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Abbreviations List 缩略语清单

A	Ampere安培	N	Newton牛顿
AC	Alternating Current交流电	Nm	Newton x metro牛顿 x 米
°C	Degrees Celsius摄氏度	Pa	Pascals帕斯卡
DC	Direct current直流电	HP	Horse Power马力
g	Grams克数	psi	Pound/square inch磅/平方英寸
h	Hours小时数	rpm	Revolution per minute每分钟转数
L	Liters公升数	V	Volts伏特
m	Meters米	W	Watts瓦特
min	Minutes分钟数	Ω	Ohms欧姆

ABDC	After Bottom Dead Center	BDC	Bottom Dead Center
ATDC	After Top Dead Center	BTDC	Before Top Dead Center
BBDC	Before Bottom Dead Center	TDC	Top Dead Center

GENERAL INFORMATION 通用信息

Before Service 售前服务

Before starting an inspection service or performing a disassembly and reassembly operation on a motorcycle, please read the precautions listed below. To facilitate actual operations, detailed notes, illustrations, photographs, cautions, and descriptions have been included in each chapter whenever necessary. 在开始检查或对摩托车进行拆卸和重新组装操作之前，请阅读下列预防措施。为了便于实际操作，每一章都有详细的注释、插图、照片、注意事项和说明。

Battery ground 蓄电池地线

Before completing any service on the motorcycle, disconnect the battery cables. Disconnect the ground wire (-) first and then the positive (+). When finished with service, first connect positive (+) battery cable. 在完成对摩托车的任何维修之前，要断开蓄电池的电缆。首先断开接地线（-），然后断开正极（+）。当完成维修后，首先连接电池正极（+）线。

Protection gloves 防护手套

Wear protective gloves to avoid injury from the sharp surfaces of motorcycle components. 戴上防护手套，避免被摩托车部件的尖锐表面伤害。

Vehicle cleaning 车辆清洗

Clean the vehicle well before disassembling it. Dirt or other foreign materials that enter sealed areas during vehicle disassembly can cause excessive wear and decrease vehicle performance. Do not apply high pressure water directly to electrical components or intake systems. 在拆解车辆之前，要充分清洁车辆。在车辆拆卸过程中，灰尘或其他异物进入密封区域，会造成过度磨损，降低车辆性能。不要将高压水直接用于电气元件或进气系统。

Repair and cleaning of removed parts 修理和清洁拆下的部件

The disassembled parts are easy to confuse. Arrange the parts in the order they were disassembled and clean the parts. 拆卸下来的零件很容易混淆。按照拆卸的顺序排列零件，并清洗零件。

Once all the parts have been cleaned, store them in a clean area, cover them to protect them from any foreign material that may accumulate before reassembling. 一旦所有部件都被清洗干净，将它们存放在一个干净的地方，在重新组装之前，盖上盖子以保护它们免受任何可能积累的异物。

Inspection 检查

Visually inspect the removed parts for corrosion, discoloration, or other damage. See the appropriate sections of this manual for service limits for individual parts. Replace parts if any damage has been found or if the part is beyond its service limit. 目视检查拆下的零件是否有腐蚀、变色或其他损坏。关于各个部件的维修极限，请参见本手册的相应章节。如果发现有任何损坏，或者零件超过了使用期限，请更换零件。

Replacement parts 替换零件

Use only replacement parts authorized by Auteco Mobilty. Self-locking gaskets, oil seals, circlips, pins and nuts should be replaced with new ones when disassembled. 只能使用 Auteco Mobilty 授权的替换零件。自锁垫圈、油封、卡环、销钉和螺母在拆卸时应更换为新的。

Tightening sequence and torque 拧紧顺序和扭矩

When installing a part with multiple bolts, nuts, or screws, start putting them all into their holes and hand-tighten them. Then tighten them according to the specified sequence to avoid warping. When loosening the bolts, nuts, or screws, first loosen all of them about a quarter turn and then remove them. If the specified tightening sequence is not indicated, alternately tighten the screws diagonally.

Apply the specified tightening torque for each screw to avoid parts damage. 当安装一个有多个螺栓、螺母或螺钉的部件时，先把它们全部放入孔中，用手拧紧。然后按照规定的顺序拧紧，以避免翘起。松开螺栓、螺母或螺钉时，首先将所有的螺栓、螺母或螺钉松开约四分之一圈，然后再将其取出。如果没有标明规定的拧紧顺序，则交替着拧紧螺丝。对每个螺钉都要使用规定的紧固扭矩，以避免零件损坏。

Pressed components 压制件

For parts such as bearings or oil seals that need to be pressed into place, apply a small amount of oil to the contact area. Be sure to maintain correct alignment and use gentle strokes when installing. 对于需要压入的部件，如轴承或油封，在接触区涂上少量的油。确保保持正确的对准，安装时使用柔和的笔触。

Ball bearing and needle bearings 滚珠轴承和滚针轴承

Remove the bearings only if absolutely necessary. Replace them with new ones when they are removed. Press the bearings with the manufacturer's identification and size markings outward. 只有在

绝对必要的情况下，才可以拆卸轴承。当它们被卸下时，请用新的取代它们。将有制造商标识和尺寸标记的轴承向外压。

Lubrication 润滑剂

It is important to lubricate rotating or sliding parts during assembly to minimize wear during initial operation. Apply the specific oil or grease as specified. 在装配过程中，对旋转或滑动部件进行润滑是很重要的，以减少初始运行时的磨损。按照规定使用特定的油或润滑脂。

