This manual describes SITRAK-C7H series vehicles with respect to operation method, routine maintenance and maintenance information, as well as the relevant safety regulations that should be followed when driving the vehicle.

Be sure to read this manual carefully before you start your vehicle for the first time.

For details on assemblies, modifications or attachments not manufactured by SINOTRUK, please refer to the documents provided by their manufacturers.

Due to the large number of models, the pictures in this manual may not exactly match the model you purchase; the illustrations are merely representative examples. SINOTRUK reserves the right to modify the shape, configuration and technical performance of the vehicle at any time. Therefore, we will not accept any claims that may have been made against the data, illustrations or text descriptions in this manual.

The vehicle configuration is subject to the order, and the driver's manual will be updated from time to time.

The driver's manual and warranty manual are part of the vehicle, please keep them in your vehicle and available for use.

Warning symbols used in this manual are as follows:

⚠ CAUTION: These safety instructions warn against possible injury（risk of serious or fatal injury）.

⚠ WARNING: These safety anstructions warn against possible damage to property.

ⓘ Note: These notes provide additional information which may prove invaluable.

This manual is prepared by Technology Development Center of SINOTRUK.

Wish you a safe, comfortable and happy driving journey!

China National Heavy Duty Truck Group Co., Ltd.

2018.02

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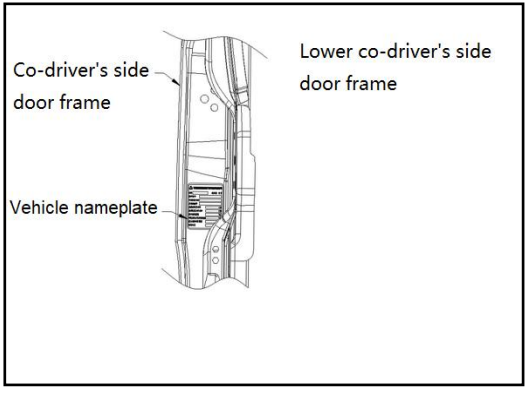
Vehicle nameplate

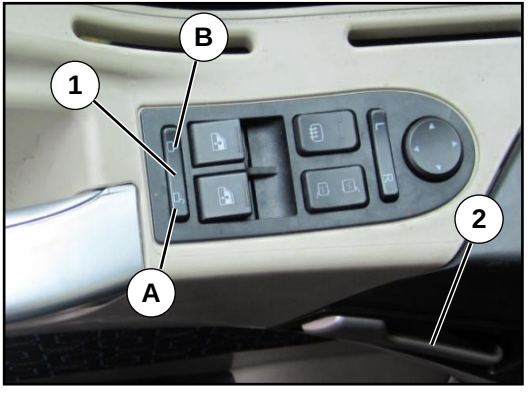
The nameplate of the vehicle is located at the door frame on the co-driver's side（visible after opening the door）. The nameplate is marked with the vehicle model, main quality parameters, engine model and other information.



VIN is printed on the outside of the web of right rail of the frame at the centerline of front axle and on the nameplate of the vehicle.

Please carefully check whether VIN is consistent with the certificate.

Door operation/central door lock（inside）



Open the door

Method 1: When the door is closed and locked, press "A" on the right side of the rocker switch ① and pull the handle ② to open the door; in the unlocked state, pull the handle ② and open the door.

•Method 2: When the door is closed and locked, press the unlock button on the remote-control key to open all the door locks, pull the handle ② and open the door.

Lock the door

•Method 1: Close the door properly, press "B" on the left of the rocker switch ① to lock all the doors.

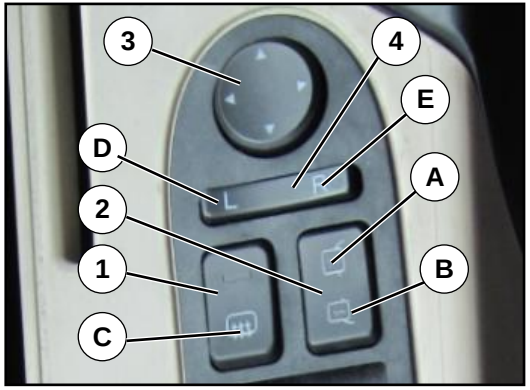
•Method 2: Close the door properly, and press the lock button on the remote-control key to lock all the doors.

