

All information in this Owner's Manual is the newest publication based on the current models. However, JAC reserves the right to make changes at any time so that our police of continual product improvement may be carried out.

This manual applies to all current JAC models and includes description and explanation of option as well as standard equipment. As a result, you may find material in this manual that does not apply to your specific vehicle.

## Preface

Thank you for choosing JAC Heavy Duty Trucks. We are pleased to welcome you to join into JAC family. The advanced engineering and high-quality construction of each JAC we build is something of which we are proud.

This Owner's Manual will introduce you to the features and operations of your new vehicle. It is suggested that you read it carefully since the information it contains can contribute greatly to the satisfaction you receive from your new vehicle.

The manufacturer also recommends that all service and maintenance on your vehicle be performed by an authorized JAC service station. JAC service stations are prepared to provide high-quality service, maintenance and any other assistance that may be required.

ANHUI JIANGHUAI AUTOMOBILE CO., LTD.



### NOTES:

**Because future owners will also need the information included in this manual, when you sell this vehicle, please leave it in the vehicle for their use. Thank you.**

The manual has been edited on the basis of the truck air over hydraulic brake, left-hand drive vehicle. On the other models, only the differences have been covered. Some illustrations may not coincide with your vehicle, but the contents of explanations are common. The material in this publication may not be reproduced in any form without written permission from the JAC Motor Company.

## SAFETY AND VEHICLE DAMAGE WARNING

This manual includes information titled as WARNING, CAUTION and NOTE. These titles indicate the following:

### WARNING:



This indicates that a condition may result in harm or injury to you or other persons if the warning is not heeded. Follow the advice provided with the warning.

### CAUTION:



This indicates that a condition may result in damage to your vehicle or its equipment if the caution is not heeded. Follow the advice provided with the caution.



### NOTES:

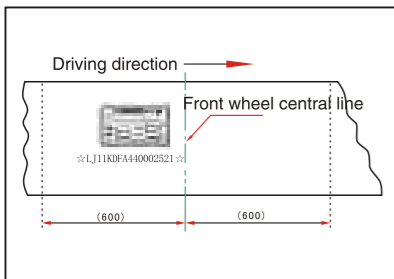
This indicates that interesting or helpful information is being provided.

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# Before Driving

The followings are very important for the correct management and economic use of JAC vehicles, and they shall be read carefully before use and maintenance.

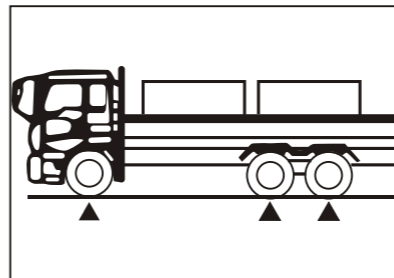


#### VIN code and nameplate

Please take note of the VIN code, which will be needed when you maintains and repair the vehicles.

The nameplate and VIN code are located on the right longeron of the frame, about 600mm behind the first axle (the first front axle, if there are two front axles ).

The model, chassis number, engine number and VIN code are stamped on the nameplate.



#### Overload

Overloading will shorten vehicle's service life, but also bring about potential risk to safe driving.

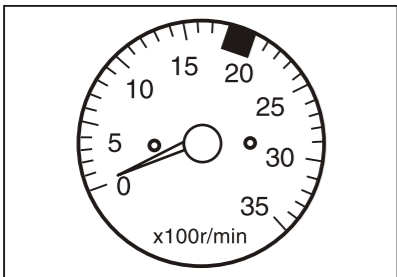
The loading mass must be limited to the specified range of the max. Total mass for vehicle, and the load distributions on the front and rear shafts shall not be more than the carrying capacity of the vehicle shafts. Please refer to the technical specification sheet for the rated total mass value and shaft loading capacity.



#### Before driving

During the breaking-in period, carefully driving and maintaining vehicles will be decisive helpful in improving the performance and extending the working life for the vehicles.

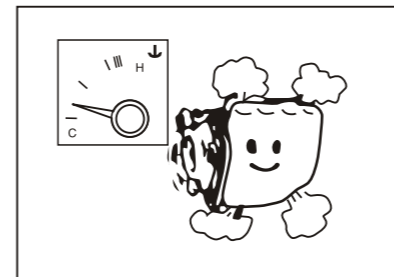
1. Avoid overloading



2. Avoid high revolving speed. No more than 1500rpm during breaking-in drive.



3. Avoid idling, sudden start, accelerate and brake.



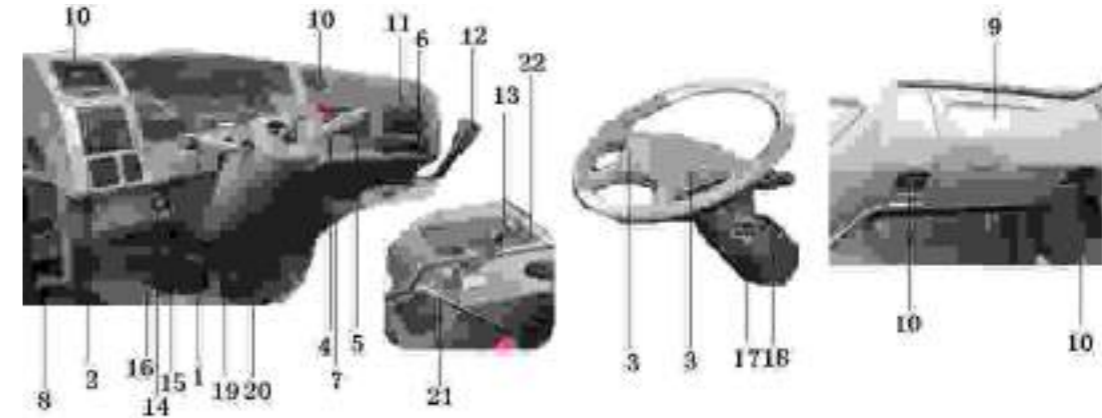
4. Sufficient preheat, until the cooling water reaches 60°C (140° F) .



#### Operations and check

All components and equipment shall be checked by 'instructions & controls', 'driving preparation' and 'driving notes'.

## Instruments & Controls



- |   |                             |   |                                     |
|---|-----------------------------|---|-------------------------------------|
| 1. Switches (Tail light /Head light/turn signal light switch) | 6. A/C control switches     | 13. Parking brake                                   | 18. Steering column adjusting lever |
| 2. Control switches   | 7. Cigarette lighter        | 14. Hand throttle drawing handle (EIII and EVI W/O) | 19. Brake pedal                     |
| 3. Horn button  | 8. Front panel opening draw | 15. Work light switch                               | 20. Accelerator pedal               |
| 4. Switches(Wiper & washer/exhaust brake switch)              | 9. Fuse box                 | 16. Clutch pedal                                    | 21. Trailer hand control assembly   |
| 5. Control switches   | 10. A/C louver              | 17. Start switch                                    | 22. Floor console                   |
|   | 11. Audio system            |   |                                     |
|   | 12. Speed control handle    |   |                                     |



### Horn button and steering wheel

Press the horn button under the steering wheel to ring the Horn.

Don't rotate the steering wheel while the vehicle is in stationary state; Don't move the vehicle while the steering wheel is locked to avoid damage to steering wheel.

### Adjustably steering wheel

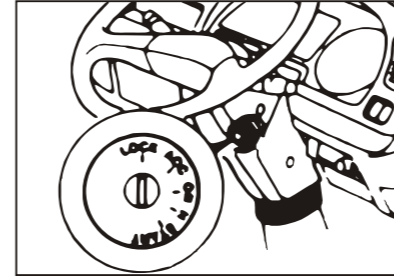
The steering column can be adjusted to a different angle and the steering wheel can be adjusted up and down.

Adjust a most suitable seat before adjusting the steering wheel.

Tighten the steering wheel adjustment locking handle after set the steering wheel; Don't adjust the steering wheel while the vehicle is moving but parking.

### Adjustment procedure

1. Turn the adjustment handle upward and release the locking device.
2. Turn steering wheel vertically and adjust the steering column forward and backward to its desired position.
3. Move the adjustment handle downward and lock the steering column after setting the steering wheel.



### Start switch

As the above picture showed, the switch has four positions

"LOCK": under this position, you can insert or pull the key. The steering wheel will lock while pull out the key. When the key turned into position "LOCK" the engine stop moving.

"ACC": under this position, attachment circuit connected

"ON": Keep the key in this position while the vehicle is running

"START": Rotate the key to this position to start the engine. Release and the key return to "ON" position automatically

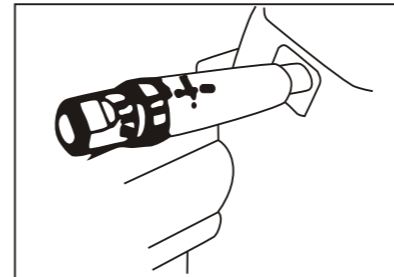
### ⚠ CAUTION:

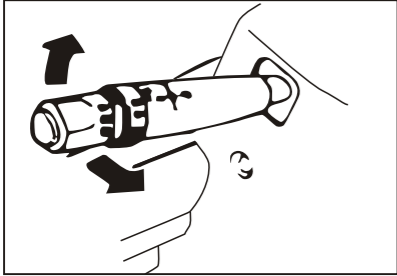
- Starting is a short time work, 2s normally and no more than 15s each time, and no more than 30s between.
- Rest engine for 15 mins after each 5 times and wait for another row.

### Switches

Left side handle includes: turn signal indicator light, light control switch, high beam indicator light, low beam indicator light and passing light

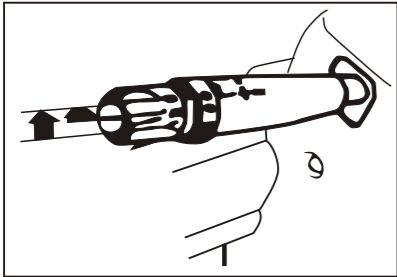
Right side handle includes: exhaust brake switch, wiper switch and washer switch.





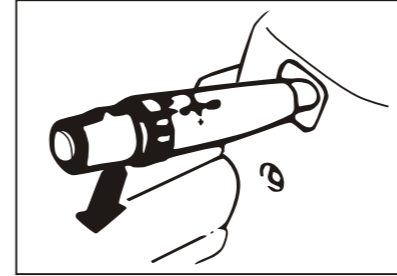
#### Turn signal indicator light

Pulling the lever back (away from you) causes the turn signals the left side of the vehicle to blink. Pushing the lever forward (toward you) causes the turn signals on the right side of the vehicle to blink. As the turn is completed, the lever will automatically return to the center position and turn off the turn signals at the same time.



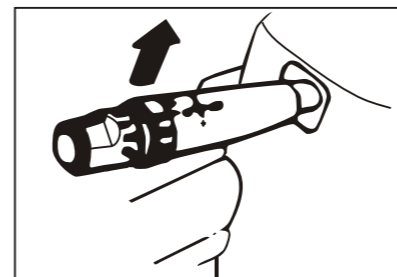
#### Light control switches

This switch has two positions to control the following light:  
First position: width light, tail light, registration mark light and instrument panel light.  
Second position: front head light.



#### High beam indicator light and Low beam indicator light

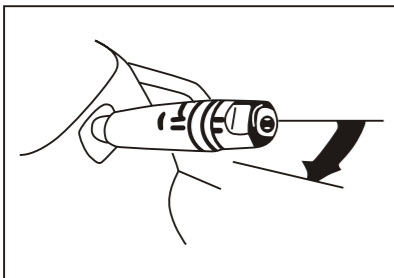
Whenever flip the switch handle up and down, the front head light will go high beam to low beam or low beam to high beam alternately conversion.  
When the front head light is high beam light the related indicator light on the instrument panel will turn on.



#### Passing switch

Light switch in the position "Disconnected" (OFF) or the first position, pull or release the switch handle each time will cause the head light high beam on and off. If the passing signal needed, it should be operated repeatedly, flashes light during the day time and high and low beam light alternately during the night time.





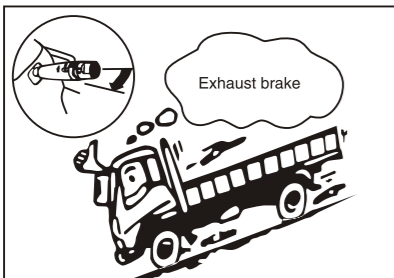
### Exhaust brake switch

Using the engine brake while operating the exhaust brake switch, the exhaust brake system will close the exhaust pipe to contribute to the brake function.

Push the wiper /washer switch handle forward to turn the exhaust brake on. If the indicator light is on, the exhaust brake is working

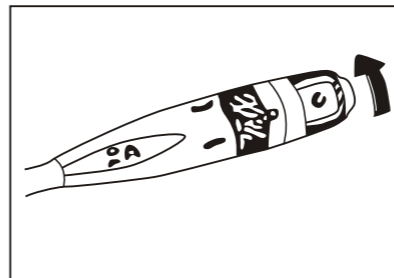
When driving on the road condition of downhill or situation with a lot traffic lights, exhaust brake is recommended, either stepping the accelerator pedal or the clutch pedal will the exhaust brake work.

If idling the engine operation by preheating, keep the exhaust brake switch in "OFF" position.



### ⚠ CAUTION:

**If the vehicle running in neutral position, the exhaust brake can't be use otherwise the engine will turn off and cause accident.**



### Wiper switch

The windshield wiper switch has three positions:

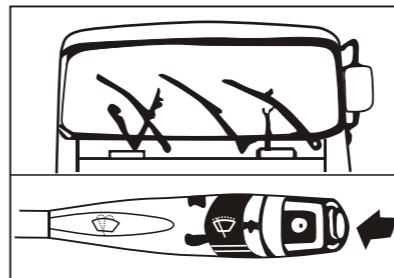
INT: Intermittent position

LO : Low-speed position

HI : High-speed position

### ⚠ CAUTION:

- To prevent damage to the windshield glass, do not use the wiper when the glass is dry;
- To prevent damage to the wiper system, do not attempt to wipe away heavy accumulations of snow or ice.

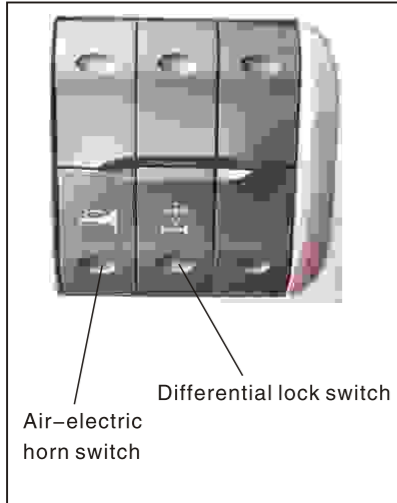


### Washer switch

press the washer button to use the windshield washer

### ⚠ CAUTION:

The washer button should not be pressed if the washer reservoir is empty. This can damage the washer fluid pump. Do not operate the washer for more than 15 seconds at a time.



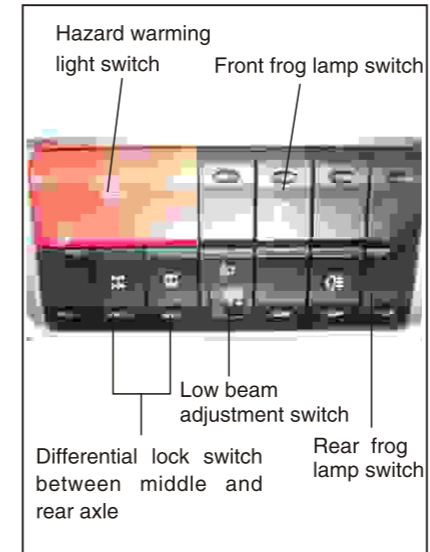
### Control switches

#### Air-electric horn switch

When the pressure is more than 6 pa, press the this switch then press the steering wheel horn switch, the air horn works

#### Differential lock switch

Press this bottom, the differential lock works



### Hazard warning

The hazard warning lamp should be used whenever you find it necessary to stop the car in a hazardous location. When you must make such an emergency stop, always pull off the road as far as possible. The hazard warning lights are turned on by pushing in on the hazard switch. This causes all turn signal lights to blink. The hazard warning lights will operate even though the key is not in the ignition.

To turn the hazard warning lights off, push in on the switch a second time.

#### Fog lamp switch(front/rear)

Use the fog lamp when you go through the foggy area. Turn on the light on the switch handle and press the fog lamp switch to turn the lamp on. While operating this switch, clearance lamp, tail lamp, license plate lamp, instrument lamps will come on at the same time.

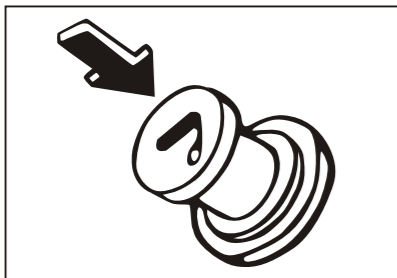
press the switch one more time to turn it off.

#### Low beam adjustment switch

Adjust the low beam irradiation by scrolling this button up and down.

#### Differential lock switch between middle and rear axle

Press this switch when the vehicle encounters a muddy road and the differential system will connect the left and right wheels to work, press the switch again to turn it off.



### Cigarette lighter

For the cigarette lighter to work, the key must be in the "ACC" position or the "ON" position.

To use the cigarette lighter, push it all the way into its socket. When the element has heated, the lighter will pop out to the "ready" position.

Do not hold the cigarette lighter pressed in. This can damage the heating element and create a fire hazard.

If it is necessary to replace the cigarette lighter, use only a genuine JAC replacement or its approved equivalent.



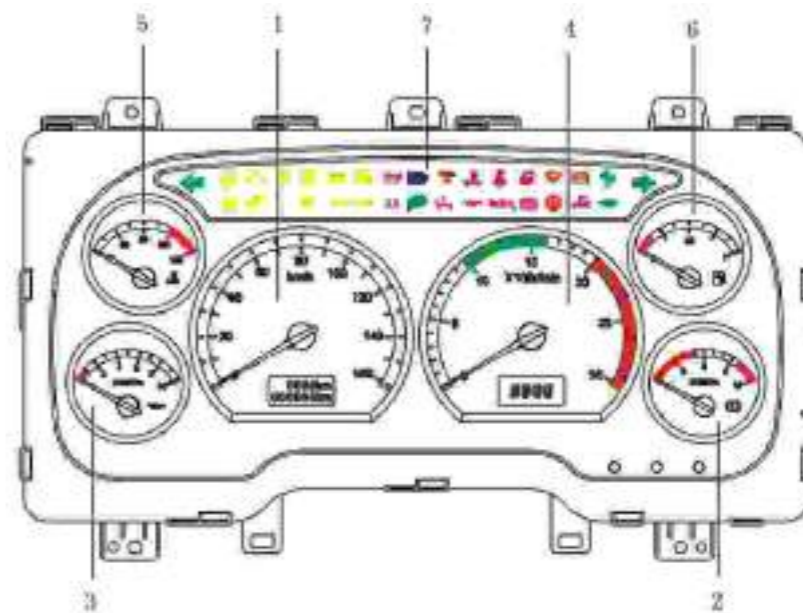
### Heater switch (optional)

To start the heater: Press down the first gear of the "heater switch" to run the heater water pump, and then press down the second gear to start the heater.

After the heater works normally, the green indicator lamp on the "heater switch" will come on. When the heater is faulty, the yellow indicator lamp will come on.

To stop the heater: Deactivate the second gear button of the "heater switch" to turn off the green lamp. At this moment, the water pump will work normally.

### Instrument cluster and indicator



1. Speedometer

2. Air pressure gauge

3. Oil pressure gauge

4. Tachometer

5. Water temperature gauge

6. Fuel gauge

7. Instruments Indicator light

### Speedometer

Speedometer mainly indicate the vehicle speed, Unit: kilometers per hour.

The odometer records the total driving distance, Unit: kilometers , the record can remind you for maintenance intervals according to requirements.

### Tachometer

The tachometer registers the speed of your engine in revolutions per minute (rpm). It is useful to help you shift at the appropriate engine speed to avoid lugging or over running.

