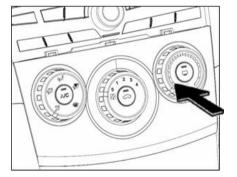
The cleanser added shall be windshield glass cleanser, if it is not available you can use clean water as substitute. But in cold region you shall use windshield glass cleanser with anti-freezing agent It is available in BYD service stations and most auto part stores. For mixing ratio of water and anti-freezing agent, please refer to manufacturer's instructions.

#### Note

Please adjust the concentration of the cleanser according to the external temperature. With improper concentration, the cleanser may freeze on the windshield and affect the driver's view, and the cleanser in the tank may also freeze.

Do not use engine cooling fluid as cleanser, which may cause damage to the paint of the car.

### **Rear Windshield Defroster**



# To remove fog or frost on the rear windshield, please press this switch.

The ignition switch shall be on "ON".

The slim heating wire at the internal side of the rear windshield will make the glass clear quickly. The indicator will be turned on, indicating that the defroster is in working.

Press the switch again and the defroster will be turned off.

When an auto AC controller is installed, the system will be turned off automatically after the defroster operates for some 15 minutes.

After the rear windshield becomes clear, make sure to turn off the defroster. Leaving defroster operating for a long time will cause discharge of battery, especially when the car is stopped frequently. Defroster is not intended to remove rain and snow.

### Note

- When manual AC controller is installed: to prevent battery discharge, turn off the defroster switch when stopping the engine.
- When clean the internal side of the rear window, pay attention to not scratching or damaging heating wire or its connector.



# Chapter 1 Section 5

## **Operation of Instruments and Controllers**

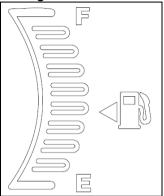
## **Instruments and Maintenance Indicators**

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Maintenance of Indicator Lights & Warning Buzzer	48
Right Information Display	



## **Left Information Display**

• Fuel Gauge



When power supply is at ON, this gauge indicates remaining fuel amount in the fuel tank.

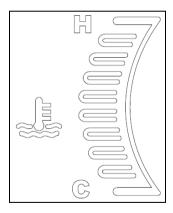
Almost Full – all eight grids are lighted. Almost Empty – the last grid is flashing. Generally the fuel shall be more than 1/4 full.

In braking, accelerating and turning, the indicator may flash quickly, which is caused by shaking fuel in the tank.

When the fuel level is near to "E" mark with the information screen displaying "Please refill fuel", you shall add fuel as soon as possible.

On slope road or in turning, the shaking fuel in the tank may cause the fuel indicator flashing or "Please refill fuel" displayed on information screen before the normal refilling time.

 Engine Cooling Fluid Temperature Gauge



When power supply is at ON, this gauge indicates the temperature of engine cooling fluid. The engine temperature varies with climate and engine load.

If the main warning light is on with "Cooling Fluid Overheated" displayed on the right information screen, it means the engine cooling fluid is overheated. When the engine is overheated, you shall stop the car to cool down the engine.

The engine may get overheated in the following cases:

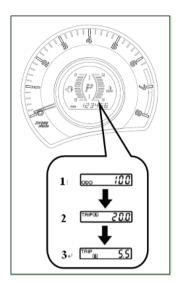
- Driving uphill in hot days;
- When the car is stopped frequently in driving, the AC device is turned on with the engine running in idle state for a long time
- When the care is used to tow a trailer.

### Note

- ◆ Do not remove the thermostat in the engine cooling system, otherwise the engine may run abnormally.
- When the engine is overheated, do not continue driving.



## Odometer and Dual Short Mileage Odometer

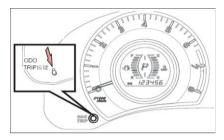


## This screen displays the following information.

- 1. Odometer displays the total travel mileage of the car.
- 2. Dual Short Mileage Odometer display the travel mileage after the two short mileage odometers are reset to zero respectively.

You can use one to calculate remaining fuel amount (TRIP A) and use another to record the mileage of each trip (TRIPB).

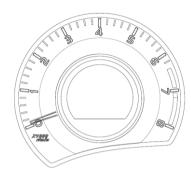
3. Trip/Reset button (ODO TRIP button on the left) – reset the dual short mileage odometers and change the display mode.



To change the display mode, press down and then quickly release the ODO TRIP button. Pressing the button repeatedly, the odometer will display the following information in cycle: Total Mileage (ODO) – Short Mileage Odometer (TRIPA) – Short Mileage Odometer (TRIP B) - Total Mileage (ODO).

To reset a short mileage odometer, switch the information displayed on the screen to the reading of it firstly, then press TRIP button for over 2 seconds and release the button after it is reset to zero.

## **Tachometer**



Tachometer displays the engine speed in rpm (round per minute) by multiply the reading by 1000. Make gear shift according to the tachometer reading can prevent engine from over speed running.

Driving at over high engine speed will lead to excessive wear of the engine and higher fuel consumption.

## Note

Do not allow the pointer to enter read area, which means the engine may severely damaged.



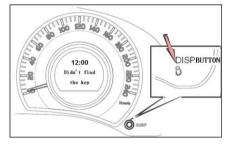
## Maintenance of Indicator Lights & Warning Buzzer

	ring, if any indicator light is on or on is displayed on the right screen	Solution
	buzzer gives out warning tone	Coldion
(a)		Parking brake indicator Possible cause: low braking fluid level, braking system failure, parking brake is not released. Stop driving and contact BYD service station immediately.
(b)		Indicator for unfastened seat belt. Wear driver's seat belt.
(c)		Indicator for charging system fault. Stop driving and contact BYD service station immediately.
(d)		Warning indicator for low engine oil pressure. Stop driving and contact BYD service station immediately.
(e)		Indicator for engine fault Send the car to BYD service station for a check.
(f)	ක්දිය	Smart key, key position indicator
(g)	(ABG)	Indicator for ABS fault Send the car to BYD service station for a check. If the parking brake indicator is also on, stop driving and contact BYD service station immediately.
(h)	SVS	Service Indicator Send the car to BYD service station for a check.
(i)		Indicator for opened door. Check and make sure all doors are closed.
(j)	26	Indicator for airbag fault Send the car to BYD service station for a check.
(k)	<u> </u>	Main warning indicator Pay attention to information displayed on the right screen.



## **Right Information Display**

Information switch button (DISP button on the right) – used to switch between and set up information.



## **Time Adjustment**

Clock setting is realized through combination of DISP button on the right and ODO TRIP button on the left of the combination instrument.

- ① Switch to clock interface through DISP button, and press ODO TRIP button on the combination instrument to enter clock setting interface, and the hour value on the screen begins flashing. At this time, press DISP button once to increase the hour value by 1; press and hold the button the value will be displayed from 00 to 23 in cycle.
- ② Press ODO TRIP button again, the hour value stop flashing and the minute value begins flashing. At this time press DISP button once to increase the minute value by 1; press and hold the button the value will be displayed from 00 to 59 in cycle.
- ③ Press ODO TRIP button again, the minute value stop flashing and the single digit and tens digit of year value begins flashing. At this time press DISP button once to increase the minute value by 1; press and hold the button the value will be displayed from 09 to 49 in cycle.

- ④ The order of value adjustment is hour value- minute value – tens digit and single digit of year value – month valueday value – hour value.
- When finishing adjustment of day value, long press ODO TRIP button for 2 seconds to exit clock setting and the interface will shift to clock interface automatically; press ODO TRIP button again to go to step 1.
- ® During operation, if you long press ODO TRIP button for 2 seconds, the interface will switch to clock interface automatically.

During setting, if you stop operation before adjustment is finished, the clock setting will be regarded as completed and the current time value will be accepted after 10 seconds.



 Driving Information Display
 Press TRIP button to switch driving information, and available items and
 display order are shown in the table below:

Display item	Description
Clock	When the power supply is at ON, the clock will always be displayed.
Date	When the power supply is at ON, the date will be displayed by default.
Fuel consumption	The total fuel consumption since the last resetting, press "DISP" button for 2 seconds to reset this item.
Average fuel consumption	The average fuel consumption / 100 km since the last resetting; press "DISP" button for 2 seconds to reset this item.
Instant fuel consumption	Instant fuel consumption amount.
Oil mileage	The expected travel mileage of the remaining fuel, which is calculated by a combination of average fuel consumption and instant fuel consumption. The actual mileage may be different from this value.
Average speed	The average vehicle speed since the last resetting; press "DISP" button for 2 seconds to reset this item.
Clock setting	Clock and date adjustment is in increment cycle mode.
Driving time	The time after engine starting or the last resetting; press "DISP" button for 2 seconds to reset this item.



## Prompt Information Display

Display description or buzzer tone	Description
Key is not detected	If key is not detected, this information will be displayed after pressing starting switch.
Low key battery This information prompts key battery is running low. Please change batte	
Parking braking is not released.	When vehicle speed is over 5km/h and the parking braking is not released, this
	information will be displayed with buzzer warning.
Please refill fuel	When remaining fuel is low, this information will be displayed with buzzer warning.

## • Fault Information Display

Display description or buzzer tone	Description
Cooling fluid temperature is over high	This information will be displayed when the cooling fluid temperature is over high. Stop the car immediately and contact BYD service station.
Low engine oil pressure	The engine oil is not sufficient. Stop driving and contact BYD service station immediately.
Check charging system	This information indicates that there is fault with charging system. Stop the car immediately and contact BYD service station.
Check brake system	This information indicates that brake fluid level is low or there is fault with braking system. Stop the car immediately and contact BYD service station.
Check ABS system	This information will be displayed when there is fault with ABS or braking system. Contact BYD service station for a check immediately.



## (a) Braking System Warning Light

When ignition switch is at ON, the indicator will be on in the following cases:

• When Braking Fluid Level is low...

Tips	
When braking fluid level is lo	w,
continued driving is dangerous	<b>.</b>

The car shall be checked by BYD service station in the following cases.

- When ignition switch is at ON, the light is not on even when the parking brake is applied.
- When the parking brake is released, even if ignition switch is turned on, the light is not on.

During operation if the light is on temporally it does not mean that there is fault.

## Tips

If any of the following cases, park the car in a safe place and contact BYD service station immediately.

- When engine is running, even if the parking brake is released, the light remains on.
- In this case the brake may be abnormal, which means the brake stopping distance is longer. Step on the brake pedal forcibly for emergency cut-off.
- Braking system warning light is still on when ABS warning light is on.

In this case, the anti-lock brake system does not function and the car will be extremely unstable.

## (b) Seat Belt Indicator

The light will remind the driver to fasten seat belt.

When ignition switch is at ON or START, if the driver's seat belt is not fastened, this indicator will be turned on. The seat belt will remains on until the driver's seat belt is fastened.

## (c) Discharging Warning Indicator

This light remind you that the battery in discharging state.

If this indicator is on during driving, there may be fault in charging system.

The engine can start up normally until the battery is depleted. Turn off all electrical appliances, such as AC, fan and radio, and drive the car to the nearest BYD service station for repair.



## (d) Low Engine Oil Warning Indicator

This indicator warns you that engine oil pressure is low.

In driving, if this indicator flashes or remains on, stop your car away from the road and stop the engine immediately. Contact BYD service station for help.

When the engine is in idle running, this indicator will flash occasionally or turns on after emergency braking. In this case, if the indicator goes out in acceleration, it means this system is normal.

When the engine oil level is low, this light will also be turned on. This light is not intended to indicate engine oil level. Engine oil level shall be checked by dipstick.

## Note

Do not continue driving when the warning light is on – even a short distance may damage the engine.

## (e) Engine Fault Indicator

This indicator will be turned on when there is fault with engine EFI system. When the light is turned on, please contact BYD service station for repair/check as soon as possible.

## (F) Low Fuel Level Warning Indicator

This indicator will turn on when the fuel in the tank is running low. You shall refill the tank as soon as possible.

On slope or in turning, the shaking fuel in the tank may cause the indicator to be turned on earlier.

## (g) ABS Warning Indicator

When ignition switch is at ON, this light will be turned on. If the anti-lock brake system is normal, the light will be turned off after several seconds. Later if the system gets it trouble, this light will turn on again.

When ABS warning light is turned on and braking system warning indicator is turned off, anti-lock braking system is disabled but the braking system still functions normally.

In this case the wheels may be locked in braking in emergency braking and on slippery road.

If any of the following cases, parts monitored by the indicator system may have problem, and please contact BYD service station as soon as possible.

- When ignition switch is at ON, this light never turns on or is always on.
- This light is turned on in driving.

  During operation if the light is on temporally it does not mean that there is fault.

## Tips

When braking system warning indicator is on, if ABS warning indicator is still on, please park the car at a safe place and contact BYD service station immediately. In this case, the anti-lock brake system does not function and the car will be extremely unstable.

## (h) Door Open Warning Indicator

This light will remains on until all doors are closed.



## (i) SRS Warning Light

When ignition switch is at ON, this light will be turned on. And it will be turned off after some 5 seconds. It means the airbag system functions normally.

This warning indicator is intended to monitor airbag ECU, impact sensor, air charging device, warning light, connecting wire and power supply.

If any of the following cases, it means there is fault with parts monitored by warning indicator system. Please contact BYD service station for a check as soon as possible.

- When ignition switch is at ON, this light never turns on or is always on.
- This light is turned on or flashes in driving.

## (j) Buzzer Light Indicator

When width-indicator lights or headlights are turned on, if you open driver's door, the buzzer will give out warning tone.

## **Check Maintenance Indicators**

- 1. Apply parking brake.
- 2. Open a door.

Door open indicator shall be turned on.

3. Close the door.

Door open indicator shall be turned off.

4. Turn ignition switch to ON, but do not start the engine.

All maintenance indicators shall be turned on except door open indicator. ABS indicator shall be turned off after several seconds. SRS indicator shall be turned off after some 6 seconds.

If any maintenance indicator or buzzer does not function as per the procedure above, please have the car checked in BYD service station as soon as possible.

#### Note

In driving, if the red warning indicator (such as indicator for discharging, braking, engine oil, water temperature) on the instrument panel is turned on, vou shall stop the car immediately and check for fault as per instructions in this manual. If necessary, please call for help for BUD service station.



# Chapter 1 Section 6

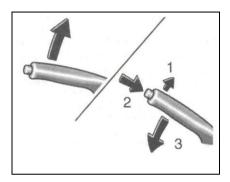
## **Operation of Instruments and Controllers**

## **Parking System**

5	i
	.5



## **Parking System**



When parking the car, apply the parking handle firmly to avoid random move of the car.

Setting: pull up parking handle. To get better holding force, step on and hold the brake pedal firstly until the parking handle is pulled up.

Releasing: pull up parking handle (1) slightly, press down lock-releasing button (2) and then release (3).

To remind you that the parking handle is applied, the parking system indicator on the instrument panel will remain on until the parking handle is released.

## Tips

Before driving, make sure that parking handle is released fully and the parking system indicator goes out.



Chapter	1
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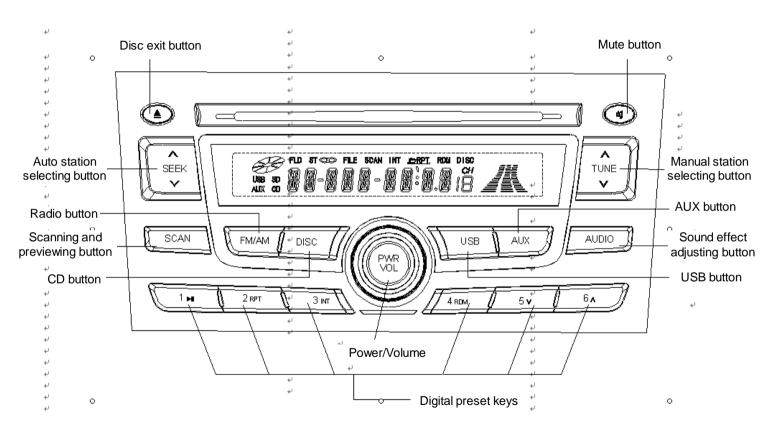
## **Operations of Instruments and Controllers**

## **Automobile Multimedia System**

Multimedia System (optional) ......58



## Multimedia System (optional)





## Multimedia System

## FM/AM Radio

Multimedia system on your BYD auto can receive AM and FM band clearly. Meanwhile, digital preset key makes it easy for you to select your favorite radio station.

## **Operations of Radio**

Only in the position of ACC (I) or ON (II), can you operate the sound system. Press power/volume button (PWR/VOL) or FM/AM button, you can start the Multimedia system. Turn power/volume knob (PWR/VOL), you can adjust the volume.

At last, the received waveband and frequency will be displayed. To change the waveband, just press FM/AM button. Every time you press FM/AM button, waveband will switch from FM1 to FM2, FM3, AM1 and AM2.If you listen to the stereo radio station, "ST" will appear on the screen. If you drive through the place with weak radio signal, "ST" will flicker on the screen.

## **Radio Selection**

Five ways are available for you to search radio station on the selected waveband as follows: manual station selection (TUNE), auto station selection (SEEK), scanning and previewing (SCAN), auto station scanning and saving (long press SCAN) or digital preset button.

## Manual Station Selection (TUNE)

Using manual station selection button (TUNE), you can receive your desired broadcasting frequency. Press the top of TUNE, you can adjust to high frequency; press the bottom of TUNE, you can adjust to low frequency. When your desired frequency appears on the screen, just stop pressing.

## Auto Station Selection (SEEK)

Auto station selection is available to search radio station with a strong signal on certain waveband automatically. To enable this function, press the top or bottom of SEEK button and then release it. Sound system will scan up or down from the current frequency according the place you press. When it searches certain station with strong signal, it will stop searching.

## Scanning and Previewing (SCAN)

Scanning and previewing is available to play all the saved radio stations on all the wavebands for previewing. To enable this function, press SCAN button and then release it. "SCAN" will appear on the screen. Multimedia system will play all the saved radio stations on all the wavebands for about 5 seconds. Without any operation at the moment, system will continue to play the next radio station; when it plays your desired station, just press SCAN and then you can listen to it.

Preset (PRESET)

You can store the frequency of your favorite radio stations under the six digital preset keys. Digital preset keys are available to save radio stations in AM1 and AM2 on the AM waveband well as FM1, FM2 and FM3 on FM waveband respectively.

