

Chapter I Important statements

第一章 重要说明

I. Adoptable vehicle models of this manual 本手册适应车型

Model 车型	Series No. 结构号	Engine model 发动机型号	Transmission model 变速箱型号
N Series Light Truck N 系列高端轻卡	LG016	ISDe180 43	WLY6G70

II. Important statements 重要说明

- 1、 This manual is designed according to the format suitable for the global technical people. The goal of this is to use a common format, and list the some contents in all of the manuals.

本手册是以一种适合技术人员需求的格式来设计撰写。其目标是使用一种通用的格式，将相同内容列入手册。

- 2、 Proper maintenance method and the correct repair procedures is the basis of the safe and reliable operation of all motor vehicle, as well as the personal security of the operation staff.

适当的保养方法与正确的维修程序，是所有车辆安全、可靠的操作，以及执行工作人员之个人安全的基础。

- 3、 This manual cannot be fully predict all of the possible changes and provide individual advice or warning.

本手册不可能完全预料到所有的可能变化，而分别给予警告。

- 4、 The one, who will not in compliance with this manual, has to confirm that the chosen method, tool or part will not be harmful to their personal security and endanger the whole vehicle performance firstly.

不遵照本手册中所提供指示的任何人，都必须先行确定他们所选择的方法、工具或零件，既不

不可使冷媒瓶暴露于阳光、热源、霜雪。

- Do not discharge or exhaust the refrigerant to the atmosphere in any cases.

不可在任何的情况下，将冷媒排放至大气中。

- Do not mix different refrigerants, for example R12 (Freon) and R134a

不可将不同的冷媒混合。

5、Inspection of Air Conditioning System and Filling of Refrigerant 空调检查及加注制冷剂

□ Installation of refrigerant filling instrument 安装制冷剂加注仪

- Close the manual valves on both ends of refrigerant filling instrument.

关闭制冷剂加注仪两端手动阀门。

- Install the filling pipe of refrigerant filling instrument in the connecting place. Connect the LP pipe at LP pipe nozzle and the HP pipe at HP pipe nozzle, and then tighten the nuts with hand.

制冷剂加注仪的加注管安装在连接部位。低压管在低压管口，高压管在高压管口连接后用手拧紧螺母。

□ Operation of Refrigerant Discharge 制冷剂排出操作

- Connect the refrigerant filling instrument to the system.

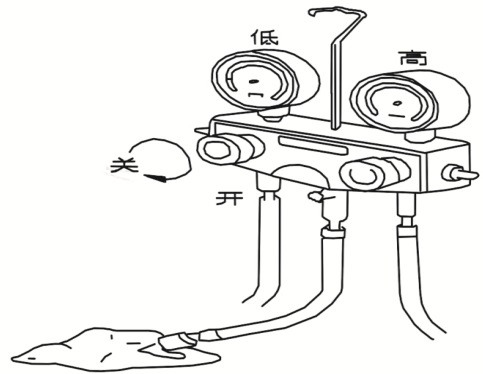
制冷剂加注仪连接到系统。

- Put the cleanly cleaning cloth in the open place of central hose.

中央软管开放部位放干净的抹布。

- Gradually open the HP manual valve and discharge the refrigerant.

逐步开启高压手动阀门并排出制冷剂。



Caution: The compressor refrigeration oil will discharge from the system, if the exhaust velocity is too fast.

Chapter II How to use this manual

第二章 如何使用本手册

I. Preface 序

1、JAC maintenance manual covers <The overview and maintenance fascicule >, <The engine fascicule >,<The chassis fascicule >, <The body structure and electric equipment fascicule >, <The circuit the circuit>

维修手册分《概述与保养分册》、《发动机分册》、《底盘分册》、《车身结构与电器分册》和《电路分册》五本。

2、Engine fascicule, Chassis fascicule, Body structure and electric equipment fascicule are focused on the "Brief" and "Location Map and exploded, the "Remove and Install and adjust the troubleshooting, and processing".

底盘分册、车身结构与电器分册三本维修手册主要围绕“简述”、“位置图及爆炸图”、“拆装与调整”、“故障诊断与处理”来讲解。

II. Terminology 术语

1、The WARNING and CAUTION parts mainly remind staffs of the steps that must be followed to prevent personal injury or damage to some parts of the vehicle.