#### CAUTION:

**The engine should not be raced to such a speed that the needle enters the red zone on the tachometer face. This can cause severe engine damage.**

### Water temperature gauge

The water temperature gauge indicates the temperature of the engine cooling water

#### CAUTION:

**Stop and keep the engine idling until the cooling water temperature to normal if the water temperature gauge shows the water temperature is too high**

The air pressure gauge indicates the air pressure in the air reservoir.

If the air pressure drops to below 6 kg/cm<sup>2</sup>, the air pilot light comes on and the warning buzzer will sound at the same time.

If fails to build up again, stop the engine immediately and contact the nearest JAC Service shop.

#### CAUTION:

**Do not drive the vehicle if the air pressure indicates the pressure that is below red zone. It is dangerous.**

The gauge indicates the engine oil pressure while the engine is running.

If the gauge indicates below 200Pa, oil warning lamp turns on and buzzer will sound at the same time. At this time stop the engine immediately and check the lubricating system.

#### CAUTION:

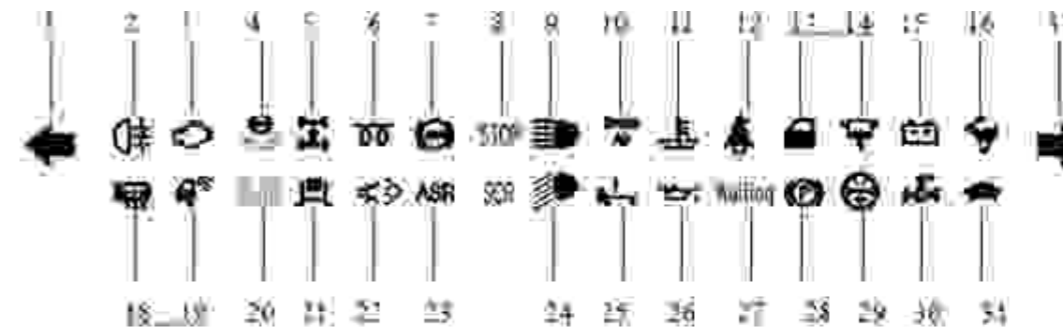
- Engine oil pressure when the engine temperature is under zero degree may go up above the normal pressure. If the engine is warm, the gauge will indicate back to normal pressure immediately.
- If the oil filter is clogged, the oil pressure warning light comes on but the buzzer will not sound.

## Fuel gauge

The fuel gauge will indicate the fuel level when the ignition is in the "ON" position.

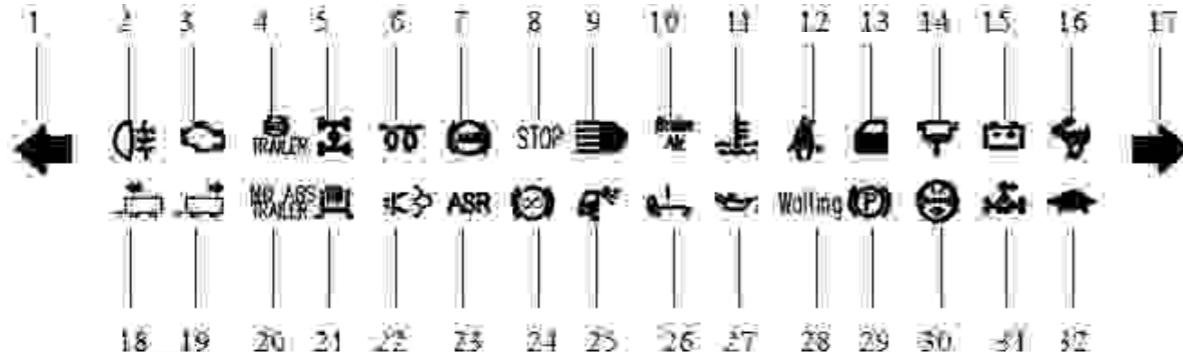
If the fuel is full or almost out the ignition is in the "F" or "E" position.

## Instrument indicator lamp-1 (some vehicle models may have minor differences)

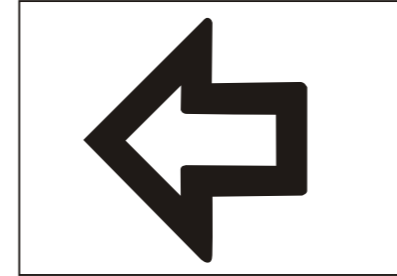


- |                                       |  |   |
|---------------------------------------|--|---|
| 1. Left turn indicator lamp           | 12. Safety belt malfunction indicator lamp                   | 22. OBD indicator lamp                  |
| 2. Rear fog lamp indicator lamp       | 13. Door switch indicator lamp                               | 23. ASR indicator lamp                  |
| 3. Engine malfunction indicator lamp  | 14. Oil water separation indicator lamp                      | 24. Low beam indicator lamp             |
| 4. Trailer ABS indicator lamp         | 15. Charging/discharging indicator lamp                      | 25. Cab locking lamp                    |
| 5. Differential lock indicator lamp   | 16. High gear indicator lamp                                 | 26. Engine oil pressure indicator lamp  |
| 6. Engine preheating indicator lamp   | 17. Right turn indicator lamp                                | 27. Engine waiting indicator lamp       |
| 7. ABS indicator lamp                 | 18. Rear-view mirror defrosting and defogging indicator lamp | 28. Parking brake indicator lamp        |
| 8. Engine stop indicator lamp         | 19. Working lamp indicator lamp                              | 29. Air cleaner blockage indicator lamp |
| 9. High beam indicator lamp           | 20. Trailer NO ABS indicator lamp                            | 30. PTO indicator lamp                  |
| 10. Brake air pressure indicator lamp | 21. Exhaust brake indicator lamp                             | 31. Low gear indicator lamp             |

## Instrument indicator lamp-2 (some vehicle models may have minor differences)

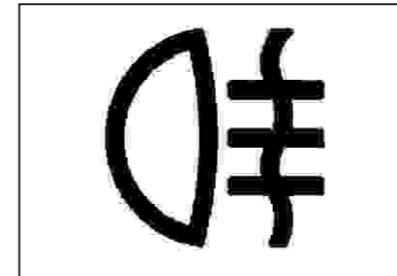


- |                                       |  |   |
|---------------------------------------|--|---|
| 1. Left turn indicator lamp           | 12. Safety belt malfunction indicator lamp | 23. ASR indicator lamp                  |
| 2. Rear fog lamp indicator lamp       | 13. Door switch indicator lamp             | 24. Retarder indicator lamp             |
| 3. Engine malfunction indicator lamp  | 14. Oil water separation indicator lamp    | 25. Working lamp indicator lamp         |
| 4. Trailer ABS indicator lamp         | 15. Charging/discharging indicator lamp    | 26. Cab locking lamp                    |
| 5. Differential lock indicator lamp   | 16. High gear indicator lamp               | 27. Engine oil pressure indicator lamp  |
| 6. Engine preheating indicator lamp   | 17. Right turn indicator lamp              | 28. Engine waiting indicator lamp       |
| 7. ABS indicator lamp                 | 18. Trailer left turn indicator lamp       | 29. Parking brake indicator lamp        |
| 8. Engine stop indicator lamp         | 19. Trailer right turn indicator lamp      | 30. Air cleaner blockage indicator lamp |
| 9. High beam indicator lamp           | 20. Trailer NO ABS indicator lamp          | 31. PTO indicator lamp                  |
| 10. Brake air pressure indicator lamp | 21. Exhaust brake indicator lamp           | 32. Low gear indicator lamp             |
| 11. High water temperature alarm lamp | 22. OBD indicator lamp                     |   |



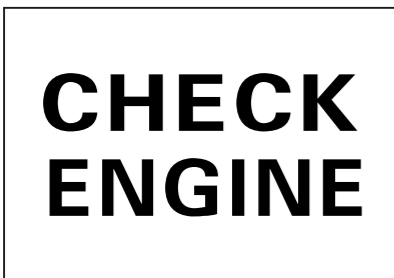
## Left turn indicator lamp

There is a green flashing arrow on the dashboard, which is intended to show the turning direction as the turn signal lamp display. If the arrow is lit up while no flashing, the flashing speed of the turn lamp may be faster than the normal flashing speed or it doesn't flash at all. In such case, please check the turn signal system for malfunctions.




## Rear fog lamp indicator lamp

When pressing down the fog lamp switch, the indicator lamp will come on.



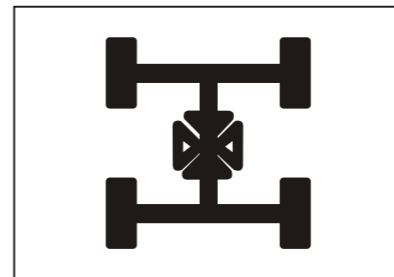
#### Engine malfunction indicator lamp

When activating the main key switch in normal conditions, the engine malfunction indicator lamp will come on and then go out after 2s. If it stays on, the engine may have malfunctions, and the inspection or repair shall(must) be carried out at the JAC service station. If there is no such indicator lamp, Stop and Waiting indicator lamps will be provided to display the  malfunction, engine stop and engine waiting respectively.



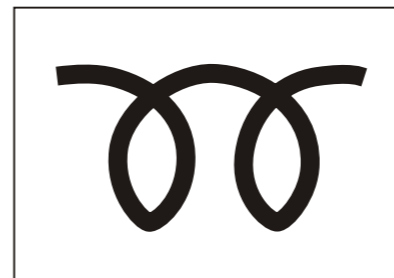
#### Trailer ABS indicator lamp (optional)

When the trailer is equipped with ABS, this lamp will come on.



#### Differential lock indicator lamp (optional)

When the differential lock begins working, this indicator lamp will come on.



#### Engine preheating indicator lamp

This lamp will come on, When turning the ignition switch to the position "ON" in cold seasons, which shall be kept at this position till the indicator lamp is off. After this lamp is off, turn the switch to the position "START" and start the vehicle.



ABS

#### ABS indicator lamp (optional)

When turning the key to the position “ON”, the ABS indicator lamp will come on, and will be off automatically after a few seconds. If the ABS indicator lamp stays on during driving or when turning the key to the position “ON”, the ABS may be faulty. In such case, please go to the JAC service station for inspection.



#### High beam indicator lamp

When turning the headlamp switch to the high beam position, this high beam indicator lamp will come on.



Brake  
Air

#### Braking air pressure indicator lamp

When the engine is running while the air pressure of the air reservoir is lower than 6 kg/cm<sub>2</sub>, this indicator lamp will come on and the buzzer will sound as well. In such case, please stop the vehicle and run the engine at idle speed for a little while. When the air pressure is up to the requirement, the indicator lamp will go out, and you can continue the driving.

#### ⚠ CAUTION:

**If you drive the vehicle when the braking air pressure indicator lamp is lit up, it may be very dangerous. If a long time is required to recover the air pressure, please contact the JAC service station.**



#### Too high water temperature alarm lamp

If the engine temperature is too high, the warning lamp will come on; if the coolant level is below the set value, the alarm buzzer will sound as well. In such case, please drive the vehicle to the roadside, stop it and check the coolant level. If necessary, please fill the coolant till it is between the MIN. and the MAX. of the fluid level scale.





#### Safety belt malfunction indicator lamp

With ignition ON, the safety belt malfunction indicator lamp will flash for 5s approximately. to remind the driver of fastening the safety belt. If the driver fastens the safety belt within 5s, the indicator lamp will go out. With ignition switch ACC or LOCK, this indicator lamp will go out as well.

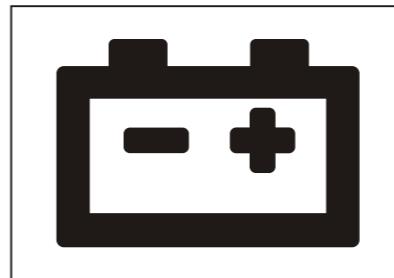


#### Door switch indicator lamp

The door switch indicator lamp is used to prompt you that the door is not closed.

#### ✿ NOTES:

**Please close the doors during driving;  
Prior to driving, please check if the door switch indicator lamp is off.**



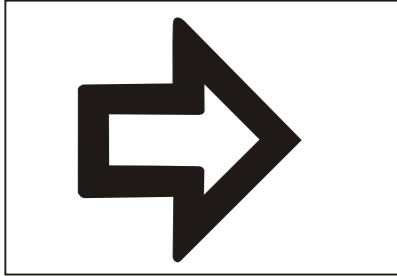
#### Charging/discharging indicator lamp

With ignition key ON, the charging/discharging indicator lamp shall come on; when the engine is running, the charging/discharging indicator lamp will go out. If the indicator lamp is lit up during driving, please stop the vehicle and stop the engine to check the tensioner pulley belt. If the belt is loose or worn, please adjust or replace it.



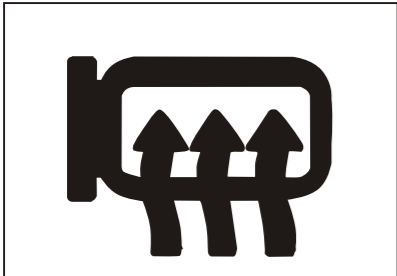
#### High gear indicator lamp (12-speed transmission and 16-speed transmission without PTO)

If set at high gear, this indicator lamp will come on.



#### Right turn indicator lamp

There is a green flashing arrow on the dashboard, which is intended to show the turn direction as the turn signal lamp display. If the arrow is lit up while no flashing, the turn lamp flashing speed may be faster than the normal flashing speed or it doesn't flash at all. In such case, please check the turn signal system for malfunctions.



#### Rear-view mirror defrosting and defogging indicator lamp (optional)

When turning on the rear-view mirror heater switch, the lens of the exterior rear-view mirror will be heated and the rear-view mirror defrosting and defogging indicator lamp will come on as well.



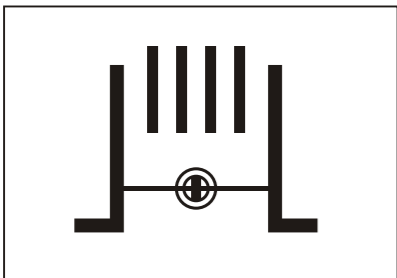
#### Working lamp indicator lamp

When turning on the working lamp switch, this indicator lamp will come on. The switch shall be deactivated after the work is completed or the driving becomes normal.



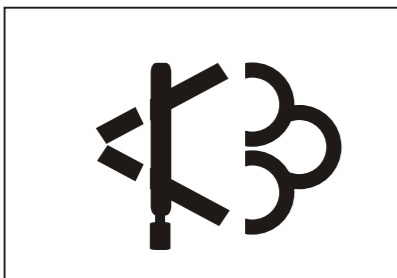
#### Trailer NO ABS display lamp (optional)

This lamp will come on when the trailer is not equipped with ABS.



#### Exhaust brake indicator lamp

When turning on the exhaust brake switch, this indicator lamp will come on; when resetting the switch, this indicator lamp will go out.



#### OBD indicator lamp (Euro IV)

It is used to display the after-treatment work, which will go out 10 s after starting the vehicle. If this indicator lamp stays on, it means that the after-treatment system is faulty.



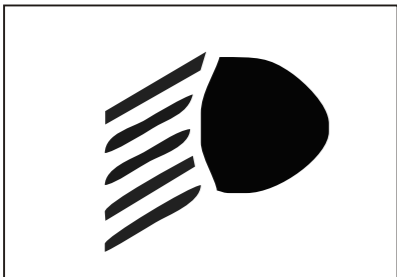
#### ASR indicator lamp (optional)

When turning the key to the position "ON", the "ASR" lamp will come on. If braking, the "ASR" lamp will be off; if the "ASR" lamp stays on, it means that the "ASR" is faulty. When the ASR system is faulty, the "ASR" will come on. During normal driving, the "ASR" lamp will go out. When the "ASR" works, the "ASR" lamp will flash.



#### Retarder indicator lamp (optional)

When the retarder works, this indicator lamp will come on. If the indicator lamp flashes, it means that it is faulty.



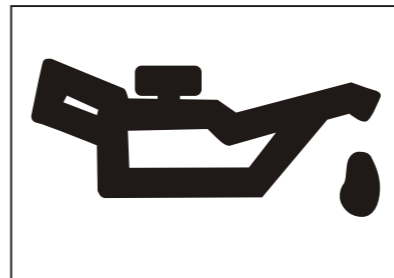
#### Low beam indicator lamp (optional)

When turning the headlamp switch to the low beam position, this low beam indicator lamp will come on.



#### Cab locking indicator lamp

When the cab locking mechanism is not locked, this indicator lamp will come on.



#### Engine oil pressure indicator lamp

When turning the ignition switch to the position “ON” , this indicator lamp will come on; however it will go out after starting the engine. If the indicator lamp is lit up during engine running, please immediately stop the engine and contact with the nearest JAC service station.



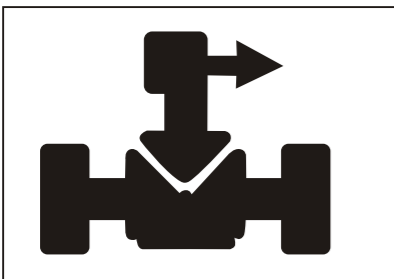
#### Parking brake indicator lamp

When the ignition switch is turned on and the parking brake is not released, the parking brake indicator lamp will come on; when the parking brake is released, the parking brake indicator lamp will go out. Only after the parking brake is released and the parking brake indicator lamp is off, can you drive the vehicle.



#### Air cleaner blockage indicator lamp

When the air cleaner is very dirty and needs maintenance, the air cleaner will be blocked and the indicator lamp will come on. When the indicator lamp is lit up, please maintain the air cleaner as the vehicle maintenance requirements.

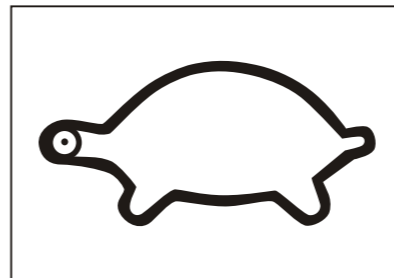


#### PTO indicator lamp (optional)

When turning on the PTO switch, the PTO indicator lamp will come on.

#### CAUTION:

Don't operate this switch during driving, for the power train parts may be damaged.



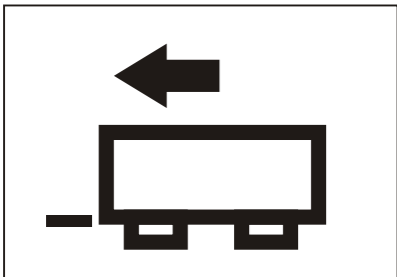
#### Low gear indicator lamp (12-speed transmission and 16-speed transmission without PTO)

When turning to the low gear position, this indicator lamp will come on.



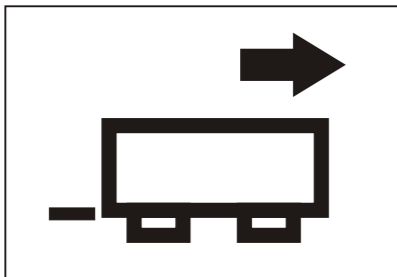
#### Oil water separation indicator lamp

When the diesel filter has too much water inside, this indicator lamp will come on to remind you of draining water.



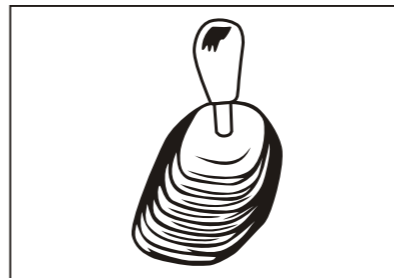
Trailer left turn indicator lamp (optional)

When the trailer left turn lamp is lit up, this indicator lamp will come on.



Trailer right turn indicator lamp (optional)

When the trailer right turn lamp is lit up, this indicator lamp will come on.

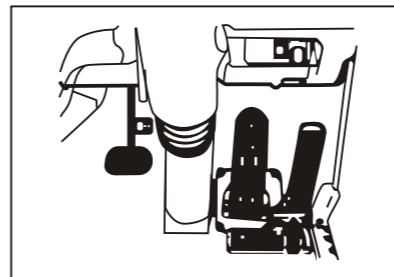


Floor operating mechanism

Select lever

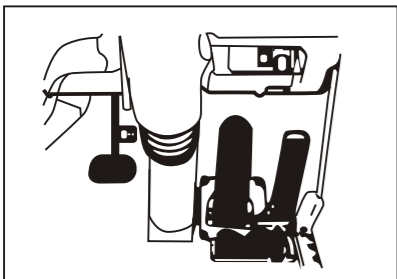
Gear mark is on the select lever, place reverse gear while starter switch is in "on" connect position, then the reversing light is on.