Key bar code

According to different configurations, the key can be divided into remote control key and ordinary key. There is an ID code necessary to make a new key on the key's plastic pendant, which can be used to make the key at the distributor.

Please keep the ID code properly.

Functions of the mirror adjusting switch



• The adjustment of the corresponding mirror can be realized by pressing the arrow in the four directions in the adjustment switch ③:

Rotate the mirror left and right

Rotate the mirror up and down

• After the adjusting switch is released, it will automatically return to its original position.

• The mirror will stop in case of any of the following conditions:

The mirror selector switch and the left/right selector switch are in neutral;

The ignition switch is not in ON position.

Storage box

The upper storage box can store living items such as clothing, without heavy items.

The position of an opened storage box is shown in the figure.

The cooling system uses a closed forced water cooling system, and uses all-weather long-term antifreeze as a coolant. Even if there is no antifreeze requirements in the region where the vehicle is used（the temperature is above the freezing point throughout the year）, it is not allowed to use water instead of antifreeze.

WARNING

-Coolant is toxic and may not be inhaled when used, stored and dispensed.

-Different types of coolant must not be mixed.

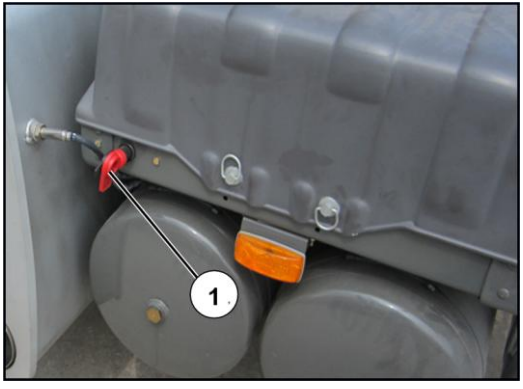
-It is not allowed to open the expansion tank cover immediately after the engine stops, so as to avoid burn due to high temperature pressure gas inside.

-If the coolant is drastically reduced during the vehicle operation, the entire system will be overheated. Do not immediately fill coolant at this time because the sudden drop of the coolant temperature may damage the engine.

Drain the coolant

- When the coolant reaches the change cycle, it should timely be changed with new coolant.
- When flocs appear in the coolant, change it with new coolant immediately.
- Unscrew the drain plug ① on the radiator draining chamber to drain all coolant; for drainage of the engine coolant, see “Engine maintenance”.

Start the engine



Before starting the engine, check whether the main battery switch is on.

Avoid unnecessary engine starting to protect the battery.

WARNING

-When the vehicle is parked for a long time or the electrical system is being serviced, the main battery switch should be off.

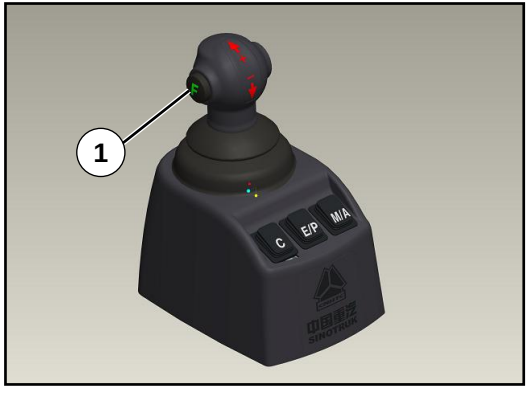
-Do not loosen or remove the battery terminal ends while the engine is running.