In saving frequency, you shall follow the steps below:

- 1. Select your desired waveband (AM or FM).
- 2. Use manual station selection (TUNE), auto station selection (SEEK), or scanning and previewing (SCAN) to receive your desired radio station.



- 3. Select the preset number (1  $\sim$  6) for saving your desired station, press this key for 2 seconds and then the station will be saved under the corresponding preset number.
- 4. Repeat the operations above from 1 to 3, you can save 12 AM radio stations and 18 FM radio stations.

Once the frequency of radio station is saved, simply press the corresponding digital preset key and you can listen to this radio station. If storage batteries on the car are detached or used up or fuse of radio is taken down, the preset channel will be cancelled.

# Auto Station Scanning and Saving (long press SCAN)

Long press SCAN for about 2 seconds, system will automatically search the radio station with strong signal and save them to FM1, FM2 and FM3 or AM1 and AM2.Press auto station scanning and saving button (SCAN), you can enable this function. Then, "SCAN" on the screen will flicker at the frequency of 1Hz.Altogether, 12 AM and 18 FM radio stations can be saved under

the digital preset keys (1~6). Then, you can select the preset radio station with these digital preset keys (1~6). If you don't like to listen to the channel saved through auto scanning, you can use the digital preset key to save other frequencies. First, search your desired frequency by manual station selection (TUNE), auto station selection (SEEK) or scanning (SCAN), and then save them under the selected digital preset key as mentioned above.

## **Volume Adjustment**

Bass, treble, balance and fader are adjustable. Press the sound-effect adjustment button (AUDIO), you can select your desired mode. Every time you press AUDIO button, the mode will switch from BAS to TRE, BAL, and FAD in order; after one circle, short press "AUDIO" button, the interface of screen will return to the current mode. If the mode is changed, corresponding mode name will be displayed on the screen one by one.

### Balance/Fader

Sound intensity of each speaker can be adjusted by these two modes. Left & right sound intensity can be adjusted by Balance while front & rear sound intensity can be adjusted by Fader. Press AUDIO button and you can select Balance or Fader. Turn the volume knob and you can adjust Balance or Fader to a satisfied level. The displayed number is what you set currently.

#### Treble/Bass

By using these modes, you can adjust the timbre to a favorite level. Press AUDIO button and you can select treble (TRE) or bass (BAS) mode. Turn the volume knob and you can adjust the timbre to a favorite level. The displayed number is what you set currently. After you stop using the volume knob to adjust the mode for three seconds, the system will get back to the current mode automatically.

#### Mute

If a quiet environment is needed temporarily, you can quickly turn off the sound of speaker by mute button.



## **Playing Compact Disc**

To play compact disc, the ignition switch must be turned ACCESSORY (I) or ON (II). You can operate CD player with the controlling device which can also be used to operate the radio. To select CD player, please press DISC button. You will see "CD" and the number of ongoing program displayed on the screen. System will continue to play CD until you change the mode. Insert a CD into the CD slot and the driver will absorb it and start playing. After the system finishes playing, it will return to the very beginning and play the CD again.

## Notes:

Please do not use the disk with any adhesive label. As the label may curl, it may lead to the disc to be locked in the device or cause other faults. Please do not play the 8cm (3 inch) disc. You are only allowed to play the standard round disc. Deformed disc may be locked in the driver or cause other faults.

When playing the CD, press FM/AM button and you can switch to radio mode. Press DISC button again and the system returns to CD mode and starts playing from the point where it stops last time.

During playing, if you turn off this system by pressing PWR/VOL button or shutting down the ignition switch, the disc will remain in the driver. Start this system again and the player will start playing from the point where it stops last time. Press Exit button and you can take out the disc from the driver.

If the disc is released out but not taken away from the disc slot for ten seconds, it will enter again automatically. To start playing this disc, just press DISC button.

During playing the disc, you can select music and change program by SEEK button.

To fast move the disc in the same program, just long press SEEK button. Long press the top of "SEEK" button to fast forward and its bottom to fast rewind. When it reaches your desired position, just release the button. Short press the top of "SEEK" button, the system will skip forward to the beginning of next program. Shot press the bottom of "SEEK" button, the system will skip backward to the beginning of current program.

Press it again and the system will skip to the beginning of last program. During playing, you can achieve such functions as pause, repeat (RPT), preview (INT) or random play (RDM).

### **Pause**

In CD mode, press 1 to pause. Play-time of the current track will flicker on the screen for reminding. Press 1 again and it can get back to normal playing.

## Repeat (RPT)

To enable this function, just press 2 in CD mode. "RPT" will appear on the screen for reminding. The system will replay the current program continuously. Press 2 again and you can disable this function.



## Preview (INT)

When you enable this function, the system will sample all the programs on the selected disc in the order of recording. To enable this function, just press 3 in CD mode. "INT" will appear on the screen. The system will play the first program for about 10 seconds. Without any operation at the moment, the system will continue to play each remaining program for about ten seconds. When you search your desired program, just press 3 again.

## Random Play (RDM)

After you enable this function, the system will play the programs on the disc in a random order instead of in the order of recording. To enable random play, just press 4 in CD mode. "RDM" will appear on the screen. Then, the system will select and play the program in a random order. It will continue to do so until you press 4 to exit from random play.

## **Operations of USB/AUX Interface**

This system can play MP3/WMA music on the external USB drive through USB interface, can also input audio signal through AUX interface and play music through vehicle speaker. When you insert the USB device, the system will switch to USB mode automatically and also play the music saved in it. You can also perform the same operations as CD music, such as play/pause, pre track/next track and fast forward/fast rewind.

Through car data cable, you can connect the headphone jack of MP3 player and AUX interface; when it switches to AUX mode, the music in the MP3 player will be played through Vehicle speaker.

When playing the MP3/WMA music on the external USB drive through USB interface, you can also perform the following operations:

#### **Pause**

In USB mode, press 1 to pause. Play-time of the current file will flicker on the screen for reminding. Press 1 again and it can get back to normal playing.

## Repeat (RPT)

Two repeating functions are available – you can repeat one file and also one whole folder as well.

Short press 2 and "RPT" will appear on the screen. The system will replay the current file continuously. Press 2 again and you can disable this function.

You can also long press 2 until you hear a "beep"; " TRPT " will appear on the screen and then the system will repeat all the files in the folder you are listening. When the last file in the folder is over, the system will get back to the first file automatically and replay it. Press 2 again and you can disable this function.

## Preview (INT)

Press 3 and "INT" will appear on the screen. The system will play the first file in the current folder for about ten seconds. Without any operation at the moment, the system will continue to play each remaining file in the current folder for about ten seconds. When you search your desired program, just press 3 again.

## Random Play (RDM)

Press 4 and "RDM" will appear on the screen. Then, the system will play the files in the current folder in a random order. Press 4 again, you can exit from random play.

#### **Folder Selection**

You can select a folder by pressing 5 and 6.Press 5 or 6 to skip upward or downward to another folder until the required folder number appears on the screen.

## Notes:

- 1. Users are advised to connect USB drive with car data cable, as direct connection may cause destruction and danger.
- 2. USB interface does not support mobile HDD and MP3 player with poor compatibility as well as the USB drive over 1GB.

### **CD Maintenance:**

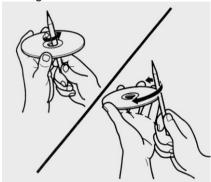


Please hold the edge of CD and do not touch its front and rear surface. Do not add any stabilizing ring or attach any label on the disc. Keep it from being contaminated by fingerprint and ink of felt-tip pen, or it will not be played normally or may be locked in the driver.



When not in use, put it into a box so as to avoid being contaminated by dust or other things. To avoid deformation, you shall keep it from direct sunlight or over heat.

You shall wipe the disc with a clean soft cloth. Wipe the disc from the center to the edge.

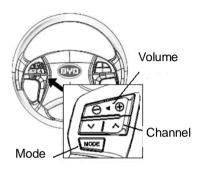


The inner and outer edge of new CD may be a little bit rough. Plastic scraps on the rough edge may peel off. If it drops on the recording side, it may cause skipping or other faults. Rub the inner and outer edge of CD with the side of pencil or pen and you can eliminate these scraps.

Do not insert any foreign materials into the CD player.



# Steeling Wheel Control Device of Audio System (only for some models)



There are 3 buttons for setting audio system on the left of hub of steeling wheel. These buttons make it easy for you to operate the basic functions of audio system without getting your hands away from the steeling wheel. Volume buttons "+" and "-" are designed to adjust the volume. Press and hold "+" or "-" until it reaches a desired level, and then release it.

Mode (MODE) button is designed to change the mode. When using, press the button over and over, the mode will switch to FM, AM or playing CD (if disc is loaded) or playing MP3 music (if USB drive is connected to the USB interface) or audio play (if a player is connected to AUX interface.)Long press MODE and you can turn off the audio system.

The functions of channel button are the same as "SEEK". If you are listening to radio, you can press " $\wedge$ " to search the next channel with strong signal automatically; press " $\vee$ " to search the previous channel with strong signal automatically.

If you are playing CD or things on the USB device, short press " $\wedge$ " and the audio system will skip to the beginning of next program. Short press " $\vee$ " and the audio system will skip to the beginning of current program. Short press it again and the system will skip to the beginning of last program. Then disc number and program number will appear on the screen.

If AUX audio play now, there will be no response after you press it.



# Chapter 1 Section 8

## **Operations of Instrument and Controller**

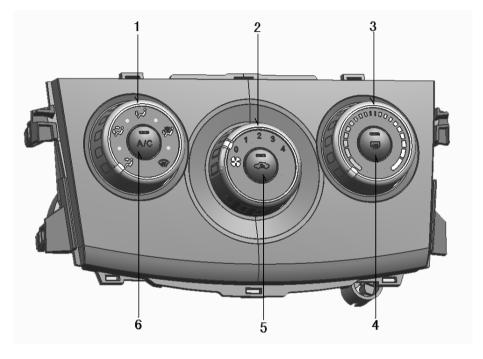
## **Air Conditioning System**

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## Manual Air Conditioning System -

- Control Panel



- 1. Wind mode knob
- 2. Speed regulating knob for blower
- 3. Temperature regulating knob
- 4. Rear defrost button
- 5. Internal & external recycle button
- 6. "A/C" button

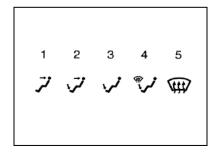


# **Speed Regulating Knob for Blower**

Turn this knob to regulate the rotating speed of blower – five gears are available "0, 1, 2, 3 and 4". Turn this knob clockwise to increase the wind speed, counter-clockwise to reduce the wind speed; the blower is shut down until gear 0.

## **Temperature Regulating Knob**

Turn this knob to regulate the temperature of air out – clockwise to increase the temperature; when you turn it to the maximum position and can not turn it again clockwise, the temperature reaches to the top; counter-clockwise to reduce the temperature; when you turn it to the maximum position and can not turn it again counter-clockwise, the temperature reaches to the lowest.



#### Wind mode knob

Turn this knob to select the air-flow ventilation opening.

- **1. Instrument panel** air flow is mainly from the ventilation opening of instrument mounting plate.
- **2. Dual Source** air flow is from ventilation openings of floor and instrument mounting plate.
- **3. Floor** air flow is mainly form the ventilation opening of floor.
- **4. Floor/Windscreen** air flow is mainly from the ventilation openings of floor and windscreen.
  - It is used together with internal and external recycle button in external recycle.
- Windscreen air flow is mainly from the ventilation opening of windscreen.

It is used together with internal and external recycle button in external recycle.

For settings about wind mode knob, you could refer to "- wind mode knob settings" below

#### **Internal & External Recycle Button**

Button operations to select the source of air flow.

- **1. Internal recycle** to recycle the air in the car.
- **2. External recycle** to absorb the air outside into the system.

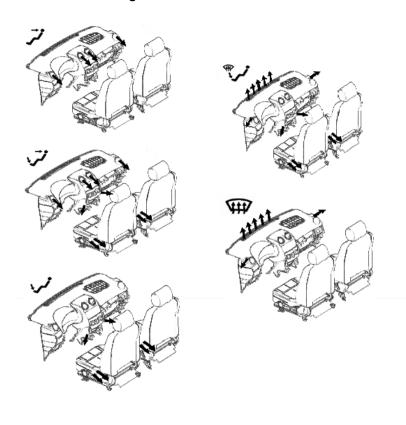
When you press the internal and external recycle button, the indicator (green) is on and the air-inlet mode is internal recycle; press the button again, the indicator is off and the air-inlet mode is external recycle.

# "A/C" Button

To start the air-conditioning system, first turn the speed-regulating knob of blower (not gear 0), and then press "A/C" button. Then, the indicator (green) of button is on. To turn off the air-conditioning system, press the button again (then blowing natural wind) or turn the speed-regulating knob of blower to gear 0.



## **Wind Mode Knob Settings**



## - Operation Gist

- To quickly cool the car exposed in the hot sun, just drive for minutes with windows opened.
- •Confirm that the air suction grid in the front of windscreen is not blocked (such as leaves or snow).
- In wet weather, do not let cooling air blow to the windscreen. Due to temperature difference between the outside and inside of windscreen, the windscreen will fog over.
- You must keep it clean and open under the front seat so as to make the air fully recycled in the car.
- In cold weather, you must set the rotating speed of blower to a high speed for one minute so as to clear the snow or moisture in the air inlet channel. By doing so, you can reduce fogging on the windows.
- When driving on the dirty road, you shall close all the windows. After closing all the windows, if dusts raised by car still enter, you are suggested to press the internal and external recycle button, set it to internal recycle and turn the speed-regulating knob of blower to non-0 gear.



## Heating

To get best effect, set the panel of air conditioner to the following:

Rotating speed of blower – non 0 gear
Temperature – point at warm (red area)
Air suction – external recycle (outside air)
Air flow - floor
Air conditioner - OFF

- To fast warm up, enable internal recycle for several minutes. To not fog on the windows, enable external recycle after the car gets warmed.
- Press "A/C" button to eliminate moisture and warm up.
- When defrosting and defogging for the windscreen, select floor/windscreen air flow to get the car warmed up.

# Cooling

To get best effect, set the panel of air conditioner to the following:

Rotating speed of blower – non 0 gear
Temperature – point at cold (blue area)
Air suction – external recycle (outside air)
Air flow – instrument panel
Air conditioner - ON

To fast cool the car, turn the external and internal recycle mode selecting knob to internal recycle for several minutes.

#### Ventilation

To get best effect, set the panel of air conditioner to the following:

Rotating speed of blower – non 0 gear
Temperature – point at cold (blue area)
Air suction – external recycle (outside air)
Air flow – instrument panel
Air conditioner - OFF

# Defogging

Inside of windscreen

To get best effect, set the panel of air conditioner to the following:

Rotating speed of blower – non 0 gear
Temperature – point at warm (red area) to warm up;
Point at cold (blue area) to cool down.
Air suction – external recycle (outside air)
Air flow - windscreen
Air conditioner - ON

 In wet weather, do not blow the cooling air to the windscreen – indoor and outdoor temperature difference may cause serious fogging.



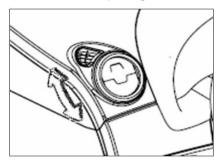
## Defrosting

Outside of windscreen To get best effect, set the panel of air conditioner to the following:

Rotating speed of blower – non 0 gear
Temperature – point at warm (red area)
Air suction – external recycle (outside air)
Air flow - windscreen
Air conditioner - OFF

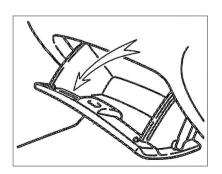
 When defrosting for the windscreen, to get the car warmed up, you can select floor/windscreen air flow.

# **Side Ventilation Opening**



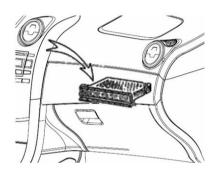
If you are not satisfied with the air flow, check the side ventilation opening which may be opened or closed as shown in the figure.

# Checking and Replacing the Filter of Air Conditioner



Instruction label of filter of air conditioner is sticked on the inner side of glove box as shown in the figure, indicating that a filter is equipped.

Filter of air conditioner can prevent dust from entering the car through air inlet of air conditioner.

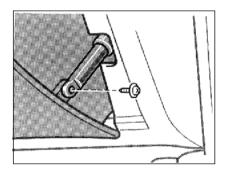




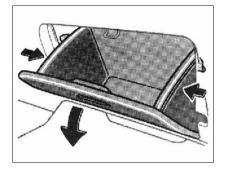
# Filter of air conditioner lies behind the glove box.

In the long term, filter of air conditioner will be blocked. If you feel the air flow efficiency of air conditioning or heating is extremely weakened or it is easy to fog on the windows, you must replace the filter.

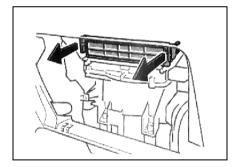
To maintain the efficiency of air conditioner, you must check and replace its filter according to the maintenance program.(you can refer to "BYD Maintenance Program" in chapter 6)



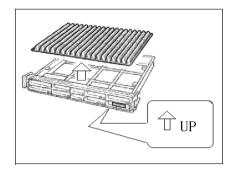
1. Open the right glove box and take down the screws on the damper with a cross screwdriver.



2. Press both sides of the right glove box, unfasten the pothook and take down the right glove box.



3. Take out the filter box from the outlet of filter as shown in the figure.



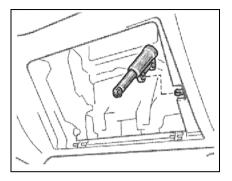
- 4. Take out the filter from the filter box.
- 5. Check the surface of filter. If dirty, replace it.

When installing filter and filter box, keep the arrow upward.

## Tips:

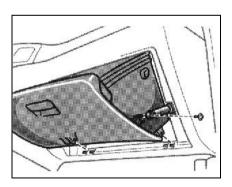
Air filter must be installed into place properly. Using air conditioner with the air filter taken away will reduce the dust-proof effect and also affect the performance of air conditioner.



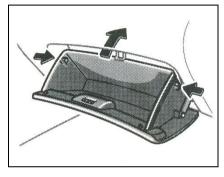


# Reinstall the right glove box

1. Insert a bolt into the hole of damper as shown in the figure.



2. Hook up the right glove box, draw the damper and insert a screw into the damper. Fasten the screw with a cross screwdriver.