If the reverse alarm have equipped, the alarm will buzzer if place to reverse gear.



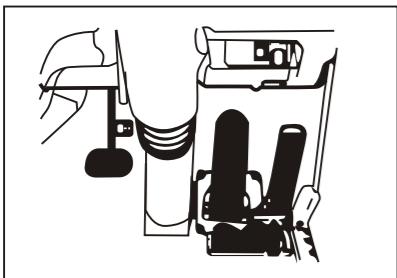
Accelerator pedal

To avoid unnecessary fuel consumption, the accelerator pedal operating should be stable and proper.



#### Brake pedal

Gently press the brake pedal, the brake will generate a very strong ground braking force.



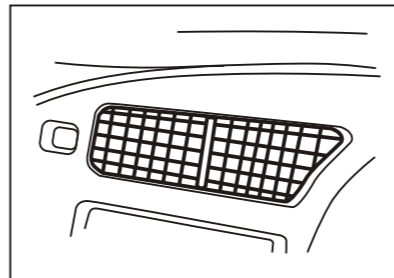
#### Clutch pedal

If separate, press the clutch pedal quickly to the end, otherwise will exacerbate the clutch friction.

If connected, release the pedal gently.

#### CAUTION:

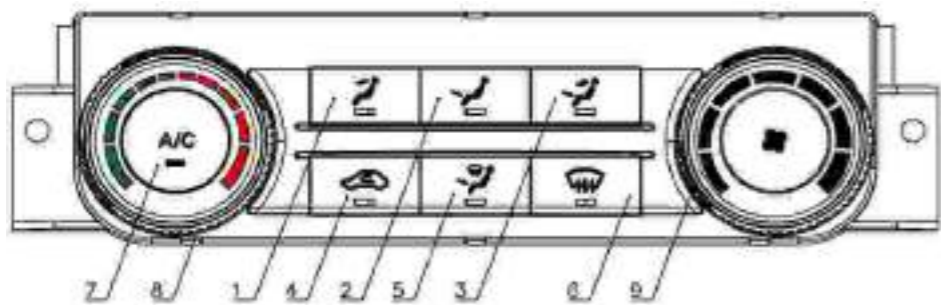
Don't touch the clutch pedal when the clutch is not used.



#### Ventilation device

Turn the grille to adjust the air flow direction

## AC control



- |                                     |                           |
|-------------------------------------|---------------------------|
| 1. Face-level button                | 6. Defrost-level button   |
| 2. Floor-level button               | 7. A/C button             |
| 3. Face-floor bi-level button       | 8. Cooling-heating button |
| 4. Fresh-recirculation level button | 9. Ventilation button     |
| 5. Floor-defrost level button       |                           |



## Face-level button

The airflow comes from the face outlet of the dashboard for face air



## Floor-level button

Most of the airflow comes from the floor outlet with this mode





#### Face-floor bi-level button

Half of the airflow comes from the face outlet and the rest of them from the floor outlet



#### Fresh-recirculation level button

Press this button, with the light on, indicate the mode is recirculation inside mode which prevent any air came into the compartment; Press it again with the light off goes fresh outside mode which allows the air exchange with outside the compartment.



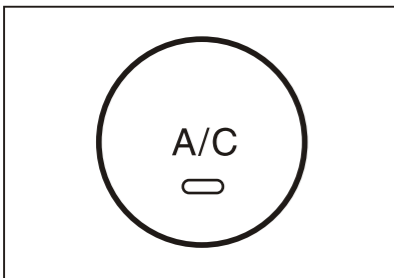
#### Floor-defrost level button

Most of the air guided to the windscreen and floor outlet and a few amount to the side windows by this mode. In order to prevent any fog on the front windshield, recirculation outside button should on when use this mode.



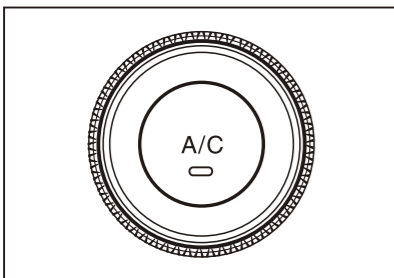
#### Defrost-level button

Air comes from the front windshield outlet and a few from the side window. In order to prevent any fog on the front windshield, recirculation outside button should on when use this mode.



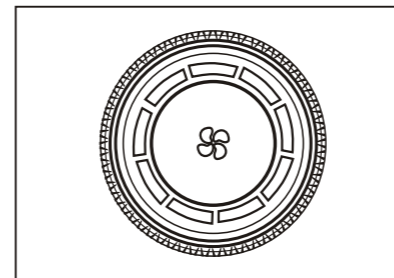
#### A/C button

After start the engine, press this button(the light is on) and rotate the air volume knob to start the compressor and press the button again to turn the compressor off.



#### Cooling-heating button

Rotate the button to the left for cooling and the other side for heating, by rotating the control button the temperature for the compartment can be controlled within a certain range.



#### Ventilation button

Rotating the air volume knob to the clockwise way to increase the airflow volume and to the counter way to reduce it.

#### ⚠ CAUTION:

- Open the window to fresh the inside air when the weather is hot, then close the window, which can shorten the time of the cooling and keep the working efficient.
- Using the air conditioner for long hours with the 'Recirculation mode' will contaminate the air inside the vehicle. In order to avoid the situation, place the button at "Fresh mode" once in a while after the temperature of the compartment is low.
- Turn off the AC once in a while if the vehicle is in a long run to prevent the engine from overheating.
- During winter months or in periods when the air conditioning is not used regularly, run the air conditioning for a few minutes to help circulate the lubricants and keep the system in peak operating condition.
- The window may fog due to the long time recirculation inside mode, if so, select the defrost mode.



Switch lock

Right switch

Left switch

### Electric window switch at driver's side

#### Switch on

The driver's side windows moves down as long as the switch is operated half way down. Once release the switch, the move stops.

To fully open the driver's window automatically, press the switch fully down.

To stop at the desired opening, pull upon and release the switch.

#### Switch off

The driver's side windows moves up as long as the switch is operated half way up. Once release the switch, the move stops.

To fully close the driver's window automatically, pull the switch fully up. To stop at the desired closing, push down and release the switch.

In the cold area, the safety equipment will prevent the window fully closed when fully pull up the switch. Pull up the witch then the window will close completely under this situation.

The switch can be operated within 30 seconds after the ignition key is turned to 'LOCK', which will be very convenient if you forget to close to window after turn off the ignition key.

#### CAUTION:

- **The switch in driver's side can also control the window in passenger's side.**
- **Watch out your head, hands and other parts of your body not be clamped by the window.**
- **The safety equipment will be active and stop the moving of windows if the witch is pushed or pulled forcefully.**
- **Under this situations, switch off and switch on after a few seconds, then check it is OK or not.**

#### Switch lock

Push this switch will lock both windows and stop them to be opened or closed. Push again to release the lock.



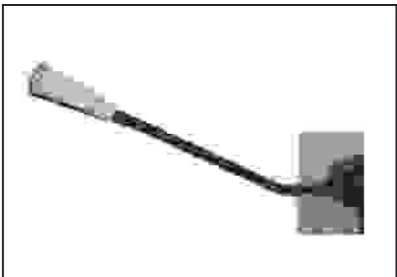
### Operations for the window in passenger's side

#### Open the window

Push the switch to move down the window. The move will stop if release the switch.

#### Close the window

Pull the switch to move up the window in passenger's side. The move will stop if release the switch.



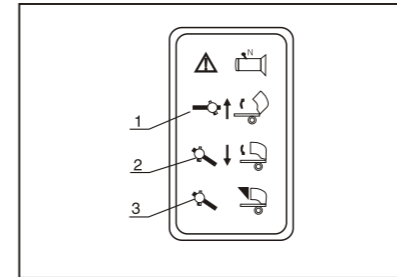
### Trailer control valve assembly

When the tractor stops, pull up the trailer control valve, the brake for trailer will active. Push down the valve, to release the brake and continue to drive.



### Parking brake handle

When parking the vehicle, pull up the parking brake handle then the parking brake will be active. Push down the handle, the parking brake will be released and can continue to drive.



### Overturn of cab

#### 1. Lift the cab

(1) Switch the overturn handle to lift position

(2) For hand control, plug the operating handle into the oil pump operating hole, move upward and downward the handle repeatedly, the cab will move upward gradually.

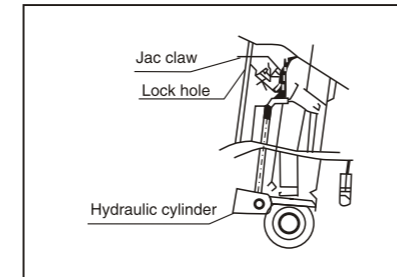
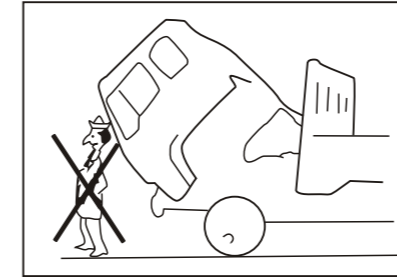
For electric control, switch on the overturn switch, the alert rings and cab moves upward.

## 2. Descend the cab

- (1) Switch the overturn handle to descend position.
- (2) For hand control, plug the operating handle into the oil pump operating hole, move upward and downward the handle until the cab fully descend, continue to operate and make sure the handle goes to the bottom.  
For electric control, switch on the overturn switch, the alert rings and cab move downward.

## 3. Cab lock

After descending the cab, the overturn handle should remain in descending position.



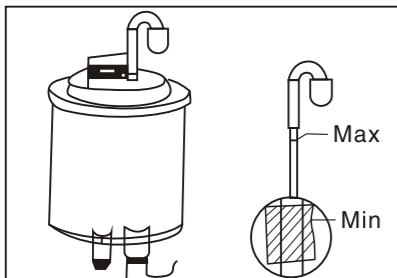
## ✿ NOTES:

- When turn over the cab, the vehicle should be parked on flat road, parking brake activated, shifting handle in neutral position, and take out all unfixed goods in the cab and close the door.
- Make sure there are enough space around the cab to operate, at least 1 meter in front and top of the cab.
- If not lift to the max angle, please make sure the jac claw in the lock hole completely before repairing under the cab.
- If you want to descend the cab, switch the pump handle to downward position. If the handle can not be switched, move up the cab a little then switch the handle to move downward the cab.
- Make sure there are no waste cloth or other tinder in the engine nacelle before move down the cab.
- After locking the overturn handle, the vehicle can be driven.
- Please use YH-10 aviation hydraulic oil.



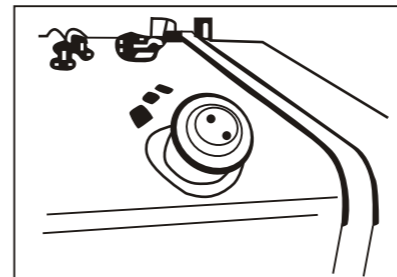
### Cooling kettle

Do not open the cooling kettle when the engine and radiator are hot. Hot liquid and gas may erupt out under high pressure.



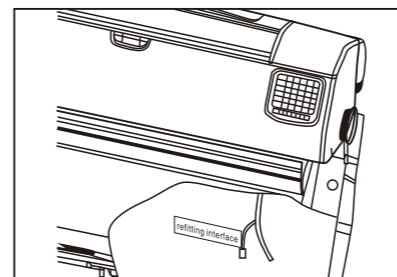
### Power steering oil tank

Check and fill the oil between max and min scale line before driving.



### Fuel tank cap

Move the fuel tank cap anti-clockwise when dismantle the fuel tank cap. Make sure to close the fuel tank cap completely in case that water, dust and other things go into the tank to cause engine problems. Make sure use the diesel in fuel system.



### Electrical refitting interface

The Electrical refitting interface locates under the right instrument desk cover, marked as “refitting interface”

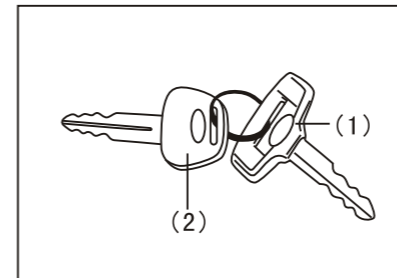
The red yellow line is constant power line, protected by the fuse . Load should be within 120W.

Yellow blue line is on power line, protected by the fuse. Load should be within 120W. Black line is and load should be within 120W. The sectional area of wire used in refitting should be no less than 0.85 square millimeter.

JAC will not bear the loss of wrong refitting.

## Driving Preparation

Proper management and driving can extend the working life and improve fuel economy. Please drive carefully.



### Key

There are two keys with the vehicle and its main function is to ignite, open and close the door and fuel tank. Please take good care of the keys and it's suggested to keep the keys separately for backup.

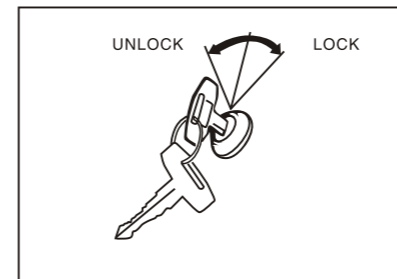
Plug the ignite key into door lock, turn around to lock the door.

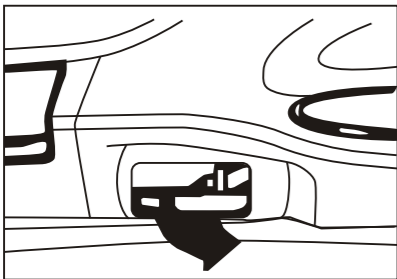
### NOTES:

**Take the key with you when get off the vehicle and do not leave the key inside.**

### Outdoor handle

Push the button of the outside door handle to open the door.





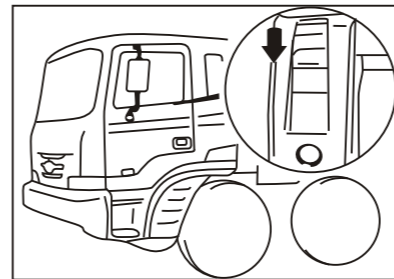
#### Indoor handle

Pull out the indoor handle to open the door.



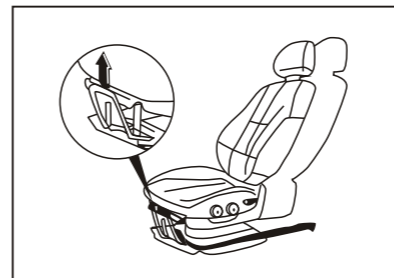
#### Lock the door from inside

Push down the button in the door to lock it.  
Once locked, it cannot be opened inside or outside the door.



#### Lock the door from outside

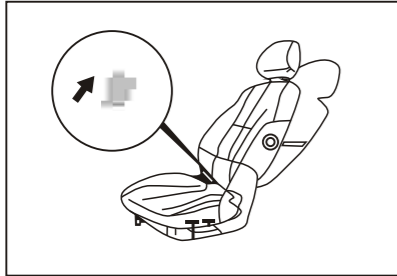
It does not need the key to lock the door.  
Press the lock button on the door and press the button on the outside handle,  
then close the door.



#### Adjust the driver's seat

To move the seat toward the front or rear, pull the lock release lever upwards,  
which releases the seat on its track so you can move it forward or rearward to  
the desired position. When you find the position you want, release the lever and  
slide the seat forward or rearward on its track until it locks into position and  
cannot be moved further.





### Adjusting seatback angle

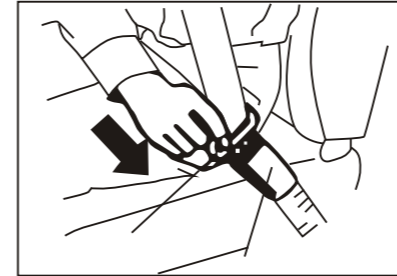
To recline the seatback, lean forward to release your weight off it, then pull up on the recliner control lever at the outside edge of the seat. Now lean back until the desired seatback angle is achieved. To lock the seatback into position, release the recliner control lever.



### Three-point safety belt

Three-point safety belt has three points to hold, also works as belt and baldric. To use the safety belt properly, please read and follow the below instructions.

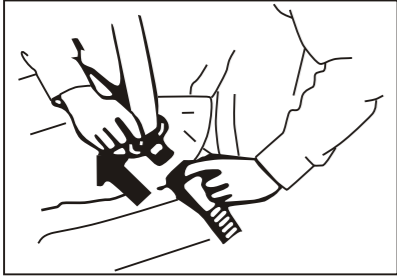
1. Adjust the seat to the comfortable position to lean the back against the seat.
2. Hold the connector of safety belt (L), tensioning the belt to cross the body. Pull the belt and connector to the other connector (B) and plug into it until hearing click.



### NOTES:

- It's very important for the belt to touch closely to the body and lower its position. Because the strength during collision will work on strong os pelvium, not on the weak belly. If the belt does not touch the body closely, it will cause casualties during accident.

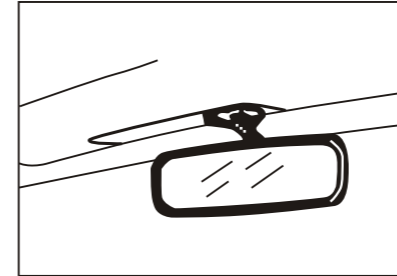
- It should push down the belt in front of the belly, make it touching the os pelvium closely. Then tighten the belt near the shoulder, making the belt to touch your waist closely, which will lower the chance for the belt slipping from the body during accident.
- To avoid the injury during accident, it is forbidden for two people sharing the same safety belt. Take care to avoid the belt be twisted or clamped by the seat accessories or door.
- The belt reaches to the proper length only after it is adjusted manually. If you move forward slowly, the belt will extend and allow you move. But if sudden stop or collision happens, the belt will be locked. If you move forward too quickly, it will also be locked.



The belt can be draw back into the drawing device. The belt can also be fully drew back by moving the positioning button on the belt if necessary. Then the belt can be hang on the brace within head reach.

#### Checkup and maintains for the safety belt

- Check regularly for damage in the safety belt, connector, drawing device and support, in case to lowering the safety effects.
- Keep the sharpen stuff and those may damage the safety belt away from the belt in case to harm the belt.
- The safety belt shall be changed once it is cut, weak, tore or damaged in collision.
- Check the fix bolts of whether be fixed tightly on the floor.
- All spare part shall be replace once there is a problem.
- Keep the safety belt clear and dry.
- Only use low alkalinity soap and warm water to clear the safety belt.
- Do not bleach or dye the safety belt, or it will weak its strength.



#### Interior rear-view mirror

Turn a few angles of the connector between the mirror and mirror support when adjust the mirror.

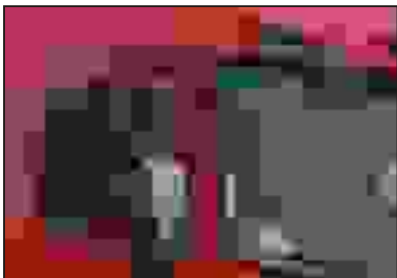


#### Outside rear-view mirror

Adjust the outside rear-view mirror to make sure you can see both side and road conditions in the back.

#### Front down-view mirror

Make sure the driver to see the front down road conation.

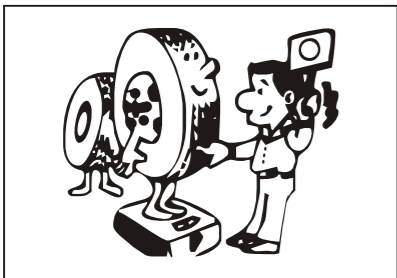


### Starting mirror

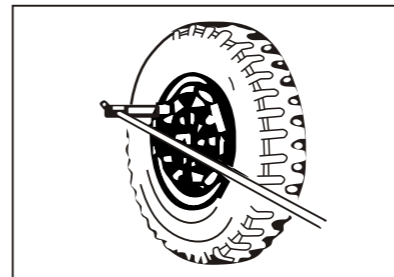
To help the driver have better view of the right down road in the front.