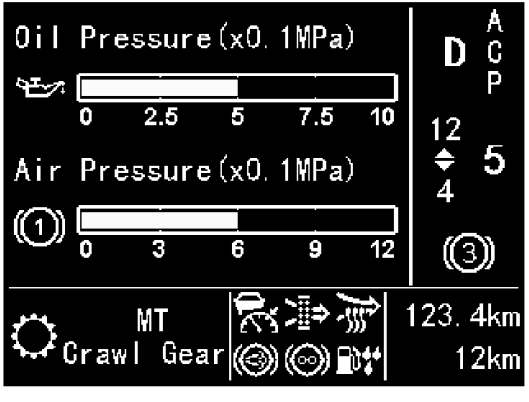
Turn on the switch

Turn the main switch clockwise to the horizontal.

Turn off the switch

Turn the main switch anticlockwise to the vertical.





Downshift operation

According to the current traffic environment, do not change the current accelerator pedal position when shifting unless there is a special circumstance.

When the driver pushes the lever backward, the shift request of at least one downshift will be sent without pressing the function button ①（the circle button F on the left of the lever）, and the shift request of one downshift will be sent when the function button is pressed. When the target gear on the screen stops flashing, it indicates that the downshift is achieved.

Shifting can be achieved only when the vehicle's operating environment meets the shifting needs.

Engage an appropriate gear from neutral

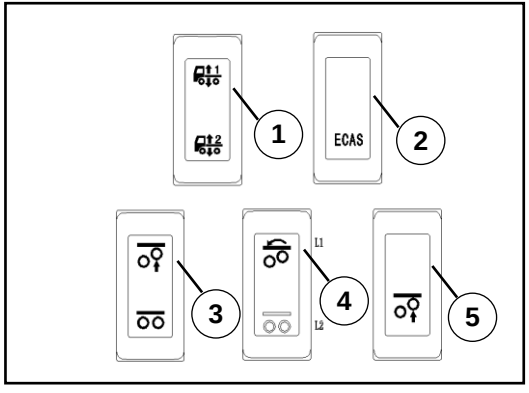
When the vehicle is running and the transmission is in neutral position, it is possible to shift to an appropriate gear via the lever.

Shift to the higher best gear:

Push the lever forward, and the shifting process is completed when the driver’s screen displays the target gear and stops flashing.

Shift to the lower best gear:

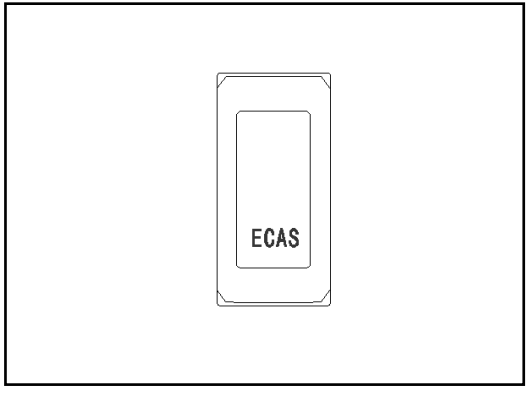
Push the lever backward, and the shifting process is completed when the driver’s screen displays the target gear and stops flashing.



Cab rocker switch

4×2 and 6×4 vehicle models（single axle with four airbags, double axles with eight airbags）are provided with three-height selector switch ① and ECAS fault warning light ②;

6×2 vehicle models with lift shafts are provided with three-height selector switch ①, airbag control switch on the intermediate/rear axle ③, three-mode selector switch ④, ECAS fault warning light ② and the intermediate/rear axle lifting airbag control indicator ⑤.



ECAS fault warning light

In the event of ECAS fault, ECAS fault warning light will come on. In this case, the vehicle should be stopped immediately for inspection. If the vehicle can be driven, drive it slowly to the place that does not obstruct the traffic, and immediately request the help from SINOTRUK service station.

System maintenance

• To ensure the normal operation of the vehicle, the system should be regularly checked for leakage. In the event of any fuel leakage, contact SINOTRUK service station for processing.

• The pressure of the cylinder involved with vacuum failure will rise rapidly by 0.1~0.4MPa/h appropriately. If there is a substantial pressure change, contact the SINOTRUK service station for processing immediately.