3. Press the both sides of right glove box and close it.



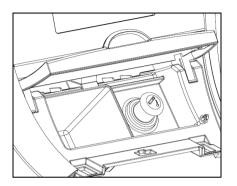
# Chapter 1 Section 9

# **Operations of Instrument and Controller**

# **Other Equipment**

Digar Lighter	.74
Right Glove Box	
Central Glove Box	
Reversing Radar System (Optional in G3)	

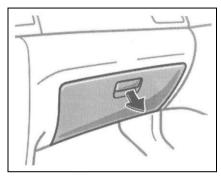
# Cigar Lighter



To use cigar lighter, just press it. After cigar lighter lights it on, it will pop up for use.

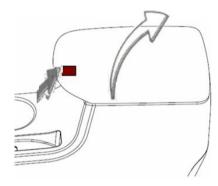
If the engine is not running, ignition switch must be in the position of "ACC". Do not press the cigar lighter and hold.

# **Right Glove Box**



To open the right glove box, pull the handle.

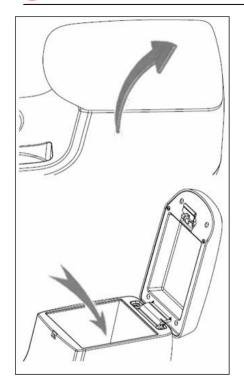
# **Central Glove Box**



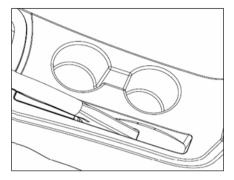
To open the central glove box, uplift its cover and pull upward the locking buckle.

## Tips

To reduce the possibility of unexpected accident or human injury in emergency braking, you must keep the central glove box closed during driving.

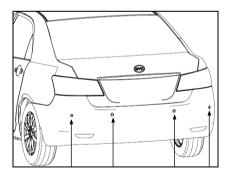


# **Cup Holder**



It is designed to place cup or drink can safely.

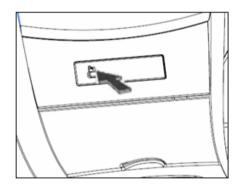
# Reversing Radar System (Optional)



# **Reversing Radar System**

During reversing, it will remind the driver of the approximate distance between the car and barrier through indicator and buzzer. A sensor is used in this system to detect the barrier.

When ignition switch is at "ON" and selection lever stays at reversing gear, the system is in working conditions.

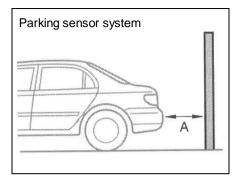


ON: press the switch.

Indicator is on and buzzer sounds.

OFF: press the switch again.





This system reminds the driver of the distance between car and barrier through indicator and buzzer.

Distance illustrated by A mm	Indicator	Buzzer
About 1,000 - 750	Flicker	Sound intermittently
About 750 - 500	Flicker	Fast sound intermittently
About 500 or less than 500	ON	Sound continuously

# **Sensing Range**

Sensing range means the maximum value is about 1,000 mm to probe A. Due to limited sensing range, you must check around the car before driving and start driving quite slowly.

# Tips

Do not stick accessories or other things on the sensor used for probing barriers. Otherwise, it will interfere with the accurate working of system, which may cause unexpected accidents.

The system can not work normally under the following conditions.

- Things such as ice, snow and mud are sticked on the sensor.
- Stop the car in the environment of high or low temperature for a long time.
- Drive on the rough path, muddy road or road with deep grass
- Be close to the horn of other vehicles, engine of motorcycle or any object which may generate supersonic wave.
- Drive in the heavy rain or with water splashed on the car.

- Be equipped with two-channel radio antenna or buffer rod.
- Car weight is tilt.
- Cover the sensor with hands.
- Be too close to the object.
- Beat the sensor heavily.

When the following objects approach the sensor, the system may not work.

- Metal line, rope or thinner objects
- Cotton, snowflake or absorptive things
- Smaller objects
- Objects with sharp edges
- High and protruding objects

In the following conditions you must entrust BYD Service Station to check the system.

- Bumper dent.
- Indicator continues to be on but the buzzer does not sound.



# Chapter 2

# **Tips on Driving BYD G3**

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#### **Run-in Period**

# Drive the car stably and do not drive at high speed.

BYD G3 does not have complicated run-in procedure. In the first 2,000 kilometers, please follow the tips below to save fuel and extend the service life of the car.

- Do not press the accelerator to the bottom in starting and driving.
- Do not let the engine runs overspeed.
- Avoid emergency braking in the first 300 kilometers.
- Do not drive the car for a long time at the same speed, high or low.
- Do not tow a trailer in the first 2000 kilometers.

#### **Fuel**

Appropriate fuel can give full play to engine performance, while reducing exhaust emission and allowing simple maintenance of parts.

Engine damage or incompliance of emission as a result of improper fuel are not covered by BYD warranty.

# **Fuel Type**

# Only use #93 or above unleaded gasoline.

To prevent wrong operation in gas station, BYD G3 is equipped with a small fuel tank opening. The special nozzle of unleaded gasoline pump can match up with the small opening while the larger standard nozzle of leaded gasoline pump can not.

#### Note

Do not use leaded gasoline, which may cause failure of three-way catalytic converter and abnormality of emission pollution control device. It will also increase maintenance expense.

#### Note

Emission system on BYD G3 is only intended for #93 or above unleaded gasoline.

## **Engine Knock**

When you are using fuel recommended by BYD dealer, in case of serious engine knock, or if you hear regular knock sound, please contact BYD service station.

But occasionally you can hear slight knock sound for short time when the car is accelerating or on uphill road, which is normal.

# **Rated Capacity of Fuel Tank**

50L (liter)



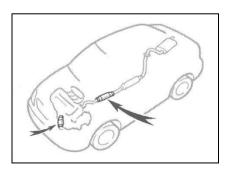
## Fuel Cut-off System

In case of accident, when the engine stops running, the engine control system will cut off fuel supply to the engine to reduce the danger of fuel leakage to the minimum. When fuel pump stops work, to restart the engine, turn the ignition switch to ACC or LOCK, then restart it.

### Tips

Check the ground under the car before restarting the engine. If any liquid leakage on the ground, the fuel system may have damage and need repair. Do not restart the engine in this case.

# **Three-Way Catalytic Converter**



Three-way catalytic converter is an emission pollution control device integrated in emission system.

It is intended to reduce pollutant in emission.

#### Note

- When the engine is running, stay away and keep inflammable material from the exhaust pipe. The hot gas from the exhaust pipe may cause injury or fire.
- Avoid driving on ground covered with grass, leaves, paper or other inflammable objects, and it is especially prohibited to park the car or leave the engine running idle on such ground.

#### Note

Large amount of uncombusted mixture gas entering the three-way catalytic converter may cause overheat of the converter and even fire. To prevent such danger, please follow the instructions below:

- ◆ Only use unleaded gasoline.
- ◆ Do not drive the car when the fuel level is extremely low; insufficient fuel may cause misfire in the engine and overload in three-way catalytic converter.
- Do not let the engine run for over 10 minutes at high idle speed or over 20 minutes at low idle speed.
- ◆ Do not let the engine runs overspeed.
- ◆ Do not push or pull the car for starting.
- ◆ Do not turn off ignition switch in driving.

Always keep the engine at optimum conditions. If electrical system, electronic ignition system or fuel system has fault, the three-way catalytic converter will get overheated.



◆ Please the engine has trouble in starting or stalls frequently, please check the car immediately.

To ensure normal operation of three-way catalytic converter and the whole emission control system, regular check according to BYD G3 Auto Maintenance Schedule is required. (See chapter 6.)

## **Engine Exhaust Warning**

## **Tips**

- Avoid breathing in exhaust gas from the engine.
- Make sure the exhaust system has no leakage or loose connection. Please check the exhaust system regularly. If the car has a collision with any objects or when you hear abnormal exhaust noise, please check the exhaust system immediately.
- Do not run the engine in garage or closed space except entering/exiting the garage. High concentration of exhaust gas is severely dangerous.
- Do not stop the car with the engine running for a long time. If you have to, park the car in open space and adjust heating/cooling air system to take fresh air into the car.
- Lock up trunk lid in driving.
   Open or loosened trunk lid or rear door may cause exhaust gas entering the car.
- To ensure normal operation of ventilation system, keep the intake grid before the

windshield free from snow, leaves or other stuff.

 If you smell exhaust gas within the car, open the window immediately, find out the place from where the exhaust gas entered, and make correction.



#### **Consumption of Engine Oil**

# **Function of Engine Oil**

Engine oil is used to lubricate and cool the inside of the engine and play a major role in maintenance to keep the engine at normal running status.

# Consumption of Engine Oil The engine consumes some engine oil in normal running status for the following causes:

- Piston, piston ring and cylinders are lubricated by engine oil. When a piston moves downwards in a cylinder, a film of engine oil will be formed on the cylinder wall. In deceleration, the resulting high negative pressure will suck in engine oil from the film to the combustion chamber. The sucked-in engine oil will combust together with the oil film on the cylinder wall during the high-temperature combustion in the chamber.
- The intake valve stem is also lubricated by engine oil. Some engine oil is sucked in together with the intake air to the combustion chamber and participates in combustion. High temperature exhaust gas may also combust engine oil used to lubricate the exhaust valve stem.

Consumption speed of engine oil depends on its viscosity and quality and actual vehicle conditions.

High speed driving and frequent acceleration/ deceleration will increase consumption of engine oil.

New engine may consume more engine oil as the pistons, piston rings and cylinder walls shall undergo running-in.

# Consumption of Engine Oil Pay close attention that the engine oil consumption may not be judged correctly by engine oil level because the engine oil may be diluted.

For example, after the car has undergone repeated short trips (such as 1,000 km), the engine oil level on dipstick may have not dropped even when engine oil is consumed normally. The fact that the engine oil has been diluted by fuel and steam make the oil level stay at the original position on the dipstick.

During high-speed driving, such as a trip on express way, the foreign matter may be evaporated. As a result, the engine oil level may drop sharply after a high-speed trip.

# Significance of Checking Engine Oil Level

One of the key points in vehicle maintenance is to keep the engine oil at optimum level, which allows normal function of the engine oil. In one word, it is important to check the engine oil level regularly. You are recommended to check the engine oil level every time you refill gasoline.

#### Note

If the engine oil level is not checked regularly, insufficient engine oil may result in severe engine faults.

For details on checking engine oil level, please refers to "Check Engine Oil Level" in Section 7-2.

#### **Gear Shift**

#### **Manual Transmission**

For stable running, the manual transmission is synchronized on all forward gears. A lock-up device is available to prevent gear shift directly from 5<sup>th</sup> gear to reverse gear. In gear shift, you shall step the clutch pedal to the bottom; do not stay your feet on the clutch pedal when you are not make gear shift, otherwise the clutch wear may be speeded up.

#### Note

Shift to R gear only after the car stops completely, otherwise the transmission may be damaged.

After stepping on the clutch pedal, you shall wait for a few seconds before shift to reverse gear, or shift to a forward gear and wait for a few seconds. In this way, the gears will stop rotating, avoiding milling on each other.

In deceleration, downshift can provide additional braking force from the engine. Such additional braking force helps to keep the car at safe speed, especially on downhill road it can prevent the brake from overheating.

# ! Warning

On slippery road surface, high acceleration and deceleration may cause the car out of control. Once a collision occurs, you may suffer personal injury.

Take special care when driving on slippery road.

#### **CVT Transmission**

Position of Gear Shift Lever

Gear shift lever has four positions. When starting the engine the lever shall be in P (Parking) gear or N (Neutral) gear. When you park the car at D, N or R gear, you shall step on braking pedal forcibly with the feet away from accelerator pedal.

P gear – at this position the transmission is locked up mechanically. The lever shall be at this gear when starting/shutting down the engine. To get out of this gear, step on the braking pedal with your feet away from the accelerator pedal.

If the procedure above fails to get gear shift lever out of P gear, please refer to "Release Gear Shift Locking".



To avoid damaging the transmission, you shall shift to P gear only after the car stops completely.

R gear – for gear shift from P gear to R gear, please refer to description on P gear. To shift from N gear to R gear, you shall stop the car completely first.

N gear – to restart the engine after it stalls, or to stop the car temporarily with the engine running idle, you can use N gear. You shall shift to P gear whenever you leave the car.

D (driving) gear – it is used in driving. The transmission will select proper gears according to vehicle speed and acceleration, When the engine is cold, you can feel that the transmission upshifts quickly, which is helpful to warm up the engine.



When using D gear, to speed up acceleration, please step the accelerator pedal to the bottom to upshift the gear. The transmission will upshift by one grade or two grades according to the speed you step on the accelerator pedal.

S (sport) mode – when using sport mode, push the gear shift lever upwards to upshift, and downwards to downshift.

Release Lock by Gear Shift

When you cannot get the lever out of P gear by regular way (step down the braking pedal), please use this device.

- 1. Shut down the engine and pull up the hand brake.
- 2. Press P gear releasing button, and switch the gear shift lever from P gear to N gear.
- 3. Step down braking pedal and restart the engine.

If you need to release lock by gear shift, it means the car has fault. You shall have your car checked by BYD service station.

#### Hill Start

To protect CVT transmission, when starting the car on steep slope, you shall make hill starting assisted by parking lever. Or the car may slide downwards, which may result in damage to the transmission.

Self-adaptive Update of Transmission Clutch

You shall make self-adaptive update of transmission clutch in the following cases:

- 1. TCU program is updated.
- 2. A new TCU is installed.
- 3. A new gearbox is replaced.

The self-adaptive procedure of the clutch is as follows:

- 1 Stop the car completely.
- 2 Run the engine.
- 3 Set throttle valve opening to 0% (do not step the accelerator pedal).
- 4 Make the engine run at stable idle speed.
- 5 Make the engine run with stable torque.
- 6 Press footbrake.
- 7 Make the following gear shift.
- Shift from N gear to D gear for 4 times, staying at each position of N gear and D gear for at least 6 seconds.

 Shift from N gear to R gear for 4 times, staying at each position of N gear and R gear for at least 6 seconds.

Parking Brake

When parking the car, apply the parking brake firmly to prevent random move of the car. To prevent the car from unwanted move, when parking on flat ground and uphill slope, it is recommended to shift the gear lever to 1 position; when parking on downhill slope, it is recommended to shift the gear lever to R gear.

Before driving, make sure that parking brake is released fully and the parking brake indicator goes out.

To prevent the car from unwanted move, after the car is stopped completely, you shall apply the parking brake firmly. In addition, it is recommended to shift the gear shift lever out of N gear, specifically, to 1 gear on flat ground or uphill slope or R gear on downhill slope.

Apply parking brake and shift the transmission to non-N gear (1 gear is recommended).

Park the car on flat and solid ground, pull up parking brake firmly and shift the transmission to non-N gear (1 gear is recommended).



## Maintenance Operation:

Replace lubricant and oil screen in CVT transmission upon each 60,000 km mileage.

Note: precautions on CVT transmission maintenance:

Maintenance Period Replace transmission fluid and oil screen for the transmission upon each 60,000 km mileage. The transmission comes with refilling cock on the top of the gearbox and drain plug.

Lubricant Specification
Only use ESSO EZL 799A.
Lubricant of other specification
may damage the transmission,
and the resulting faults are not
covered by BYD warranty.

# **Precautions in Towing**

	Transmission		
Towing	Configuration		
Method	MT	Stepless	
		AT	
Towing	N gear	Not	
gear		allowed	
Towing	Allowed	Allowed	
with front			
wheels off			
ground			
Towing	Allowed	Not	
with rear		allowed	
wheels off			
ground			
Towing	Allowed	Not	
with four		allowed	
wheels on			
ground			
Shipped	Allowed	Allowed	
on			
special-pur			
pose			
vehicle			

Note: vehicles with CVT transmission can not be towed, because only when its engine is running the cone pulley can produce fluid pressure to drive the transmission belt.

To tow a vehicle with CVT transmission, its front wheels must be lifted up off the ground.

In emergency towing for short trip, a vehicle with CVT transmission shall be at N gear with the engine running. Only when the engine is running, the transmission oil pump can provide oil pressure to drive the transmission belt, otherwise the belt may be damaged.

#### Transmission Oil Selection

1. Specification of Gear Oil for Manual Transmission:

75W—90 North region in winter 80W—90 North region in summer 80W—90 or 85W—140 South region all around the year

API Grade GL-4 or above

Amount: a total of 2.1L; when replace gear oil, the refilling amount is 2.0L.

2. CVT Transmission Oil Specification ESSO EZL799A

Amount: when replacing transmission oil, refilling amount is 4.1L and checking oil level is required.

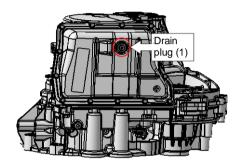
Check CVT transmission oil level in the following procedure:

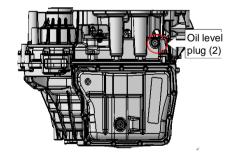
Transmissions are delivered with transmission oil not fully filled, as a result, when installing the transmission on a vehicle or replacing a transmission, it is required to refill 4.1±0.05 L of ESSO EZL799A oil. After the first refilling, check the oil level in the following procedure:

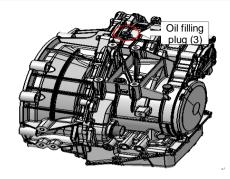


- start the engine and run idle for at least 10 seconds (during engine starting, the noise of air flow in circulating in the system is normal).
- Shift gear shift lever to other gears (P gear R gear D gear), waiting for at least 5 seconds before shift gear.
- Shift to "D" (Driving) gear.
- Release foot brake pedal.
- Slow down the vehicle to a minimum of 60km/h (engine speed shall not be over 2500 rpm).
- Release the accelerator to let the car slow down until stop (noise caused by air flow circulation since engine starting disappears).
- Warm up the oil by driving the car for at least 5 minutes or until the transmission oil temperature reaches 60°C.
- Park the car on flat ground or slope.
- Step on foot brake pedal.
- Wait for 2 seconds.
- Shift gear to "N" (Neutral) gear.
- Wait for 10 seconds.
- Shift gear to "P" (Parking) gear.
- Let the engine run idle.
- Pull off oil level plug screw.
- Make sure at least 0.2L oil flows out after removing the oil level plug screw.
   (If the oil outflow is less, it means the original oil amount is insufficient.)