警告和注意部分,是用来提醒工作人员必须遵守的步骤,以避免造成人身伤害或车辆零部件的损坏。

2、WARNING indicates that if not follow the instructions, may cause serious injury or significant property damage.

警告部分表示如果不遵守该说明,可能会造成严重的人身伤害或重大财产损失。

3、CAUTION indicates that if not follow the instructions, may cause general personal injury, or damaged components, assembly or engine.

注意部分表示如果不遵循该说明,可能会造成一般的人身伤害,或者损坏零件、总成或发动机。

Chapter III Model identification information

第三章 车辆识别信息

I. Product model and the position of identification information 产品型号和车辆识别信息位置

- 1、 Position 1: the plate at the right side carling of the frame(some countries' products IDs are different)

位置一：车架右纵梁外侧面产品标牌上（个别国家产品标牌有所区别）



- 2、 Position 2: the right side carling of the frame

位置二：车架右纵梁外侧面上



II. Product model description 产品型号说明

- 1、 Basic composition 基本组成

☐ Vehicle Model Number is composed by the name of enterprise code, vehicle type code, the parameter

江淮汽车 部门：[客户服务部]

Assembly 总成	Key operation 关键工序	Tightening torque (N * m) 拧紧扭矩 N·m
Engine 发动机	Main bearing cap bolts主轴承盖螺栓	Refer to “Engine”
	Connecting rod nut连杆螺母	Refer to “Engine”
	Cylinder Head Cap Screws 缸盖螺栓	Refer to “Engine”
	The sump Assembly Cap Screw 油底壳总成螺栓	Refer to “Engine”
	ALTERNATOR BELT TENSION 发电机皮带张力	Refer to “Engine”
	Flywheel Assembly Cap Screws 飞轮组件螺栓	Refer to “Engine”
Transmission 变速箱	The fork bolt拨叉螺栓	Refer to “Chassis”
	6 the flange bolt六角法兰面螺栓	Refer to “Chassis”
	Intermediate Support plate mounting bolts中间支撑板固定螺栓	Refer to “Chassis”
	Internet lock plate cap screws互锁板螺栓	Refer to “Chassis”
	Bearing Plate bolt轴承压板螺栓	Refer to “Chassis”
	Intermediate Shaft Front Bearing plugs中间轴前轴承螺塞	Refer to “Chassis”
	Housing Cap Screws壳体螺栓	Refer to “Chassis”
	Reverse Gear Shaft bolt倒档轴螺栓	Refer to “Chassis”
	oil filler plug加油螺塞	Refer to “Chassis”
	Second shaft plug二轴螺塞	Refer to “Chassis”
	The front U-bolt前骑马螺栓	126~154 N·m
	The ear pin前吊耳销	157~196 N·m
	The leaf spring pin前板簧固定销	157~196 N·m
	The rear ear pin后吊耳销	157~196 N·m
	The rear U-bolts后骑马螺栓	126~154 N·m



- ☐ Disassemble front fender, the dismantling order is fender rubber sheet, the fender bolts

拆解前挡泥板，拆解顺序为挡泥橡胶板、挡泥板上固定螺栓



- ☐ Remove fender rubber plate fixing bolts, remove the fender rubber sheet

拆卸挡泥橡胶板固定螺栓，取下挡泥橡胶板



- ☐ Dismantle the fender mounting bolts, remove the fender

拆卸挡泥板上固定螺栓，取下挡泥板

Assembly process: opposite to dismantle process.

装配：按照拆解相反步骤开展。

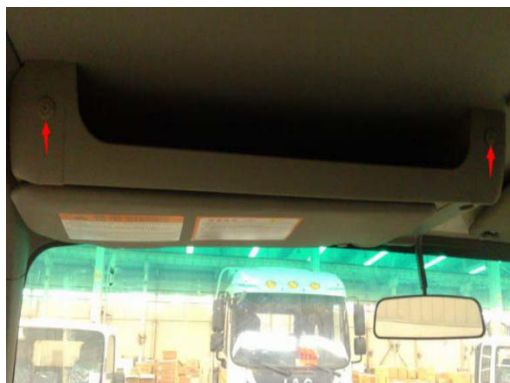
3.9 Disassembly and assembly of pedal device 脚踏板装置的拆装