### Daily examine

To ensure the safety driving, the following items should be examined before driving.



Tire pressure, damage and abrade of the tire.

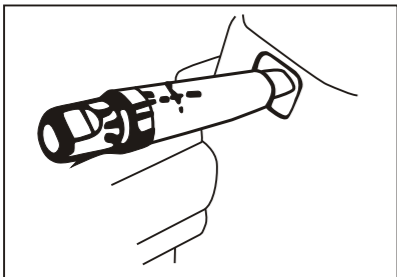


Check the bolts of tire loos or not.

The nuts and bolts for tire are all right wise in spite of left or right.



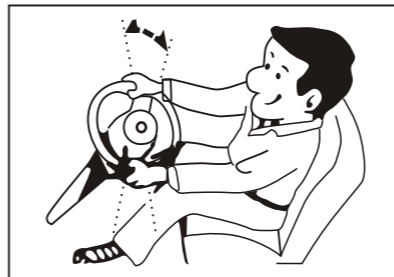
Check whether there is damage for leaf springs.



Check for working conditions for all lights



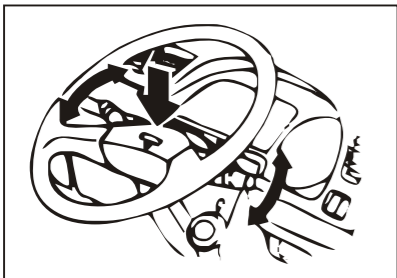
Check the electrolyte in the battery and the status light, make sure it remain green light.



Check the free steering condition and loosening conditions.  
Steer the wheel when the engine is on, until the tires start to move to check for the free steering condition.

The front wheel should move forward when checking the free steering. The free steering should be within 20–50mm calculated by the outside of steering wheel. In addition, it also should check the loosening condition by moving frontward and backward, leftward and rightward.

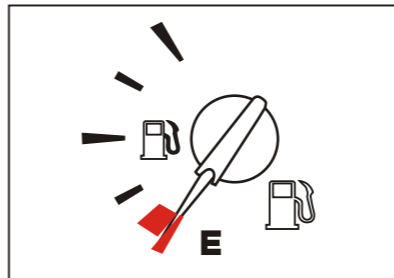




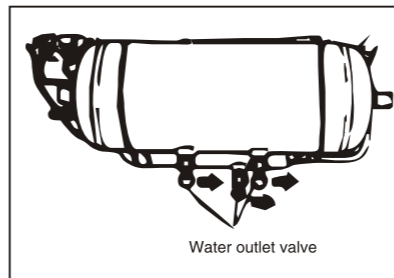
Check the working condition of horn and windshield wiper  
Please clean the windshield before checking the wiper and windshield wiper.  
Then spurt the washing liquid and check whether it can spray on the windshield normally and make sure the wiper working well in all shifts.



Check the working conditions for instruments and indicator light.  
Check the working conditions of lamp switches and indicator lights.



Check the fuel gauge and fuel level in the fuel tank.



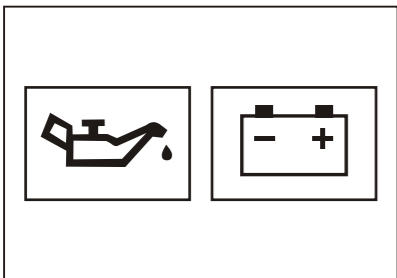
Release water from gas storage tank.  
Release the valve under the gas storage tank to release the water.

✿ NOTES:

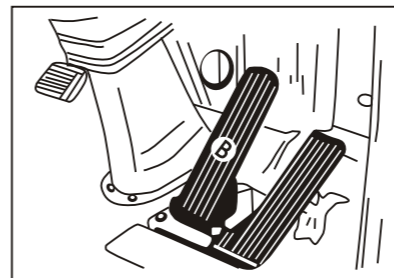
Please release the water after using the trucks because the remaining water may be frozen inside.



Check the level of clutch lubricating oil.



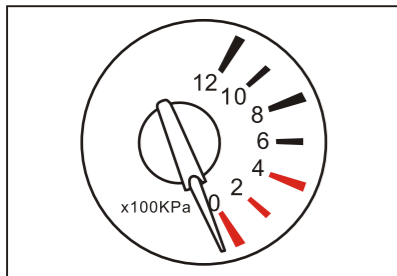
When the engine runs, check the engine oil pressure light and charge indicator light. Please check the reason if either light is on.



Check the free range and function of brake footstep.  
Standard range: 9–14mm

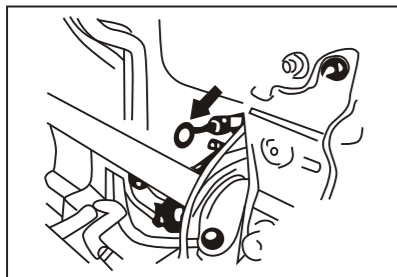


Check the free range, working range and function of clutch footstep.  
Standard range: 15–20mm



Check the pressure of air storage tank

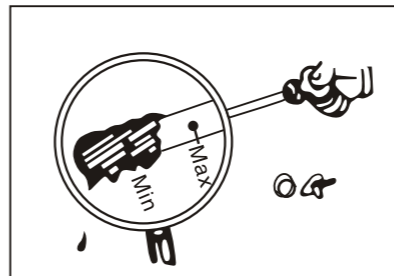
Check the pointer of gaspressure meter and buzzing reminder. If the pointer locates in red area or there is a buzz, please check the reason for this.



Engine oil level

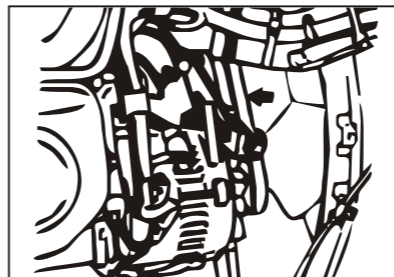
Pull out the dipstick, wipe it clear and plug into the engine again.

Then pull out the dipstick and check whether the level locates between the max and min level mark. Check the polution situation of the engine oil on the dipstick.



✿ NOTES:

The vehicle should be parked on the flat road when check the engine oil level. If the engine has been running before checking the engine oil level, the engine should stop for 5 min in order to let the oil level calm down.



Belt of water pump and alternating-current generator

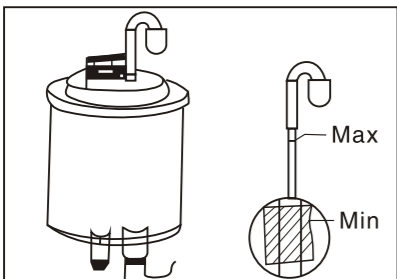
Check the curve condition of the belt when pressing the middle part of the belt with 98N.

Please refer the Engine manual for the standard curve.

Please also check the flaw and damage of the belts.

✿ NOTES:

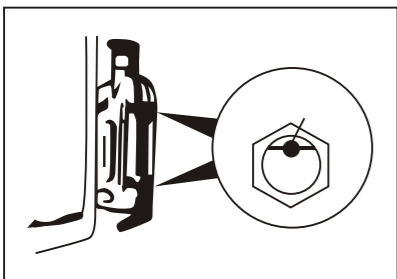
**Please replace both belts together when replacing them.**



#### Level of power steering lubricating oil

Check the level of power steering lubricating oil and refill it with automobile transmission lubricating oil if necessary.

If the level is lower than MIN, please check if there is a leak and then refill it to 'MAX'.

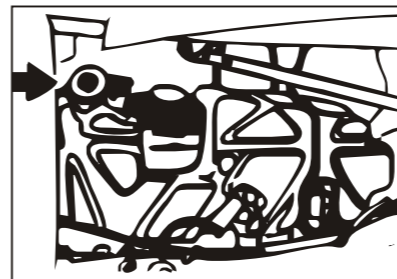


#### Anti-freezing solution level

Check the anti-freezing solution level and refill it if necessary. If the level is lower than MIN, please check if there is a leak in the radiator and cooling system and then refill it to 'MAX'.

#### NOTES:

- Do not fill too much anti-freezing solution in case it might be higher than MAX.
- Do not dismantle the refill cover on the radiator if it has to.
- The level check should be proceeded after the engine is cool down.

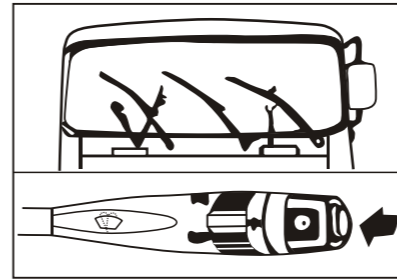


#### Level of windshield wiping liquid

Check the tank is filled up with wiping liquid or not.

#### NOTES:

It may block the pipe if using cleanser or other liquid. So it is highly important to use the windshield wiping liquid.



Push the combined switch to check whether the liquid can spray on the windshield normally.

#### NOTES:

Do not switch on wiping function if the tank is empty.





#### Level of clutch lubricating oil

Check the level of clutch lubricating oil, refill it if it is not between MIN and MAX.



#### Liquid level of the urea tank

The level shall stay between 30~80% of total volume of the urea tank.



#### Exhausted status

Check the smoke color after the engine preheated.

Non color or light blue color: Perfect combustion (Good).

Black color: Incomplete combustion.

White color: engine oil burning or not enough preheated.

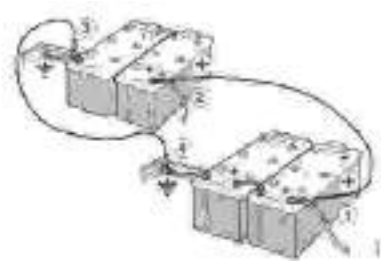
## Emergency measure

## Start from other power

If the battery is run out of power, the truck can be started using the same volt battery, say 24V battery, to start the engine.

**⚠ WARNING:**

**It should be very careful to operate the battery in case for injuries of people, battery explosion, electrolyte burning or damages to the electrical components by sparks.**



Use the wireline with insulated clamp (at least 30mm<sup>2</sup>)

1. Start the engine with charged battery.
2. Link as follows:
  - (1) Use the battery of the same volt(24V).
  - (2) Following the below instruction to link the wirelines.
    - ① The positive rod of uncharged battery.
    - ② The positive rod of assisted battery.
    - ③ The negative rod of assisted battery.
    - ④ Link the grounding wire of the chassis of uncharged battery. The grounding line should leave far from the uncharged battery and may cause sparks during the linking.

- (3) After linking the wirelines, start the engine with assisted battery.
- (4) Raise the revolving speed with assisted engine, then start the engine with uncharged battery.
- (5) Remove the linking wirelines in the reverse order of above after start the engine.
 

It is forbidden to link the positive rod and negative rod. Do not remove the wirelines when the engine is running or it may cause problems of starting system.

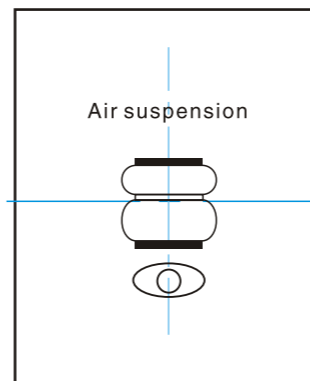
## Support bridge(optional)

## Air suspension button

When the switch is not pressed during no-load, the bearing airbag and brake chamber will have no air pressure; namely the follow-up axle is not braked with no-load. When pressing down the air suspension button, the bearing airbag will begin to inflate; when releasing the button, the air suspension airbag will begin to bleed.

**⚠ CAUTION:**

**It is forbidden to inflate the air spring when the vehicle runs with no-load; namely, the airbag cannot be used for load bearing; or else, the rear axle of the vehicle will skid.**



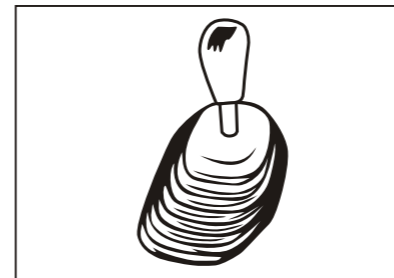
## Driving Notes

Correct maintenance and driving will not only prolong the service life of vehicle, but also improve the economical efficiency of engine oil and fuel.

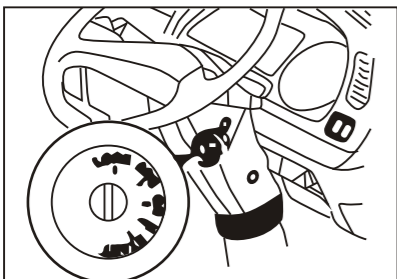


### Preparation for startup of engine

1. Inspect whether the parking brake handle is pulled up (as for the towing vehicle, please also inspect the manually-operated trailer control valve assembly).



2. Set the gear shift lever to the neutral position.



### Startup of engine

1. Turn on the main power switch, and make sure that the gear shift lever is in the neutral position and the hand brake is pulled up.
2. Insert the ignition key, turn it to the position “ON” , and then the charging indicator and oil pressure indicator will come on. Turn the ignition key to the position “START” so as to start the engine. After the engine runs stably, the indicator will go out. In the course of startup, don't push down the accelerator pedal suddenly.

Position	Role
ACC	Parking step, which will energize the current-consuming equipment to be used when the vehicle stops, such as radio & tape player
ON	Driving step, which will energize the current-consuming equipment to be used when the vehicle is running, such as instrument, pre-heater and wiper
START	Starting step, which will start up the engine and will return to the position “ON” automatically after the engine is started up

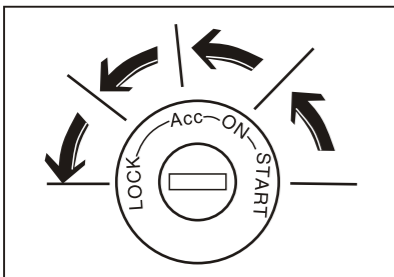
### ⚠ CAUTION:

In order to start up the engine in cold state (the temperature of engine cooling water is lower than 0℃ ), the electronically-controlled flame preheating device must be used. The operation steps are detailed as follows:  
When the ignition key is turned to the position “START” , the preheating indicator will come on, and the preheating plug will ignite the fuel, so as to form the flame and heat up the intake air. After the engine is started up, the ignition key will automatically return to the position “ON” . If the engine can't be started up, please wait 2 minutes, and then try to start the engine again in accordance with the above-mentioned steps.



Hand throttle cable handle (no such handle for Euro III/Euro IV vehicle models)

Adjust the angle of accelerator pedal by using the hand throttle cable.



### Shutdown of engine

Turn the key from position “ON” to position “LOCK”, so as to switch off the engine.

### Operation of turbocharged engine

The naturally aspirated engine is replaced with the turbocharged engine, so that the performance of engine is improved. However, the permissible axle load

and the permissible gross weight of vehicle shall remain the same. Overloading and prolongation of frame must be avoided, otherwise danger may occur and the parts will incur early wear and damage.

### Normal startup of engine

After the turbocharged engine is just started up, the turbocharger bearing and other revolving parts are not fully lubricated. Therefore, don't make the engine run at high speed, but make it run at idle speed for at least 3 minutes.

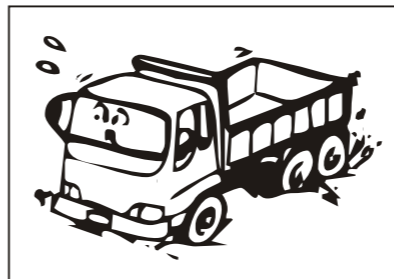
### Stop of engine

After the vehicle is running on highway, don't immediately switch off the engine, but make the engine at idle speed for at least 3 minutes until the engine cools down. In this way, the turbocharger will run at low speed, so that the running of turbocharger at high speed under the condition that that is no oil pressure as well as the damage of bearing and oil seal will be avoided, and thus the service life of turbocharger bearing will be prolonged.



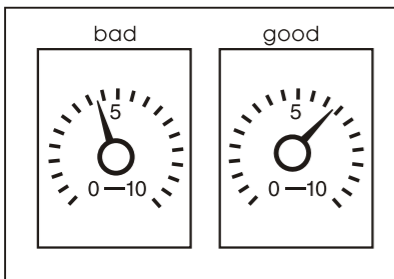
### Operation of inter-wheel differential lock

Inter-wheel differential lock: If it is necessary to use the inter-wheel differential lock when the vehicle is running on any muddy or unfavorable road, it is preferred to activate the inter-wheel differential lock by operating the rocker switch for inter-wheel differential lock on instrument panel under the condition that the vehicle stops (or the speed is lower than 5km/h). Just press down the rocker switch for inter-wheel differential lock, and, before the inter-wheel differential lock is engaged, get the clutch disengaged. The indicator will come on after the rocker switch is engaged.



### ⚠ CAUTION:

**After the vehicle passes the road of poor conditions, please immediately release the differential lock.**



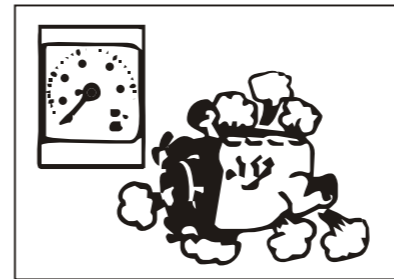
### Takeoff of vehicle

1. Please inspect whether all devices are in normal working conditions in accordance with the formal technical inspection procedure.  
If the air pressure is found lower than 6 times atmospheric pressure, please don't use the vehicle.
2. Fully release the parking brake



### Parking

1. Make sure that all lamps and turn signal switches are turned off.  
After the ignition switch is turned off, the headlamp, turn signal lamps and marker lamps should be able to be turned on.
2. Pull up the parking brake handle (as for towing vehicle, please also pull up the manually-operated trailer control valve assembly). If the vehicle is parked on an unattended slope, please block up the wheels.



### Notices for driving

1. Please avoid the over-speeding of engine  
When driving down a slope, please pay close attention, so as to prevent the engine from over-speeding. Especially when the gear shift lever is set from high speed gear to low speed gear, the engine may get overspeeded.



2. If any abnormal noise or off odor is found when the vehicle is running, please stop the vehicle and carry out inspection for causes thereof.



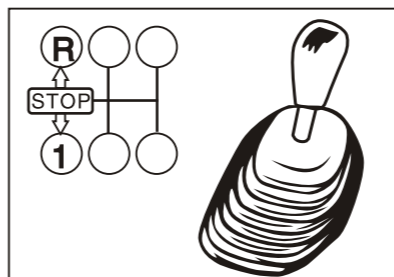
3. If any indicator or instrument is found working abnormally when the vehicle is running, please stop the vehicle and carry out inspection for causes thereof.



4. Please avoid the unnecessary sudden acceleration and hard braking.

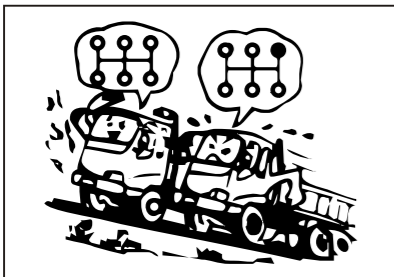


5. In the course of driving, don't put the foot on clutch pedal, otherwise the clutch may be in the semi-disengaged state, which may lead to the early wear of friction lining on clutch.

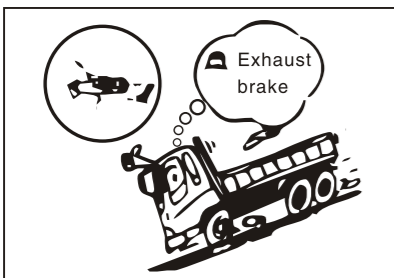


6. Before the shifting from forward gear to reverse gear or from reverse gear to forward gear, please fully stop the vehicle.

\* NOTES:  
Neutral coasting is forbidden during driving.



7. When driving up a slope, please get the low-speed gear engaged in advance, so as to prevent the engine from getting overloaded.



8. When driving down a relatively long slope, please get the low-speed gear engaged, and use the engine brake, foot brake and exhaust brake. Continuous and repeated use of foot brake only may get the brake overheated and then lead to failure of brake. In rainy days, the vehicle may skid in the course of braking operation, and good braking effect can be obtained by using the exhaust brake.