VEHICLE IDENTIFICATION 车辆识别

Left side view 左侧视图

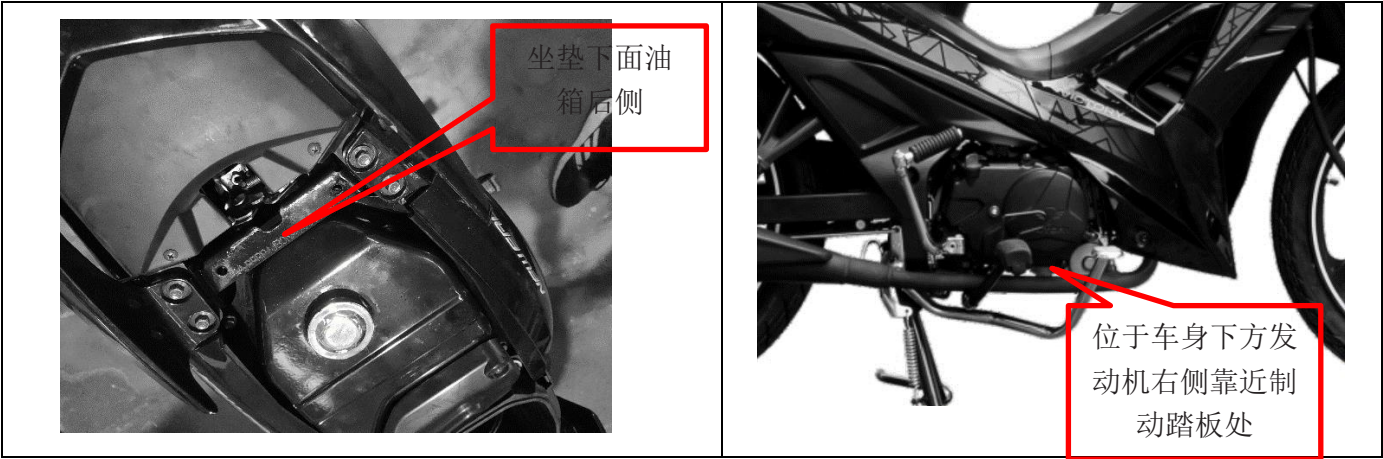


Right side view 右侧视图



Vehicle Identification Number (VIN)车架打刻

Engine Number 发动机打刻号



Technical Specifications 技术规格

Dimensions	
Length × Width × Height 长宽高	1980*720*1020mm
Distance between axis 轴间距离	1260mm
Ground clearance 离地间隙	130mm
Distance from seat to ground 座位到地面的距离	770mm
Curb weight (total mass of a vehicle with standard equipment and all necessary operating consumables such as motor oil, transmission oil, brake fluid, coolant, air conditioning refrigerant, and full tank of fuel, while not loaded with either passengers or cargo) 整车整备质量（车辆总重量，包括标准设备和所有必要运行消耗品，如机油、变速箱油、刹车油、冷却剂、空调制冷剂、满箱燃油，不载乘客货物）	93 Kg
Gross weight (Curb weight + maximum payload of passengers and cargo) 毛重（整车整备质量+最大可载荷量的乘客和货物的重量）	243 Kg
Maximum weight capacity 最大承重	150 Kg
Fuel tank capacity 油箱容量	5L

Engine 发动机	
Type 类型	RW154FWI
Cooling system 冷却系统	Oil cooling
Bore × stroke 孔径×行程	54×55.5mm
Displacement 排量	127.1ml
Compression ratio 压缩比	9.1: 1
Maximum power 最大功率	7.5Kw/7500rpm
Maximum torque 最大扭矩	10.5N.m/5500rpm
Fuel system 燃油系统	Electronic injection
Air filter type 空滤器类型	Self priming
Start System 启动系统	Electric
Ignition system 点火系统	Ignition advance angle mode
Ignition advance 点火提前量	12°
Spark plug 火花塞	A7RTC_带电阻
Lubrication system 润滑系统	Pressure lubrication
Idle speed 怠速	1500±150 rpm
Spark plug gap 火花塞间隙	0.6-0.7 mm
Engine Oil 发动机油	
Type 类型	Synthetic oil
Viscosity 粘度	10W-40
Capacity (how much oil to put in the engine) When Refilling 加注时容量（在发动机中放多少机油）。	1.2L
Capacity (how much oil to put in the engine) When engine dismantling 发动机放油时放多少油量	1L
Transmission 传动装置	
Clutch type 离合器类型	Multi plate wet clutch
Transmission type 传动类型	Chain drive
Chain type 链条类型	Drive chain
1 st	2.833
2 nd	1.706
3 rd	1.238
4 th	0.958
Frame 车架	