• When dismantling or replacing the parts, contact SINOTRUK service station for processing.

Applicable road conditions

In poor road conditions, drive the vehicle at a low speed, otherwise the fatigue damage to the support structure may occur, resulting in leakage and other safety accidents.

Regular maintenance requirements

Maintenance contents	Time interval	Maintenance method
Connect the nuts on the cylinder pipe	Each time before a trip	Visually check for leakage
Vaporizer	Every 12 months	Clean the scale on the coil
Valve	Every 7,500km or 2 months	Check for tightness and leakage
Safety valve	Every 12 months	Send it to the local technical supervision department for verification
Pressure gauge	Every 12 months	Send it to the local technical supervision department for verification
Cylinder vacuum degree	Every 12 months	Pressure test
Check the system connection points for leakage	Every 7,500km or 2 months	Airtightness test or leakage detection

Paintwork maintenance

- Small paint damage should be repaired immediately.
- The painted surface should be protected from corrosion in good time.

Rearview mirror

- Clean the dirty mirror surface with a glass cleaner.

Clean the cab inside

- Clean the steering wheel, shift lever, dirty interior and carpet with warm water and detergent solution. Do not use the scrubbing solution.
- Oil stain can be removed with alcohol（gasoline cannot be used）.
- Below 30℃, wash the curtain with a flexible cleaner.
- Clean the seat belts with warm water and soap. Do not use any chemical detergent.
- In frosty weather, handle the door and window seals with talc to prevent the doors and windows from being freezed with the seal.

Cleaning and maintenance of seats and berths

- Clean the plastic parts（eg, belts, holders, levers）with a damp cloth and a solvent cleaner（eg, scrubbing solution）can be used if dirty.
- Clean the interior and seat cushions with a special damp cloth, and also the dry foam and a soft brush can be used.

Fault name	P-Code fault code DEC	Flash code	Fault description	MIL light	Fault light
DFC_ExhFlpLPOL	P0475	311	Exhaust brake drive circuit is open	Not come on	Come on after 3 driving cycles and go out immediately after repair
DFC_ExhFlpLPOvrTemp	P0475	311	Exhaust brake drive chip is overheated	Not come on	Come on after 3 driving cycles and go out immediately after repair
DFC_ExhFlpLPSCB	P0478	311	Exhaust brake drive circuit is short to power supply	Not come on	Come on after 3 driving cycles and go out immediately after repair
DFC_ExhFlpLPSCG	P0477	311	Exhaust brake drive circuit is short to ground	Not come on	Come on after 3 driving cycles and go out immediately after repair
DFC_ExhFlpLPStLnNpl	P0476	311	Exhaust brake action is not reasonable	Not come on	Come on after 3 driving cycles and go out immediately after repair
DFC_ExhFlpLPStLnSig	P0475	311		Not come on	Come on after 3 driving cycles and go out immediately after repair
DFC_FlFltCtlClogDet	P1048	213	Fuel filter blocking detection signal fault	Not come on	MIL light comes on immediately in the case of a failure and goes out after repair
DFC_FlFltCtlClogDetPlaus	P1049	213	Fuel filter blocking detection feasibility fault	Not come on	MIL light comes on immediately in the case of a failure and goes out after repair
DFC_GlwLmpSCG	P3081	332	Air intake preheat power circuit is short to ground	Not come on	Not come on
DFC_GlwLmpSCB	P3081	332	Air intake preheat indicator preheat power circuit is short to power supply	Not come on	Not come on
DFC_GlwLmpOvrTemp	P3081	332	Air intake preheat indicator preheat power is overheated	Not come on	Not come on
DFC_GlwLmpOL	P3081	332	Air intake preheat indicator preheat power is open	Not come on	Not come on