**⚠ CAUTION:**

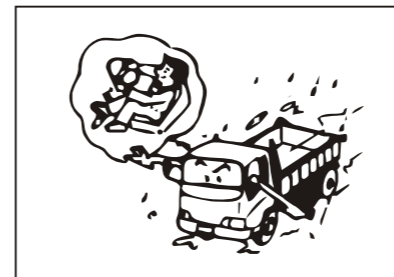
**When the transmission is set at the neutral position, be sure not to use the exhaust brake, otherwise the engine may get shut down and thus accident may occur.**



9. When driving the vehicle across any shallow shoal or water hole, please pay special attention, otherwise water may flow into air pipe and then engine will get seriously damaged. After passing the river, please inspect where there is water in lubricating oil for engine, transmission and rear axle.

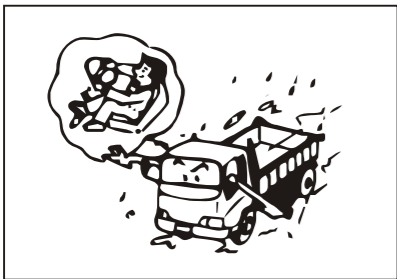
**⚠ CAUTION:**

**If any water is found, please drain the water, and then fill the specified gear oil.**



10. When driving the vehicle in heavy rain or on shallow shoal, please pay special attention, because the wet brake may temporarily reduce the braking force.



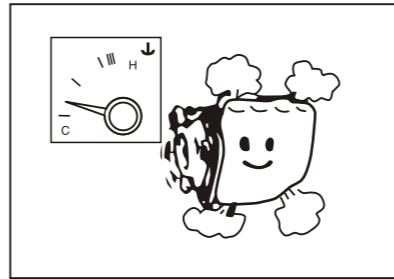


### Economically-efficient driving

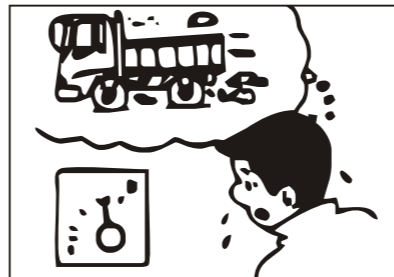
1. Getting high-speed gear engaged and driving the vehicle at unnecessary high speed or low speed will increase the consumption of fuel.



2. In the course of driving with the highest speed gear or over-speeding gear engaged, please maintain the speed as stable as possible.



3. In the course of driving, please always maintain the temperature of cooling water in the normal range.



4. The tyre which is not fully inflated may reduce the fuel economy.



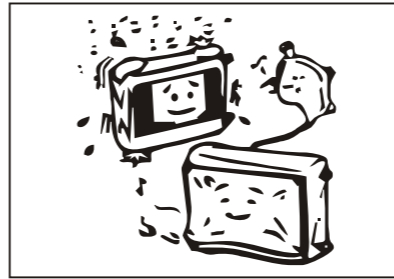
#### Notices for use of vehicle in summer

When the atmospheric temperature is high, the engine may get overheated. Please carry out the operation in accordance with the following method, so as to prevent the engine from getting overheated.

Don't fill hard water such as well water or river water into the engine cooling system, otherwise the rusting of parts such as radiator and the accumulation of water scale will get accelerated.



Insect, soil or other foreign matters remaining in radiating fin of radiator will reduce the heat dissipation capacity of cooling system. Please inspect whether the radiating fins are blocked up from time to time, and use the water under not too high pressure to clean them up.



#### Notices for use of vehicle in winter Prevention of overcooling of engine

The overcooled engine will not only accelerate the wear of main parts of engine, but also reduce the fuel economy.

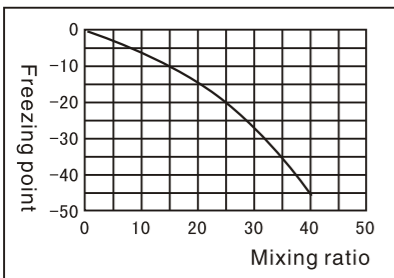
If necessary, thermal insulating curtain may be used.

When using the thermal insulating curtain, please pay attention to the water temperature gauge from time to time, so as to prevent the engine from getting overheated.



#### Use of anti-freezing fluid

The freezing temperature of engine cooling water will vary as the proportion of anti-freezing fluid in water varies.



1. The mixing ratio of anti-freezing fluid can be determined by reference to the chart. Please note that, the lowest ambient temperature used to determine the mixing ratio shall be 5-10°C lower than the expected lowest ambient temperature.

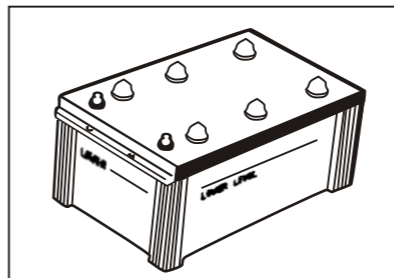


2. Before using the anti-freezing fluid, please fully clean up the inside of cooling system, including radiator.
3. The damaged rubber hose must be replaced, because when the anti-freezing fluid is used, even the smallest crack will lead to the leakage of engine cooling water.



#### Engine oil

When the temperature lowers, the engine oil will become thicker. Please select the engine oil with the viscosity suitable for ambient temperature.



#### Battery

The capacity of battery will reduce as the temperature lowers, and the specific gravity of electrolyte will reduce as the discharge rate reduces. Therefore, it is necessary to take appropriate measures to prevent the battery from getting frozen.

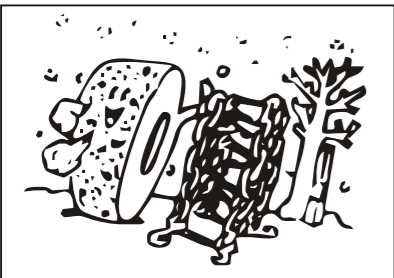
In order to improve the cold start performance of engine in cold area (with the temperature lower than -15°C), please replace the battery with a cold-start battery with the same capacity.



#### Diesel fuel with low freezing point

As for the vehicle used in any extremely-cold area in winter, if the diesel fuel with relatively high freezing point is used, freezing will occur. As the ambient temperature lowers, the diesel fuel in fuel tank and fuel supply pipe will be frozen into jelly state, which will lead to the troubles such as difficulty in starting of engine.

Therefore, before driving the vehicle from warm area to cold area, it is better to select the diesel fuel with low freezing point sold in cold area when refueling the vehicle.



#### Driving on icy or snowy road

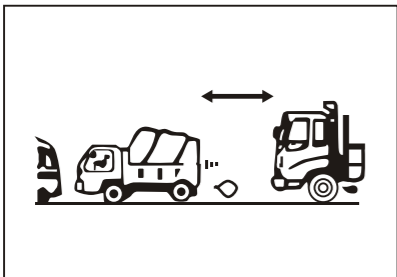
1. It is advised to use the tyre chain or snow tyre.



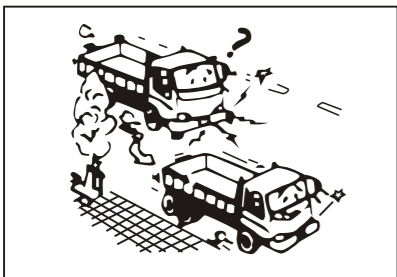
2. Please avoid over-speeding, sudden acceleration, hard braking and sharp turning.



3. Please use the low-speed gear, so as to obtain the effect of engine brake. Use the brake pedal within reason.

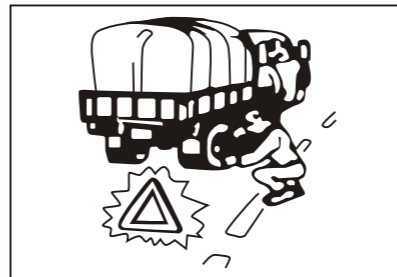


4. When driving the vehicle, be sure to keep sufficient distance away from the preceding vehicle.



#### Emergency parking

1. If it is necessary to park the vehicle for any reason, please park the vehicle as close to the right side as possible, and be sure not to park the vehicle on driving lane.

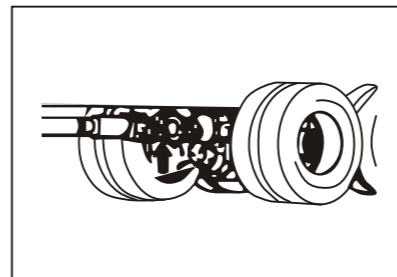


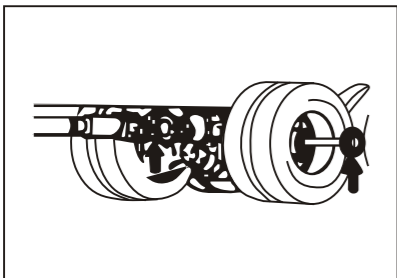
2. Be sure to pull up the parking brake handle, and turn on the warning lamp, whether in daytime or at night.

#### Towing from front end

Towing method under the condition that all wheels are on ground or the front wheels are not on ground:

If the steering system can function normally, it is necessary to tow your vehicle by towing all wheels. Please remember, the power steering system will become inactive. If the air pressure in braking system is too low, the brake of the vehicle will be inactive. Between the towing vehicle and the vehicle which has lost the driving performance, it is necessary to connect the air source of towing vehicle, or to loosen the spring brake for releasing the brake and adopt the rigid connection for towing operation.



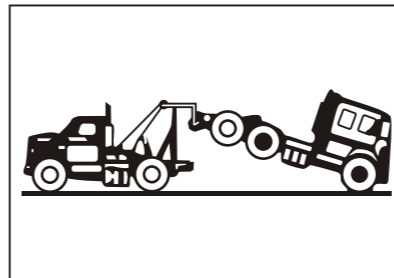


Disconnect the transmission shaft on rear axle from the axle flange, and then fix the transmission shaft onto the frame or crossbeam, so as to prevent the transmission from getting damaged.

If the rear axle is damaged, please replace the transmission shaft. Put on the shaft sleeve, so as to prevent the loss of lubricating oil and the intrusion of dust and other foreign matters.

**⚠ WARNING:**

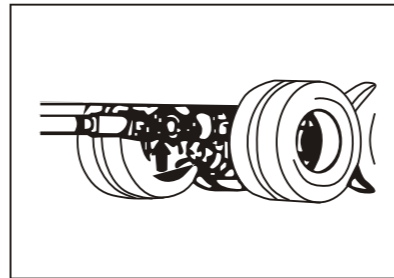
The towing device of the vehicle can be used only on normal road and under rated load; if the vehicle is equipped with two towing hooks, be sure to use both the two hooks for towing, and ensure that force is applied to the two hooks evenly; under the special circumstance that the wheels of vehicle are trapped or there is relatively high obstacle, please unload the vehicle firstly, and then carry out the towing operation; if it is still difficult to tow the vehicle after it is unloaded or if it is inconvenient to unload the vehicle, please employ a specialized towing service provider to carry out the towing operation, and be sure not to tow the vehicle forcibly, otherwise the vehicle may get damaged!



**Towing from rear end**

Towing method under the condition that the rear wheels are lifted away from ground:

Fix the turning wheels so that the vehicle will run in straight line.



**Loosen the brake by hand**

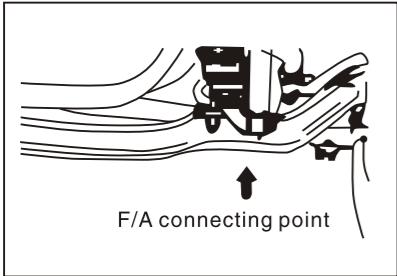
If the air pressure reduces, the front/rear spring brake can be loosened by hand. The specific method is detailed as follows:

1. Remove the anti-loosing double-threaded screws and nuts from the braking axle side.
2. Remove the rubber cap from rear axle.
3. Place the anti-loosing double-threaded screw with nut and flat washer into the axle (with the rubber cap removed), and then turn it anticlockwise for 1/4

round. Use spanner to turn the nuts on double-threaded screw for several rounds, so as to reduce the resistance which will be encountered when loosening the brake. When the length of screw exceeds 70mm, the spring brake can be released.

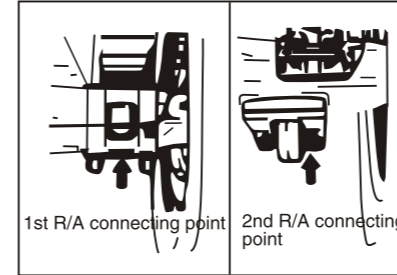


4. Clockwise turn the nut on rear portion of wheel brake cylinder.
5. When the screw is prolonged to about 70mm, the spring brake can be loosened by hand. When releasing the spring brake, please block up the wheels. Thereafter, hang up the towing rope (safety chain or wire rope) on the towing hooks between towing vehicle and the damaged vehicle.



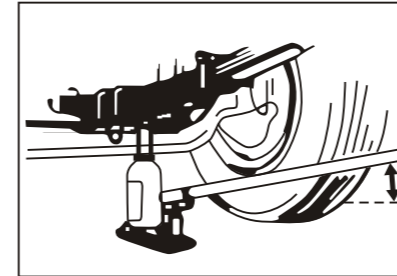
#### Lifting of front axle

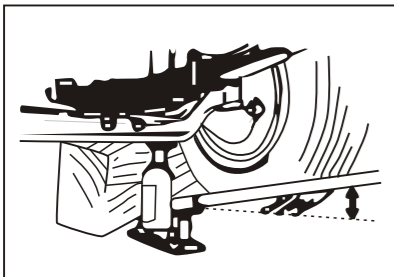
Place the jack under the corresponding leaf spring behind the front axle (as indicated in the figure), and make sure that the jack does not directly contact with the torsion bar.



#### Lifting of rear axle

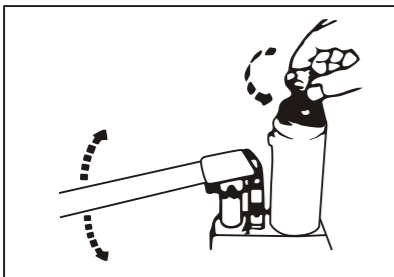
1. As for the vehicle with single rear axle, directly place the jack under the leaf spring of rear axle, and be sure not to place it under differential.
2. As for the vehicle with two rear axles, directly place the jack under the axle tube. If it is impossible to place the jack under the specified lifting point for lifting up the front axle because the tyre is punctured and must be replaced, please firstly place a square wood block under the front axle in accordance with the following method:
  - (1) Pull the parking brake handle to the end in the braking direction, and then firmly fix the wheel which is located on the other end of diagonal line with the specified lifting point.
  - (2) Place the jack under the leaf spring on the rear portion of front axle, and then lift up the front axle. At this time, please make sure that the jack has been raised to the position where the front axle can be lifted up.
  - (3) Insert the square wood block under the front axle: Make sure that the front axle is duly supported by the square wood block, and then remove the jack under the leaf spring.
  - (4) Place the jack under the specified lifting point, and lift up the front axle again until there is sufficient height for dismantlement of tyre.





If the bottom face of leaf spring is found bent, please jack up the front axle with special care.

In order to ensure the stability of vehicle lifted up, please use the square wood block of which is as large as possible.

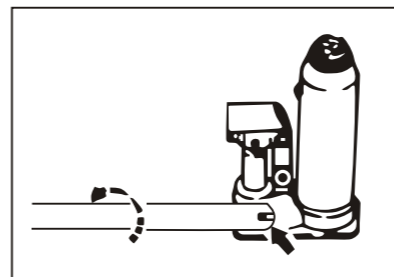


#### Notices for use of jack

##### Lifting

If the lifting point of vehicle is higher than the top of jack, please anticlockwise turn the top of jack, so as to prolong the jack.

As indicated in the figure, insert the jack handle, and then pull it upwards and downwards.

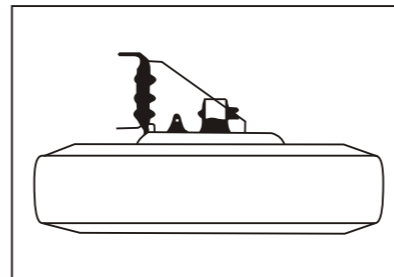


##### Lowering

Under the condition that the jack handle is at the position as indicated in the figure, anticlockwise and slowly turn the screw on venting port.

Be sure not to lift up the vehicle on a slope or soft ground, otherwise serious danger will occur.

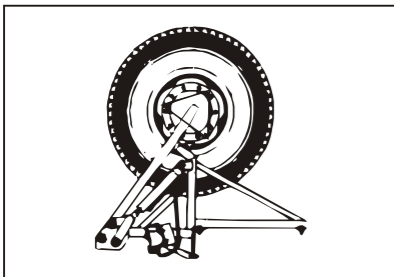
Be sure not to jack up the vehicle at any position other than the specified lifting point.



#### Use of spare tyre rack

1. Insert the spare tyre rocker into the plug on screw until the connection chain is tensed.
2. Loosen the nuts on three fixing bolts between spare tyre and spare tyre rack.
3. Slowly turn the spare tyre rocker, lower then spare tyre, take out the spare tyre from side, and then take the rack out from spare tyre.





4. After the wheel is replaced, place the spare tyre onto the rack, and then slowly turn the rocker so as to raise up the spare tyre.
5. Use three fixing bolts to fix spare tyre, and the tightening torque is: 250–280N.m.

 **NOTES:**

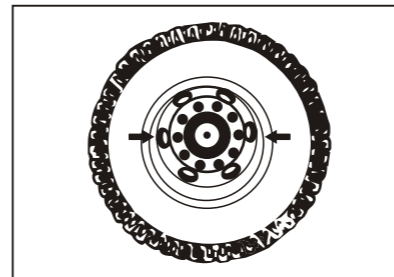
- Before using the spare tyre rack, please clean up the connection chain, and if necessary, apply appropriate lubricating grease.
- Please inspect the tightening of spare tyre from time to time.

**Replacement of tyre**

1. Jack up the wheel, remove the wheel nuts and wheel, and then install the spare tyre.

 **NOTES:**

- The stud bolt is used to fix the double tyre, so that special attention shall be paid thereto in the course of replacement of tyre.
- When replacing the wheel, please firstly make the tyre valve face downwards, and then carry out dismantlement and installation.

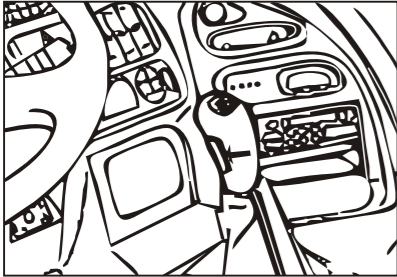


2. Wash tyre pin and nut, spray some engine oil onto the screw, and install nuts and tighten them, and then put down the tyre in ground.
3. Tighten the tyre nuts by wheel wrench as drawing instructed, the tightening torque of the wheel nuts is 590–680 N · m
4. After tyres installed, adjust the valve core position in order to adjust inflation pressure.

 **WARNING:**

**Intermittent checking and maintenance of tyre nuts is required.**

- As trucks drove the first 1000km, tighten the nuts by specific wrench.
- Every 5000km and one month driving, check the nuts.
- As change the tire, tighten the nuts after driving 50~100km.





### T/M operation

#### Gears change

The operation of gears change is the same as ordinary vehicle.



Transfer case only works between the shifts of high and low gears like 4L-4H.

1. Turn the auxiliary T/M switch to H or L.
2. Release the acceleration pedal and press down clutch pedal, the automatic gears-shift will turn to high-or-low gears position. Check if the light is on.  or 

Gears shifting of T/M and transfer case at the same time.

Gears shifting of switch.

Like 4L→5H or 4L←5H

1. Turn the auxiliary T/M switch to H or L.
2. Release the acceleration pedal and press down clutch pedal, the automatic gears-shift will turn to high-or-low gears position. Check if the light is on.  or 
3. Operate the gears rod for shifting.

Drive economically as following instructions.