Type 类型	Steel pipe frame
Front suspension 前减震	Hydraulic shock absorber
Rear suspension 后减震	Hydraulic shock absorber
Turning radius 转弯半径	1975(mm)
Tires 轮胎	
Front tire 前轮胎	Rubber tyre
Rear tire 后轮胎	Rubber tyre
Brakes 刹车	
Front brake type 前刹类型	Disc brake
Front brake size 前刹尺寸	$\phi 220 \pm 0.5$ 厚度 4 ± 0.2
Rear brake type 后刹类型	Drum brake
Rear brake size 后刹尺寸	蹄块外径 $\phi 110$, 后轮轴孔 $\phi 12$, 横销孔 $\phi 12$
Electrical system 电气系统	
Battery 电池	蓄电池规格: 12N5-3B; 额定容量: 5Ah
Front light bulb 前灯灯泡	远光光源 5W2 颗; 近光光源: 5W2 颗; 位置灯光源由 24 颗
Back light bulb 后灯灯泡	后位置灯、制动灯由 8 颗 LED 组成; 转向灯由 20 颗 LED 组
Fuses 保险丝	10A, 15A
Position light 位置灯	LED
Blinkers bulb 转弯灯灯泡	位置灯由 17 颗 LED 组成, 转向灯由 4 颗 LED 组成。
Blinkers indication bulb in dashboard 仪表板上的转向灯指示灯泡	LED
High beam indication bulb in dashboard 仪表板上的远光灯指示灯泡	LED
Dashboard backlight bulb 仪表板背光灯泡	LED

PERIODIC MAINTENANCE CHART 定期维护表

I: 检验、清洗、润滑、调整或更换; C: 清洗; R: 更换; L: 润滑。

“*”项由维修站的人员维修。若用户有专用工具、维修配件和维修能力，也可自行维修，维修知识可参照本维修说明书。

“**”为了确保安全，该项目只能由维修站的人员维修。

备注：1、在尘土较大的地区行驶时，更应经常进行清洗。

2、当里程表读数超过给定的最高数。

			项目周期	里程表 km（注 2）				备注
		保养项目		1000km	4000km	8000km	12000km	
*	Circuit of fuel system	燃油系统通路			I	I	I	
*	Fuel filter	燃油过滤器	/	/	/	/	/	/
*	Throttle operating sysem	油门操作系统			I	I	I	
	Air filter element	空滤器滤芯			C	C	C	注 1
	Spark plug	火花塞			I	R	I	
*	Air valve gap	气门间隙		I	I	I	I	
	Engine lubricating oil	发动机润滑油		R	每 5000km: R			
	Lubricating oil screen	润滑油过滤网		R	每 5000km: R			
*	Tension of chain	正时链条张紧度			I	I	I	

	Driving chain	传动链		每 1000km: I				
	Battery	电池		每 1000km: I				
	Wear of brake shoes	刹车片磨损			I	I	I	
	Rear braking system	后制动系统		I	I	I	I	
**	Braking liquid hose	制动液软管		每四年更换一次				
**	Cup of braking liquid	制动液杯			I	I	I	
**	Braking liquid	制动液		每两年更换一次				
**	Front braking system	前制动系统		I	I	I	I	
*	Rear braking light switch	后制动灯开关		I	I	I	I	
*	Light changing of front illuminator	前照灯调光			I	I	I	
	Clutch	离合器		I	I	I	I	
	Side stand	边站			I	I	I	
*	Suspension	悬架			I	I	I	
*	Nuts, bolts & other fasteners	螺母、螺栓及其他紧固件		每 5000km: I				
**	Wheel / spokes	铝轮/辐条		I	I	I	I	
**	Bearing of steering handle	方向轴承		I	I	I	I	

Fasteners Torques - Frame 紧固件扭矩 – 车架

Item 项目	Torque (Nm) 扭矩 (Nm)
转向杆上部螺丝	45-60N.m
平叉轴	60-80N.m
后轮轴	50-60N.m
前轮轴	45-60N.m
前碟刹	35-45N.m
后减震	35-45N.m
发动机悬挂	30-40N.m
车头支撑	35-45N.m

General torques General torques

Thread diameter (mm) 螺纹直径(毫米)	Torque (Nm) 扭矩 (Nm)
5	3.4 – 4.9
6	5.9 – 7.8
8	14 – 19
10	25 – 34
12	44 – 61
14	73 – 98
16	115 – 155
18	165 – 225
20	225 - 325

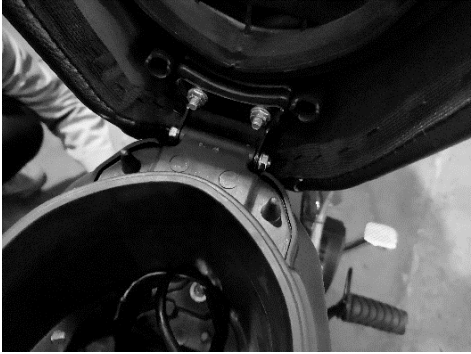
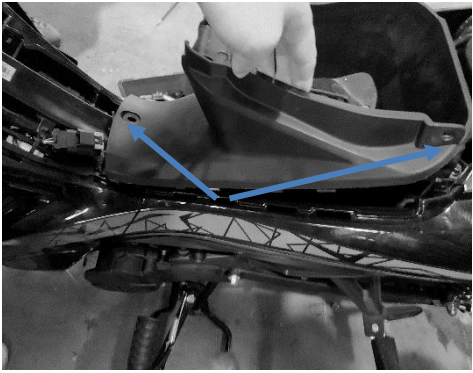
Fasteners Torques - Engine 发动机紧固件扭矩