- Wait for a few minutes until the oil droplet falls off from the plug screw opening.
- Reinstall the oil level plug screw.
- Shut down the engine.





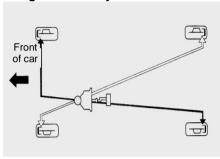


Note: During refilling transmission oil, prevent it from overflow. In Case of overflow, clean up overflowing oil immediately



### **Brake System**

## **Design of Brake System**



The hydraulic system driving the brake has two independent loops. Each loop acts in the diagonal direction across the car, linking the left front wheel and right rear wheel, ect. If one loop has fault, another two wheels still have brake function.

# Disc (Drum) Parking Brake

The car is equipped with disc (drum) parking brake. This kind of brake system requires running-in to the brake shoe regularly, and especially, after brake shoe and/or brake disc (drum) is replaced.

Running-in shall be conducted by BYD service station.

## **Anti-lock Brake System**

ABS helps to prevent the wheels from locking or skidding in hard braking, allowing steering control in braking.

When the front wheels are skidding, steering control is not available, which means even if you rotate the steering wheel, the car keeps running ahead straightly. ABS helps to prevent wheel locking, and keeps the steering control available as the quick-acting pulse brake responds much faster than the driver.

ABS also distributes braking forces on all wheels according to the load status of the car.

Do not step on the brake pedal repeatedly in a short time, otherwise ABS may fail. When steering the car to avoid danger, you shall keep stable and strong pressure on the brake pedal so as to give full play to ABS. Sometimes it is called "Stepping stably, steering accurately".

When ABS acts, you will feel a shake on the brake pedal and sometimes you will hear noise. This is normal when ABS makes quick-acting pulse braking. The ABS response time depends on tires' driving force (adhesive force). On dry and paved road, you shall step on the brake pedal forcibly to enable ABS. But if you want to stop the car on snowy or freezing road, you can feel that ABS acts quickly.

Important Safety Tips

ABS can not reduce the time and distance required for braking. Its function is to maintain steering control in braking. You shall always keep safe distance away from other vehicles.

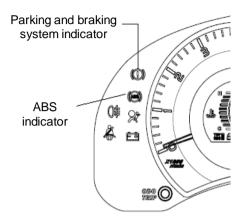
ABS cannot prevent skidding caused by sudden change of vehicle direction, such as sharp turning or sudden lane changing. Drive the car carefully at safe speed regardless of the road and weather conditions.

ABS cannot prevent reduction in vehicle stability. In hard braking, the steering shall be moderate. Sharp turn in driving may cause the car to smash into the traffic flow in the opposite direction or rush off the road.

On soft or rugged road (such as sandy or snowy road), a vehicle with ABS may need longer braking distance than a vehicle without ABS. Under this condition, you shall slow down the car while keeping larger distance from other vehicles.



#### **ABS Indicator**



ABS has self-detection function. If any fault, ABS indicator (refer to introduction on combination instrument) on the instrument panel will be turned on. This means ABS function of the brake system has fault. But the brake can still provide normal braking force like an auto without ABS function. Please contact BYD service station to check you car.

If ABS indicator and braking system indicator are turned on at the same time when hand brake is released completely, it means the braking force distribution system also fails.

Press brake pedal slightly to check if it is normal; if normal, check the braking fluid level when refilling fuel at the next time (refer to section on checking braking fluid). If the level is low, drive your car to BYD service station to check whether brake system has leakage and check the brake wearing piece.

If the brake pedal feels abnormal, you shall take measures immediately. As the brake system adopts dual loop design, even if part of the system fails, you can still control braking of the other two wheels. But at this time you shall step the brake pedal deeper to brake the car, and the brake distance will be longer.

Shift to lower gear to slow down the car, and park the car at roadside. As the braking distance is longer, driving the car under this condition is dangerous. You shall have the car towed away and repaired as soon as possible.

If you have to drive the car for a short trip, you must drive with extremely car.

#### **Drive in Poor Weather**

Driving force (adhesive force) and visibility will reduce in rainy, snowy and fog days, and such environment requires different driving skill. Make good maintenance of the car in normal time, and take special care when driving in poor weather. Under such conditions, do not use cruise control function (optional on some models).

Driving skill – driving speed shall be slower than in dry weather. Even when the road is a little damp, the car need much longer response time to apply stable and even pressure to all control devices. In wet weather, sharp turning or hard braking may cause the car out of control. In the first a few miles after the road condition changes, you shall drive with special care, especially in winter days. During summer, a driver may forget driving skills for driving on snowy road, and exercise is needed to regain such skills.

After long dry period, you shall be careful when driving in rainy days. In the first rainy days after long dry period, oil on the road will float on the top of water, making the road slippery.

Visibility – under all weather conditions, it is very important for a driver to see around and to be seen by other drivers clearly. In poor weather, visibility will



deteriorate and you shall turn on headlights even in daytime for better visibility.

You shall check the windshield wiper and cleaner regularly. Keep sufficient cleanser liquid in the cleanser tank of windshield cleaner. If the wiper can not wipe the windshield clean, you shall replace the wiper blade. In addition, you can use defroster and AC device to prevent fogging on the internal side of the windows.

Driving force (adhesive force) – you shall check whether the wear and pressure of the tires are appropriate regularly, which is important to prevent the auto shift (adhesive force reduced on wet road). In winter all 4 wheels shall change to snow tires (with deep anti-skidding tread) for optimum operation performance.

In driving you shall check the ever-changing road conditions. Damp leaves my be as slippery as snow, "Clean" road may be covered with thin ice. When the environment temperature is near freezing point, driving is very dangerous as the road may be covered by water and ice alternatively. As a result, the adhesive force may change a

lot suddenly.

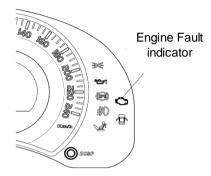
When downshift, take special care. If the adhesive force is low, the driving wheels may be locked up for an instant, which may also cause skidding.



In overtaking or being overtaken, take special as the water fog splashed up by large vehicle may block you view and the air shock wave caused by large vehicle may lead to losing control of the car.

Note: do not drive on a road under deep water, which may cause damage or failure of engine and electrical system.

# **Engine Fault Indicator**



This indicator will be on for several seconds when turning the ignition switch to ON (II). If it turned on at any other time, it means some emission control device in the engine system has fault. Even if you cannot feel obvious change in vehicle performance, the fault may cause deteriorated fuel economy and increase exhaust emission, and long time driving under this condition may result in severe damage.

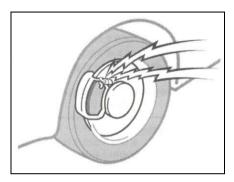
If this indicator is on, you shall park the car at roadside and shut down the engine. Restart the engine and check the indicator again, if it is still on, you shall have the car checked by BYD service station as soon as possible. Before the fault is identified and repaired by BYD service station, you shall drive with care and avoid full accelerator and high speed.

If the indicator turns on frequently, even if it goes out after you take measures in the procedure above, you shall have the car checked by BYD service station.

# Tips

Driving when the fault indicator is on may damage the emission control system and the engine. Such damage is not covered by BYD warranty.

#### **Brake Wearing Piece Warning Plate**



The warning plate of brake wearing piece gives alarm sound when the wearing piece need replacement.

If you hear alarm sound or friction noise in driving, you shall immediately call BYD service station for check and replacement of brake wearing piece. Do not continue driving your car when there is alarm sound

## Notice of using luggage compartment

When shipping luggage or goods by the car, follow the instructions below:

- It is recommended to load the luggage or goods in the trunk.
  - Make sure all items are fastened in place.
- Keep proper weight balance across the car. It is recommended to place heavy articles in the front part to keep weight balance,
- Do not ship unnecessary items to save fuel.

# Suspension and Chassis

# Tips

Do not amend the suspension/ chassis with lifting tools, partition panels, springs, etc., which may cause the car out of control.



# Chapter 3

# **Starting and Driving**

Before Starting Engine	9
How to Start Engine	
Safety Check Before Driving	
Oriving Tips Under Certain Conditions	
Oriving Tips in Winter	
Fow Trailer	
How to Save Fuel and Extend Auto Service Life	



## **Before Starting Engine**

- 1. Check the environment around the car before getting in.
- Adjust seat position, seatback angle, seat height, head protection device height, steering wheel angle and height.
- Adjust interior and exterior rear-view mirror.
- 4. Lock up all doors.
- 5. Fasten seat belts.

## **How to Start Engine**

## (a) Before Staring Engine

#### MT:

- 1. Check parking brake.
- Shut down all unwanted lights and electrical devices.
- 3. Shift gear shift lever to neutral gear.
- 4. Step clutch pedal to the bottom and maintain until the car moves.
- 5. Anti-theft function will be disabled.

#### CVT:

- 1. Apply parking brake firmly.
- 2. Shut down all unwanted lights and electrical devices.
- Shift gear shift lever to P gear. If you need to restart engine in driving, please shift gear shift lever to N; when the lever is on any other gears, starting protection device will prohibit starter running.
- 4. Step brake pedal to the bottom and maintain until the car moves.

# (b) Start Engine

Make sure procedure in " (a) Before Staring Engine" is performed before starting engine.

# **Normal Starting**

Multi-point fuel injection system in the engine automatically controls appropriate mixing of air / fuel for starting. You can perform cold starting or hot starting in the following procedure:

Turn ignition switch to START to start the engine.

The engine can warm up through travel rather than running idle. Run the engine stably for preheating until the engine coolant temperature rises up to normal range.

## If Engine Stalls

Restart as per normal starting procedure.

# When Engine Cannot Start

Refer to "When Engine Cannot Start" in Chapter 4.



#### Note

- ◆ Each starting attempt shall be no more than 5 seconds, or it will cause overheating of engine or wires.
- ◆ Do not let the engine run overspeed.
- Check the engine immediately if it has difficulty in starting or stalls frequently.

# Safety Check Before Driving

Before driving you had better conduct a safety check of the car. Several minutes' check can ensure safety and allow you to enjoy happy time in driving. A simple check procedure only requires basic knowledge on vehicle structure and sharp eye. If necessary you can ask BYD service station to check you car at low charge.

# Tips

If you make safety check in a closed garage, make sure the garage has good ventilation. The exhaust of engine is harmful.

# Check Engine Before Starting Vehicle Exterior Conditions

**Tires:** check tire pressure with a gauge, and check if there is cutting, damage or excessive wear.

Wheel Nuts: make sure there is no loose or missing nut.

**Leakage:** if the car has been in parking for a while, you shall check if there is fuel, engine oil, water or other fluid leakage under the car. (Water drops produced by AC system are normal.)

**Lighting:** make sure headlights, parking lights, width-indicator lights, turn signal lights and other lights work normally. Check illumination intensity of headlights.

Vehicle Interior Conditions Spare tire, jack and wheel nut wrench: check tire pressure and make sure jack and wrench is in place.

**Seat belt:** check whether buckle can fasten seat belt firmly. Make sure seat belt has no wear or scratching.

**Instruments and Controllers**: take special care to make sure maintenance prompting indicator, instrument lighting and defroster work normally.

**Brake**: make sure the pedal has enough action clearance.



## **Inside Engine Compartment**

**Spare Fuse**: make sure all types of fuses are available.. The fuse specifications shall be in compliance with the rated values.

**Coolant Level**: make sure the coolant level is proper. (Refer to section 7-2.)

Battery and Cables: all cells of the battery shall be filled with distilled water to proper level. Check whether there is corroded or loose terminals, and whether the battery box has cracks. Check whether cables and connection are proper.

**Cables**: check whether there is damaged, loose or disconnected cable.

**Fuel Pipe:** check whether there is leakage or bad connection in fuel pipe.

## **Tips**

Do not leave children's toys in the car, which may pose potential danger, especially in hard braking and collision, in which case the toys may cause personal injury.

## **After Engine Starting**

**Exhaust System**: listen to the noise to check whether there is any leakage. If any leakage, you shall have it repaired immediately. (Refer to "Engine Exhaust Warning" in Chapter 2.)

**Engine Oil Level**: shut down the engine and stop the car on flat ground, then check oil level with a dipstick. (Refer to description in section 7-2.))

# In Driving

**Instruments:** make sure maintenance prompting indicators and speedometer work normally.

**Brake**: under safe traffic conditions, make sure braking does not result in deviation of the car.

Other Abnormalities: check whether there is any leakage or bad connection, and listen for abnormal noise.

If no abnormality is found out, you can enjoy your driving now.

# Driving Tips Under Certain Conditions

- Driving slowly in head wind, which is helpful for operating of the car.
- When driving the car to climb the roadside curbstone, keep low speed and proper direction. Avoid driving on any objects with sharp edges or on any road block. Otherwise the tires may suffer severe damage such as explosion.
- Slow down vehicle speed on rugged roads. Otherwise tires and/or wheels will suffer severe damage.
- Brake may be wet after washing the car or driving on road under deep water. To check whether the brake is wet, make sure the environment is safe and then step on the brake pedal slightly. If you feel that the braking force is abnormal, the brake may be wet. To dry the brake, slightly step on the braking pedal while driving the car carefully with parking brake applied.



### Tips

- Before driving, make sure that parking brake is released fully and the parking brake indicator goes out.
- Do not leave the car when the engine is running.
- Do not rest your feet on brake pedal in driving, which may cause dangerous overheating, wear and higher fuel consumption.
- When on long downhill slope, slow down the speed and shift to low gear. Please note that the brake will overheat and function abnormally if you steps on the brake pedal too many times.
- Take special care when speeding up, shift to higher/lower gear, or braking on slippery road. Hard acceleration or engine braking may result in skidding or spinning of the car.
- Do not continue driving when the brake is wet. Wet brake requires longer braking distance and may cause deviation of the direction of the car. Also, in this case parking brake can not stop the car firmly.

Do not stretch any part of your body out of the window in driving, which may cause severe accidents and risk severe personal injury. Take special care when there are kids on the car.

#### Note

When driving on damp road, avoid deep water as when a large amount of water enters engine compartment, the engine and/or electrical parts may be damaged.

# **Driving Tips in Winter**

# Make sure coolant is suitable for use in winter.

Only use cooling fluid authorized by BYD service station. Choose and add suitable type of cooling fluid into cooling system according to environment temperature.

Improper cooling fluid may damage engine cooling system.

#### Note

Do not over use water, which may damage engine cooling system in winter.

## **Check Battery and Cable Status**

Cold weather may reduce battery performance, and you shall keep the battery high enough for starting in the winter. Visual check of the battery is described in section 7-3. BYD service station can check charging status of the battery for you.



# Make sure viscosity of the engine oil is suitable for driving in winter.

Please refer to section 7-2 for information on recommended viscosity of engine oil. If a large volume of engine oil for summer use is left in the engine in winter, it may cause difficulty for engine starting. If you are not sure about choosing engine oil, please contact BYD service station for help.

#### **Avoid Door Lock Freezing**

Spray some deicing agent or glycerin in door lock hole to prevent the lock from freezing.

#### Use Cleanser with Antifreeze

It is available in BYD service stations and all auto part stores. Mixing ratio of water and antifreeze shall follow manufacturer's instruction.

#### Note

Don't use engine antifreeze or other substitutes as cleanser, as they will damage the vehicle paint.

# Do not apply parking brake if it may be frozen up.

In parking, shift to gear shift lever to N gear and place obstacles around rear wheels to retain the car. Do not apply parking brake as it may be frozen up by water or snow, resulting in difficulty to release the parking brake.

# Prevent snow from staying under mudguard.

Snow or ice under mudguard may make steering difficult. When driving in winter, you shall stop the check regularly to check whether there is ice or snow under mudguard.

# You are recommended to keep certain emergency tools on the car according to your region.

Examples of such articles are tire chains, window wiper, a bag of sand or salt, flasher signaling device, shovel and connection cables.

# **Tow Trailer**

BYD G3 is designed for transportation of passengers. Towing a trailer may pose bad effect to operation, performance, braking, endurance, fuel economy of the car. Safety and comfort in driving depends on proper use of devices and the driver's habitual care in driving.

For the sake of safety of yourself and others, do not over load the car or tow a trailer. Damage or failure cause by towing a trailer for business purpose is not covered by BYD warranty.

# Weight Limit

Before towing a trailer, make sure it is within the car's capacity. You can contact the local BYD service station to check the trailer's capacity.

Towing capacity is measured on level road. In region with high altitude, please take note that the engine power and its towing capacity will reduce.



## Tips

Towing trailer shall not exceed the maximum rated load of the two-hook, or it may cause an accident and severe personal injury.

As towing a trailer may require longer braking distance, you shall keep a larger interval with other vehicles. For each 10 km/h, the interval between you car and the vehicle in front of you shall be no less than the total length of your car and the trailer. Avoid hard braking to prevent the car from skidding, which may get the car out of control.

#### Tire

- Make sure the tire pressure is proper.
   Refer to description in section 7-2.
- Taking the total weight of a trailer into consideration, keep its tires with proper pressure as specified by its manufacturer.

## Running-in Procedure

 For a new auto or after it undergoes replacement of driving system parts (engine, transmission, differential mechanism, wheel bearing, driving shaft, etc.), do not tow any trailer in the first 2000 km travel.

#### Maintenance

 When towing a trailer, the increased load requires more frequent maintenance of the car

# How to Save Fuel and Extend Auto Service Life

In simple and easy way you can save fuel. Fuel-saving is also helpful to extend service life of the car. Here are some tips on saving fuel and maintenance expense:

- Maintain proper pressure in tires. Insufficient tire pressure may cause excessive tire wear and waste fuel. Refer to description in section 7-2.
- Do not leave unnecessary articles on the car. Weight of unwanted articles will increase engine load and consume more fuel.
- Avoid engine long time running idle for warming up. Once the engine running is stable, you shall speed up the car stably. Take note that in cold weather the engine warming up may take longer time.
- Acceleration shall be slow and stable.
   Avoid hard acceleration. Try to shift to high speed gear as soon as possible.