☐ Dismantle roof debris boxes 拆卸顶杂物盒

(1) Remove sun visor 拆卸遮阳板

(2) Remove roof debris boxes fixed bolts 拆卸顶杂物盒固定螺栓



(3) Remove the roof debris box fixed expansion snaps, remove the roof debris box 拆卸顶杂物盒固定膨胀卡扣，取下顶杂物盒



(4) Remove roof debris box left and right fixed bolts, remove the roof debris box left and right fixed bracket 拆卸顶杂物盒左、右固定支架固定螺栓，取下顶杂物盒左、右固定支架



☐ Dismantle roof ventilation 拆卸顶通风

(1) Remove roof vent cover mounting bolts, pry the roof vent cover 拆卸顶通风盖板固定螺栓，撬开顶通风盖板



- Disassemble fog light, the disassembling sequence is front bumper, front fog light mounting bolts and plug-ins, front fog light bulb.

拆解雾灯，拆解顺序为蓄电池负极、前保险杠、前雾灯固定螺栓和接插件、前雾灯灯泡

- Remove the front bumper: refer to “Front Bumper Removal Procedure”.

拆卸前保险杠：参考【前保险杠的拆卸步骤】



- Remove the fog light mounting screws from the front bumper.

从前保险杠上拆下雾灯上的固定螺钉



- Disconnect the electrical plug-ins, and remove the fog light assembly.

断开电气接插件，拆下雾灯总成

- Rotate the bulb seat cover in counter lock direction, and remove the bulb seat cover, and remove the fog bulb from the seat.

逆时针旋转灯泡座盖，取下灯泡座盖，从灯泡座上拆下雾灯灯泡

Installation: follow the reverse order of removal.

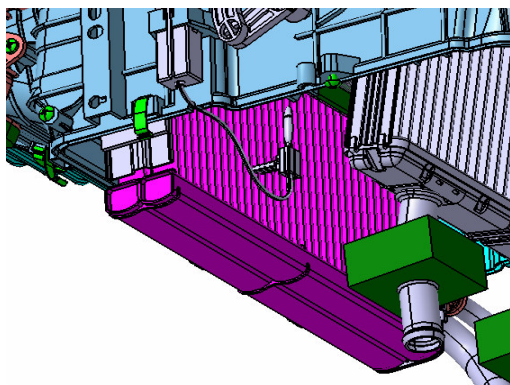
disfunction 指示仪表误差或不工作, 里程液晶不工作	②instrument circuit damaged 仪表电路损坏	conduction 检查相关传感器输出是否正常, 线路、接插件是否接通 Replace instrument 调换仪表
LCD mileage number error 里程液晶缺笔画	Instrument circuit damaged 仪表电路损坏	Replace instrument 调换仪表

☐ Whole instrument do not work 整个仪表不工作

Step 步骤	Measure 主要故障	Yes 是	No 否
1	Check whether the fuse blow 检查电器盒保险丝是否熔断	To step 至步骤 2	To step 至步骤 3
2	Replace the fuse and confirm if problem solved 排除因其他线路造成的故障后, 更换保险丝, 故障是否排除		To step 至步骤 3
3	Check voltage between the instrument power plug and ground 检查仪表插头电源端子与接地之间电压是否正常	To step 至步骤 5	To step 至步骤 4
4	Fix the power circuit to check whether problem solved 根据配电线路图, 修理或者更换仪表的供电线路, 故障是否排除		To step 至步骤 5
5	Check the conduction between plug ground pin and ground wire 检查仪表插头接地端子与接地之间线路是否导通	To step 至步骤 7	To step 至步骤 6
6	Fix or replace the instrument plug ground pin and ground wire 修理或者更换仪表插头接地端子与接地之间的线路, 故障是否排除	To step 至步骤 7	
7	Replace the instrument 更换组合仪表		

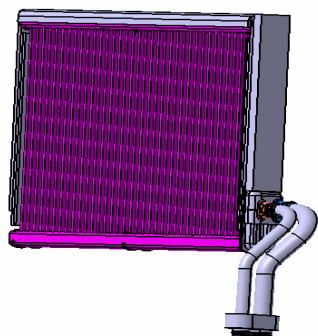
☐ Indicator and light do not illuminate 指示灯、照明灯不亮

Step 步骤	Measure 主要故障	Yes 是	No 否
1	Check the conduction between the light and instrument 检查相关指示灯、照明灯本身与仪表的连接线路是否导通	To step 至步骤 3	To step 至步骤 2



- ☐ Remove the temperature sensor.