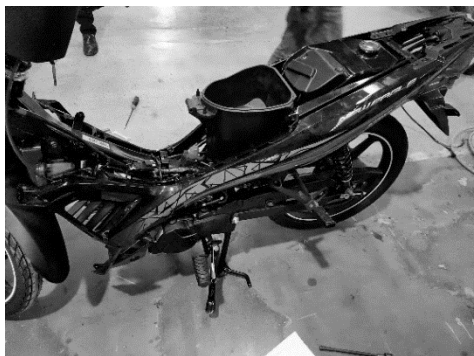
Description 描述	Torque (Nm) 扭矩
Cylinder head cover bolts 缸头盖盖板螺栓	10-15N. m
Cylinder head bolts 缸头盖螺栓	10-15N. m
Spark Plug 火花塞	15N.m
Chain tensioner bolts 链条张紧器螺栓	10-15N. m
Clutch nut 离合器螺母	50-60N. m

Primary gear nut 主齿轮螺母	38-45N.m
Chain guide screw 链条导向螺丝	10-15N. m
Oil filter bolts 机油过滤器螺栓	18-24N. m
Crankcase joints bolts 曲轴箱连接螺栓	10-15N. m
Oil pump bolts 油泵螺栓	8-12N. m
Flywheel cover screws 飞轮盖螺丝	10-15N. m
Magneto plate screws 磁板螺丝	48-55N.m
Flywheel nut 飞轮螺母	10-15N. m
Intake manifold bolts 进气歧管螺栓	10-15N. m

Please state the procedure to remove the plastic components to access the mechanical components (side covers, fairings, seat). 请说明拆卸塑料部件以接触机械部件（侧盖、整流罩、座椅）的程序

Please include photos of the removal and installation of each component 请附上每个部件的拆除和安装的照片

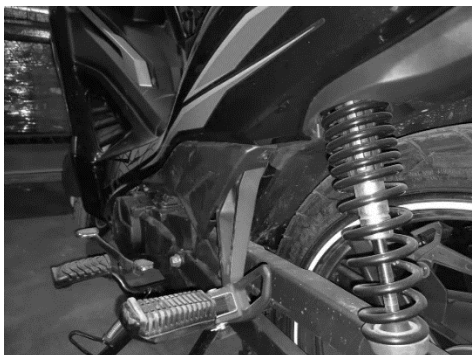
Removal of seat 拆除座椅	
	(1) 将车身左后方座垫锁打开，松开坐垫紧固螺母即可取出坐垫。
Removal of fairings 拆除整流罩	
	(2) 参照坐垫拆卸步骤取下坐垫，松开蓄电池正负极端子连接，取出蓄电池。松开中缝板前后固定螺栓。



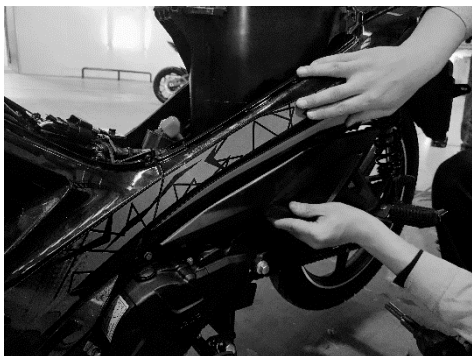
(3) 松开置物箱固定螺栓，取下置物箱。



(4) 松开后货架固定螺栓，取下后货架。



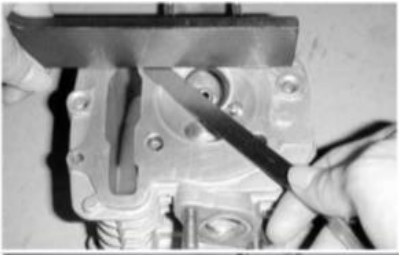
(5) 松开车体前后固定螺栓。

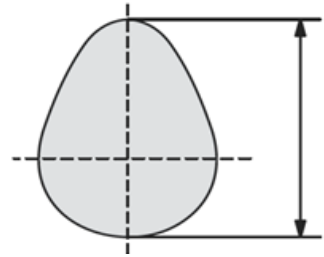
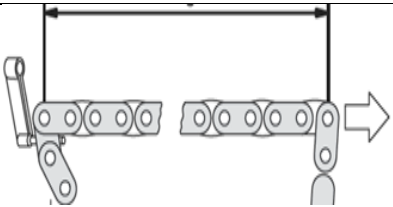


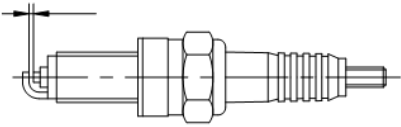
(6) 取出车体。

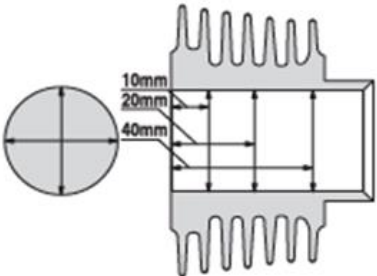
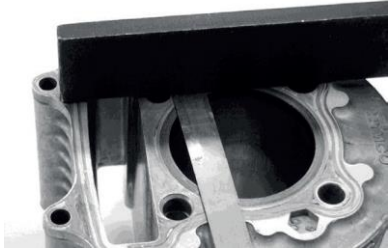
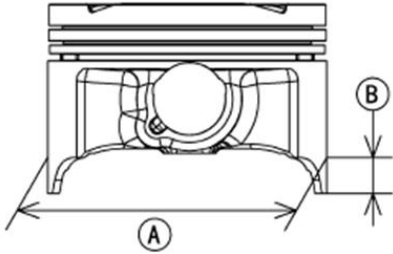
(7) 在拆卸覆盖件时注意覆盖件扣合支耳，请勿强行拆卸，在取覆盖件时观察紧固点是否全部解除及扣合支耳位置。取下的覆盖件请勿直接放置于地面等硬表面上以免划伤。