- Avoid engine running idle for a long time. If the car must be stopped for long period, you had better shut down the engine.
- Avoid engine lug-down or overspeed.
   Select appropriate gear according to road surface conditions.
- Avoid unnecessary alternative acceleration and deceleration, which will waste of fuel.
- Avoid unnecessary stopping or braking. In driving, if you keep a steady vehicle speed while taking traffic signaling lights into consideration, you can stop your car for fewer times; and if possible, take a road without traffic lights. Keep proper interval with the vehicle in front of you to avoid hard braking, which is also helpful to reduce brake wear.
- Avoid driving in traffic peak hours or traffic jam region.
- Do not rest your feet on clutch pedal or brake pedal. It will cause excessive wear, overheating and higher fuel consumption.

- Keep proper speed on expressway.
   The higher speed, the larger fuel consumption. Slower speed can save fuel.
- Keep Front Wheels in Proper Alignment Do not impact on curbstone, and slow down the speed on rugged road. Bad alignment of front wheels may cause excessive wear of tires, and also increase engine load and fuel consumption.
- Keep the chassis clean and free of mud and similar materials. It helps to reduce vehicle weight and prevent corrosion.
- Adjust and Keep Vehicle at Best Performance Dirty air filter, spark plug, engine oil and lubricant, improper throttle clearance, badly adjusted brake, etc. may have bad effect on engine performance and increase fuel consumption. To extend service life of all parts and reduce operating expense, regular maintenance is required. When driving under poor conditions, such as bad weather, maintenance to the car shall be more frequent (Refer to Chapter 6).

# Tips

It is prohibited to shut down the engine when running down a slope. The power steering and vacuum booster will be disabled when the engine is off. Similarly, emission pollutant control devices only function when the engine is running.



# Chapter 4

# **Emergency Treatment**

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f Engine Stalls in Driving	
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Гоw the Car	109



# If the Car Cannot Start Up

# (a) Simple Check

Before conducting this check, make sure the starting procedure in "*How to Start Engine*" in Chapter 3 is performed properly and there is sufficient fuel.

# If Engine Cannot Rotate or Rotate Slowly

- 1. Check whether battery terminals are tightened and cleaned properly.
- 2. If battery terminals have no problem, turn on rear interior light. If the interior light can not be turned on or is dim, or when the battery is depleted in starting, you can try jump starting. See descriptions in "(c) *Jump Starting*".

If the interior light is on but the engine cannot start, it shall be repaired or adjusted. Please contact BYD service station for help.

#### Note

Do not push or pull the car for starting. Otherwise when the engine starts, there may be damage to the car or collision. It may also make three-way catalytic converter overheated, which may lead to fire.

# If the starter of the engine runs at the normal speed but can not start the engine

- Turn the ignition switch to "ACC" or "OFF" and try again to start the engine.
- If the engine can not start up, maybe there is fuel spill as a result of repeated starting. Please see "(b) Start Engine with Fuel Spill" for more details.
- If the engine still can not be started, please contact BYD service store for adjustment or repair.

# (b) Start Engine with Fuel Spill

If the engine can not start up, maybe there is fuel spill as a result of repeated starting.

In this case, please step on the accelerator pedal in full force and meanwhile rotate the ignition switch to "START". Keep the ignition switch and accelerator pedal in this status for 5 seconds, and then release them. Make another attempt to start the engine with your feet off the accelerator pedal.

If the engine still can not start up after 15 seconds, please release the ignition switch, and try starting once again several minutes later.

If the engine still can not be started, please contact BYD service store for adjustment or repair.

#### Note

Each starting attempt shall be no more than 5 seconds, or it will cause overheating of engine or wires

# (c) Jump Start

To avoid personal injury and damage to the car and electronic components caused by battery explosion, sulphuric acid burning, electrical appliances fire, please strictly follow the instructions below.

If you are not sure about these procedures, please contact BYD service station for help.

## Tips

- The battery contains toxic and erosive sulphuric acid. While making jump start, please wear safety glasses and protect your skin, clothes, and the car from being spilled with sulphuric acid leakage.
- If sulphuric acid comes in contact with any part of your body or your eyes accidentally, please take off the clothes immediately, wash the afflicted part with clean water, and go to see the doctor quickly. If possible, continue to clean the affected area with sponge or cloth soaked in water on the way to the hospital.
- If there is flame or sparkle nearby, the gas generated by battery may cause explosion.
   Please use standard wire for jump start and avoid smoking or lighting a match.

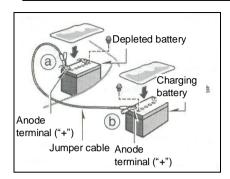
#### Note

The charging battery shall be 12V. Before conducting a jump start, please make sure the charging battery is applicable.

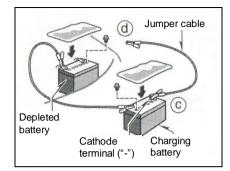
# **Procedures of Jump Start**

- If the charging battery is installed on another car, please make sure there is no contact between two cars. Shut down all unwanted lights and electrical devices.
- If necessary, remove all plugs for opening of the charging battery and depleted battery, and cover a piece of cloth on the opening. (This is helpful to reduce danger of explosion, personal injury and burning.)
- Start and run the engine of the car with charging battery for a few minutes. Step lightly on the accelerator pedal to keep the engine running at 2000rpm.

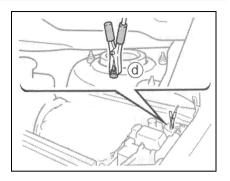




- 4. Connect wires in order of a, b, c, d:
  - a. Connect the clamp of anode (red) jump starting wire to anode terminal ("+") of the depleted battery.
  - b. Connect another clamp of anode (red) starting wire to anode terminal ("+") of the charging battery.



c. Connect the clamp of cathode (black) starting wire to cathode terminal ("-") of the charging battery.
d. Connect the another clamp of cathode (black) starting wire to a solid, fixed, unpainted metal fixation point on the car with depleted battery.
Joint point is shown in the figure below:



# **Connection for Jump Starting**

For jump starting connection, please do not leave the starting wire within action range of any moving part.

## Tips

To avoid personal injury, while connecting, please do not lean against the battery or, by accident, make the starting wire or clamp touch any object except the appointed battery terminal or ground point.

5. Start the engine in normal way, and then step lightly on the accelerator pedal to keep the engine running for several minutes at the speed of 2000rpm.



- 6. Disconnect the starting wire carefully in the reversed order of connection: disconnect the cathode starting wire first, and then disconnect the anode starting wire.
- 7. Take away the cloth covering the battery, which may be spilled with sulphuric acid.
- 8. To relocate the battery, you shall put all plugs of the battery back in place. If the battery power is discharged for reasons unknown (such as a light remaining on), please contact the BYD service station for examination.

## If Engine Stalls in Driving

If Engine Stalls in Driving...

- Please slow down the car slowly, keep moving in a straight way and run off the road to a safe place.
- 2. Turn on the emergency flashlight.
- 3. Try again to start the engine.

If the engine can not start up, please see "If the Car Cannot Start Up".

# Tips

When the engine is not running, boosters of brake and steering device do not work, which makes steering and braking more difficult than usual.

• If the engine stalls in driving, do not open the driver's door before the car stops completely. Steering wheel will be locked once the driver's door is opened, which may cause the car out of control.

#### If the Car Is Overheated

If the engine coolant thermometer indicates overheated, or there is power loss, loud knocking, or noisy bang, that means the engine may be overheated. Please handle it as per the procedures below...

- 1 Drive the car off road, stop it and turn on the emergency flashlight. Set the transmission to N gear, and apply the parking brake. Shut down air conditioning if it is running.
- 2. If there is coolant or steam spouting out of the radiator or expansion tank, please shut down the engine. Open engine hood after steam fades away. If no coolant or steam is spouting, just keep the engine running and make sure the cooling fan is working; if not, please turn off the ignition switch.

## **Tips**

To avoid personal injury, please keep the engine hood closed until there is no steam coming out. The spouting of steam or coolant means high pressure.



 Check whether there is obvious coolant leakage under the radiator, hose, and the car. Water drops produced by AC system in use are normal.

### Tips

When engine is running, please keep your hands and clothes away from the working fan & driving belt of the engine.

- 4. If there is coolant leakage, please shut down the engine at once and contact BYD service station for help.
- 5. In case of no obvious leakage, please check the coolant reservoir. If it is dry, please add coolant to the reservoir until the level is between two scale marks while the engine is running.

### Tips

Under high temperature, it is not allowed to remove the radiator cap since the spouting high-temperature steam and liquid under pressure may cause serious personal injury.

6. When the coolant temperature falls down to normal, check the coolant level in the tank again and add additional coolant if necessary. Large drop of coolant level means leakage in the system; please contact BYD service station for immediate examination.

### If the Car Has Flat Tires

- Please slow down the car slowly, keep moving in a straight way and run off the road to a safe place. Do not park your car on the turnout track in the middle of a highway. Park the car on firm and flat ground.
- 2. Shut down the engine and turn on the emergency flashlight.
- 3. Apply the parking brake and set the transmission to N gear.
- 4. All people should get off the car for a place away from traffic.
- 5. Read the following instructions carefully:

#### Tips

To reduce the possibility of serious personal injury, please obey the instructions below when you lift the car by jack.

- Follow the manufacturer's instructions on using the jack.
- No part of your body is allowed to stay under the car lifted by jack, or there may be bodily injury.
- When the car is lifted by jack, do not start the engine or leave it in running.

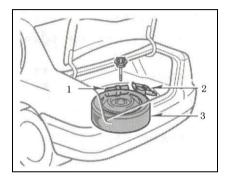


- Park the car on flat and solid ground, pull up parking brake firmly and shift the transmission to N gear. If necessary, lay chock blocks under the tire which is diagonally opposite to the tire to be replaced.
- Make sure the jack is placed on the right lifting point. Lifting up the car by a jack not placed properly may damage the car or cause the car dropping down from the jack, which may result in personal injuries.
- When the car is supported completely by jack, no one is allowed to stay under the car.
- Lifting up the car only for tire replacement purpose.
- Do not lift up the car when someone is in it.
- Do not put any thing at the top or bottom of the jack while lifting.
- Just lift the car to a height that allows tire removal and replacement.

### Note

Do not continue driving the car with a flat tire. Even a short trip may damage the tire permanently.

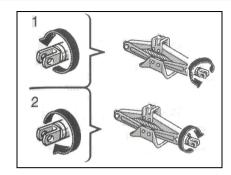
### **Tools Required and Spare Tire**



# Take out tools required and the spare tire.

- 1. Toolkit
- 2. Jack
- Spare tire

In emergency conditions, you may have to repair the car by yourself. Please well know the use method and storage location of the jack and various tools.

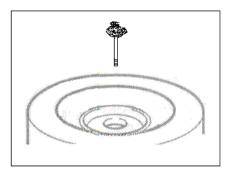


# Rotate the terminal of the jack manually

Remove: rotate the terminal in direction 1 until the jack become flexible.

Storage: rotate the terminal in direction 2 until the jack is fixed tightly to prevent it from being thrown forward when there is crash or emergency braking.

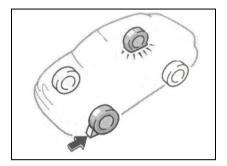




Loosen and remove the bolts, then take out the spare tire.

To store the tire, please put the outside of the tire downward in place, and then fasten the tire in the opposite order to prevent it from being thrown forward when there is crash or emergency braking.

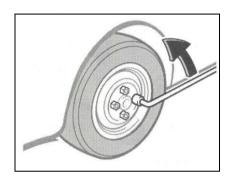
### **Block Wheels**



2. While lifting, please lay the chock block under the wheel in the diagonal direction of the flat tire to prevent the car sliding.

Put the chock block in front of a front wheel or behind a rear wheel.

## Unscrew Bolts on Wheel with a Flat Tire



# 3. Unscrew all bolts on the wheel with a flat tire.

Before lifting up the car, please loosen bolts on the wheel by rotating them anticlockwise.

For better torque, you can fit a spanner onto the bolt with its handle on the right as shown in the figure above. Grip at the end of the spanner handle and pull upwards. Please avoid the spanner slipping out of the bolt.

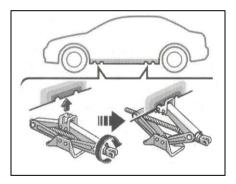


Do not remove the bolts, just loosen them by rotating one cycle and a half.

### Tips

Do not apply engine oil or lubricant on the bolts, or they will get loose, which may cause the wheel detached and lead to serious accident.

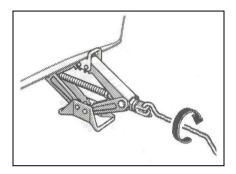
### **Jack Positioning**



# 4. Place the jack under the proper lifting point.

Make sure that the jack is placed on flat and solid ground.

### Lift Up Vehicle



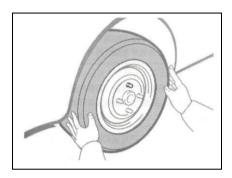
# 5. Make sure nobody is in the car, and lift up the car to a height that allows installation of spare tire.

Please notice that it needs larger clearance to install the spare tire than remove the flat tire.

To lift up the car, please insert the jack handle into the jack (loose joint) and rotate it clockwise. When the jack touches the car and starts lifting, please check again if the jack is at the right position.

# Tips When the car is supported completely by jack, no one is allowed to stay under the car.

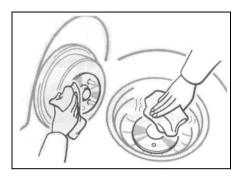
### **Replace Wheels**



## 6. Remove wheel bolts and replace the tire.

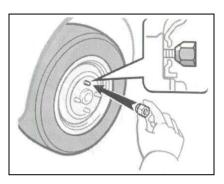
Take off the flat tire and put it aside.

Roll the spare tire to the installation position, align the bolt to tire hole, and then raise the tire until the top bolt fit into the screw hole. Rotate the tire push it until all bolts can fit into corresponding screw holes.



Before installation, please brush off all corrosive materials on the installation surface with a wire brush. During installation, the metal area on the installation surfaces must be in well contact with each other, or the wheel bolts may get loose, which may cause the tire falling off in driving.

### Reinstall Wheel Bolts



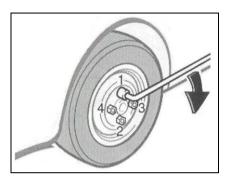
### 7. Reinstall all wheel bolts manually.

To reinstall bolts, please manually tighten them with wedged end inward first. Push the wheel backward and try to further tighten the bolts manually.

### Tips

Do not apply engine oil or lubricant on the bolts, or they will get loose, which may cause the wheel detached and lead to serious accident. If there is engine oil or lubricant on the bolts or nuts, clean them immediately.

### Lower Down Vehicle



8. Lower down the car to ground and tighten the wheel bolts.

To lay down the car, please rotate the jack handle counterclockwise.

Please use a spanner for wheel bolt to tighten the bolts. Do not use any other tools or lever, like hammer, tube, or your feet.

Make sure the spanner is fitted onto the bolts firmly.

As per the order shown in the figure above, tighten the bolts slightly one by one, repeat the procedure until all the bolts are fastened firmly.



### Tips

- Please make sure no part of your body and no one nearby will get injured while laying down the car onto the ground.
- When the tire is replaced, please use the spanner with a torque of 103N·m (10.5 kgf·m) to fasten the bolts. Otherwise the bolts will get loose, which may cause the tire falling off and result in serious accident.

### After Tire Replacement

# 9. The tire pressure after replacement.

Adjust the tire pressure to the value specified in Chapter 8. If the current pressure is lower than specified value, please drive the car slowly to the nearby service station for air charging.

Do not forget to install the tire valve cap, or dust and moisture will enter the valve core to cause possible air leakage. If the tire valve cap is missing, please use a new one immediately.

# 10. Put tools, jack and flat tire in proper storage.

After tire replacement, please use a torque spanner to tighten the wheel bolts to the torque specified in Chapter 8. The flat tire should be repaired by a qualified technician.

### **Tips**

Before driving, please make sure all tools, jack, and flat tire are fixed in their storage position so as to reduce the possibility of personal injury in case of a crash or emergency braking.

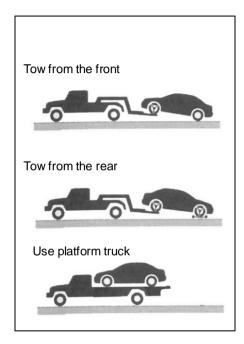
### If the Car Gets Stuck

If the car gets stuck in snow, mud, or sand, please try to get it out by pushing it forward or backward.

### **Tips**

If there are persons or objects near the car, please do not try to move the car by pushing it forward and backward. If not, once the car gets out and suddenly moves forward or backward, there may be personal injury or damage to objects.

#### Tow the Car



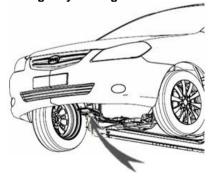
Use proper towing devices to tow the car to avoid damage.

Improper towing may damage the car. Most personnel handling towing know the right method, but something may go wrong accidentally. To avoid damage to the car, please follow the precautions below.

### **Precautions for Towing:**

Towing should use safety chain system and abide to applicable national and local laws. The wheels touching the ground and their axle should be in good condition. If they are damaged, you shall use platform truck for towing.

### **Emergency Towing**



For emergency towing, you can contact BYD service station to handle on your behalf.

If you can not find a towing company under emergency situation, please tie the towing cable or chain to the emergency towing hook at the bottom of the car for temporary towing. In this case, you shall be extremely careful.

### Note

- Please use the specified towing hook, or the car may be damaged.
- ◆ Do not tow the car from the rear side with all four wheels on the ground, or it will seriously damage the transmission.

The driver should sit inside steering the car and controlling the brake.

Towing in this way may only move the car slowly for a short distance on a hard road. Meanwhile it requires that the wheels, shafts, transmission, drivetrain, steering wheel, and brake be in good condition.



### Tips

Take special care when towing the car. Please avoid sudden startup and unstable driving operation, which may exert great stress on emergency towing hook, and towing cable/chain. The hook, towing cable/chain may crack, in which case there may be serious personal injury or damage to the car.

#### Note

Please use the towing cable or chain designed specifically for car towing. Tie the cable or chain to the towing hook firmly.

Before towing, please release the parking brake and set the transmission to N gear. The ignition switch should be at "ACC" (engine shut down) or "ON" (engine running).

### Tips

When the engine is not running, boosters of brake and steering device do not work, which makes steering and braking more difficult than usual.