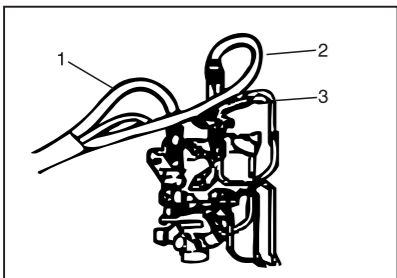
1. Keep engine RPM at middle range.
2. Driving at a high gear as much as you can.
3. Respond with the traffic condition in advance.
4. Avoid unnecessary breaking and acceleration.

#### Notices and instructions of gears shifting

1. The clutch shall separate completely during driving shifting.
2. Do not overexert during shifting, operate the shifting rod smoothly until full connection.
3. Turn the gears switch from H to L before press down clutch pedal.
4. From High to low gears shifting, make sure RPM lower than 1800, after gears changed, the engine will rotate extra above the high RPM range.
5. Even if the auxiliary T/M gears switch has a wrong operation, it will not realize the gears changed otherwise the clutch has been pressed down. If it has a wrong operation, return it back to normal immediately.

#### NOTES:

- Under full load, start with 1st gear or climbing special gear.
- The climbing special gear can only used under full loading, climbing road and extremely bad road conditions.
- The reverse and climbing gear can only work as the truck stand still.



### Tractor capstan operation instruction

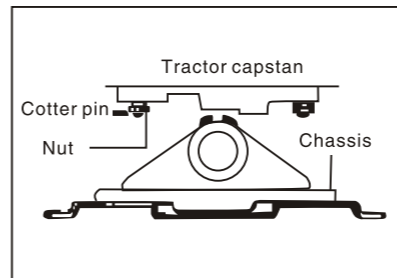
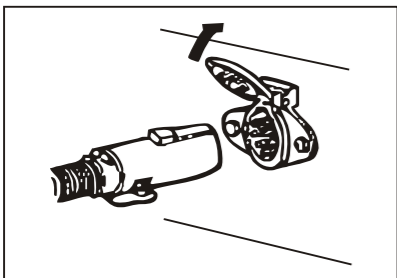
#### Trailer's connection

Push the trailer locking switch on the vehicle mounted with hooks. After the trailer is connected, and the following operation 2 and adjust valve section:

#### **⚠ WARNING:**

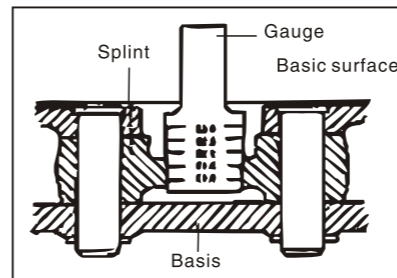
~~Do not mistakenly connect each tube.~~ Do not mistakenly connect each tube and remove tubes.

- 2、 In the truck installed with lock hook, before connecting shut-off switch 1 and emergency break tube, pull out the cabin control valve and cut off air supply, connect tube and open the adjust valve. And then push the cabin control valve inside and supply the breaking air.
  - 3、 Connect breaking tube. Inspect and make sure the parking light, tail light and steering light function well during operation.
  - 4、 Release trailer parking break.
  - 5、 Pull parking brake and check if it works.
- If there is a sound of gas release, it means function well.



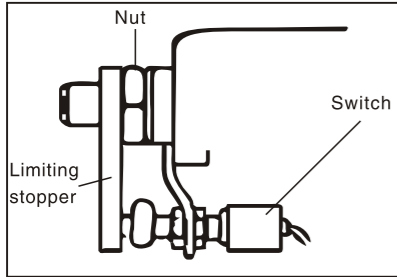
### Adjust steering angle

1. Adjust the steering angle according with driving situation.
2. Take away cotter pin, revolve nut 3~4 rounds as the direction of counter clockwise.
3. Install tractor capstan in an ideal position.

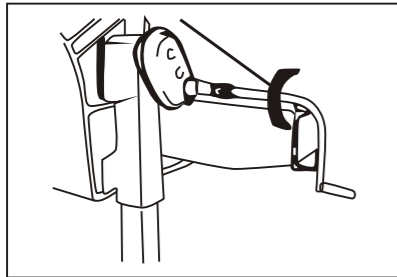


### Splint inner diameter adjustment

1. Adjustment needed as splint inner diameter outside due to abrasion.
2. Rotate limiting stopper by tools as the counter clockwise direction .
3. Loosen nut slowly so that it will reduce the inner diameter of splint as push forward rod.

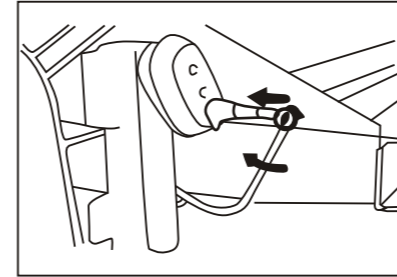


- 4.If the inner diameter between 51~52.2, make sure limiting stopper contact nut tightly in the help of gauge, then check if it can rotate the gauge manually
- 5.Before towing, make sure no interference between hooks and tight contact between limiting stopper and nut, running second level lock.
- 6.Never screw nut down as clockwise direction by bigger torque.



#### Base adjustment

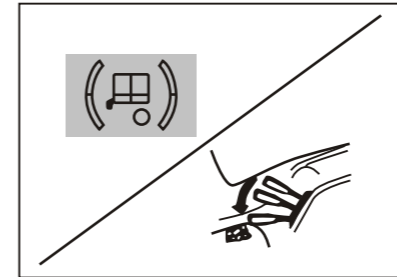
The height of base can be adjusted through rolling control rod 1.



#### Adjust the trailer

Put control rod as the above picture shows.

The wedge makes sure trailer's breaking and safety. The hook is used for adjusting the height of connection and hooking.

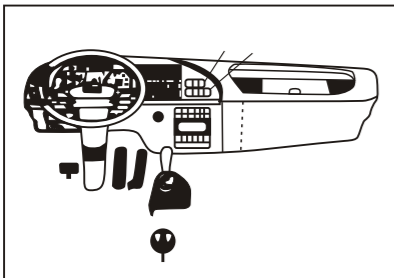


#### Trailer breaking rod

After pulling up the brake rod, the trailer brake will work. During running down a long slope, please apply the trailer brake. The higher position of the brake rod will produce larger brake force. Even though the trailer brake works, the tractor brake can work normally.

#### ⚠ WARNING:

In the long downgrade road, it's required to use trailer break.



### Dump truck box uplifting operation instruction

The different T/M decides a different box uplifting operation.

1. Dump truck with FAST TM uplifting operation instructions:

Pressing down clutch pedal, press the neutral position power-take and PTO switches in the right side of instruments, then put in the 2nd gear, release the clutch pedal. Then press down uplifting switch's limiting ejector rod and rotate hand grip to uplifting position, therefore, cargo box starts uplifting and dumping. As finish dumping, press down clutch pedal and return to gears neutral

position, turn off neutral position and PTO switches, release clutch pedal and rotate hand grip to downward position, as cargo box decrease to normal position, rotate hand grip to middle-stop point.

2. Dump truck with other T/M operation instruction:

Pressing down clutch pedal, press the PTO switches in the right side of instruments, release the clutch pedal. Then press down uplifting switch's limiting ejector rod and rotate hand grip to uplifting position, therefore, cargo box starts uplifting and dumping. As finish dumping, press down clutch pedal, turn off PTO switches, release clutch pedal and rotate hand grip to downward position, as cargo box decrease to normal position, rotate hand grip to middle-stop point.

### WARNING:

- In the long downgrade road, it's required to use trailer break.
- The truck shall move slowly on a flat road as it is in the process of dumping.
- In the process of dumping, it's forbidden to have a emergency break.
- It's forbidden to uplift and dump on a tilting road.
- Driving on road before confirming following points.
  1. Cargo box return to normal position fully.
  2. Turn off PTO and neutral position power-take switch.
  3. Uplifting switch arm rod stays at the middle-stop position.

## Lubricating Instructions

Please use the below lubricating oil and diesel in order to get the best performance the vehicle and longest working life.

Name of Accessories	Part	Recommended Type	Quantity
Engine oil	Diesel engine oil pan	<p>Quality grade:            The engine oil of Weichai diesel engine shall not be lower than grade CF-4            The engine oil of Dongfeng Cummins diesel engine shall not be lower than grade CF            The engine oil of Xi'an Cummins diesel engine shall not be lower than grade CH            Viscosity grade (chosen according to the ambient temperature):            In case of temperature below -30°C, apply the engine oil with the viscosity grade of 0W            In case of temperature of -30°C~20°C, apply the engine oil with the viscosity grade of 5W/30            In case of temperature of -25°C~35°C, apply the engine oil with the viscosity grade of 10W/30            In case of temperature of -20°C~40°C, apply the engine oil with the viscosity grade of 15W/40</p>	Based on quantity specified in the <i>User's Guide</i> of the engine manufacturers
Transmission gear oil	Transmission	<p>Fast transmission (choosing according to the ambient temperature):            In case of temperature higher than -12°C, apply 85W/90 (GL-5)            In case of temperature of -26°C~-12°C, apply 80W/90 (GL-5)            In case of temperature of -26°C~-40°C, apply 75W/90 (GL-5)            ZF transmission:            Please fill the type certified by ZF manufacturer (see Attached Table 1 and Attached Table 2 for details)</p>	Based on quantity specified in the <i>User's Guide</i> of the transmission manufacturers

Name of Accessories	Part	Recommended Type	Quantity
Gear oil of the intermediate axle/rear axle	Final redactor of the rear axle	Choosing according to the ambient temperature: In case of temperature higher than -12°C, apply 85W/90 (GL-5) In case of temperature of -26°C~-12°C, apply 80W/90 (GL-5) In case of temperature of -26°C~40°C, apply 75W/90 (GL-5)	Steyr axle: 8 L Benz axle: 12 L Note: Fill the oil from the oil filler till it overflows
	Final redactor of the intermediate axle		Steyr axle: 12 L Benz axle: 16 L Note: Fill oil from the oil filler till it overflows
	Hub redactor of the intermediate axle/rear axle		Steyr axle: 2 L respectively Benz axle: 3.5 L respectively Note: Fill the oil from the oil filler till it overflows
	Front differential lock of the intermediate axle		Steyr axle: Null Benz axle: 4 L the oil from the oil filler till it overflows
Power steering oil	Power steering gear	ATF III automatic transmission oil or oil up to DEXRON III automatic transmission oil requirements	Double-front-axle steering truck: 5.2 L Others: 4.2 L

Name of Accessories	Part	Recommended Type	Quantity
Lubricating grease	Steering tie rod and link rod ball stud, steering knuckle king pin, drive shaft intermediate support, slip yoke and cross shaft bearing, leaf spring pin, gear selecting and shift pull rod bracket, clutch release bearing, wheel hub bearing, engine water pump bearing, generator bearing, starter bearing, balance shaft seat, brake adjusting arm, front support for cab turnover, fixed support for cab turnover, trunk plate turnover shaft, and towing plate	Universal lithium-based lubricating grease for vehicles, with the application temperature range of -30°C~120°C 2# high/low temperature and extreme pressure lithium-based complex lubricating grease, with the application temperature range of -45°C~190°C	Fill the oil filler points with the oil till it is full (the oil outlet hole leaks oil)
Clutch oil	Clutch fluid reservoir	Synthetic brake fluid JQ4	0.3 L
Cab hydraulic oil	Overtake oil pump of the cab	YH-10 aviation hydraulic oil	0.5 L
Anti-freezing fluid	Engine cooling system	Chosen according to the ambient temperature: In case of temperature higher than -25°C: Fill -25# anti-freezing fluid In case of temperature of -25°C~30°C: Fill -30# anti-freezing fluid In case of temperature of -30°C~35°C: Fill -35# anti-freezing fluid In case of temperature of -35°C~40°C: Fill -40# anti-freezing fluid In case of temperature of -40°C~45°C: Fill -45# anti-freezing fluid In case of temperature of -45°C~50°C: Fill -50# anti-freezing fluid	Middle position of the auxiliary water tank

Name of Accessories	Part	Recommended Type	Quantity
Diesel	Oil tank	Summer: 0# diesel Winter: Chosen according to actual environment changes In case of temperature higher than -5°C, apply -10# diesel In case of temperature of -5°C~-14°C, apply -20# diesel In case of temperature of -14°C~-29°C, apply -35# diesel In case of temperature of -29°C~-44°C, apply -50# diesel	Based on the volume of oil tank

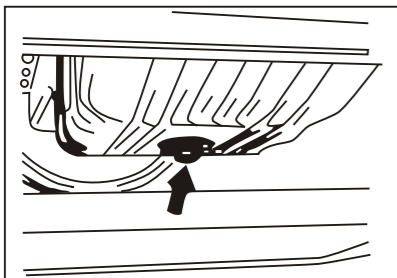
Attached table 1: lubricating oil approved by ZF manufacturer (transmission without retarder)

Manufacturer	Lubricating oil type
FUCHS PETROLUB AG, MANHEIM/D	TITAN GEAR MP SAE 80
	TITAN SUPPERGEAR MC 80W-90
MOBIL OIL AG, HAMBURG/D	MOBILLUBE GX-A
SHELL INTERNATIONAL, LONDON/GB	SHELL SPIRAX MA80W

Attached table 2: lubricating oil approved by ZF manufacturer (transmission with retarder)

Manufacturer	Lubricating oil type
CASTROL LTD, LONDON/GB	CASTROL SYNTRANS Z LONG LIFE 75W-80
ARAL AG, BOCHUM/DE	ARAL GETRIEBE?L SNS-M 75W-80
DAF TRUCKS N.V., EINDHOVEN/NL	DAF XTREME 75W-80
CEPSA LUBRICANTES SA, MADRID/ES	MAN SUPER GEAR 341-Z5
HUILES BERLIET S.A., SAINT PRIEST/F	RTO LONGEVIA BZV ECO 75W-80
ZF FRIEDRICHSHAFEN AG, FRIEDRICHSHAFEN/DE	ZF-ECOFLUID M SAE 75W80
TOTAL LUBRIFIANTS S.A., NANTERRE/FR	TOTAL TRANSMISSION XS FE 75W-80



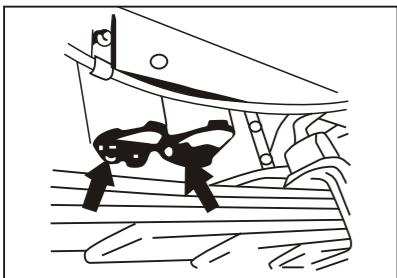


### Replace the engine oil

Dismantle the release valve under the engine oil pan and leave out all engine oil in the crankcase.

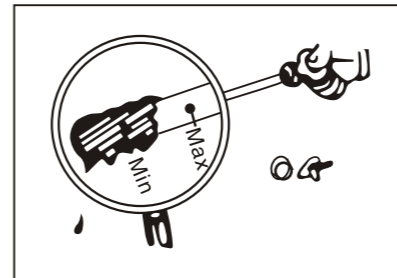
**CAUTION:**

The hot engine oil may cause serious scald of your skin. So please let the engine get cold before replacing it.

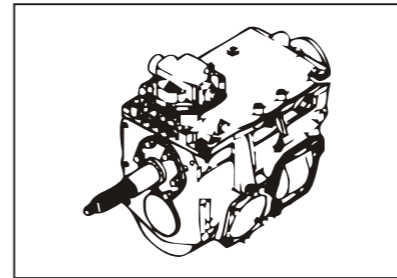


After leaving out all engine oil in the crankcase, also leave out all engine oil in the main engine oil filter and divided flow engine oil filter. Then screw up the release valve.

Then refill the recommended engine oil into the crankcase through oil filling opening.

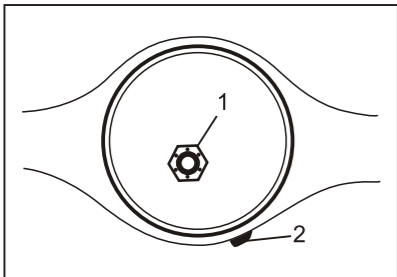


Fill the tank to the max mark, start the engine and run in idle speed for a few minutes. Than stop the engine, recheck the oil level and refill it if necessary.



### Check and refill the lubricating oil in transmission box

1. filling plug
2. releasing plug
3. air plug



#### Check the lubricating oil of middle and rear driving axle

1. oil level check hole
2. releasing plug

#### Replace the lubricating oil of power steering gear

##### Release the lubricating oil

1. Lift the front wheels by a lifting jack.
2. Release the nut under the steering gear and make slight turns of the wheel leftward and rightward.

##### Refilling

1. Open the storage tank cover, fill the recommended oil into it.
2. Fill the oil to the required level mark and wait for 2 or 3 minutes to let oil calm down.

#### CAUTION:

Do not let the air come into the hydraulic system when filling or refilling to the storage tank.



#### Check the liquid level of the urea tank

Check the urea solution level according to usage, and the level shall stay between 30~80% of total volume of the urea tank. If it is insufficient, please fill urea timely. The urea shall not be filled in excessively and the level shall not be higher than the scale; or else, the urea will overflow.

#### CAUTION:

The urea tank can only be filled with urea; fuel, water or other liquid are not allowed.

## Maintenance of the transmission box

### 1. The right level of the oil

Make sure the oil level to parallel the inject hole. Check the oil level through the side taper injection hole. Fill in with oil until the hole leaks.

### 2. Working environment

The temperature during the constant work must remain between 120°C and -40°C. If it is over 120°C, the gear oil will decompose and shorten the gear box life.

### 3. Replacement circle

It must be replaced the gear oil for new gear box after 2000-5000 km.

Check the oil level and leaking condition according to the required distance or time, and refill it.

Replace the gear oil according the required distance.

### 4. Release the old oil

Usually release the old oil after a long trip because the gear oil is warm and easy to flow at that time. Cool down the gear box for a while because hot oil may cause serious skin burns.

Screw off the releasing plug and release the old oil into container. Clean the release plug( there is a magnet inside to absorb the steel powder inside the oil. Screw on the plug tightly by 60N · m torque.

### 5. Oil level check

Lack of oil will cause damages to the gear.

Check the oil level regularly

- The vehicle should be parked on the flat road.
- Do not check the oil level immediately when the vehicle stops( or it will not get the right result). The temperature of the transmission box shall be lower than 40°C/105F when checking it.
- screw the filling plug
- If the oil level is lower than the filling hole edge, please refill the oil. Check whether there is a leak of the transmission box before checking the oil level.

### 6. Air vent of transmission box

When the transmission box works, it will get hot and inner pressure will rise and must be released through an air vent.

Check whether this valve can work normally and continuously. Keep the air vent clean and do not cover it.

#### Maintenance of the liquid heater (optional)

1. The filter element shall be cleaned or replaced when the filter has worked for 1–2 years;
2. Ensure the cleanliness of the oil tank to avoid oil circuit blockage due to dirt;
3. Ensure the smooth electric circuit and oil circuit as well as properly–fastened mechanical parts;
4. Ensure smooth intake and exhaust ports prior to use;
5. Check the carbon deposition conditions and perform timely cleaning prior to use every year;
6. Check and clean impurities in the oil pump filter screen and fuel nozzle;
7. Check the oil circuit system for oil leakage (check the heater mounting floor for oil stain) prior to use every year.

#### Maintenance of the SCR system (Euro IV)

##### 1. Check the filter element of the urea pump

During maintenance, remove the filter element of the urea pump, and then install it after cleaning. It is not allowed to beat or knock the filter element violently.

##### 2. Check the urea nozzle gasket

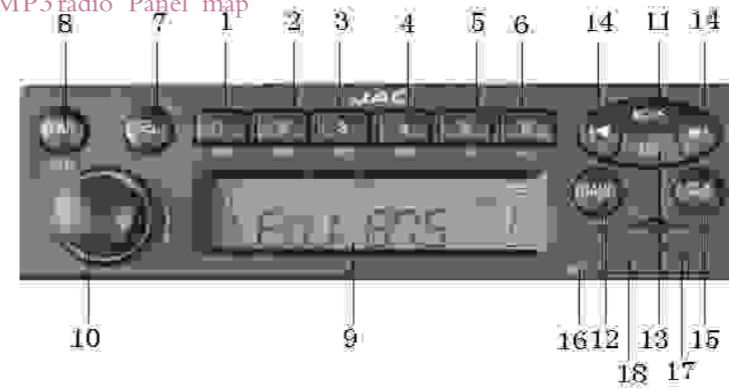
During the urea nozzle replacement or installation, please check it for damage or deformations. If necessary, replace the urea nozzle gasket.