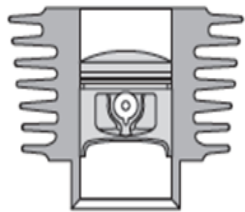
ENGINE, CLUTCH Y TRANSMISSION 发动机、离合器和变速器

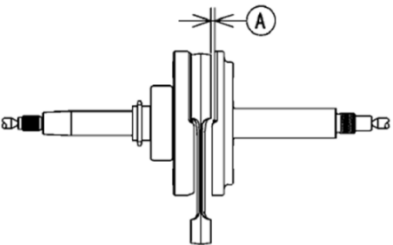
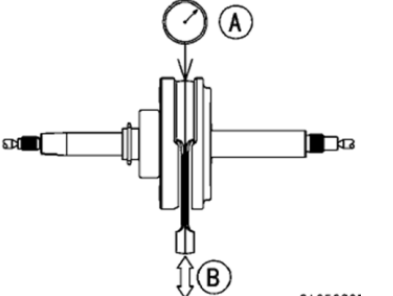
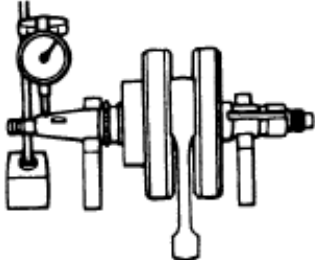
Name 名称	Description 描述	Standard value 标准值	Images 图片
Cylinder head 气缸头	Engine time location 发动机正时位置	正时链轮标记与缸头中间	
	Compression of the engine 发动机的压缩	9KMa 以上	
	Valve tappet clearance 气门挺柱间隙	进排：0.03-0.05mm 使用 0.04mm 塞尺调节	
	Cylinder head warpage 气缸盖翘曲	0.05	

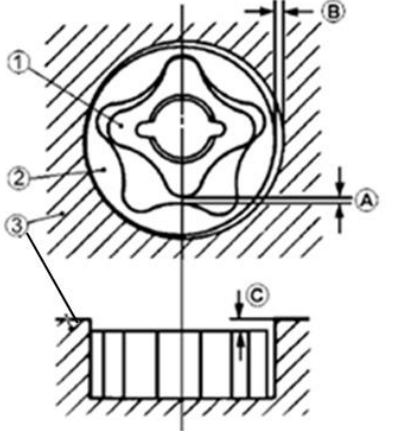
Cylinder head 气缸头	Internal diameter of rocker arm 摇臂内径	10	
	External diameter of the rocker arm shaft 摇臂轴外径	10	
	Height of the cam 凸轮高度	Intake Value 进气值 5.56	
		Exhaust Value 排气值 5.37	
	Valve spring free length 气门弹簧自由长度	Value 值 35.5	
	Outer diameter of the valve stem 阀杆外径	Value 值 5	
	Length of the camshaft chain. (Please include the length measured on how may links) 凸轮轴链条的长度 (请包括测量链接的长度)	Value 值 571.5	

Cylinder head	Spark plug gap 火花塞间隙	Value 值 0.7	
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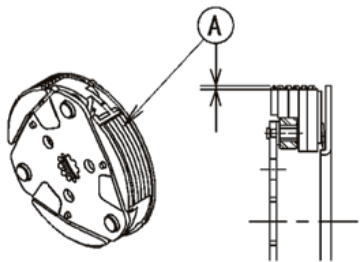
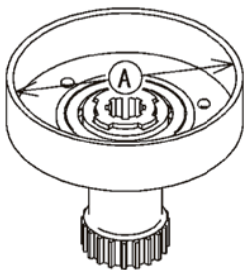
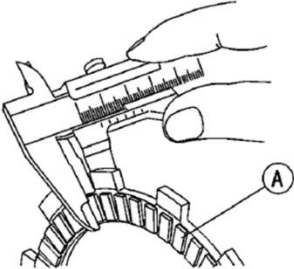
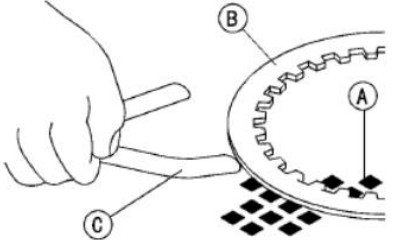
Cylinder 气缸 体	Cylinder internal diameter 气缸内径	Value 值 10 mm 54 Value 值 20 mm 54 Value 值 40 mm 54	
	Cylinder warpage 气缸翘曲	Value 值 0.05	
	Piston outer diameter 活塞外径	Value 值 A 54 Value 值 B 7	