### Chapter 5

### **Anti-corrosion and Auto Exterior Maintenance**

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Tips on Maintenance of Paint Surface	11
Washing and Waxing	11
Inside Cleaning	



#### Anti-corrosion

Proper maintenance can protect the car against corrosion for a long time.

## The common causes for car corrosion are:

- Saline-alkali, dust, and moisture concentrates at unaccessible part under the bottom of the car.
- The paint film or base coating is scratched by slight crash or foreign bodies such as sand.

# If operating the car under special circumstance or environment, please take special care:

- The dust on the road with saline-alkali or chemical substances will speed up corrosion; the air along the seacoast or in regions polluted by industries is also saline.
- High moisture will speed up corrosion, especially at a site with a temperature just over 0°C.
- When certain parts of the car are always under moisture or humidity, even if the rest parts are kept dry, corrosion will occur.
- High compartment temperature may cause corrosion to the parts which can not get dry quickly due to lack of proper ventilation.

The above items show that it is very import to keep the car, especially its bottom, clean and repair the damaged paint and protection coating as soon as possible.

To prevent corrosion of BYD G3, please follow the instructions below: Wash the car regularly. Washing your car regularly can keep it clean. But for anti-corrosion purpose, please abide by the following points:

- In winter if you drive the car on the road with saline-alkali or live by the sea, please wash the running part of the car at least once per month to reduce corrosion.
- High pressure water or steam is effective for cleaning chassis and wheel cover. Slurry and dirt in these positions are difficult to remove; you need to pay extra attention as getting the slurry and crumbs wet without removing them may cause severer damage. Please avoid the dust jamming the drain hole on the lower edge of the door, sill plate, and frame, otherwise water accumulated will lead to corrosion.
- Arrange a thorough cleaning for the chassis when winter is over.

For more hints, refer to "Washing and Waxing".

Check the car's paint and decorative pieces. When there is any fragment or crack on the paint film, please repair it at once to avoid commencement of corrosion at this location. If the fragments or cracks peel off the metal surface, please contact the BYD service station for repair.

Check inside of the carriage. Moisture and dust will concentrate beneath the floor mats and cause corrosion, please check the underside of the floor mats frequently and make sure it is dry. When you transport chemicals, detergent, fertilizer, salt and similar materials, please pay particular attention and use proper containers. In case of any spillage or leakage, please clean and dry the affected part immediately.

Use mudguard. When driving in saline-alkali area or on the gravel road, you can use mudguard to protect the car. The mudguard with bigger size and shorter clearance from the ground has better protection effect. Small mudguard for wheel cover is optional for BYD G3, installation of which is available at BYD service station.



Park the car in a well ventilated garage rather than in damp or unventilated place. Washing your car in the garage or parking after a drive on a wet or snowy road will get the garage damp and thus cause corrosion. Even though the garage is dry, the car will also get damp and suffer corrosion if it is poorly ventilated.

# **Tips on Maintenance of Paint Surface**Pay attention to the following points in use and maintenance of the car:

- (1) Clean the dust on the car before, during and after using the car, which can reduce dust absorption by static.
- (2) Wash the car timely after rain. The taint left by rain on the car body will shrink in size after rain stops, which means acid materials in the rain will concentrate. Clean the taint as soon as possible to avoid harm to the paint surface caused by the taint.
- (3) Wash the car after the engine cools down. Do not wash the car in strong sunlight or high temperature, otherwise the detergent will form taint on the paint surface after quick drying. If you wash the car by yourself, only use special-purpose detergent and neutral running water. Do not use strongly alkaline washing power, soap water and

detergent, which may wash away grease in the paint and speed up aging. When washing the car at a carwash, prevent the staff from using dewaxing detergent, or the paint may be damaged. When the car is used along seacoast or in a region with heavy pollution, you shall wash the car daily.

- (4) Only use damp, clean and soft sponge or finishing cloth to wipe the car, and make sure metal and sand particle does not exist in it. Do not use dry cloth, sponge or towel to wipe it to avoid scratching. When wiping, move the cloth gently along the running water, and do not move in circle or perpendicular to the running water.
- (5) Taint of strongly corrosive stuff, such as pitch, bird manure and insect remains, shall be cleaned timely. Please use special purpose detergent. Do not use knife or gasoline to remove the taint, otherwise the paint surface may be damaged.
- (6) Do not touch the paint with greasy hands, wipe the paint with greasy cloth, or put any tool with grease on it or finishing cloth dipped in organic solvent on the car body, otherwise there may be harmful chemical reaction.
- (7) If there is no obvious scratch, do not make repainting as the new paint color

may vary with the original paint. (8) In case that the car will not be used for a long period, please park it in a well-ventilated garage or similar place, and use a special-purpose car cover. For a short period parking, please select a shade place.

- (9) Prevent strong impact, knock or scratch to the paint film. If the paint has scratch, sinking or peeling off, please make repair in time, and you are recommended to go to a professional auto beauty store.
- (10) Use carbon detergent to clean glossy metal parts, and apply waxing regularly for protection.
- (11) Use quality detergent for cleaning of trimming, and do not use excessive force when waxing to prevent the base layer from exposing when the paint is penetrated.

Apply waxing when it is required and go to auto beauty store for maintenance regularly (at least once per quarter) to keep the paint surface glossy.



### **Washing and Waxing**

### Cleaning for BYD G3 Clean the car in normal way.

In the cases below, the paint may peel off and there will be corrosion in the car body and parts. Please clean the car immediately.

- Driving along the seacoast.
- Driving on the road covered with anti-freezer.
- Stuck with coal tar, resin, bird manure, and insect remains.
- Driving in an area with heavy smoke, coal ash, dust, iron scurf, or chemical substances.
- The car is obviously covered with dust and slurry.

### Manual Cleaning for BYD G3

Clean the car in shade place when the body does not feel hot.

### **Tips**

Please protect your hands from hurt while cleaning the underside of the floor or chassis.

- Use water pipe to wash away the loose dirt, slurry and saline-alkali at the bottom of the car and in the sunk places of wheels.
- Use neutral detergent to wash the car, following the manufacturer's instructions when mixing the detergent with water. Dip a soft cloth into the detergent to wipe the car gently, and use soap water and clean water to remove the dirt.
- Flushing with running water, otherwise when the soap water get dry, it will leave taints. Especially, please use clean water to flush each part of the car after washing in the summer.
- To avoid leaving water mark, please wipe it dry with clean soft towel. Do not wipe or press too hard, or the paint surface may be damaged.

Decorative plastic pieces on wheels: the decorative plastic pieces may be damaged by organic substances easily. If any organic substance spills onto the decorative pieces, please wash it away by clean water and check whether the decorative pieces are hurt.

### Tips

Do not install plastic decorative pieces which have been seriously damaged on wheels, or they may drop off the wheel while driving and thus lead to accident.

Aluminum wheel: Wash it only with neutral soap water or neutral detergent. Plastic bumper: be careful in washing it. Do not use detergent containing grinding medium to wipe it, because its front side is soft.

**Asphalt from the road**: wash it by turpentine or detergent marked as non-harmful to the painted surface.

### Note

Do not use such organic substances as gasoline, kerosene, naphtha, and strong solvent as they may cause poisoning or damage.



### **Auto Car Washing**

You can wash your car at an automatic carwash station. But please take notice that some types of brushes, unfiltered water, and the wash process adopted by the machine will hurt the painted surface. Damage to the painted surface will reduce its duration and gloss, particularly for the car in dark color. Usually the staff from carwash will tell you which washing process is most proper for your car.

### Waxing for BYD G3

# To keep the glossy surface as brand-new, we suggest you to polish and wax the car regularly.

Waxing shall be done once per month or when the car body shows poor water-resistant performance.

- Before waxing, please wash and dry the car body even if you use the mixture of detergent and wax.
- Please use quality polish and car wax.
   When the polishing coat has been weathered seriously, please use the cleaning polish which is separated from the car wax. Follow the instructions and precautions from the manufacturer. The chrome plated surface also needs polishing and waxing.
- 3. On a large surface, if the water can not form beads but stay on the surface, you shall wax the car.

#### Note

When the car is placed in painting & polishing workshop with high temperature for repainting, please remove the plastic bumper from the car, or the heat may damage the bumper.

### Inside Cleaning

### Tips

Do not wash the floor with water or allow the water to flow onto the floor while cleaning the car inside or outside; otherwise water may enter the audio devices or other electric appliances on or under the carpet (mat), which may result in malfunction of the devices and corrosion of the car body

### Carpet

## Please use quality foam detergent to clean the carpet.

First use the dust collector to absorb the dust. Several kinds of foam detergents are applicable: some are packed in aerosol can, and some are powder or liquid which shall be mixed with water to generate foam. Use a sponge or brush dipped with foam to wash the carpet by moving in circle.

Do not use water to keep the carpet dry. Please read and strictly follow the instructions from the detergent manufacturer.



### **Seat Belts**

The seat belt can be washed with neutral soap water or warm water.

Use sponge or soft cloth to clean it. Check if the seat belt has excessive wear or cut.

#### Note

- ◆ The seat belt can not be cleaned with coloring agent or bleacher, or its strength will be weakened.
- Do not use the seat belt until it is dry.

### **Doors and Windows**

Doors and windows can be cleaned with any normal household detergent.

### Note

When cleaning the internal side of the rear window, pay attention to not scratching or damaging heating wire or its connector. Please use damp and soft cloth to clean the air conditioning control panel, stereo system, instrument panel, control panel, and switches.

Dip a clean and soft cloth into the water or warm water, and then wipe away the dust gently.

### Note

- ◆ Do not use organic substances (like solvent, kerosene, alcohol, or gasoline) and acid-base solutions, because these chemicals will lead to color change, taint, and peeling on the surface.
- Before using detergent or polish, first please make sure they do not include the substances mentioned above.
- If you use new liquid detergent, please do not spill the liquid onto the inside surface of the car as they may contain harmful substance. If any spilling, please clean up the spilled liquid at once in the way described previously.

Leather Trimming inside the Car For leather trimming, you can use neutral detergent intended for woolen fabrics to clean them.

Use a soft cloth dipped with 5% of neutral detergent intended for woolen fabrics to erase the dust, and then wipe off the residual detergent with a clean wet cloth.

If any part of the leather gets wet after cleaning, please wipe it dry with a clean soft cloth and keep it in the ventilated shade for drying.



## chapter 6

### **Maintenance Instructions**

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BYD G3 Maintenance Program	



### Maintenance Scheduled maintenance is

# Scheduled maintenance is very important

BYD Auto Company strongly recommends that users protect their new G3 BYD cars by following the maintenance program, because scheduled maintenance serves the following purposes:

- Save fuel
- Extend its operating life
- Enjoy driving
- Drive safely
- Drive stably
- Conform to regulations on maintenance
- Conform to governmental regulations

#### Notes:

Please refer to BYD G3
Maintenance & Repair Manual and turn to BYD service station regularly for car maintenance.

BYD G3 car has been designed to be a economical driving and maintaining car which dispenses with many maintenance services required before. To ensure your car runs with best travel efficiency, you must follow the maintenance program.

# Where can you get maintenance service?

It is best to get car maintenance from local BYD service station.

Technicians in BYD are all well-trained professionals. They will get the latest service information. such as proceedings about technique, maintenance gist and internal training program of special repair shop. They have completed study in BYD Auto Company before working, instead of study while working. Is it the best way? BYD service station has spent a large amount of money on special tools and maintenance equipment for BYD cars, which helps to better complete tasks as well as reduce expenses.

The maintenance department of BYD service station can perform all the maintenance program for your car – reliable and economical.

# Which maintenance items can be completed by driver himself?

Many maintenance items can be easily completed by driver himself, as long as has some knowledge about mechanical maintenance and also has some basic auto tools For easy operations, you can refer to section 7. Notes: special tools and professional skills are required for part of maintenance operation. These items shall be maintained by qualified technicians. Even though the driver is a well-experienced technician, BYD Auto Company still recommends you contact BYD service station for repair and maintenance. What's more, they can keep a record of maintenance for your car, which will be very helpful when you need maintenance service.



## How to judge the vehicle need maintenance?

Pay attention to changes of car performance and sound, as well as visualized signs for necessary repair. Some important conditions are shown as below:

- The engine is misfiring, unstable or sounds "bang"
- Driving force is reduced obviously
- Abnormal noises made by engine
- The car is leaking at its bottom (yet air conditioning water drop is normal))
- Exhaust sound changes (it may indicate carbon monoxide leak) You must drive with windows opened and check the exhaust system immediately.)

- Flat tire; excessive noise made by tires during turning a corner; uneven tire wear
- The car leans to one side during driving in a straight line on the flat ground.
- Abnormal noises related to movement of suspension device
- Braking is disabled; brake pedal or clutch pedal feels like sponge; brake pedal almost touches the floor; when braking, the car turns to one side.
- Temperature of coolant still continue to be too high

If any conditions above, drive your car to BYD service station as soon as possible, as your car may need adjustment or repair.

### **Tips**

Do not keep on driving without any inspection, or it may cause serious car damage and human injury.



### **BYD G3 Maintenance Program**

BYD G3 maintenance program is designed for ensuring stable driving, reducing faults and driving safely and economically.

You can refer to the schedule for intervals of maintenance, which is almost scheduled according to the reading on odometer or time interval. It is subject to what comes first.

For maintenance item out of the last expiration date, it can also be maintained at the same interval.

Maintenance interval for each item are all recorded in the maintenance program.

Rubber hose (used for cooling and heating system, brake system and fuel system) shall be checked by qualified technicians according to the BYD G3 maintenance program.

These are extremely important maintenance items. If any deterioration or damage, the hose shall be replaced immediately. Notes: rubber hose will be deteriorated with the passing years, thus it may cause expansion, abrasion or breakage.

**Requirements for Maintenance Program** 

BYD G3 auto must be maintained according to the normal maintenance program (you can refer to "Maintenance Program").



If the car is operated under the following one or more special conditions, some maintenance item is required to be performed more frequently.

some maintenance item is required to be performed more frequently.									
A. F	Road Conditions	B. Driving Conditions							
1.	Drive on rugged, muddy or snowmelt road	1. When the car has towed a trailer; used a camping trailer or top							
2.	Drive on the dusty road	clamping bracket							
	•	2. When the car has run at a short							
		distance repeatedly below 0 $^{\circ}\mathrm{C}$ , within 8km.							
		When the car has idled for a long time or							
	long run at a low speed such as pol								
car, taxi or delivery car.									



# Maintenance Program Maintenance Operations:

Maintenance Operations: I = check, correct or replace when necessary; R = replace, change or lubricate; C = clean

Maintenance Operations:	Reading on odometer or months, subject to what comes first															
Maintenance Intervals	Readi	ing on o	don	eter	or m	nonth	ıs, sı	ubjed	t to	what	con	nes fi	rst			
	×1,000km	3	8	13	18	23	28	33	38	43	48	53	58	63	68	73
Maintenance Items	Months	Forced Mainte nance	3	6	9	12	15	18	21	24	27	30	33	36	39	42
Basic parts of engine																
<ol> <li>Check if any crack, flying chip, w and adjust its tensity</li> </ol>	ear on the drive belt	I		I		-		I		Ι		I		ı		1
2. Check if any damage on the igniti-	on cable					I								I		
3. Replace the timing belt of	General using conditions					I				I				I		R
engine Rigorous using conditions			R: every 70,000km													
Check if the oil and gas control sy normal	4. Check if the oil and gas control system of crankcase is normal					I				I				I		
<ol><li>Check and replace the spark plug</li></ol>				ı				R				-		R		
<ol><li>Check if the cooling water pip confirm if the pipe joint is locked tight</li></ol>				I		Ι				I				I		
7. Check the engine coolant level in	the over flow pot	I		ı		ı		ı		_		ı		ı		-
Replace the engine coolant						R				R				R		
Check if the air filter element is blocked and damaged	General using conditions		I	I	I	I	I	I	I	I	I	I	I	I	I	I
	Rigorous using conditions															
10. Replace the air filter element	General use conditions			R		R		R		R		R		R		R
	Rigorous using conditions				F	R: SI	norte	n the	cycl	e as	requi	red				



Maintenance Interval	Readi	ading on odometer or months, subject to what comes first														
	×1,000km	3 8 13 18 23 28 33 38 43 48 53 58 63 6									68	73				
Maintenance Items	Months	Forced Mainte nance	3	6	9	12	15	18	21	24	27	30	33	36	39	42
11. Check the gear oil level in manua	al transmission box															
12. Replace the gear oil in the manual transmission box	General using conditions	I	I R R R R													
manual transmission box	Rigorous using conditions	R: Shorten the cycle as required  Free from replacing, just check and supplement it every 1 year or														
13. Check and replace the oil in	General using conditions	Fre	e fro	m re	placi	ng, ju	ıst ch		and s 000kr		emei	nt it e	very	1 ye	ar or	
automatic transmission box	Rigorous using conditions															
Replace the lubricating oil and transmission	oil filter in CVT	Replace it every 60,000km														
14. Replace engine oil	General using conditions															
14. Replace engine on	Rigorous using conditions	Every 3,000km														
15. Replace the engine oil filter	General using conditions	Replace it every 6 months or every 5,000km														
element	Rigorous using conditions						E	very	3,000	0km						
16. Check the electrolyte of battery					-		-		-	- 1	- 1	-	-	- 1	ı	-
17. Check the engine idle speed		I		Ι				Ι		- 1		Ι		- 1		Ι
18. Check the ignition timing		l														
19. Check the air hose of crankcase				ı				ı				ı				ı
20. Check the valve gap				L.				L.		I I		L.		I I		
21. Check the joint of exhaust pipe for	or gas leak															
22. Throttle Body				C		С		C		C		C		С		С
23. Injection nozzle				С		С		С		С		С		С		С



24. Check the oxygen sensor		ı	ı	ı		I	-	- 1
25. Check the three-way catalytic converter			_			-		- 1
Fuel and Exhaust Purification Control System								
26. Fuel filter		R	R	R	R	R	R	R
27. Fuel tank cover, fuel pipe and joint							_	

Maintenance Interval	Reading on odometer or months, subject to what comes first															
	×1,000km	3	8	13	18	23	28	33	38	43	48	53	58	63	68	73
Maintenance Items	Months	Forced Mainte nance	3	6	9	12	15	18	21	24	27	30	33	36	39	42
28. Activated carbon canister				- 1		ı		I		ı		- 1		ı		
Chassis and Car Body																
29. Brake pedal and parking brake		I		-		- 1		I		-		-		I		
30. Brake pad and brake disc		I		-		- 1		- 1		-		-		I		l
31. Brake fluid		I	ı	-	- 1	R	- 1	- 1	I	R	-	-	-	R	-	l
32. Pipeline and hose of brake system				-		- 1		- 1		-		-		I		l
33. Power steering fluid						R				R				R		ı
34. Steering wheel, draw bar										-				ı		-
35. Transmission shaft dust cover								ı						-		I
36. Ball pin and dust cover		I		-		- 1		- 1		-		-		I		l
37. Front and rear suspension device	e			-		- 1		I		-		-		I		
38. Tire and inflation pressure		1	- 1	-	I	-	- 1	I	I	-	ı	-	-	I	ı	I
39. Check the front and rear wheel a	llignment	- [	ı		I	I	-			-				I		ı
40. Check if the wheel bearing has e	40. Check if the wheel bearing has end play									-				ı		-
41. Cooling or heating system		I								-				ı		-
42. Air filter of air conditioner		1		R		R		R		R		R		R		R
43. Refrigerant of air conditioner/coo	oling device			I		I		-		ı		I		I		-
44. Check the SRS system				I		I				I		I		I		- 1
45. Check the car body for damage		Every year														



### Notes:

# "Rigorous Using Conditions" specifications only apply to the cars used in rigorous using conditions. It includes as follows:

- (1) Drive in the dusty areas or often expose the car in air with salt or by the sea;
- (2) Drive on the rugged road, road full of water or mountain road;
- (3) Drive in the cold area:
- (4) The engine runs idle for a long time or often runs for a short distance in cold season;
- (5) Use the brake frequently and often slam the brake:
- (6) Use the car as a tractor-trailer;
- (7) Use the car as a taxi or an operating car;
- (8) Above 32°C, drive the car in the crowded urban area for more than 50% running time;
- (9) Above 30°C, drive the car at 120km/hour or a higher speed for more than 50% running time;
- (10) Overloaded running.