##### 3. Clean the urea tank and its filter element

During maintenance, please check the cleanliness of the urea tank and filter element. If necessary, clean them.

## MP3 And CD

MP3 radio Panel map



- 7.SEL.....Sound selection, acoustics settings  
PWR.....Short press: power on; Long press:  
power off.
- 8.MUTE.....Short press: mute on/mute off
- 9.....Monitor
- 10.....Volume knob: switch to adjust the  
sound volume
- 11.MODE.....Short press: choose source RAD  
10-USB-AUX

- 12.BAND.....Choose wave band: short press-  
FM-MW-FM
- 13.AST.....Short press: radio browsing  
Long press: store radio station
14. ◀▶ .....Radio mode  
Short press: auto search the radio stations  
up/down  
Long press: manual search the radio  
stations up/down

### Panel explanations

- 1.#1 button.....Preset key 1  
▶▶\*.....USB pause playback
- 2.#2 button.....Preset key 2  
RND\*.....USB random play
- 3.#3 button.....Preset key 3  
RPT\*.....USB repeat play
- 4.#4 button.....Preset key 4  
SCN\*.....USB browsing play
- 5.#5 button.....Preset key 5  
-10\*.....Play 10 songs back in USB state
- 6.#6 button.....Preset key 6  
+10\*.....Play 10 songs ahead in USB state

- USB playback mode  
Short press: last music/next music  
Long press: rewind/fast forward
- 15.CLK.....Time setting/display button
- 16.RST.....Reset switch
- 17.....USB electrical connection
- 18.AUX.....Insertion to AUX IN
- Tip: “\*” is the composite function in USB  
state.

## Play

- When a flash disk is connected, the display will show USB and play the music in it automatically.

### 1.Next or previous song

- Press ◀ or ▶ to choose the song wanted.

### 2.Speed up or fast reverse ( ◀ or ▶ )

- Long press ◀ or ▶ to fast reverse or speed up the current song, release to play normally.

### 3.Pause/play

- Pause the current song in flash disk.
- Short press #1 button to pause or play the current song in USB state.

### 4.Random play

- Random play all songs in flash disk.
- Short press #2 button to play/stop play randomly.

### 5.Play repeatedly

- Play the current song repeatedly .
- Short press #3 button to play/ stop play repeatedly in USB state.

### 6.Preview all songs

- You can preview all songs for 10 seconds.
- Short press #4 button to begin/stop preview songs.

### 7. -10 play

- Short press #5 button to play the 10th song backward in USB status.

### 8. +10 play

- Short press #6 button to play the 10th song forward in USB status.

## Radio

### 1.Wave band

- Short press BAND/AST to choose the wanted waveband.



### 2.Auto search

- Press ◀ or ▶ to auto search radio channel.
- Press ◀ to listen to the lowest frequency channel and press the ▶ to play the highest frequency channel.

### 3.Manual search (if you know the frequency of the radio channel).

- Press and hold the search button, the frequency will increase or decrease the frequency. Release the button and press continuously it in 2 seconds to increase/decrease 0.1MHz in FM status or 9KHz in MW status. If the button is not pressed within 2 seconds, the manual search will stop.

### 4.Save the channel manually

- Save the channel into the preset button(1-6). It can save 6 channels for each band.
- Move the wanted channel and press the preset button(1-6) for two seconds to save this channel.

### 5.Save the channel automatically

- Short press AST button to view all channels.
- Long press AST button to save the 6 strongest channels to 1–6.
- Change to FM1,FM2,FM3 mode, long press auto search and save the 6 strongest channels into 1–6.
- Change to MW1, MW2 mode and long press AST button to auto search and save the 6 strongest channels to 1–6.

#### AUX IN mode

##### Play

Short press MODE button to enter AUX IN mode(AU on display), plug into the out music source and adjust the volume by the knob.

##### Explanations of audio

##### Volume

- Turn the knob clockwise to increase the volume and anti-clock wise to decrease it. Please keep the volume not preventing you hearing the traffic information ( horn and alarm).

##### Sound effects settings

- Short press SEL to choose your favored effect
  - BAS : bass
  - TRE : treble
  - BAL : balance
  - FAD : back and forward
- Then choose the model you wanted by turning the volume knob, 5 seconds later the display will return to the last mode.

#### ✿ NOTES:

- **Please keep the volume not preventing you hearing the traffic information ( horn and alarm)**
- **The working volt is 12V/24V and the negative pole of battery has grounded circuit(connected with the chassis). The radio may not work or be damaged if not following this.**
- **Please do not connect the loudspeaker line to the ground directly or with mega base equipment or power amplifier. Do not connect with the external loudspeaker devices as well.**
- **Please make sure all wire lines are installed well and not be worn by the sharpen edge or sliding components**

#### ⚠ WARNING:

**Please cut off the negative pole before settling up the radio in case of short circuit.**

**Recharge** This music player can play MP3 file and WMA file.


2. Short press means to press for 0.5 second and long press means to press for 2 seconds.

3. If the player crashes caused by damaging music file or other problems and all buttons fail to work, it can be reset by pressing RST button to recover default settings.

#### Time setup

Press CLOCK to show time in non-time showing mode.

Long press CLOCK button for 3 seconds to enter setup mode.

Press  or  to adjust the time.



## Technical index

## FM

Tuning range .....	87.5~108MHz
Sensitivity .....	20dB
Degree of stereoscopic separation.....	25 dB

## AM

Tuning range.....	522~1620KHz
Sensitivity.....	30dB

## Audio

Power source .....	12~16V (12V for machine use) /22~24V (24V for machine use ) (DC) negative pole grounded
Impedance of the loudspeaker .....	4 $\Omega$
Dimension.....	178mm (width ) $\times$ 150mm (depth ) $\times$ 50mm (height )
Total output power .....	2 $\times$ 6.5 Walt
Frequency response .....	100~10000Hz

## Breakdown solutions

When you think that some functions fail to work, you can read and follow the instructions in the manuals carefully to check and solve the problems before send it to repair.

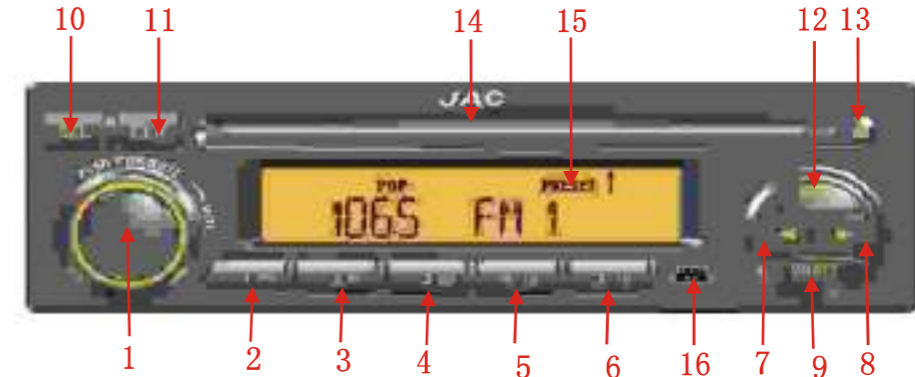


## Common breakdowns and solutions

Phenomenon	Possible reasons and solutions
<b>Common conditions</b>	
The player does not work or display	<ul style="list-style-type: none"> <li>• Check the fuse and connector of the player with the vehicle</li> </ul>
The player works but no sound or very little sound	<ul style="list-style-type: none"> <li>• Increase the volume</li> <li>• Check the antenna and connector</li> </ul>
<b>Radio</b>	
Bad reception of radio	<ul style="list-style-type: none"> <li>• Check the antenna connected or not</li> <li>• Check the antenna spread or not</li> </ul>
Can not find any channels during auto searching	<ul style="list-style-type: none"> <li>• The signal is too weak</li> <li>• Search the channel manually</li> <li>• Check the antenna spread or not</li> </ul>
<b>Play</b>	
Longtime display but not read	<ul style="list-style-type: none"> <li>• Check the flash disk damaged or not</li> <li>• Check the flash disk connected well or not</li> </ul>
Sound distortion in USB mode	<ul style="list-style-type: none"> <li>• Check the flash disk damaged or not</li> </ul>
Cannot be played in USB mode	<ul style="list-style-type: none"> <li>• The player supports MP3 format and WMA format, check the format is right or not</li> <li>• Check the file damaged or not</li> </ul>
<b>AUX IN</b>	
Display AUX IN but no sound out	<ul style="list-style-type: none"> <li>• Check the output sound valid or not</li> <li>• Check the connector of AUX IN connected well or not</li> </ul>
Sound distortion	<ul style="list-style-type: none"> <li>• Check the connector of AUX IN connected well or not</li> </ul>

Please send the player to get repaired and not dismantle it by yourself if the problem still exists.

## CD Panel map



## panel explanations

- 1.Knob.....When power off: short press to power on  
 When power on: short press to mute  
 When power on: turn around it to increase or decrease the volume  
 When power on: long press to power off
- 2.#1 button.....Save or turn to channel 1
- RND\*.....On/off of random play for CD/USB

3. #2 button.....Save or turn to channel 2  
RPT\*.....On/off of repeat play for CD/USB
4. #3 button.....Save or turn to channel 3  
SCN\*.....On/off of browsing play for CD/USB
5. #4 button.....Save or turn to channel 4  
-10\*.....Play 10 songs back for CD/USB
6. #5 button.....Save or turn to channel 5  
+10\*.....Play 10 songs ahead for CD/USB
7. ◀ .....Radio mode  
Short press: auto searching to low frequency  
Long press: manual searching to low frequency  
CD/USB mode  
Short press: previous song  
Long press: fast reverse
8. ▶ .....Radio mode  
Short press: auto searching to high frequency  
Long press: manual searching to high frequency  
CD/USB mode  
Short press: next song  
Long press: speed up
9. SOURCE.....CD short press: choose  
CD→USB→radio→CD circularly
10. SEL.....Sound effects choosing button
11. CLK.....To show clock
12. BAND.....Short press: choose waveband  
AST.....Long press: automatically save
13. ▲ .....Push out the disk
14. disk port .....Diskport
15. LCD screen .....Display button functions
16. USB port.....USB port
- Remarks: “ \* ” means composite functions in CD/USB mode

## CD/USB play

- Next or previous song( ◀ or ▶ )
  - Press ◀ or ▶ to choose the song wanted.
- Speed up or fast reverse ( ◀ or ▶ )
  - Long press ◀ or ▶ to fast reverse or speed up the current song, release to play normally.
- Random play
  - Short press RND to play songs randomly in CD/USB mode.
- Play repeatedly
  - Play the current song repeatedly.
  - Short press RPT button to play/ stop play repeatedly in CD/USB state.
- Preview all songs
  - You can preview all songs for 10 seconds.
  - Short press SCN button to begin/stop preview songs.
- 10 play
  - This function allows you to play the 10th song backward.
  - Short press -10 button to play the 10th song backward in USB status.
- +10 play
  - This function allows you to play the 10th song forward.
  - Short press +10 button to play the 10th song forward in CD/USB status.

## 8.Exit the disk(in CD mode)

- Press ▲ to exit the CD.

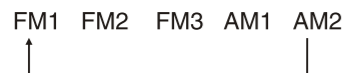
## 9.Plug flash disk(in USB mode)

- Plug the flash disk to play the songs inside.

## Radio

## 1.Wave band

- Short press BAND/AST to choose the wanted waveband.



## 2.Auto search

Press ◀ or ▶ to auto search radio channel

- Press ◀ to listen to the lower frequency channel and press the ▶ to play the higher frequency channel. Press the same button so search another channel.

## 3.Manual search (if you know the frequency of the radio channel)

- Press and hold the search button, the frequency will increase or decrease the frequency. Release the button and press continuously it in 2 seconds to increase/decrease 0.1MHz in FM status or 9KHz in MW status. If the button is not pressed within 2 seconds, the manual search will stop.

## 4.Save the channel manually

Save the channel into the preset button(1–5). It can save 5 channels for each band.

- Change to the target channel.
- Press the preset button (1–5) for two seconds to save this channel.

## 5.Save the channel automatically

Save the 5 strongest channels to 1–5.

- Change to FM1,FM2,FM3 mode, long press AST button for at least 2 seconds to search automatically and save the 5 strongest channels into 1–5.
- Change to MW1, MW2 mode and long press AST button for at least 2 seconds to auto search and save the 5 strongest channels to 1–5.

## Explanations of audio

## Volume

Turn the knob clockwise to increase the volume and anti-clock wise to decrease it. Please keep the volume not preventing you hearing the traffic information ( horn and alarm).

## Sound effects settings

- Short press SEL to choose your favored effect
  - BASS:bass
  - TREBLE:treble

- BAL: balance
- FADER: back and forward
- CUSTOM: customized
- Adjust the volume to set up sound effects in CUSTOM mode.
  - JAZZ: jazz
  - VOCAL: vocal
  - POP: pop
  - ROCK:rock
  - CLASSIC:classic
  - FLAT:flat
- Then choose the model you wanted by turning the volume knob, 5 seconds later the display will return to the last mode. Only in BASS TRE mode, the bass or treble can be adjusted.

#### NOTES:

- Please keep the volume not preventing you hearing the traffic information ( horn and alarm).
- The working volt is 12V/24V and the negative pole of battery has grounded circuit(connected with the chassis). The radio may not work or be damaged if not following this.
- Please do not connect the loudspeaker line to the ground directly or with mega base equipment or power amplifier. Do not connect with the external loudspeaker devices as well.

- Press exit button to exit the disk when it cannot be read for a transparent edge disk
- Remove the while gasket before putting it into the player in case of reading failure. The player can only read 12mm disks.

#### WARNING:

Please cut off the negative pole before settling up the radio in case of short circuit.

#### Breakdown solutions

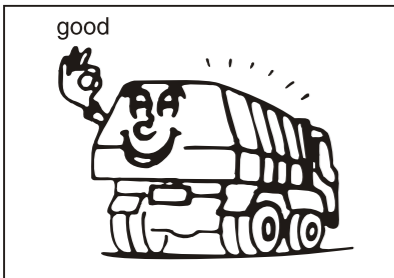
When you think that some functions fail to work, you can read and follow the instructions in the manuals carefully to check and solve the problems before send it to repair.

## Common breakdowns and solutions

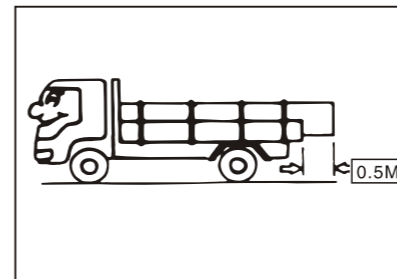
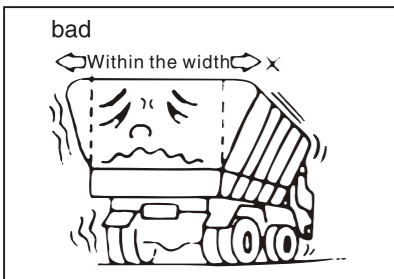
Phenomenon	Possible reasons and solutions
<b>Common conditions</b>	
The player does not work or display	<ul style="list-style-type: none"> <li>• Check the fuse and connector of the player with the vehicle</li> </ul>
The player works but no sound or very little sound	<ul style="list-style-type: none"> <li>• Increase the volume</li> <li>• Check the antenna and connector</li> <li>• Check the balance settlement of front and back, left and right</li> </ul>
<b>Radio</b>	
Bad reception of radio	<ul style="list-style-type: none"> <li>• Check the antenna connected or not</li> <li>• Check the antenna spread or not</li> </ul>
<b>CD</b>	
“ERROR” display ERROR on screen	<ul style="list-style-type: none"> <li>• Check the disk is put rightly</li> <li>• Check the disk is damaged or gets dirty.</li> </ul>
CD fail to play	<ul style="list-style-type: none"> <li>• The laser head be condensed with steam. Turn the player into radio mode for about 5 minutes to evaporate the steam.</li> </ul>
Screen shows “NO CD”	<ul style="list-style-type: none"> <li>• Check the CD is put into the player or not</li> </ul>
<b>USB</b>	
Longtime display but not read	<ul style="list-style-type: none"> <li>• Check the flash disk connected well or not</li> <li>• Check whether there are songs in the flash disk</li> </ul>
Fail to play in USB mode	<ul style="list-style-type: none"> <li>• The player supports MP3 format and WMA format, check the format is right or not</li> </ul>

Please send the player to get repaired and not dismantle it by yourself if the problem still exists.

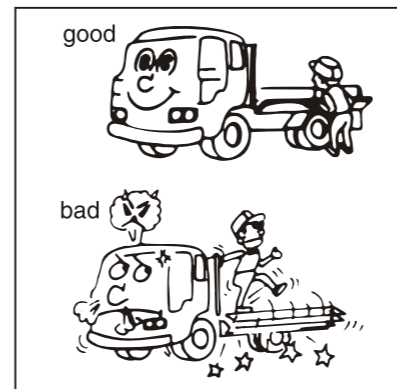
## Loading Warnings



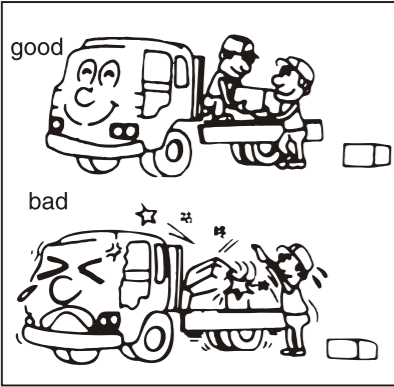
1.The width of cargo cannot reach out of the wagon box.



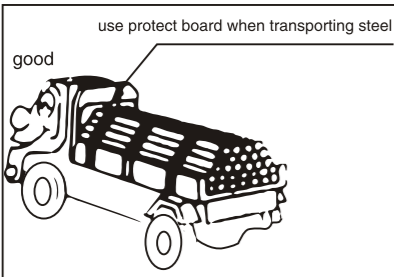
2.Try to not spread the cargo out of the wagon box from behind.



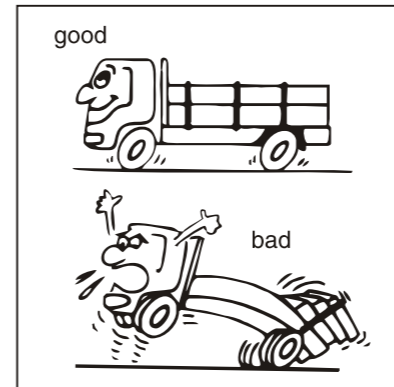
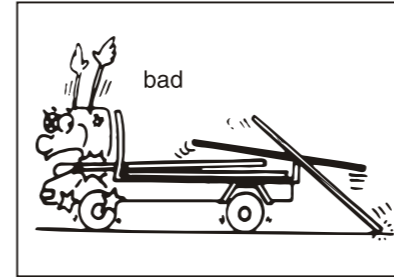
3.Close the wagon box slightly. Rude operating will shorten the wagon box life.



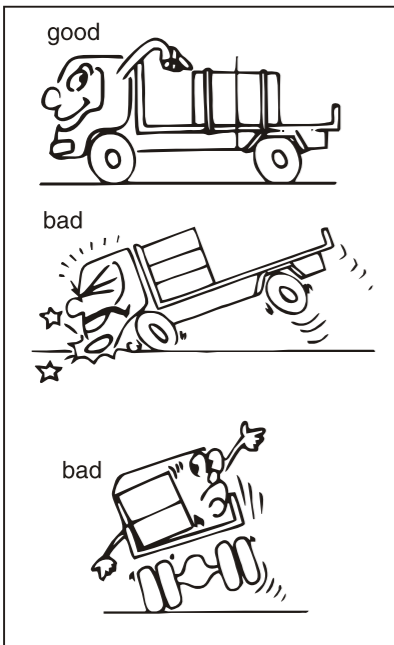
4. Loading the cargos carefully and do not throw them or it will damage the wagon box.