取出温度传感器



- ☐ Remove the evaporator assembly.

取出蒸发器总成

Assembling : opposite sequence of disassembly

装配：按照拆解相反步骤开展。

4、Disassemble air blower assembly 拆解鼓风机总成

- ☐ Disassemble air blower assembly, disassembling sequence: remove the bottom plate of instrument, disconnect the negative pole of battery , remove the fixed bolt and connector.

拆解鼓风机总成，拆解顺序为蓄电池负极、仪表板下护板总成、鼓风机固定螺栓和接插件

	Does the paper stay in its original location?纸是否停留在原位?		
9	Check whether there is leakage or block in aspirator pipe.检查吸气器的管道是否漏气或堵塞。 Has the fault been solved?是否发现并排除了故障?	Turn to process 10 转至步骤 10	—
10	Run the system, check the performance after the maintenance.运行系统, 检验修理效果。 Has the fault been solved?故障是否已排除?	System normal 系统正常	Turn to process 2 转至步骤 2

□ Air outlet failure diagnosing 出风不良

Process 步骤	Operation 操作	YES 是	NO 否
1	①Start the engine 起动发动机。 ②Turn the mode switch to OFF position.将模式开关置于OFF 位置。 Does the blower motor stop working?鼓风机电机是否停止运转?	Turn to process 2 转至步骤 2	Turn to process 2 转至步骤 2
2	①Turn the mode switch to ventilation position 将模式开关置于通风位置。 ②Select every speeds of the blower speed.将鼓风机电机开关置于每个转速位置。 can blower work in every speed?鼓风机电机是否在任何转速位置都能工作?	Turn to process 4 转至步骤 4	Turn to fault 7 转至“故障 7”
3	Does the blower motor work in homologous speed?鼓风机电机是否在相应的转速下运转?	Turn to process 4 转至步骤 4	Turn to fault 8 转至“故障 8”
4	check whether the mode ventilationdoor is damage/ block or not 检查模式风门是否破损或堵塞 whether the mode ventilationdoor is damage/ block or not 模式风门是否破损或堵塞。	Change mode ventilation 更换模式风门	Turn to process 5 转至步骤 5
5	Run the system, check the performance after the maintenance.运行系统, 检验修理效果。 Is the fault been solved?故障是否已排除?	System normal 系统正常	Turn to process 1 转至步骤 1

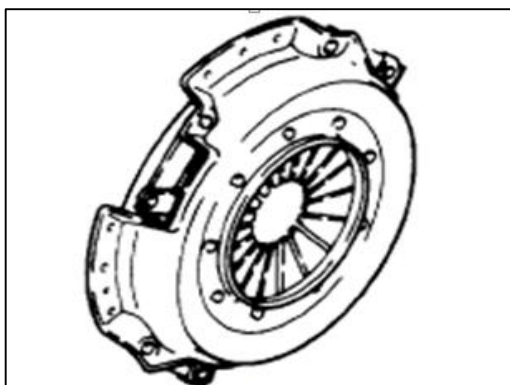


- Disassemble the socket assembly together with the split sleeve and return spring.

拆解离合器分离套筒总成，把分离套筒和回位弹簧一起拆下

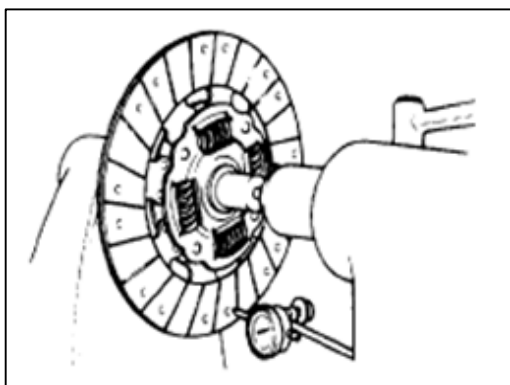
Assembly: operate in accordance with the removal procedure in reverse order, and note the following matters:

装配：按照拆解相反步骤开展，并注意以下事项



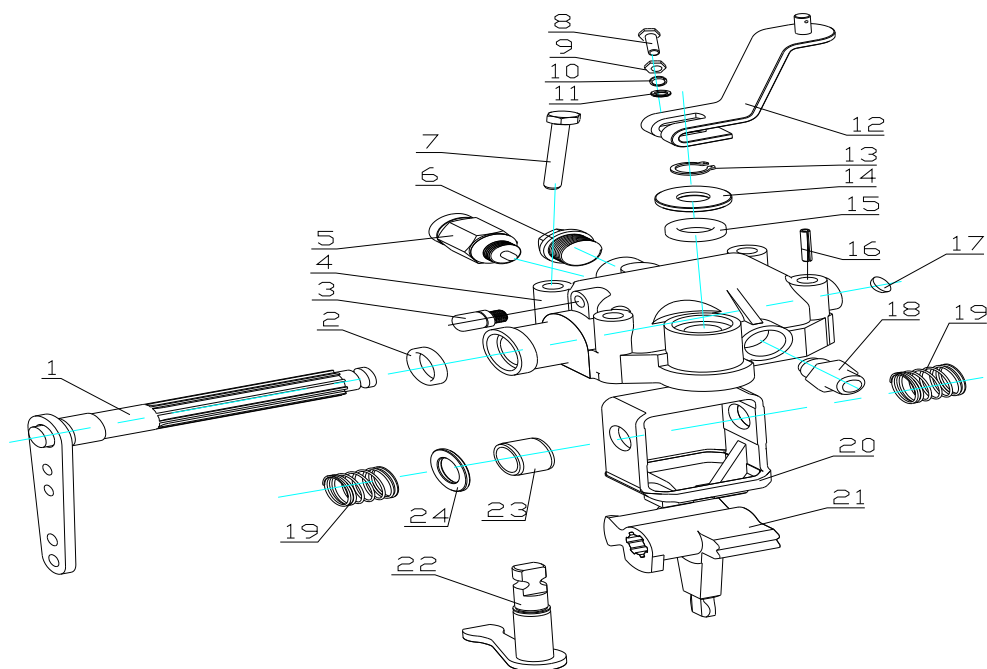
- Visually check the clutch cover for wear, cracks and damage. Clutch cover with excessive wear, cracks and other damage must be replaced.

目视检查整个离合器盖的磨损、裂纹和其他损坏。有过度磨损、裂纹和其他损坏的离合器盖必须更换。

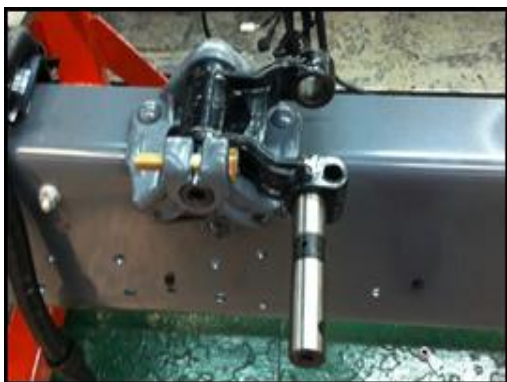


- Pilot shaft goes through splined hub. Pilot shaft must be kept in a straight. Depth measurement platen rivet. If the measured value exceeds limits, should be replaced driven disc assembly

在花键毂内插入导向轴。导向轴必须保持很平直，测量从动盘铆钉深度，如果测量值超出极限值，应更换从动盘总成



序号 No	名 称	Name	数量 Number
1	换档轴总成	Selecting shaft	1
2	骨架油封	Oil seal	1
3	通气塞	air plug	1
4	顶盖	Top cover assembly	1
5	倒档开关及增压器 总成	Reverse light switch unit	1
6	螺栓	Screw Stopper	1
7	六角头螺栓与锥型 弹性垫圈组合件	Bolt & lock washer assembly	4
8	六角头螺栓	Bolt	1
9	螺母	Nut	3
10	弹簧垫圈	Spring washer	1
11	平垫圈	Plain washer	3
12	选档臂总成	Outer select rocker arm	1
13	轴用弹性挡圈	Ring	1
14	平垫	Plain washer	1
15	骨架油封	Oil seal	1
16	圆柱销	Cylinder pin	1
17	碗形塞片	Stopper Slice	1