# Chapter 7 Section 1

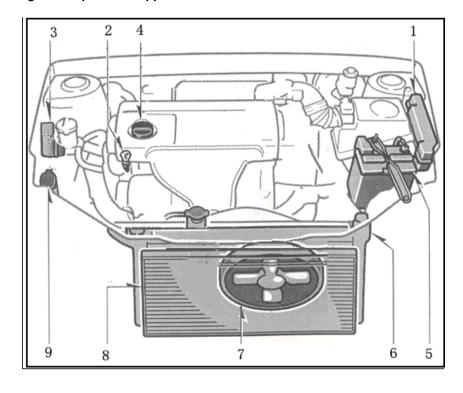
### **Self-maintenance**

### **Foreword**

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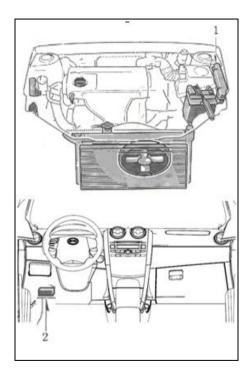
### **Engine Compartment Appearance**

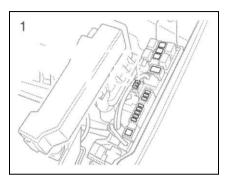


- 1. Distribution box assembly
- 2. Engine oil level dipstick
- 3. Overflow tank of engine coolant
- 4. Fuel flap of engine oil
- 5. Battery
- 6. Radiator
- 7. Electric cooling fan
- Condenser
- 9. Windscreen cleanser container

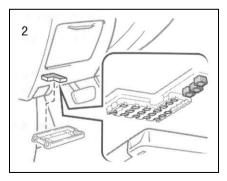


### **Fuse Location**





Please refer to section 8 "Fuse and Relay" for the name of electric appliance protected by each fuse.



### Notes of Self-maintenance

In case of self maintenance, you must follow the correct procedures in this section.

You must pay attention to that incorrect or incomplete maintenance operations may cause operating problems.

This section only makes explanations on maintenance operations which can be easily done by yourself. As said in section 6, some items must still be maintained by qualified technicians with special tools.

During operation, you must pay special attention to avoiding accidental injuries. You are required to follow the special preventive measures below.



### Tips

• When the engine is running. you must keep your hands, clothes and tools away from the running fans and drive belt of engine.(It is best to take down such things as finger ring, watch and necktie.) • After drive the car. vou the temperature of such things as its engine, radiator, exhaust pipe, hold-up vessel of power steering fluid and spark plug cover must be very high in the engine compartment.

Thus, you must be careful and do not touch them. The temperature of engine oil, fluid and spark plug must be very high, too.

- If the engine is very hot, do not take down the radiator cover or screw off the drain plug to avoid burning.
- Do not leave any flammable material in the engine compartment such as paper or cloth.
- If you work near electric cooling fan or radiator grill, you must confirm that the ignition switch has been turned off.

When turning on the ignition switch, if the temperature of engine coolant rises and/or turning on the air conditioner, the electric cooling fan of engine will start running automatically.

- Nearby the fuel tank or battery, do not smoke, to avoid generating spark and naked flame, as it may cause fire.
- Handle the storage battery with special care, as it contains poisonous gas and corrosive sulfuric acid.
- The car shall only be lifted by a jack. Do not crawl under the car; lift it with car lifting jack or other firm braces.
- Now matter operating on the top or bottom of the car, you must use eyes protector, to avoid dropping or falling objects and splashing fluid.
- Used engine oil contains potential pollutants, which may cause skin diseases such as skin inflammation and skin cancer. Thus, you must pay attention to avoiding long or frequent touch of these engine oils. You can wash the used

engine oil on your skin with soap and fresh water.

- Do not put the used engine oil in the place within the reach of children.
- Dispose of the used engine oil and filter by some safe and satisfied means and do not throw them together with the household garbage, in the sewer or on the ground. Refer to BYD service station for recycling or disposing methods.
- Since brake fluid may damage the eyes as well as the paint finish, you must be very careful in filling brake fluid; if it splashes into the eyes, wash with fresh water immediately; if your eyes still feel uncomfortable, you must go to see a doctor.



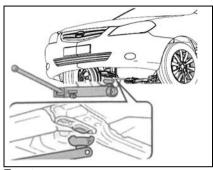
#### Notes

- Remember, storage battery and ignition coil bears high current or high voltage. Pay attention to short circuit caused by accidents.
- If the coolant overflows, you must wash it with water, to avoid damaging the components or paint finish.
- Do not drop any dirt or any other things into the spark plug hole.
- Do not lever up the external electrode of spark plug at the side of central electrode.
- You can only use the specified spark plug. Using other spark plug may damage the engine or generate radio interference.
- Do not fill too much power steering fluid, or the power steering gear may be damaged.
- ◆ If the brake fluid overflows, you must wash it with water, to avoid damaging the components or paint finish.
- ◆ Do not drive with the air filter taken down, otherwise it may cause excessive wear of engine and meanwhile backfire will

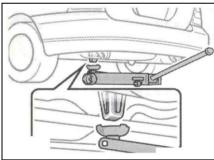
cause fire in the engine compartment.

- ♦ Notes: do not scratch the glass by the wiper bracket.
- In closing the engine cover, check if any tools or cloths are left in the engine compartment.

### **Location of Jack**



Front



Back



When lifting a car with jack, place it in proper position as shown in the figure.

### Tips

In lifting, you must follow the regulations below to reduce the possibility of human injuries:

- Avoid breathing the gas exhausted by the engine. The exhaust gas contains carbon monoxide, colorless and odorless. It may cause consciousness loss, and even death.
- Do not place any part of your body under the car lifted by a jack. Otherwise, it may cause human injuries.
- In lifting a car with a jack, do not start or run the engine.
- Stop the car on the flat ground, make sure the parking brake is applied and block the wheels opposite the lifting point, when necessary.
- Make sure the jack is placed in the correct lifting point. Lifting the car in incorrect lifting point will damage the car or the car may drop from the jack to cause human injuries.

- When the car is only lifted by a jack, do not crawl under the car; a car supporting bracket is required.
- Do not lift the car if any people in it.
- In lifting the car, do not put any thing on the top or bottom of the jack.

### Notes

Make sure the jack is stored properly, or it may damage the car.



# Chapter 7 Section 2

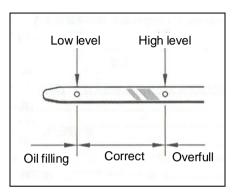
### **Self-maintenance**

### **Engine and Chassis**

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### **Check Engine Oil Level**



# Shut down engine at operating temperature, and check engine oil level with dipstick.

- To get accurate reading, you shall pack the car on flat ground. Shut down the engine and wait for a few minutes so that engine oil is collected at the bottom of the engine.
- 2. Pull out the dipstick, place a piece of fabric at its end and wipe it clean.
- Insert the dipstick again. You shall insert it to the bottommost position for accurate reading.
- Pull out the dipstick, place a piece of fabric at its end and check the engine oil level.

### Note

Do not drop engine oil on parts of the car.

If the oil level is near the low oil line, you shall add additional engine oil of the same type in the engine.

Remove the engine oil fill cap, add a small amount of engine oil and then check the dipstick. You are recommended to use funnel when adding engine oil.

After adding engine oil, the oil level shall be located between the low oil line and high oil line on the dipstick as shown in the figure above.

When the oil level is proper, install the fill cap and tighten it manually.

### Note

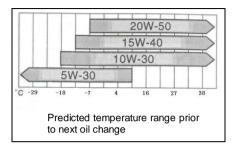
- Do not splash engine oil on parts of the car.
- ◆ Do not add too much oil, or engine may be damaged.
- Check the oil level with dipstick after you finish adding engine oil.

### **Engine Oil Specification**

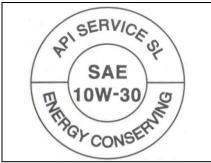
Only use lubricating oil approved by BYD-authorized service stations or equivalents in compliance with the following grade and viscosity.

Engine Oil Grade for Gasoline Engine: SAE 5W—30 above -30℃ SAE 15W—40 above -15℃ API Grade SG or above Amount: 3L (liter)

### Recommended viscosity (SAE):



In extremely cold weather, SAE 10W - 30 oil or oil with higher viscosity may cause difficulty to start the engine, so SAE 5W-30 engine oil is recommended.



API Classification Label



**ILSAC Certification Label** 

### **Engine Oil Identification Label**

One or two API registration label is available on some engine tank for reference when choosing oil.

API classification label is somewhere on the outside of the tank.

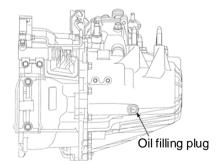
Engine oil quality is indicated on the label top according to API (American Petroleum Institute) standard, such as SL. SAE viscosity is indicated at the middle of the label, such as 10W-30. "Energy-Conserving" symbol at the bottom of the label indicates that it can save engine oil.

Certification of ILSAC (International Lubricant Standardization and Approval Committee) is at the front side of the oil tank.

### Check Fluid Level in Gearbox

# Manual Gearbox (Description about CVT gearbox is added)

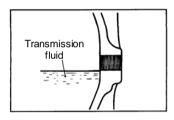
Check the fluid level in gearbox when transmission is at the normal operating temperature of 80°C with the car parking on flat ground. Remove the bolt of fluid filler opening of the transmission, and touch the fluid level within the bolt hole with a finger carefully. The fluid level shall reach the edge of the bolt hole. If not, please add original MTF (manual transmission fluid) from BYD until the fluid overflow from the filler opening. At last, install back and tighten the bolt of the fluid filler opening.



Position of oil filling plug

Clean up overflowing fluid immediately as it may damage parts in the engine compartment.

If original MTF is not available, you can use API certified gear oil as substitute. For specific specifications, please refer to *Maintenance Manual* or contact BYD service station.



Level of gear fluid

Transmission fluid shall be replaced by mileage or interval as specified in Periodic Maintenance Table. The existing transmission fluid shall be drained completely before filling new transmission fluid.

Please contact BYD service station if you have any doubt about checking fluid level or filling fluid in gearbox.

Note: no water can be contained in the gear fluid so as to avoid rusting the components in the transmission.



Drain plug
Position of drain plug



### **Check Cooling Fluid Level in Engine**

Check the transparent overflow tank of the cooling fluid when the engine is cold. If the cooling fluid level is located between "FULL" and "LOW" line on the tank, it is in compliance with the requirement. If the fluid level is low, additional cooling fluid shall be added. (Refer to section "Choose Cooling Fluid" below for information on usable type of cooling fluid.)

The cooling fluid level in the overflow tank varies with the temperature of the engine. But if the fluid level is under "LOW" line, more fluid shall be added until fluid level reaches "FULL" line.

After adding cooling fluid, if the fluid level drops in short period, there may be leakage in the system. You shall conduct visual check to radiator, hose, radiator cap, drain cock and pump.

If visual check can not find out leakage, please contact BYD service station to check cap pressure and whether there is leakage in cooling system.

### Tips

To avoid scorching, do not remove radiator cap when engine is hot.

### **Choose Cooling Fluid**

Only use cooling fluid authorized by BYD service station. Choose and add suitable type of cooling fluid into cooling system according to environment temperature.

Improper cooling fluid may damage engine cooling system.

### Note

Do not over use water, which may damage engine cooling system in winter.

For more detailed information, please contact BYD service station.

### **Check Radiator and Condenser**

If radiator or condenser becomes very dirty or you can not determine their status, please send the car to BYD service station.

### Tips

To avoid scorching, do not touch radiator or condenser when engine is hot.

### Note

Do not service radiator or condenser by yourself to avoid damage.

# Check Tire Pressure Maintain proper pressure in tires.

For information on recommended cold tire pressure and tire dimension, please refer to Chapter 8.

You shall check the tire pressure every two weeks, or, at least, every month. Spare tire pressure shall also be checked.

Improper tire pressure may increase gas consumption, reduce driving comfort, tire service life, and pose danger to road safety.

If the tire need air filling frequently, please contact BYD service station for a check.



### Tips

Maintain proper pressure in tires. Improper pressure may cause the following conditions, and even severe injury.

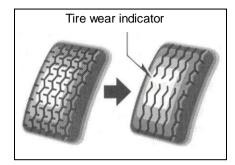
Low tire pressure (insufficient air filling)

- Excessive wear
- Abnormal wear
- Difficulty in operation
- Air leakage due to overheat of tires
- Deteriorated sealability at the edge of tire.
- Deformation of wheel and/or detachment of tire and wheel High Tire Pressure (excessive air filling)
- Difficulty in operation
- Excessive wear of center of tire tread
- Increased possibility that hard road may do damage to tire

# Follow the instructions below when checking tire pressure:

- Check tire pressure only when the tire is cold. After driving over 1.5 km, the car shall be parked for over 3 hours before checking tire pressure. You can check pressure directly after a driving no more than 1.5 km.
- Tire pressure gauge must be used.
   Experiential judgment of tire pressure may have severe error. In addition, several pounds' difference in tire pressure may reduce driving operability and comfort.
- Do not release air in tire or reduce tire pressure after driving. It is normal that tire pressure is higher after travel.
- Make sure valve cock is installed on tire. It blocks dust, damp from entering tire and prevent air leakage. Install a new one if the valve cock gets missing.

### **Check and Replace Tire**



### **Check Tire**

Check tread wear according to tire wear indicator If the wear indicator is visible, the tire shall be replaced.

Tire wear indicator is embedded in the tire of BYD G3 to indicate when to replace it. When wear depth reaches 1.6mm or less, the wear indicator will be exposed. If two or more wear indicators in continuous tread grooves are visible, the tire shall be replaced. The thinner tread, the greater danger of tire skid.



When the tire tread is worn to less than 4mm in depth, the snow tire function is lost.

In case of cutting, rupture, crack exposing cord fabric or abnormal tire inflation, it means there is internal damage in the tire and the tire shall be replaced.

In case of frequent air leakage or unrepairable cutting or other damage due to the severity or position, the tire shall be replaced. When you are not sure about tire conditions, please contact BYD service station.

If air leakage occurs on the road, stop driving immediately. Even a small travel after air leakage may cause permanent damage to the tire.

After 6 years' use, the tire, even if it has no obvious damage, shall be inspected by qualified technician.

The tire may deteriorate due to aging even it has not been used heavily. This rule also applies to spare tires and tires in storage.

### **Replace Tires**

Only use a tire with the same dimension and structure, and the same or higher load capacity to replace the tire installed on the car.

Any difference in dimensions and structure may have serious effect on operability, passenger comfort, calibration of speedometer and odometer, ground clearance and clearance between car body and tire or tire chain.

### Tips

Please follow the instructions below. Or it may result in severe injury.

- Never use a combination of radial ply tire, bias belted tire and diagonal-ply tire on the same car, or it may lose operability in driving, leaving the driver in great danger.
- Only use tires with dimensions recommended by the manufacturer. Or the car may lose control in driving.

Never replace the tire on BYD G3 with a used tire.

Tires from unknown origin may pose great danger.

You are recommended to replace four tires at one time, or at least, you shall replace two front/rear tires at the same time.

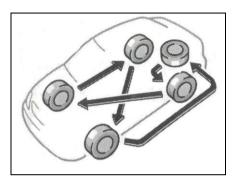
For steps of replacing tire, please refer to "When Tire Has Air Leakage" in Chapter 4.

Keep the wheels in balance after replacing tires.

Unbalanced tire may pose adverse effect on auto operability and tire service life. The tire may lose balance during normal use. As a result, irregular check is required to keep the tire in good balance.



### **Tires Rotation**



To equalize tire wear and extend its service life, you are recommended to rotate tire positions every 10, OOO km. But the optimum time to rotate tires depends on driving habit and road conditions.

Before tire rotation, check for uneven wear or damage. Improper tire pressure and wheel alignment, unbalanced wheel and frequent braking may lead to abnormal tire wear.

### **Choose Tire Chain**

Use tire chain with proper dimension. The rule to choose tire chain varies with locations and road conditions. Please refer to local rule before choosing tire chain.

### Install Tire Chain

When possible, tire chain shall be installed on front wheels. Do not install tire chain on rear wheels. Tighten tire chain again after driving for 0.5-1.0 km.

Follow strictly the instruction from the manufacturer when installing tire chain. If wheel housing is installed on the car, remove it before installing tire chain, otherwise it may be damaged by tire chain.