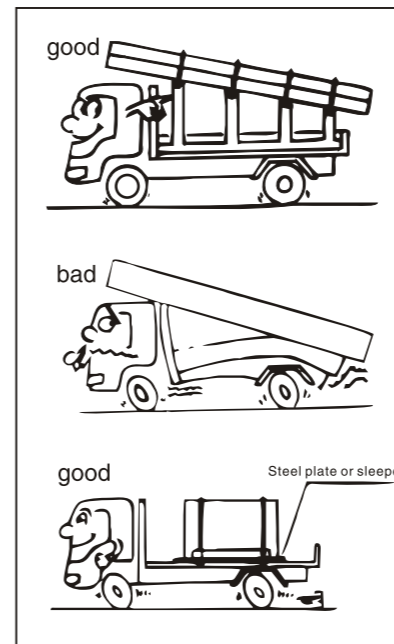
5. Tight he cargos with ropes or they may get debunching or losing.



6. The cargos should be loaded low, flat and well balanced. Unbalanced loading will cause unstable driving and damage the cargos and wagon box.



7. It should be fixed in the middle the wagon bed for high and big cargo.

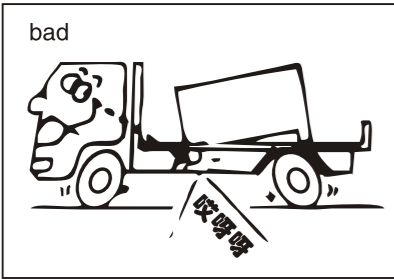


8. Use shelf for long cargos

✿ NOTES:

- It is a priority to take laws and regulations into consideration to limit the height of the vehicle.
- This type of loading will heighten the center of gravity of the vehicle and may cause rollover. So please try to avoid high speed, hard brake or hard steering.  
The wagon box is groaning by supporting only by portal frame and rear board.
- The shelf should be considered as part of the cargos.

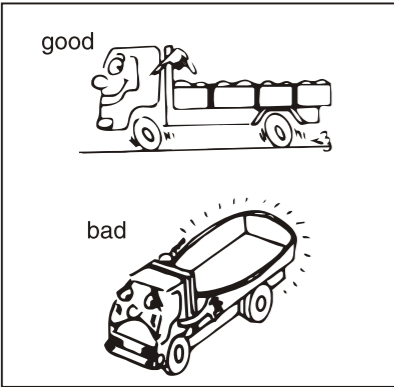




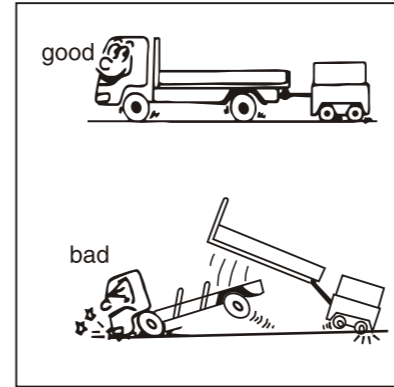
9. It should take methods to separate the weight for those weight-focused cargos, or it will damage the wagon bed.

✿ NOTES:

Steel plate or sleeper should be considered as part of the cargos.

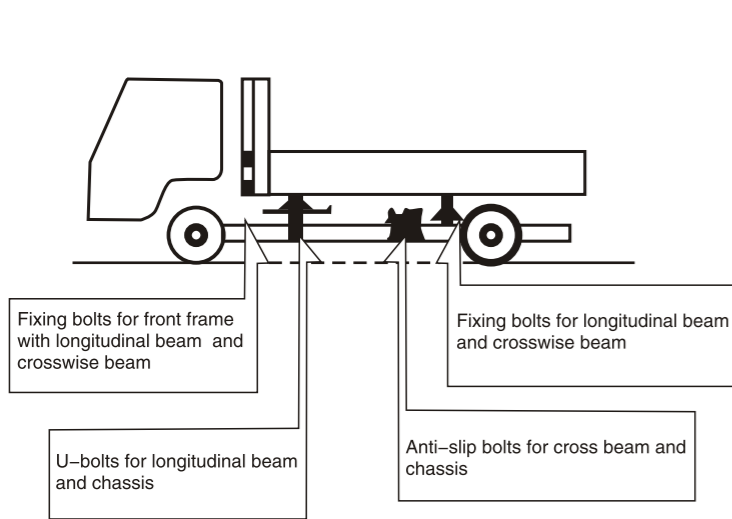


10. Tight up the sideboard of wagon box when transporting loose packing cargos or it may cause deformation of the sideboards.



11. Use the tracking hook on the chassis when tracking and do not use the wagon box to track anything.

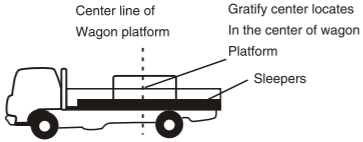
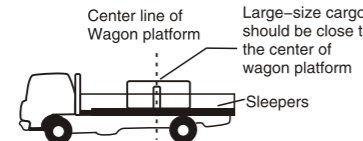
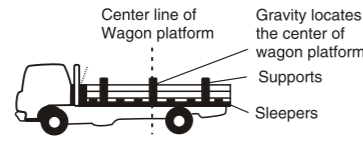
Please check and screw up all bolts in wagon box regularly for safety and working lift of the vehicle.



The 1st time	Picking up the trucks
The 2nd time	1 month later
The 3rd time	6 months later
The 4th and later on	Every 6 months

Essential points of loading

Types of cargo	Loading methods	Protections of side boards
General cargos, sand and dirt, gravels, bricks, loosing cargos and so on.		Use sideboards and ropes to protect the cargos when transporting sand and dirt, gravels, bricks.
Light goods		Hang the ropes by hooks.

Types of cargo	Loading methods	Protections of side boards
Machinery & equipments: platform center is the connecting point of the crosslines the vertical line to the bottom is the center point of the platform.		Put steel plates, plywood on the wagon bed or put sleepers crosswise.
		
Wood, telegraph pole, iron pipe and other long cargos.		Put some protection materials(wood, iron plates, braces or sleepers for wagon boards.

## Vehicle Specification

## CARGO SPECIFICATION

	Model	HFC1180KR1	HFC1251KR1	HFC1251KR1
	Drive mode	4×2	6×4	6×4
Engine	Model	WD615.44	WD615.44	WP12.400 E40
	Emission levels	E- II	E- II	E-IV
	Max output power ( Hp/rpm )	330/2200	330/2200	400/1900
	Max torque ( N.m/rpm )	1250/1400-1600	1250/1400-1600	1920/1000-1400
	Displacement(cc)	9726	9726	11596
	Transmission	Model	9JS150T-B/9JS150T-B+QH50	9JS150T-B/ 9JS150T-B+QH50
	Gear positon	R 1 3 5 7 L 2 4 6 8	7 6 3 2 L 8 5 4 1 R	R2/R1 7/1 9/3 11/5 8/2 10/4 12/6
Rear Axle	Model	Steyr Technology(4.38/4.8)	Steyr Technology(4.8)	Benz Technology(4.76)
Main parameter	Overall Dimension ( mm )	9390×2495×3460	10990*2495*3530	10985×2495×3560
	Rear cargo dimension ( mm )	/	8500*2340*800	8500×2340×800
	Wheel base ( mm )	5300	6000+1350	6000+1350
	Tread ( mm )	2040/1860	2040/1860	2040/1860
	Suspension arm ( mm )	1495/2595	1495/2145	1495/2140
	Curb weight ( Kg )	8500	11700	12400
	Rated payload ( Kg )	9500	23300	13600
	GVW ( Kg )	18000	35000	26000
	Max speed ( Km/h )	85	90	100
	Radius of turning ( m )	12	11	11
Tire		12R22.5, 12.00R20	12R22.5 16PR, 12R22.5 18PR, 12.00R20	12R22.5 18PR

## DUMP TRUCK SPECIFICATION

	Model	HFC3251KR1K3	HFC3254K2R1LT	HFC3253KR1
	Drive mode	6×4	6×4	6×4
Engine	Model	WD615.38	WD12.336	WD615.46
	Emission levels	E- II	E- II	E- II
	Max output power (Hp/rpm )	380/2400	336/2200	360/2200
	Max torque ( N.m/rpm )	1460/1400-1600	1350/1300-1600	1460/1400-1600
	Displacement(cc)	9726	11596	9726
	Transmission	Model	10JSD160T+QH50	10JSD140+QH50/ 10JSD140T+ QH50
	Gear positon	R2/R1 7/2 9/4 6/1 8/3 10/5	RH/RL 7/2 9/4 6/1 8/3 10/5	R 1 3 5 7 L 2 4 6 8
Rear Axle	Model	Steyr Technology(5.73/4.8)	Benz Technology (5.26/5.92/4.76) Steyr Technology (4.8/5.73)	Steyr Technology(5.73/6.72)
Main parameter	Overall Dimension ( mm )	8265/8355×2495×3500	8750×2580×3150	8960×2560×3330
	Rear cargo dimension ( mm )	5400/5600×2300×1500	5980×2360×1500	5960×2360×1350
	Wheel base ( mm )	3690+1350	4100+1350	4350+1350
	Tread ( mm )	2040/1880	2040/1880	2040/1860
	Suspension arm ( mm )	1495/1730,1495/1820	1495/1805	1495/1765
	Curb weight ( Kg )	13350/13580	14900	14400
	Rated payload ( Kg )	19650/19420	35100	20600
	GVW ( Kg )	33000	50000	35000
	Max speed ( Km/h )	95	90	80
	Radius of turning ( m )	9	9	10
Tire		11.00R20, 12.00R20, 12R22.5	11.00R20, 12.00R20	12.00R20, 12R22.5, 13R22.5

	Model	HFC3253KR1	HFC3251KR1K3	HFC3310KR1LT
	Drive mode	6×4	6×4	8×4
Engine	Model	ISM380E20	ISME385 30	WP10.340/380E32
	Emission levels	E-II	E-III	E-III
	Max output power (Hp/rpm)	380/1900	385/1900	340、380/2200
	Max torque (N.m/rpm)	1825/1200	1835/1200	1350、1460/1200-1600
	Displacement(cc)	9726	10800	9726
Transmission	Model	ZF 16S 1955	ZF16S1955OD	12JSD180+QH70/12JSD180T+QH70
	Gear positon	2/1 6/5 10/9 14/13 R1/R2 4/3 8/7 12/11/16/15	2/1 6/5 10/9 14/13 R1/R2 4/3 8/7 12/11 16/15	R2/R1 7/1 9/3 11/5 8/2 10/4 12/6
Rear Axle	Model	Steyr Technology(4.8)	Steyr Technology (4.8/5.73)	Benz Technology (5.26/5.92/4.76)
Main parameter	Overall Dimension (mm)	8960×2560×3330	8265/8355×2495×3500	11089×2495×3471
	Rear cargo dimension (mm)	5960×2360×1350	5400/5600×2300×1500	8100×2300×1300
	Wheel base (mm)	4350+1350	3690+1350	1800+4100+1350
	Tread (mm)	2040/1860	2040/1860	2040/1880
	Suspension arm (mm)	1495/1765	1495/1730,1495/1820	1495/2344
	Curb weight (Kg)	14400	13350/13580	18890
	Rated payload (Kg)	20600	19650/19420	41110
	GVW (Kg)	35000	33000	60000
	Max speed (Km/h)	80	80	84
	Radius of turning (m)	10	9	10
Tire		12.00R20, 12R22.5	12.00R20, 12R22.5	11.00R20, 12.00R20, 12R22.5

	Model	HFC3311P1K5E36F	HFC3251P1K6E39F
	Drive mode	6×4	6×4
Engine	Model	WP10.336E40	WP12.375/400E40
	Emission levels	E-IV	E-IV
	Max output power (Hp/rpm)	336/1900	375、400/1900
	Max torque (N.m/rpm)	1500/1200-1500	1460、1920/1000-1400
	Displacement(cc)	9726	11596
Transmission	Model	12JS160TA+QH50	12JSD200TA+QH50
	Gear positon	R2/R1 7/1 9/3 11/5 8/2 10/4 12/6	R2/R1 7/1 9/3 11/5 8/2 10/4 12/6
Rear Axle	Model	Steyr Technology(5.73/4.8)	Steyr Technology (4.8/5.73)
Main parameter	Overall Dimension (mm)	8265/8355×2495×3500	8021×2495×3150
	Rear cargo dimension (mm)	5400/5600×2300×1500	3900+1350
	Wheel base (mm)	3690+1350	/
	Tread (mm)	2040/1860	2040/1860
	Suspension arm (mm)	1495/1730,1495/1820	1495/1276
	Curb weight (Kg)	13350/13580	14250
	Rated payload (Kg)	19650/19420	18750
	GVW (Kg)	33000	33000
	Max speed (Km/h)	85	90
	Radius of turning (m)	9	18
Tire		12.00R20, 12R22.5, 13R22.5	12.00R20, 12R22.5

## TRACTOR SPECIFICATION

	Model	HFC4181KR1	HFC4181KR1	HFC4252K1R1
	Drive mode	4×2	4×2	6×4
Engine	Model	WD615.44	WD615.46	WD615.38
	Emission levels	E- II	E- II	E- II
	Max output power(Hp/rpm)	330/2200	360/2200	380/2400
	Max torque(N.m/rpm)	1250/1400-1600	1460/1400-1600	1460/1400-1600
	Displacement(cc)	9726	9726	9726
Transmission	Model	9JS150T-B	9JS150T-B/9JS150T-B+QH50	9JS150T-B/9JS150T-B+QH50
	Gear position	R 1 3 5 7 L 2 4 6 8	R 1 3 5 7 L 2 4 6 8	R 1 3 5 7 L 2 4 6 8
Rear Axle	Model	Steyr Technology(4.38/4.8/ 5.73)	Steyr Technology(4.8)	Steyr Technology(4.8/5.73)
Main parameter	Overall dimension(mm)	6226×2495×3460/3150	6226×2495×3460/3150	6665×2495×3460/3150
	Wheelbase(mm)	3500	3500	3050+1350
	Tread(mm)	2040/1860	2040/1860	2040/1860
	Suspension arm(mm)	1495/1231	1495/1231	1495/770
	Curb Weight(Kg)	7400	7400	8800
	GCW(Kg)	40000	40000	60000
	Max speed(Km/h)	90	90	90
Tire		11.00R20, 12.00R20, 12R22.5 16PR, 12R22.5 18PR	12.00R20, 12R22.5, 13R22.5	11.00R20, 12.00R20, 12R22.5, 13R22.5

	Model	HFC4251KR1	HFC4251KR1	HFC4250KR1
	Drive mode	6×4	6×4	6×4
Engine	Model	WD12.420	ISM440 E20	WD12.375
	Emission levels	E- II	E- II	E- II
	Max output power(Hp/rpm)	420/2200	440/1800	375/2200
	Max torque(N.m/rpm)	1750/1300-1600	2100/1200	1500/1300-1600
	Displacement(cc)	11596	10800	11596
Transmission	Model	12JS180T/12JS180TA	ZF16S221/ZF16S221 PTO	12JSD160T+QH50
	Gear position	R2/R1 7/1 9/3 11/5 8/2 10/4 12/6	1 3 5 7 R 2 4 6 8	R2/R1 7/1 9/3 11/5 8/2 10/4 12/6
Rear Axle	Model	Steyr Technology(4.8/ 5.73)	Steyr Technology(4.8)	Benz Technology (5.26/5.92)
Main parameter	Overall dimension(mm)	6665×2495×3460/3150	6665×2495×3460	6905×2495×3460/3150
	Wheelbase(mm)	3050+1350	3050+1350	3290+1350
	Tread(mm)	2040/1860	2040/1860	2040/1880
	Suspension arm(mm)	1495/770	1495/770	1495/770
	Curb Weight(Kg)	8800	8800	8950
	GCW(Kg)	60000	60000	75000
	Max speed(Km/h)	90	90	70
Tire		12.00R20, 12R22.5 16PR, 12R22.5 18PR, 13R22.5	12R22.5	12.00R20 18PR, 12.00R20 20PR, 12R22.5 16PR, 12R22.5 18PR, 13R22.5

	Model	HFC4250KR1	HFC4250KR1K3	HFC4181KR1K3
	Drive mode	6×4	6×4	4×2
Engine	Model	WD12.420	L375-30/L340-30	WP10.336
	Emission levels	E-II	E-III	E-III
	Max output power(Hp/rpm)	420/2200	375、340/2200	336/2200
	Max torque(N.m/rpm)	1750/1300-1600	1480、1350/1300-1600	1250/1200-1600
	Displacement(cc)	11596	8900	9726
	Transmission	Model	12JSD180TA/12JSD180TA+QH70	12JSD160TA
Gear position		R2/R1 7/1 9/3 11/5 8/2 10/4 12/6	R2/R1 7/1 9/3 11/5 8/2 10/4 12/6	R2/R1 7/1 9/3 11/5 8/2 10/4 12/6
Rear Axle	Model	Benz Technology (5.26/5.92) Steyr Technology (4.8/5.73)	Dongfeng Dana Technology (4.111/4.44/4.875)	Steyr Technology (4.38/4.8/5.73)
Main parameter	Overall dimension(mm)	6905×2495×3460/3150	6865×2495×3460/3150	6226×2495×3460/3150
	Wheelbase(mm)	3290+1350	3300+1300	3500
	Tread(mm)	2040/1880	2040/1880	2040/1860
	Suspension arm(mm)	1495/770	1495/770	1495/1231
	Curb Weight(Kg)	8950	8500	7400
	GCW(Kg)	75000	60000	40000
	Max speed(Km/h)	75	90	90
Tire		12.00R20 18PR, 12.00R20 20PR, 12R22.5, 13R22.5	11.00R20, 11R22.5, 12.00R20, 12R22.5, 315/80R22.5	11.00R20, 11R22.5, 12.00R20, 12R22.5

	Model	HFC4181KR1	HFC4181KR1	HFC4251P1K6E33F
	Drive mode	4×2	4×2	6×4
Engine	Model	WP12.400E40	WP12.400 E40	WP12.430/400 E40
	Emission levels	E-IV	E-IV	E-IV
	Max output power(Hp/rpm)	400/1900	400/1900	430、400/1900
	Max torque(N.m/rpm)	1920/1000-1400	1920/1000-1400	2060、1920/1000-1400
	Displacement(cc)	11596	11596	11596
	Transmission	Model	12JSD220TA	16S2231TO(with retarder)/ 16S2235TO(with PTO and retarder)
Gear position		R2/R1 7/1 9/3 11/5 8/2 10/4 12/6	1 3 5 7 R 2 4 6 8	1 3 5 7 R 2 4 6 8
Rear Axle	Model	Benz Technology (3.86)	Benz Technology (3.86)	Benz Technology (3.86)
Main parameter	Overall dimension(mm)	6095×2495×3460/3150	6095×2495×3460/3150	6915×2495×3460/3150
	Wheelbase(mm)	3500	3500	3300+1350
	Tread(mm)	2040/1860	2040/1860	2040/1860
	Suspension arm(mm)	1495/1100	1495/770	1495/770
	Curb Weight(Kg)	7400	7480	8500
	GCW(Kg)	40000	40000	60000
	Max speed(Km/h)	110	100	90
Tire		12R22.5 18PR	12.00R20 18PR, 12R22.5 18PR, 295/80R22.5 18PR	12.00R20 18PR, 12R22.5 18PR, 295/80R22.5 18PR

## MIXER SPECIFICATION

	Model	HFC5252GJBL1T
	Drive mode	6×4
Engine	Model	WP10.340 E32
	Emission levels	E-III
	Max output power(Hp/rpm)	340/2200
	Max torque(N.m/rpm)	1350/1200-1600
	Displacement(cc)	9726
Transmission	Model	10JSD140/10JSD140T
	Gear position	RH/RL 7/2 9/4 6/1 8/3 10/5
Rear Axle	Model	Benz Technology (4.76) Steyr Technology (4.8/5.73)
Main parameter	Overall dimension(mm)	9700×2545×3945
	Wheelbase(mm)	4100+1350
	Mixing tank volume(m <sup>3</sup> )	12
	Tread(mm)	2040/1880
	Suspension arm(mm)	1495/2755
	Curb Weight(Kg)	12250
	GVW(Kg)	39850
	Max speed(Km/h)	90
Tire		11.00R20, 12.00R20, 12R22.5