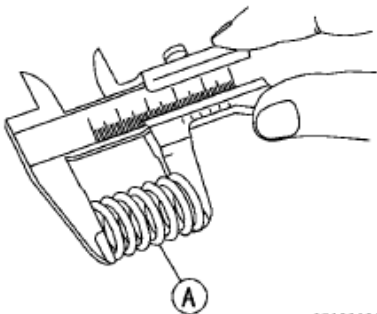
cylinder	Clearance between piston and cylinder 活塞与气缸之间的间隙	Value 值 0.02-0.04	
	Clearance of piston ring grooves against the piston ring 活塞环凹槽与活塞环的间隙	1° Value 值 0.8	
		2° Value 值 0.8	
		Lubrication Value 1.5	
	Piston ring closing gap (place the piston ring inside the cylinder, open it and measure the gap) 活塞环闭合间隙（将活塞环放入气缸内，打开并测量间隙）	Value 0.2-0.4	
	Piston pin hole diameter 活塞销孔直径	Value 值 13	
	Piston pin shaft outer diameter 活塞销轴外径	Value 值 13	

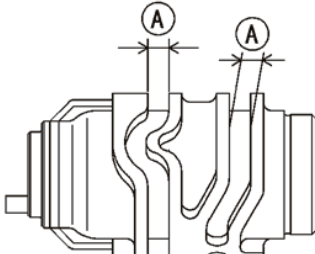
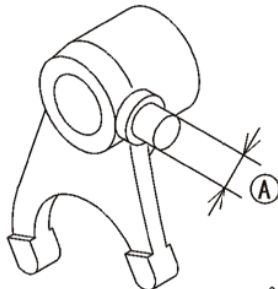
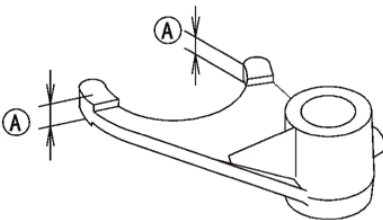
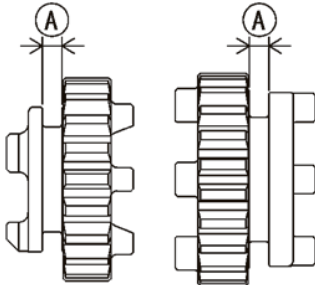
Crankshaft 曲轴	Axial clearance of crankshaft-connecting rod 曲轴连杆轴向间隙	Value 值 0.1-0.3	
	Radial clearance of crankshaft-connecting rod 曲轴连杆径向游隙	Value 0.008-0.016	
	Crankshaft runout 曲轴跳动	Value 值 0.03	

Lubrication 润滑	Oil pump clearance 油泵间隙	A: IN rotor-EX rotor 进气-排气转子 Value 0.1-0.15	
		B: Body-outer rotor 转子外部 Value 0.1-0.15	

		C: Warpage 翹 曲 Value 0.05	
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Clutch 离合	Centrifugal clutch friction material thickness 离心离合器 摩擦材料厚度	Value	
	Primary clutch drum internal diameter 主离合器鼓内径	Value ϕ 104	
	Friction plate thickness 摩擦 片厚度	Value 3	
Embrague 离 合器	Metallic plate warpage 金属板 翹曲	Value 0.1	

	Clutch sprigs free play 离合器 弹簧正常放置时	Value 值 33.4	
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Transmission 传动装置	Gear drums groove thickness 齿轮鼓槽的厚度	Value (整体式无 该尺寸)	
	Shift fork pin outer diameter 换挡叉销外径	Value (整体式无 该尺寸)	
	Shift fork claws thickness 变 速叉爪的厚度	Value 4.9	
Transmission 传动装置	Shift fork grove thickness 换 挡叉槽厚度	Value 值 4.9	