### Tips

- When tire chain is installed, the driving speed shall not exceed 50km/h or the speed limit specified by the manufacturer, whichever is lower.
- Drive carefully when tire chain is installed and avoid protrusion, holes and sharp turn on the road, which may cause jolt of the car.
- When tire chain is installed, avoid sharp turn or braking with wheels locked, which may pose adverse effect to car operability.
- When tire chain is installed, slow down the car before turning to prevent losing control of the car, which may cause accident.



### **Replace Wheels**

### When to Replace Wheels When the wheel has damage such as bending, crack or severe corrosion, it shall be replaced.

If damaged wheel is not replaced timely, the tire may detach from the wheel or the car may lose control.

### **Choose Wheels**

Only replace the wheel installed on the car with a wheel with the same load capacity, diameter, rim width and offset.

BYD service station can replace wheels correctly.

Wheels with different dimensions and structure may have serious effect on operability, service life of wheels and bearings, cooling of brake, calibration of speedometer and odometer, brake performance, headlight alignment, bumper height, ground clearance and clearance between car body/chassis and tire /tire chain.

Do not replace the wheel on BYD G3 with a used wheel, which may have undergone treatment or long travel mileage, getting the car into trouble without prior warning. Do not use a wheel which is repaired after bending, as it may have structural damage. Do not use inner tube intended for tubeless tire on an air-leaking wheel.

### Tips

Do not use a wheel with specifications other than that recommended by the manufacturer, or the car may lose control in driving, which may result in severe injury or death.

### Precautions on Aluminum Wheel

- For a car with aluminum wheels, the nuts on the wheels shall be check after the first 1,600 km travel to make sure they remains tight.
- After tires are rotated, repaired or replaced, the nuts on the wheels shall be check after the first 1,600 km travel to make sure they remains tight.
- Do not damage the wheels when using tire chain.
- Only use BYD nuts and wrench intended for aluminum wheels.
- When adjusting wheel balance using tire chain, only use BYD counter balance, plastic hammer or rubber hammer.
- As with all autos, aluminum wheels on BYD G3 shall be checked regularly, and replaced if any damage.



# Chapter 7 Section 3

## Self-maintenance

### **Electric Appliance**

Check Battery Status	. 14
Check and Replace Fuses	
Add Cleanser	
Replace Bulb	. 145



### **Check Battery Status**

#### **Precautions**

### Tips

Precautions on Battery Battery produces flammable and explosive hydrogen.

- When using tools, prevent the battery from generating spark.
- Do not smoke or use matches near battery.

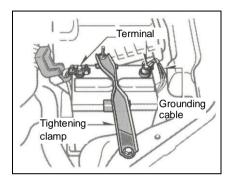
Electrolyte contains toxic and corrosive sulphuric acid.

- Prevent electrolyte from touching eye, skin or clothing.
- Do not drink electrolyte by mistake.
- Wear eye protector when working near battery.
- Keep children away from battery.

### **Emergency Treatment**

- When electrolyte enters eyes, immediately wash eyes with running clean water and then go to hospital. If possible, clean the affected area with sponge or cloth soaked in water on the way to the hospital.
- When electrolyte touches skin, immediately wash the affected area thoroughly with clean water.
   If you feel burning or pain, go to hospital immediately.
- When electrolyte is splashed on your clothes, it may penetrate and touch the skin. Please take off the clothes with electrolyte immediately, if necessary, treat it as per the previous method.
- If you drink battery electrolyte by mistake, you shall drink a lot of water or milk immediately. Milk containing magnesia, uncooked egg and plant oils are recommended to be eaten immediately. You shall go the hospital for emergency medical treatment.

### **Check Battery Appearance**



# Check whether battery and its terminal is corroded, loose, cracked or has loose fixture.

- a. If battery is corroded, clean it with mixture liquid of soda and warm water. Apply grease lubricant on the outer surface of terminals to prevent further corrosion.
- b. If terminal is loose, tighten the nuts of clamps; but do not tighten them too much.
- c. Tighten the fixture properly to allow the battery fixed on proper place.
   Tighten the fixture too much may damage the battery box.

### Note

- Make sure engine and all auxiliary devices are turned off before maintenance of the battery.
- ◆ Before check battery, remove grounding wire on negative terminal (with "-" mark) first; after completion of service, connect it at the last step.
- ◆ Do not cause short circuit when using tools.
- When cleaning the battery, prevent any liquid from entering it.

### **Check Internal Status of Battery**

Check the internal status of the battery according to instructions on the outer shell and status indicators of the battery.

### Note

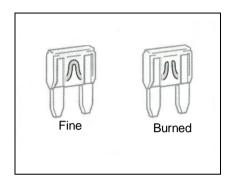
- ◆ Charging the battery without disconnecting the wires on it may seriously damage ECU and other electrical devices on the car. Remove the battery wires first before connecting the battery to charger.
- When engine is not running, using electrical devices for a long time may cause over discharge of the battery, which may lead to difficulty to start the car or even permanent damage to the battery.
- Do not use battery consuming devices, such as audio system, light system, for a long time when the engine is not running.
- Before leaving the car, make sure the doors are closed and all electric appliances, such as lights, are turned off.

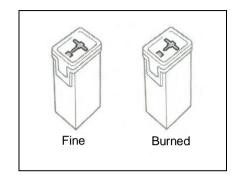
### Tips

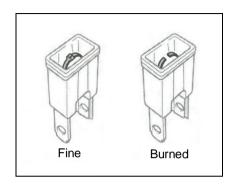
When electrolyte runs low in the battery, replace it with a new one and do not add electrolyte by yourself.



### **Check and Replace Fuses**







A Type B Type C Type



If headlight or other electric devices do not work, please check the fuses. When necessary, replace the fuses.

For information on location of fuses, see Section 7-1 "Location of Fuses".

Turn off ignition switch and other malfunctioning devices. Pull out the fuses with potential malfunction vertically and check them.

Find out which fuse has trouble. Circuit name of each fuse is indicated on cover of the fuse box. See Chapter 8 for control function of each circuit.

Pull out A type fuse with a puller. The puller is at location 19 in figure "Engine Compartment" in Chapter 8.

If you are not sure whether the fuse is burnt out, replace it with a good one.

# If the fuse is burnt out, insert a new fuse into the fuse socket.

Only install a fuse with amperage specified on the fuse box.

If there is no spare fuse in emergency situation, you can pull out "29. Indoor Light" fuse, which is not essential in driving, and substitute it for a fuse with the same amperage.

If there is no fuse of the same amperage, you should choose a fuse with lower amperage; and do try to get a fuse with the amperage as close to the rated amperage as possible. If you use a fuse with lower amperage, it may be burned out again, but this doesn't mean the car has problem. You shall install a proper fuse as soon as possible, and put back the substitute fuse in place.

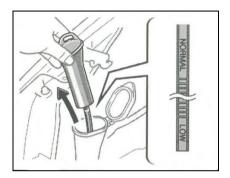
It is recommended to keep a set of spare fuses on the car for emergency use.

If a new replaced fuse is burnt out immediately, the electrical system may have problem. Contact BYD service station for a check as soon as possible.

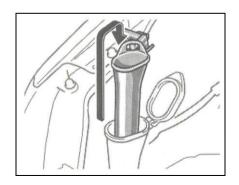
### Tips

Never use a fuse with higher amperage than the rating amperage or use any other objects to replace the fuse, otherwise it may cause serious damage and may lead to fire.

### **Add Cleanser**



If the cleaner does not work, the cleanser tank may have been empty. Check the cleanser level on the content gauge. If the level is below "LOW" mark, you shall add cleanser.





# Before Adding Cleanser Pull out cleanser funnel and hang it on the brake of engine hood support.

Water can be used as cleanser. But in cold region where the temperature is below zero degree, you shall use cleanser with ant freezing agent. It is available in BYD service stations and most auto part stores. For mixing ratio of water and anti-freezing agent, please refer to manufacturer's instructions. Make sure put back the funnel in place after filling full the cleanser tank.

### Note

Don't use engine antifreeze or other substitutes, as they will damage the vehicle paint.

### Replace Bulb

The following figures shows the method to take off the bulbs. Make sure the ignition switch and light switches are turned off when replacing bulbs. Use bulbs with rated power shown in the table below:

Parking light and rear parking light consists of a group of luminous diodes. When the number of burnt out luminous diodes affects the car's compliance with local laws, please send the car to BYD service station for replacing bulbs.

### Tips

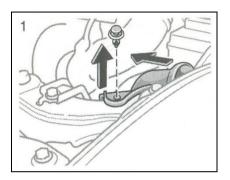
- Do not replace bulb when it is hot to avoid burning.
- The halogen bulb is filled with pressurized gas, please be particularly careful. If the bulb is scratched or falls to ground, it may explode or crack. Only hold the bulb on its plastic or metal part. Do not touch glass part of the bulb with bare hands.

When traveling in rain or when the light shade is wet after washing, the inside of lamp shade of external light such as headlight will temporarily fog. As with fog on the windshield in rainy days, the fog inside the light shade is due to the temperature difference between the inside and the outside of light shade, and isn't a trouble. But if there is water droplet or water pool in the lightshade, please contact BYD service station.

Bulb	W	Туре
Headlight (low beam)	55	H7
Headlight (high beam)	60	HB3
Front fog light	55	H11
Front turn signal light	21	PY21W
Side turn signal light	1	LED
Rear turn signal light	21	PY21W
Backup light	21	P21W
Rear fog light	21	W21W
High mount brake light	16	W16W
Name plate light	5	W5W
Door light	5	W5W
Front interior light	5	R5W
Rear interior light	10	C10W
Trunk light	5	W5W
Front parking light	1	LED
Rear parking light	0.5	LED

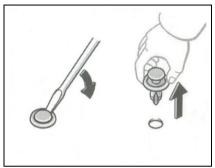


### Headlight

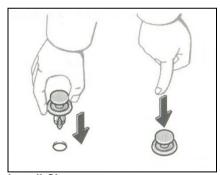


1. Left Headlight: remove clamp and take away the tube of air filter.

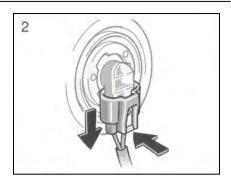
The removal and installation of the cover lamp is shown in the figures below.



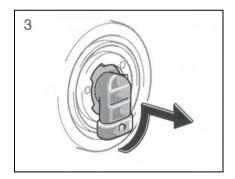
Remove Clamp



**Install Clamp** 



2. Pull off the connector while pressing down the buckle.
If the connector is too tight, shake it first.

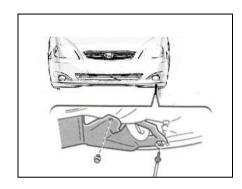


3. Rotate the bulb anticlockwise to remove it.

# 4

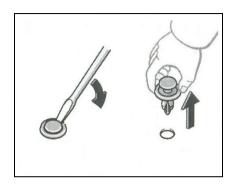
4. Install the new bulb in the mounting hole by rotating clockwise. You need not to adjust the headlight after replacing the bulb. In case that you need to adjust the headlight, please contact BYD service station.

### Front Fog Light (optional)

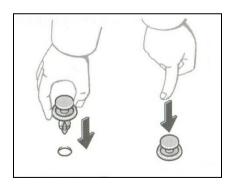


1. Remove the screw and clamp with cross screwdriver.

The removal and installation of the cover clamp is shown in the figures below.

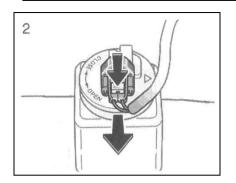


**Remove Cover Clamp** 



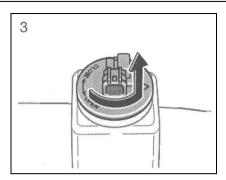
Install Cover Clamp



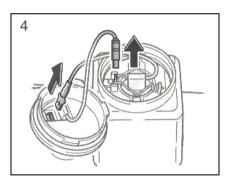


2. Pull off the connector while pressing down the buckle.

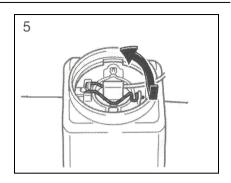
If the connector is too tight, shake it first.



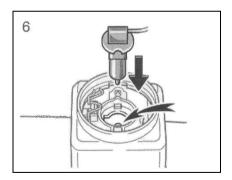
3. Rotate the cover anticlockwise to remove it.



4. Remove the connecting wire.



5. Release the fixing spring of the bulb.

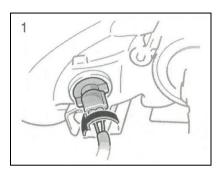


### 6. Install new bulb.

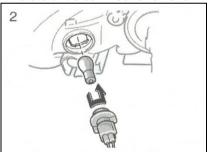
When installing new bulb, align the seat to the round notch on the bulb.



### Front turn signal light



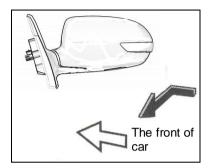
### 1. Rotate anticlockwise to remove it.



# 2. Rotate the bulb clockwise to remove it.

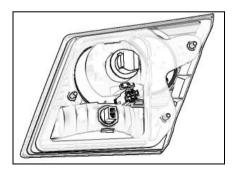
The steps of installation is opposite to disassembly

### Side turn signal light



Side turn signal light is integrated on external rear-view mirror assembly. If replacement is necessary, please contact BYD service station.

### Backup Light, Rear Fog Light



Rotate the light seat anticlockwise manually and pull it outwards to remove the light seat and bulb.



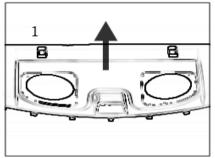
Rotate the bulb anticlockwise and pull it outwards to remove the bulb. The steps of installation is opposite to disassembly.



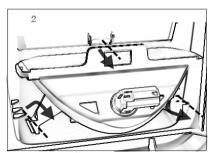
### Rear turn signal light

The steps to replace the bulb of rear turn signal light are the same with fog light.

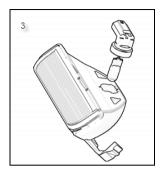
### **High Mount Brake Light (optional)**



1. Remove rear shelf of interior trim.

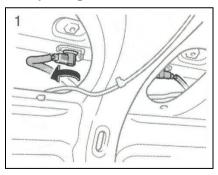


2. Remove high mount brake light assembly.

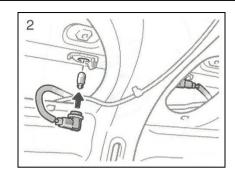


3. Rotate the light seat anticlockwise and pull the bulb outwards to remove it. The steps of installation is opposite to disassembly

### Name plate light



1. Rotate the light seat anticlockwise to remove it.



### 2. Remove the bulb.

The steps of installation is opposite to disassembly



## Chapter 8

## **Part Specifications**

Maintenance Specifications	152
Fuse and Relay	153



### **Maintenance Specifications**

### **Lubrication of Engine**

Engine Oil Grade for Gasoline Engine: SAE 5W—30 above -30℃

SAF 15W—40 above -15°C

API Grade SG or above

Amount: 3L (liter)

Specification of Gear Oil for Manual Transmission

75W—90 North region in winter 80W—90 North region in summer

80W—90 or 80W—140 South region all around the

year

API Grade GL-4 or above

Amount: 2.1L (liter)

CVT shall always use ESSO EZL 799A (CVT fluid)

Amount: 4.1 L (liter)

### **Cooling System**

Amount: L (liter)

6.8L

Tire dimension:

195/60 R15

Tire pressure, KPa (kilogram/cm²)

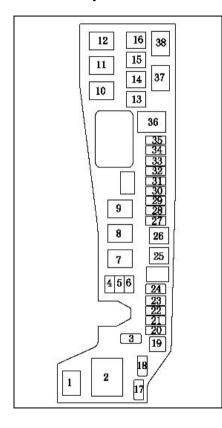
210 (2.1)

Wheel nut torque, N·m (kilogram force·m)

103 (10.5)



### **Fuse and Relay**



### **Engine Compartment**

### Relay:

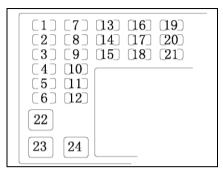
- 1. A/C relay magnet clutch
- 2. Front headlight
- 7. No. 3 fan
- 8. Reserved
- 9. Electric horn
- 10. No. 2 fan
- 11. Reserved
- 12. No. 1 fan
- 37. Reserved
- 38. Electric fuel Injection main relay

### Fuse:

- 3. Spare fuse (10A)
- 4. Spare fuse (15A)
- 5. Spare fuse (20A)
- 6. Spare fuse (25A)
- 13. Reserved
- 14. Electronic fan (30A)
- 15. Reserved
- 16. ABS (60A)
- 17. Spare fuse (30A)
- 18. Spare fuse (7.5A)
- 19. Puller
- 20. Left high beam (10A)

- 21. Right high beam (10A)
- 22. Right low beam (10A)
- 23. Left low beam (10A)
- 24. Reserved
- 25. Reserved
- 26. Headlight fuse (40A)
- 27. Reserved
- 28. EFI (15A) -MT20U/2 or (30A)
- -M7.9.7.1
- 29. Interior light (15A)
- 30. Ignition switch No. 2 power supply (30A)
- 31. Reserved
- 32. Electric horn (10A)
- 33. Warning light (10A)
- 34. Reserved
- 35. Reserved
- 36. Main power supply (100A)





### Instrument Panel

### Fuse:

- 1. Reserved
- 2. ECU (10A)
- 3. Instrument (10A)
- 4. Power seat fuse (25A)
- 5. Reserved
- 6. Reserved
- 7. On-vehicle diagnosis system (7.5A)
- 8. Wiper (20A)

- 9. Small light (15A)
- 10. Brake light (15A)
- 11. Door (25A)
- 12. No.2 door and window power supply (30A)
- 13. No.1 ignition switch power supply (25A)
- 14. Front fog light (15A)
- 15. Rear fog light (10A)
- 16. Starting power supply (7.5A)
- 17. Air conditioner (10A)
- 18. No.2 ignition switch (15A)
- 19. Defrosting compensation (10A)
- 20. Headlight control system (5A)
- 21. Lighter (15A)
- 22. Warm wind (40A)
- 23. Rear window defroster (30A)
- 24. No.1 door and window power supply (30A)