- Remove front leaf spring lug pin

拆解前板簧吊耳销

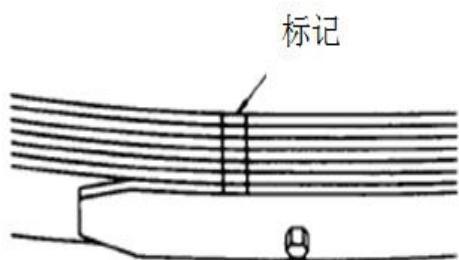


- Take down front leaf spring assembly

取下前板簧总成

Installation: Please note the following procedure and install in the reverse order of removal:

装配：按照拆解相反步骤开展，并注意以下事项



- ☐ Make a assembling mark on the leaf spring intersecting surface before removal leaf spring

拆卸钢板弹簧之前，要在钢板弹簧横面上做安装标记

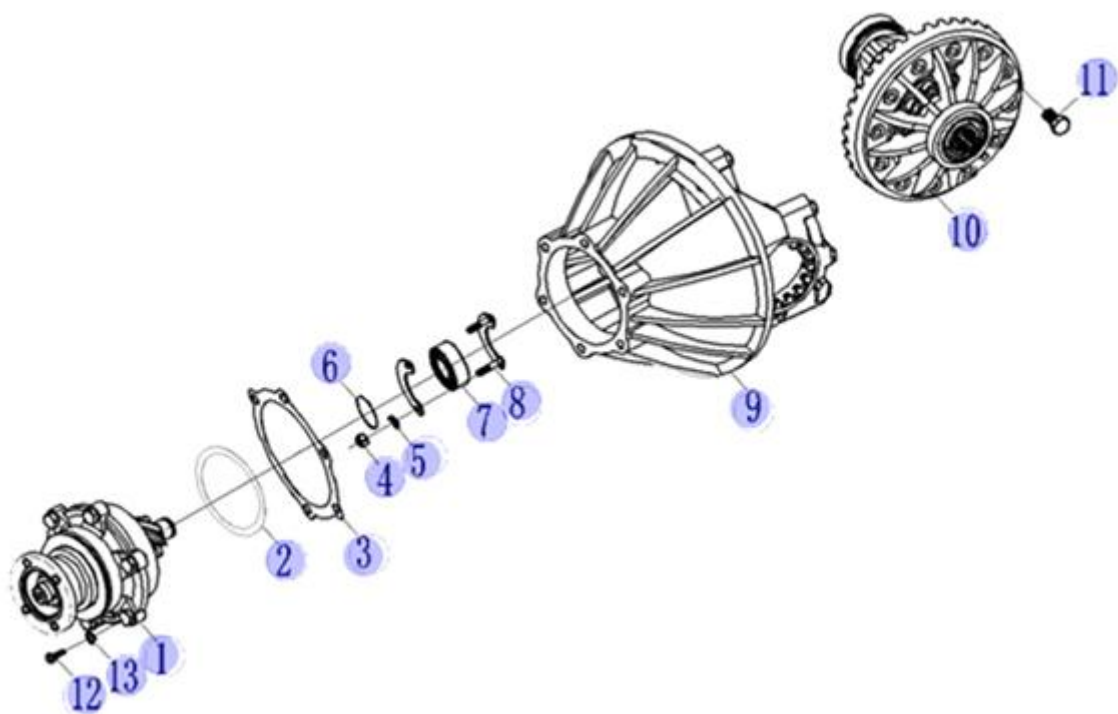
- ☐ Smear lubricating grease on two sides of leaf spring

在每个钢板弹簧两面上涂润滑脂。

- ☐ Removed center bolt cannot be reused and should be replaced with new one.

拆下的中心螺栓不要再使用，应更换新的中心螺

- ☐ Use leaf spring with same sagitta ,when changing leaf spring



□ Main reducer assembly 主减速器总成

S/N 序号	Spare Parts Name	备件名称
00	Drive gear assembly	主动齿轮总成
01	oil seal	O 形圈-主动齿轮轴承座
02	shim	主齿轴承座调整垫片
03	nut	六角螺母
04	spring washer	弹簧垫圈
05	spring sprag	导向轴承弹簧挡圈
06	guided bearing	主动齿轮导向轴承
07	stopping plate assy	导向轴承挡板总成
08	Final drive housing assembly	主减速器壳总成
09	differential unit	差速器总成
10	bolt	螺栓-从动齿轮