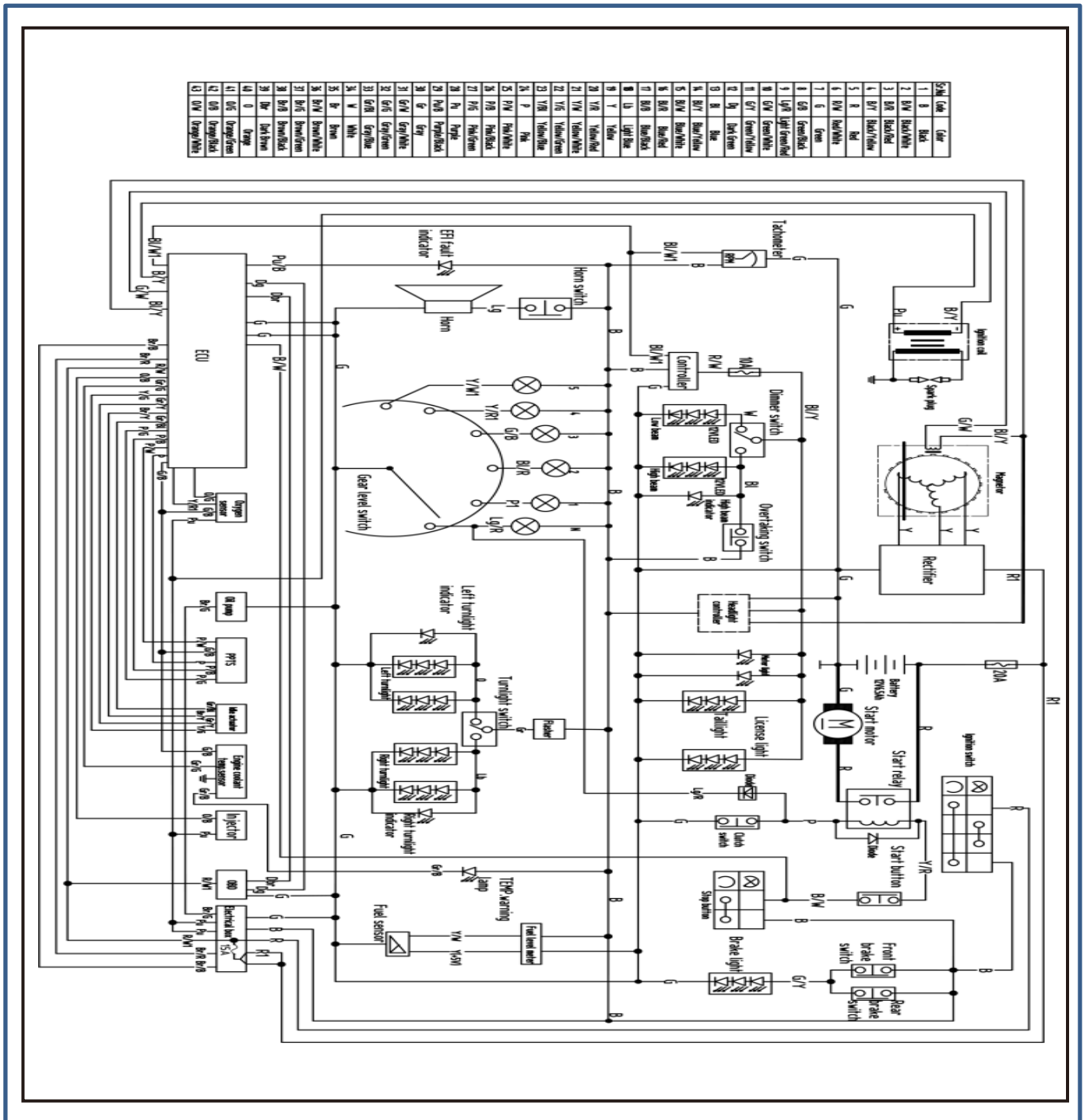
FUEL FEED SYSTEM 燃料供给系统

Electronic Fuel Injection 电喷

Item 项目	Description 描述	Value 值
O2 (Oxygen Sensor) 氧传感器	尾气温度	450°C
	浓信号输出 $\lambda = 0.97$ (mv)	≥ 720
	淡信号输出 $\lambda = 1.10$ (mv)	≤ 120
	内阻	≤ 0.5 (kohm)
	加热电流 $U=13.5V$	0.3 ± 0.2
FUEL PUMP 燃油泵	浮子顶点中心位 F 电阻值	7 Ω
	浮子顶点中心位 E 电阻值	97 Ω
	PRESSURE 压力	350kpa
	FLOW 流量	25L/h
HIGH COIL 高压线圈	Ω FROM PRIMARY WINDING (coil disconnected) Ω 来自初级绕组 (线圈断开)	0.59 Ω
	SECONDARY WINDING Ω (coil disconnected) 次级绕组 Ω (线圈断开)	8K Ω

ELECTRICAL SYSTEM 电气系统

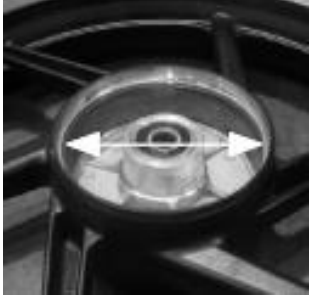
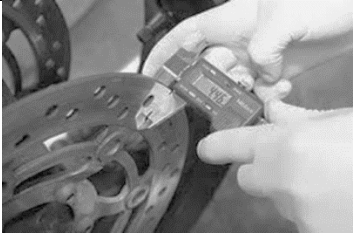
Electric diagram 电气图

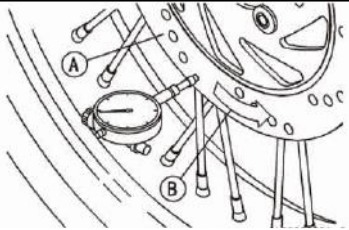
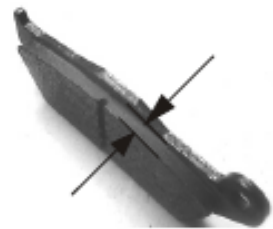
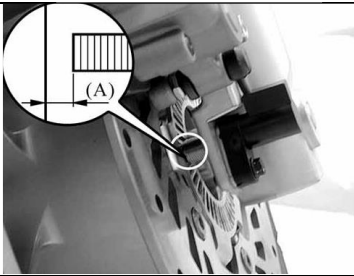
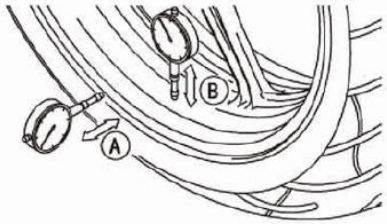
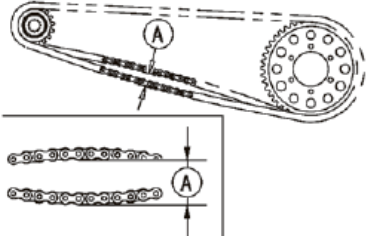