Fault name	P-Code fault code DEC	Flash code	Fault description	MIL light	Fault light
DFC_RailPOfsTstMAX	P0191	132	Rail pressure sensor signal positive deviation	MIL light comes on after 3 driving cycle and goes out after 3 driving cycles after repair	Not come on
DFC_RailPOfsTstMin	P0191	132	Rail pressure sensor signal negative deviation	MIL light comes on after 3 driving cycle and goes out after 3 driving cycles after repair	Not come on
DFC_RailPRV4	P0088	136	Rail pressure is high after the pressure relief valve is opened	MIL light comes on after the failure report and goes out after 3 driving cycle 3 after repair	Not come on
DFC_RailPRV8	P0088	136	Rail pressure is high after the pressure relief valve is opened	MIL light comes on after the failure report and goes out after 3 driving cycle 3 after repair	Not come on
DFC_RailPRV9	P0088	136	Rail pressure is high after the pressure relief valve is opened	MIL light comes on after the failure report and goes out after 3 driving cycle 3 after repair	Not come on
DFC_RailPSRCMax	P0193	131	Rail pressure sensor voltage signal is above the upper limit	MIL light comes on after the failure report and goes out after 3 driving cycle 3 after repair	Not come on
DFC_RailPSRCMin	P0192	131	Rail pressure sensor voltage signal is below the lower limit	MIL light comes on after the failure report and goes out after 3 driving cycle 3 after repair	Not come on

ZF transmission

Oil product model and oil change cycle

Please see Schedule 1.

Note

- Only use the oil products approved by SINOTRUK or ZF-Ecofluid M transmission fluid specified in the latest lubricant list TE-ML 02.

- ZF lubricant list can be obtained from any after-sales service center or downloaded from ZF official website WWW.ZF.COM.

Amount of oil filling

The oil filling amount has been indicated on the transmission nameplate or technical data sheet, and the provisions of oil filling amount should be followed strictly so as to ensure the accurate amount.

WARNING

The oil change cycle should be implemented strictly, otherwise it will affect the performance and reliability of the transmission.

Assembly	Maintenance items	First maintenance	Regular maintenance	
		First maintenance mileage（km）	Regular maintenance mileage	
			Road vehicles	Off-road vehicles, cement mixers
Engine	8. Change the oil filter element	Replace the oil filter element while replacing the engine oil, and for the first replacement, use the vehicle-attached oil filter element.		
	9. Check and clean the air filter element, and check whether the air filter alarm sensor works normally	See "Air filter maintenance"		
	10. Change the coolant	See "Engine maintenance"		
	11. Check the fan connecting bolts; check whether the fan interferes with the fan cowl or there is the possibility of interference	2000~5000km	Every 30,000km	Every 5,000km
	12. Check the tensioner to ensure the belt tension	2000～5000	Every 30,000km	Every 5,000km
	13. Check the engine idle speed	2000～5000	Every 30,000km	Every 5,000km
	14. Check for abnormal noise	2000～5000	Every 30,000km	Every 5,000km
	15. Check whether the engine suspension connection bolts are loose	2000～5000	Every 30,000km	Every 5,000km
	16. Check whether the engine support rubber pad is damaged	2000～5000	Every 30,000km	Every 5,000km
	17. Check whether the engine oil pressure and water temperature are normal	2000～5000	Every 30,000km	Every 5,000km
EOL tool inspection	18. Read the engine fault code and check whether there is a fault	2000～5000	Every 30,000km	Every 5,000km
	19. Read the SCR fault code, and check whether there is a fault	2000～5000	Every 30,000km	Every 5,000km
	20. Select the type of common rail system on EOL, and check that the accelerator pedal position can change from full close to full open normally（only for DENSO）	2000～5000	Every 30,000km	Every 5,000km
	21. Check whether K value is correct	2000～5000		
	22. Check whether the fuel moisture alarm sensor is normal	2000～5000	Every 30,000km	Every 5,000km
	23. Check whether the common rail pressure is normal	2000～5000	Every 30,000km	Every 5,000km
	24. Check whether the intake manifold pressure is normal	2000～5000	Every 30,000km	Every 5,000km
	25. Read the ABS fault code and check whether there is a fault	2000～5000	Every 30,000km	Every 5,000km