Technical data 参数表

Item 项目	Description 描述	Value 值
CHARGING COILS 充电线圈	RESISTANCE 电阻	150±10Ω
	AC VOLTAGE AC 电压	12V
RECTIFIER REGULATOR 整流稳压器	OUTPUT VOLTAGE 输出电压	14.5±0.5V
	CHARGING CURRENT 充电电流	10A
FUEL METER 燃油表	SUPPLY VOLTAGE 电源电压	12V
	EMPTY SIGNAL RESISTANCE 空信号电阻	98Ω
	SIGNAL RESISTANCE FULL 信号电阻满	8Ω
START RELAY 启动继电器	Ω START RELAY 启动继电器 Ω	3.5Ω±0.5Ω
STARTING MOTOR 启动电机	CURRENT CONSUMPTION 目前消耗	空载≤30A； 负载 ≤100A；制 动≤300A
HORN 喇叭	CURRENT CONSUMPTION 目前消耗	1.5A

FRAME

Item 项目	Description 描述	Standard value 标准值	Image 图片
Brakes 制动	Rear drum internal diameter 后鼓刹内径	Φ 110	
	Front brake disc thickness 前碟刹盘厚度	4±0.1mm Service limit 维修极限:2mm	

	Front brake disc runout 前制动盘跳动	<0.05mm	
	Front brake pads friction compound thickness 前刹车片摩擦材料厚度	7mm Service limit 维修极限: 5mm	
	Speed sensor gap 速度传感器间隙	1mm	
Ruedas	Wheel rim runout 轮辋跳动	Value A <3mm Value B <2mm	
	Drive chain free play 链条自由摆动	20-25mm	

System or Component 系统或零部件	DEC Number DEC 故障码	DTC Description DTC 故障描述
Intake Air Pressure Sensor 进气压力传感器	P0107	IAP Circuit Low Voltage or Open 进气压力传感器断路或信号端针脚短路到信号负极
	P0108	IAP Circuit High Voltage 进气压力传感器信号端针脚短路到信号正极
Intake Air Temperature Sensor (IAT) 进气温度传感器	P0112	IAT Circuit Low Voltage 进气温度传感器信号端针脚短路到信号负极
	P0113	IAT Circuit High Voltage or Open 进气温度传感器断路或信号端针脚短路到信号正极
Engine/Oil Temperature Sensor 缸头温度传感器	P0117	Engine/Oil Temperature Sensor Circuit Low Voltage 缸头温度传感器信号端针脚短路到信号负极
	P0118	Engine/Oil Temperature Sensor Circuit High Voltage or Open 缸头温度传感器断路或信号端针脚短路到信号正极
Throttle Position Sensor (TPS) 节气门位置传感器	P0122	TPS Circuit Low Voltage or Open 节气门位置传感器断路或信号端针脚短路到信号负极
	P0123	TPS Circuit High Voltage 节气门位置传感器信号短路到信号正极
Oxygen Sensor(O21S) 氧传感器	P0131	O21S Circuit Low Voltage 氧传感器信号端针脚短路到信号负极
	P0132	O21S Circuit High Voltage 氧传感器信号端针脚短路到信号正极
Oxygen Sensor Heater Circuit (OXYAHD) 氧传感器加热端	P0032	O21S Heater Circuit High Voltage 氧传感器加热端针脚短路到电瓶正极
	P0031	O21S Heater Circuit Low Voltage or Open 氧传感器加热端针脚断路或短路到电瓶负极
Fuel Injector 喷油器	P0262	Fuel Injector Circuit High Voltage 喷油器信号短路到电瓶正极
	P0261	IFuel Injector Circuit Low Voltage or Open 喷油器断路或短路到电瓶负极
Fuel Pump Relay (FPR) 油泵	P0230	FPR Coil Circuit Low Voltage or Open 油泵断路或短路到电瓶负极
	P0232	FPR Coil Circuit High Voltage 油泵信号短路到电瓶正极
Crank Angle Sensing(CAS) 曲轴位置传感器	P0336	CAS Sensor Noisy Signal 曲轴位置传感器传感器有干扰
	P0337	CAS Sensor No Signal 曲轴位置传感器传感器无信号
Ignition Coil 点火线圈	P2301	Ignition Coil Ignition Coil High Voltage 点火线圈信号短路到电瓶正极
	P2300	Ignition Coil Ignition Coil Low Voltage or Open 点火线圈断路或短路到电瓶负极

Idle Control System 怠速控制系统	P0505	Idle Control Speed Control Error 怠速控制系统出错
System Voltage 系统电压	P0562	System Voltage Low 电喷系统电压过低
	P0563	System Voltage High 电喷系统电压过高
MIL 故障灯	P0650	MIL Control Circuits 故障灯故障（灯丝坏或插件没插）
Tachometer Circuit (TACH) 转速表	P1693	Tachometer Circuit Low Voltage 转速表线短路到电瓶负极
	P1694	Tachometer Circuit High Voltage 转速表线短路到电瓶正极
Vehicle Speed Sensor 车速信号	P0500	VSS No Signal 无车速信号
Park Neutral Switch (PNSWD) 空挡信号	P0850	Park Neutral Switch Error 空档或离合器开关出错
Evaporative Emission (EVP) 碳罐电磁阀	P0445	EVP short to high 碳罐电磁阀信号端针脚短路到电瓶正极
	P0444	EVP short to low/open 碳罐电磁阀信号端针脚开路或短路到电瓶负极
ECU Check Error ECU 自检出错	P0601	ECU diagnostic by self ECU 只读存储器校验出错
VoltageRegulator 调压整流器	P0318	VoltageRegulator Circuit High Voltage 调压整流器信号短路到正极
	P0317	VoltageRegulator Circuit Low Voltage 调压整流器信号短路到负极